

## Supporting Information

1-(2-Hydroxybenzoyl)-thiosemicarbazides are  
promising antimicrobial agents targeting D-alanine-  
D-alanine ligase *in bacterio*.

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### Optimization of the colorimetric malachite green assay.

The optimization of the enzymatic assay began with the validation of the linearity zone of the absorbance as a function of phosphate quantity (**Figure 2a**). The loss of linearity was observed at phosphate concentrations higher than 40  $\mu\text{M}$ .

Then, optimal working conditions were determined by varying parameters like the incubation time with D-Ala and the enzyme concentration. The obtained results are depicted in **Figure 2b**. D-Ala and ATP concentrations were fixed respectively at 1 mM and 500  $\mu\text{M}$  according to the data reported in the literature for determination of Ddl activity with colorimetric malachite green assay.<sup>1-5</sup> An incubation time of 20 minutes and an enzyme concentration of 20  $\mu\text{g/mL}$  were adopted.

Considering the relatively poor aqueous solubility of most thiosemicarbazides, the next step was to study the tolerance of the enzyme to DMSO. It was observed that a working concentration of 10% does not significantly impact the enzyme activity (**Figure 2c**).

Finally  $K_m$  for D-Ala of our purified *His*-tagged DdlB was determined by fitting data to the Michaelis-Menten equation. Kinetic analysis of Ddl ligase is not straightforward. As known, Ddl binds two molecules of D-Ala in two distinct binding sites.<sup>6</sup> The Michaelis constants observed for the first D-Ala ( $K_{m1}$ ) are usually way lower than those for binding of the second substrate ( $K_{m2}$ ). The overall rate expression that reflects this process is given in **Equation 1**. For kinetic analysis of inhibitors, at concentrations of D-Ala high enough to occupy both sites, we will postulate that  $K_{m1}$  is negligible compared to  $K_{m2}$  as well depicted in the literature.<sup>7-8</sup>

$$\frac{d[P]}{dt} = V = \frac{V_{max}[S]^2}{K_{m1}K_{m2} + K_{m2}[S] + [S]^2}$$

**Equation 1:** Overall rate expression reflecting the two-step substrate binding process.  $K_{m1}$ : Michaelis constant for the first D-Ala site,  $K_{m2}$ : Michaelis constant for the second D-Ala site (mmol/L). [P]: concentration in product, [S]: concentration in substrate (mmol/L). V: reaction

rate,  $V_{\max}$ : maximal rate of the enzymatic reaction at saturating substrate concentration ( $\mu\text{M}/\text{min}$ ).

In the context of our work, the initial velocity of the reaction for the second D-Ala site was measured at several substrate concentrations between 0.45-30 fold the theoretical  $K_{m2}$  (value reported in the literature)<sup>7,9</sup> with saturating concentration of 500  $\mu\text{M}$  for ATP (**Figure 2d**). The inversion of **Equation 1** predicts parabolic Lineweaver-Burk plot (**Equation 2**), from which  $1/V_{\max}$  can be measured as the y intercept. The nonlinear regression of  $1/V$  against  $1/[S]$  plot gave us coefficients which allowed the calculation of the two  $K_m$  values ( $K_{m1} = 487.2 \mu\text{M}$  and  $K_{m2} = 10.5 \text{ mM}$ ). These values are higher than the ones reported in the literature.<sup>9-10</sup>

$$\frac{1}{V} = \frac{1}{V_{\max}} + \frac{K_{m2}}{V_{\max}} \frac{1}{[S]} + \frac{K_{m1} K_{m2}}{V_{\max}} \frac{1}{[S]^2}$$

**Equation 2:** Second order polynomial (quadratic) equation.  $K_{m1}$ : Michaelis constant for the first D-Ala site,  $K_{m2}$ : Michaelis constant for the second D-Ala site (mmol/L).  $[S]$ : concentration in substrate (mmol/L).  $V$ : reaction rate,  $V_{\max}$ : maximal rate of the enzymatic reaction at saturating substrate concentration ( $\mu\text{M}/\text{min}$ ).

#### **$V_{\max}$ , $K_m$ and $V_{\max}/K_m$ values of competition studies against D-Ala and ATP.**

D-Ala			
[29] $\mu\text{M}$	$V_{\max}$ ( $\mu\text{M}/\text{min}$ )	$K_m$ (mM)	$V_{\max}/K_m$
0	61.95 $\pm$ 1.11	5.62	11.02
1	48.58 $\pm$ 1.53	7.01	6.93
10	45.15 $\pm$ 3.40	9.63	4.69
ATP			
[29] $\mu\text{M}$	$V_{\max}$ ( $\mu\text{M}/\text{min}$ )	$K_m$ ( $\mu\text{M}$ )	$V_{\max}/K_m$
0	89.05 $\pm$ 5.41	298.2	0.30
1	72.11 $\pm$ 3.24	217.5	0.33
10	23.52 $\pm$ 1.11	233.7	0.10

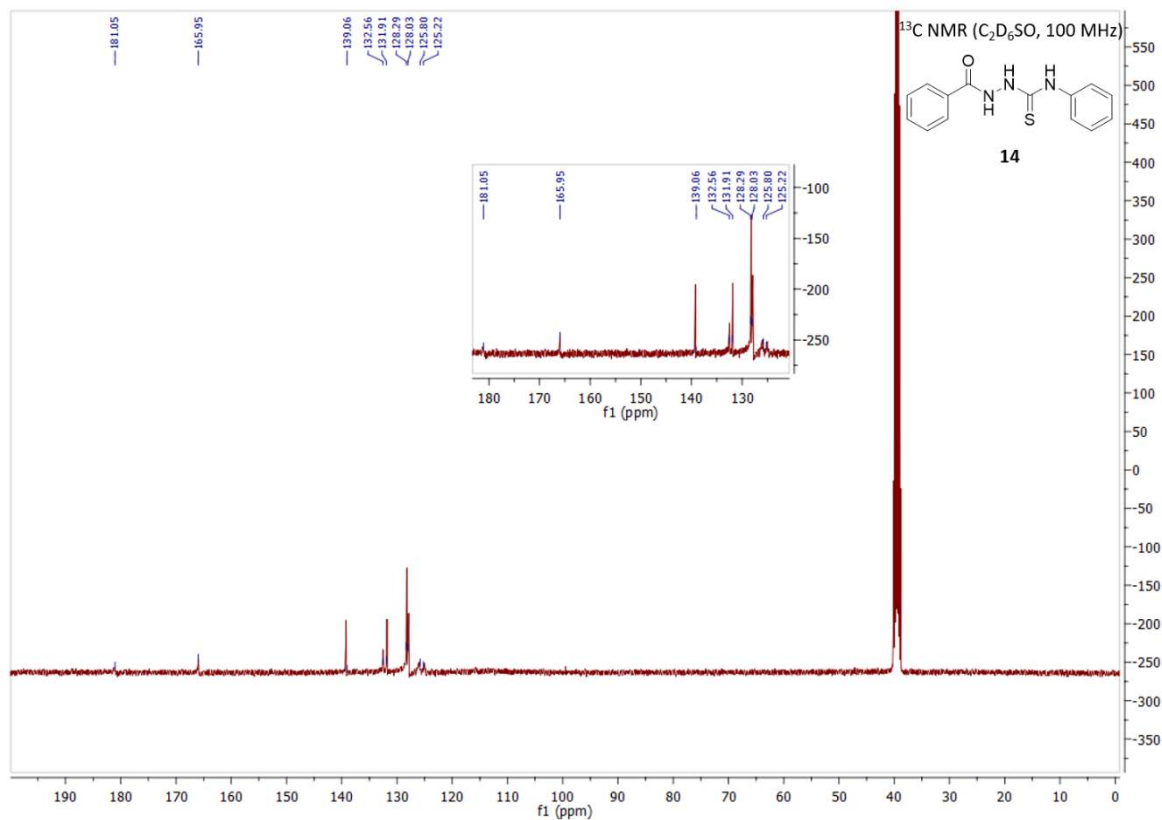
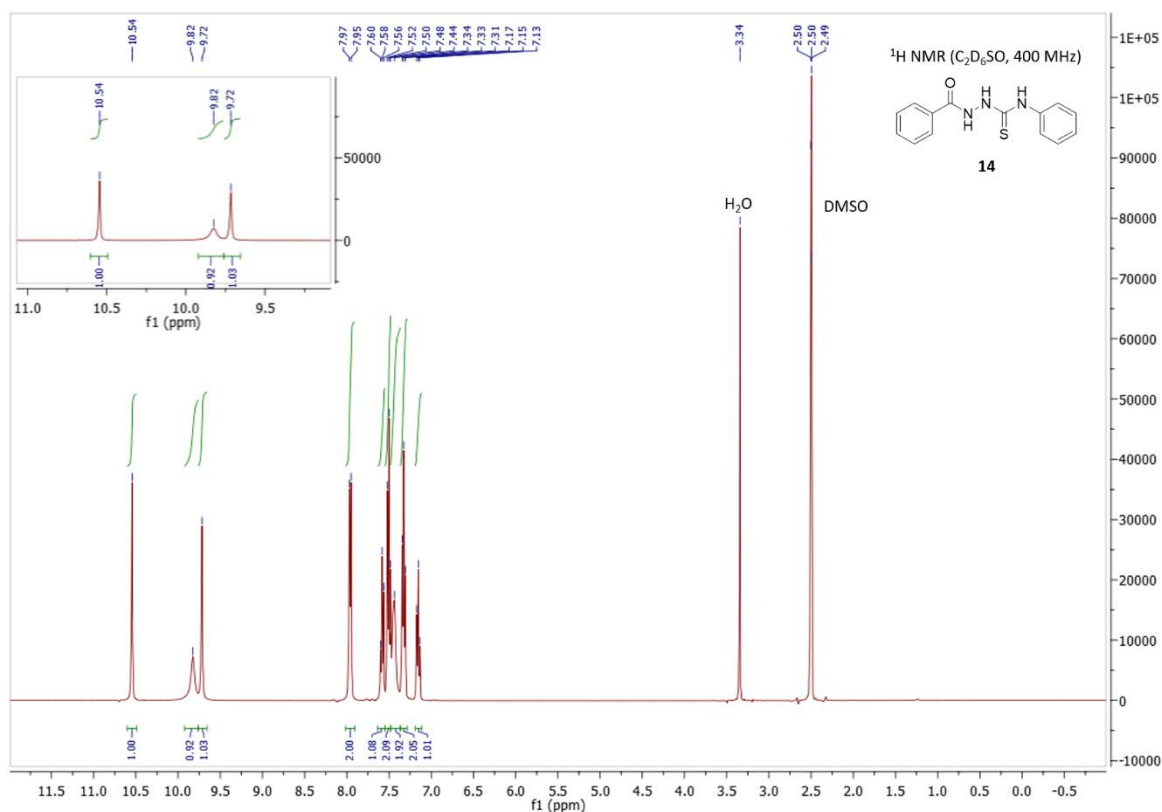
#### **MIC values of derivatives 3, 14-48 and 51-54 against Gram-positive sensitive strains.**

Compd	MIC			
	<i>S. aureus</i> ATCC 25923		<i>E. faecalis</i> ATCC 29212	
	mM	µg/mL	mM	µg/mL
<b>3</b>	> 0.1	> 28.73	> 0.4	> 114.92
<b>14</b>	> 0.1	> 27.13	> 0.4	> 108.52
<b>15</b>	> 0.1	> 30.58	> 0.4	> 122.32
<b>16</b>	> 0.1	> 30.58	> 0.4	> 122.32
<b>17</b>	> 0.1	> 30.58	> 0.4	> 122.32
<b>18</b>	> 0.1	> 28.93	> 0.4	> 115.72
<b>19</b>	> 0.1	> 28.93	> 0.4	> 115.72
<b>20</b>	> 0.1	> 28.93	> 0.4	> 115.72
<b>21</b>	> 0.1	> 34.02	> 0.1	> 34.02
<b>22</b>	> 0.1	> 32.18	0.4	128.72
<b>23</b>	0.1	32.18	0.4	128.72
<b>24</b>	> 0.1	> 32.18	> 0.4	> 128.72
<b>25</b>	> 0.1	> 30.53	0.2	61.06
<b>26</b>	> 0.1	> 30.53	0.2	61.06
<b>27</b>	> 0.1	> 30.53	0.2	61.06
<b>28</b>	0.05	17.81	0.05	17.81
<b>29</b>	0.1	35.62	0.05	17.81
<b>30</b>	> 0.1	> 31.74	> 0.4	> 126.96
<b>31</b>	> 0.1	> 31.74	> 0.4	> 126.96
<b>32</b>	> 0.1	> 31.23	0.1	31.23
<b>33</b>	> 0.1	> 28.14	> 0.4	> 112.56
<b>34</b>	> 0.1	> 28.14	> 0.4	> 112.56
<b>35</b>	> 0.1	> 33.74	> 0.4	> 134.96
<b>36</b>	> 0.1	> 41.32	> 0.4	> 165.29
<b>37</b>	0.025	8.23	0.05	16.47
<b>38</b>	0.025	9.28	0.05	18.56
<b>39</b>	0.1	39.34	> 0.4	> 157.38
<b>40</b>	0.05	0.05	14.42	14.42
<b>41</b>	0.1	48.21	> 0.4	>192.85
<b>42</b>	> 0.1	> 37.13	> 0.4	> 148.50
<b>43</b>	> 0.1	> 35.62	> 0.4	> 142.48
<b>44</b>	> 0.1	> 35.62	> 0.4	> 142.48
<b>45</b>	> 0.1	> 33.23	> 0.4	> 132.92
<b>46</b>	Insoluble	Insoluble	Insoluble	Insoluble
<b>47</b>	Insoluble	Insoluble	Insoluble	Insoluble
<b>48</b>	Insoluble	Insoluble	Insoluble	Insoluble
<b>49</b>	N.D.	N.D.	N.D.	N.D.
<b>51</b>	> 0.1	> 40.63	> 0.4	> 162.51
<b>52</b>	> 0.1	> 29.63	> 0.4	> 29.63
<b>53</b>	> 0.1	> 32.42	> 0.1	> 32.42
<b>54</b>	> 0.1	> 34.02	> 0.1	> 34.02
<b>DCS</b>	0.313	32	1.25	128

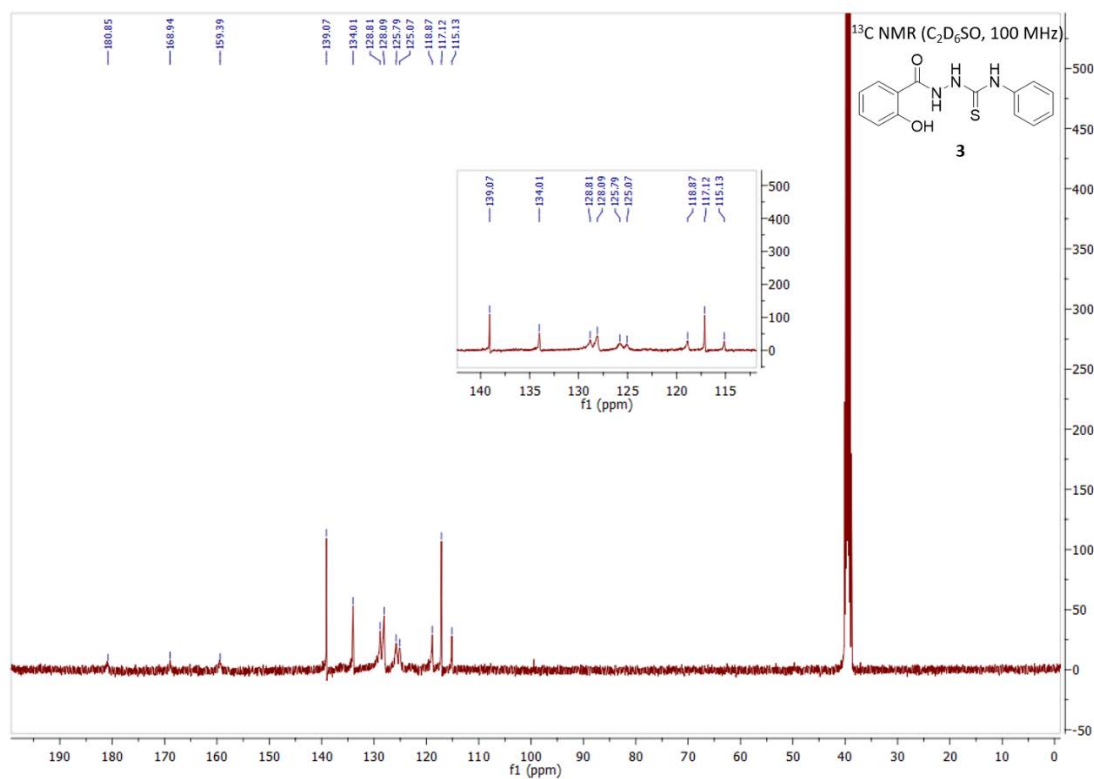
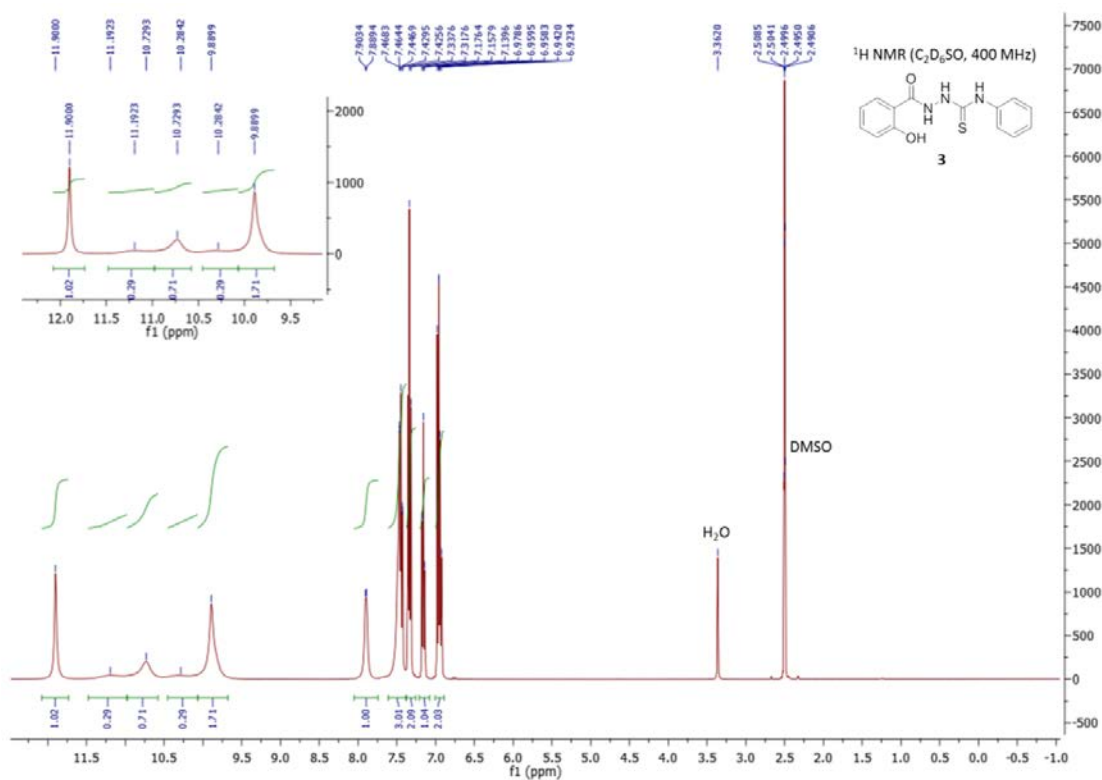
**MIC values of active compounds on Ddl 3, 22-42 and 51 against Gram-positive resistant strains.**

Compd	MIC (mM/( $\mu$ g/mL)) of:							
	<i>E. faecalis</i> <sup>a</sup>				<i>S. aureus</i> <sup>b</sup>			
	BM 4390	JH2-2::C1	BM 4575	MU 50	NRS 119	SA 325	SA 481	VRS-1
<b>3</b>	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1
<b>22</b>	> 0.1	> 0.1	> 0.1	> 0.1	0.1/32.18	0.1/32.18	0.1/32.18	0.1/32.18
<b>23</b>	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	0.1/32.18	> 0.1	> 0.1
<b>24</b>	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1
<b>25</b>	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1
<b>26</b>	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1
<b>27</b>	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1
<b>28</b>	0.025/8.90	0.05/17.81	0.025/8.90	0.05/17.81	0.025/8.90	0.05/17.81	0.05/17.81	0.025/8.90
<b>29</b>	0.05/17.81	0.1/35.62	0.05/17.81	0.1/35.62	0.05/17.81	0.05/17.81	0.1/35.62	0.05/17.81
<b>30</b>	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1
<b>31</b>	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1
<b>32</b>	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1
<b>33</b>	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1
<b>34</b>	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1
<b>35</b>	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1
<b>36</b>	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1
<b>37</b>	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1
<b>38</b>	> 0.1	0.1	> 0.1	> 0.1	0.1	0.1	> 0.1	> 0.1
<b>39</b>	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1
<b>40</b>	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1
<b>41</b>	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1
<b>42</b>	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1
<b>51</b>	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1	> 0.1
Vm <sup>c</sup>	0.7/1024	0.35/512	N.D.	0.005/8	0.0007/1	N.D.	N.D.	>0.175/>256
Lzd <sup>c</sup>	N.D.	N.D.	N.D.	0.003/1	0.19/64	N.D.	N.D.	N.D.
Cip <sup>c</sup>	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.77/256	N.D.

**$^1\text{H}$  and  $^{13}\text{C}$  NMR spectrum** of compound **14** bearing no hydroxyl substituent in the 2-position. Three labile protons are visible around 9.7 to 10.7 ppm and each singlet integrates for 1H.



**$^1\text{H}$  and  $^{13}\text{C}$  NMR spectrum** of compound **3** bearing a hydroxyl substituent in the 2-position. The labile proton of the -OH is visible at 11.9 ppm integrating for 1H. Two labile protons signals are duplicated and integrate for 0.3H and 0.7H due to the likely tautomerism (the two -NH- become a -SH and a -OH in the enol form). A last labile proton is visible around 9.9 ppm integrating for 1H (-NH- from the thio-urea function).





### Experimental data of benzohydrazides precursors (4-13 and 50).

*2-Hydroxybenzohydrazide (5)*. This compound was synthesized according to the general procedure described above using commercial methyl-2-hydroxybenzoate (1.52 g, 10 mmol), hydrazine hydrate (2.5 g, 50 mmol) in ethanol (10 mL) except that no precipitate was formed after cooling the reaction mixture. After 22 h this mixture was evaporated under reduce pressure to afford a brown oil which precipitates after trituration with brine. A white solid was collected after filtration (1.02 g, 67 %). The title compound was used for the following syntheses without any further purification.  $^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta_{\text{H}}$  (ppm) 4.68 (brs, 2H, NH<sub>2</sub>), 6.83-6.93 (m, 2H, ArH), 7.34-7.41 (m, 1H, ArH), 7.81 (dd,  $J = 1.6$  Hz,  $J = 8$  Hz, 1H, ArH), 10.10 (s, 1H, NH), 12.48 (s, 1H, OH).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta_{\text{C}}$  (ppm) 115.63 (Ar), 117.99 (Ar), 118.26 (Ar), 128.14 (Ar), 133.51 (Ar), 160.72 (Ar), 168.03 (C=O). HRMS (APCI<sup>+</sup>):  $m/z$  calcd for C<sub>7</sub>H<sub>9</sub>N<sub>2</sub>O<sub>2</sub> (M+H)<sup>+</sup> 153.06585, found 153.06545.

*3-Hydroxybenzohydrazide (6)*. This compound was synthesized according to the general procedure described above using commercial methyl-3-hydroxybenzoate (1.52 g, 10 mmol), hydrazine hydrate (2.5 g, 50 mmol) in ethanol (10 mL) except that no precipitate was formed after cooling the reaction mixture. After 19 h this mixture was evaporated under reduce pressure to afford a brown oil which precipitates after trituration with brine. A white solid was collected after filtration (0.73 g, 47 %). The title compound was used for the following syntheses without any further purification.  $^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta_{\text{H}}$  (ppm) 4.50 (brs, 2H, NH<sub>2</sub>), 6.99-6.88 (m, 1H, ArH), 7.33-7.21 (m, 3H, ArH), 9.68 (s, 1H, NH), 9.71 (brs, 1H, OH).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta_{\text{C}}$  (ppm) 114.02 (Ar), 117.32 (Ar), 117.88 (Ar), 129.25 (Ar), 134.74 (Ar), 157.24 (Ar), 165.92 (C=O). HRMS (APCI<sup>+</sup>):  $m/z$  calcd for C<sub>7</sub>H<sub>9</sub>N<sub>2</sub>O<sub>2</sub> (M+H)<sup>+</sup> 153.06585, found 153.06569.

*4-Hydroxybenzohydrazide (7)*. This compound was synthesized according to the general procedure described above using commercial methyl-4-hydroxybenzoate (1.52 g, 10 mmol),

hydrazine hydrate (2.5 g, 50 mmol) in ethanol (10 mL). After 21 h of reaction, a white solid was collected by filtration (1.20 g, 78 %). The title compound was used for the following syntheses without any further purification.  $^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta_{\text{H}}$  (ppm) 5.12 (brs, 2H, NH<sub>2</sub>), 6.75 (d,  $J = 8.7$  Hz, 2H, ArH), 7.66 (d,  $J = 8.7$  Hz, 2H, ArH), 9.47 (brs, 1H, OH).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta_{\text{C}}$  (ppm) 114.88 (Ar), 123.59 (Ar), 128.75 (Ar), 160.40 (Ar), 165.96 (C=O). HRMS (APCI<sup>+</sup>):  $m/z$  calcd for C<sub>7</sub>H<sub>9</sub>N<sub>2</sub>O<sub>2</sub> (M+H)<sup>+</sup> 153.06585, found 153.06498.

*3-Fluorobenzohydrazide (9)*. This compound was synthesized according to the general procedure described above using commercial methyl-3-fluorobenzoate (1.54 g, 10 mmol), hydrazine hydrate (2.5 g, 50 mmol) in ethanol (7 mL). After 24 h of reaction, white crystals (needles) were collected by filtration (0.83 g, 53 %). The title compound was used for the following syntheses without any further purification.  $^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta_{\text{H}}$  (ppm) 4.56 (s, 2H, NH<sub>2</sub>), 7.34-7.40 (m, 1H, ArH), 7.48-7.55 (m, 1H, ArH), 7.61 (dq,  $J = 7.4$  Hz, 3H, ArH), 7.69 (dt,  $J = 8.4$  Hz, 1H, ArH), 9.88 (s, 1H, NH).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta_{\text{C}}$  (ppm) 113.70 (d,  $J = 23$  Hz, Ar), 117.94 (d,  $J = 21$  Hz, Ar), 123.07 (d,  $J = 3$  Hz, Ar), 130.48 (d,  $J = 8$  Hz, Ar), 135.60 (d,  $J = 7$  Hz, Ar), 161.91 (d,  $J = 243$  Hz, Ar), 168.03 (C=O).

*4-Fluorobenzohydrazide (10)*. This compound was synthesized according to the general procedure described above using commercial methyl-3-fluorobenzoate (1.54 g, 10 mmol), hydrazine hydrate (2.5 g, 50 mmol) in ethanol (7 mL). After 24 h of reaction, white crystals were collected by filtration (0.77 g, 50 %). The title compound was used for the following syntheses without any further purification.  $^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta_{\text{H}}$  (ppm) 4.49 (s, 2H, NH<sub>2</sub>), 7.29 (t,  $J = 8.8$  Hz, 2H, ArH), 7.87-7.92 (m, 2H, ArH), 9.80 (s, 1H, NH).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta_{\text{C}}$  (ppm) 112.91 (d,  $J = 21.5$  Hz, Ar), 125.76 (Ar), 127.20 (d,  $J = 8.6$  Hz, Ar), 161.43 (d,  $J = 246$  Hz, Ar), 162.59 (C=O).

*2-Hydroxy-4-iodobenzohydrazide (11)*. This compound was synthesized according to the general procedure described above using commercial methyl-2-hydroxy-4-iodobenzoate (1 g,

3.6 mmol), hydrazine hydrate (0.9 g, 17.58 mmol) in ethanol (10 mL) except that no precipitate was formed after cooling the reaction mixture. After 5 h this mixture was evaporated under reduce pressure to afford an oil which precipitates after trituration with cold water. A white solid was collected by filtration after a night at 4°C and washing with cold EtOH (0.48 g, 48 %). The title compound was used for the following syntheses without any further purification. <sup>1</sup>H NMR (400 MHz, DMSO-*d*<sub>6</sub>): δ<sub>H</sub> (ppm) 4.71 (brs, 2H, NH<sub>2</sub>), ArH), 7.22 (dd, *J* = 8.3, 0.9 Hz, 1H, ArH), 7.28 (s, 1H, ArH), 7.53 (d, *J* = 8.3 Hz, 1H, ArH), 10.08 (brs, 1H, NH), 12.59 (brs, 1H, OH). <sup>13</sup>C NMR (100 MHz, DMSO-*d*<sub>6</sub>): δ<sub>C</sub> (ppm) 100.03 (Ar-I), 114.56 (Ar), 125.77 (Ar), 127.54 (Ar), 128.81 (Ar), 159.67 (Ar-OH), 167.11 (C=O).

*2-Hydroxy-4-aminobenzohydrazide (12)*. This compound was synthesized according to the general procedure described above using commercial methyl-2-hydroxy-4-aminobenzoate (2 g, 11.96 mmol), hydrazine hydrate (2.99 g, 59.82 mmol) in ethanol (20 mL). After 18 h of reaction, a white solid was collected by filtration (0.92 g, 46 %). The title compound was used for the following syntheses without any further purification. <sup>1</sup>H NMR (400 MHz, DMSO-*d*<sub>6</sub>): δ<sub>H</sub> (ppm) 4.37 (brs, 2H, NH<sub>2</sub>), 5.68 (s, 2H, ArNH<sub>2</sub>), 5.93 (d, *J* = 2.1 Hz, 1H, ArH), 6.00 (dd, *J* = 8.6, 2.1 Hz, 1H, ArH), 7.42 (d, *J* = 8.6 Hz, 1H, ArH), 9.50 (s, 1H, NH), 12.59 (brs, 1H, OH). <sup>13</sup>C NMR (100 MHz, DMSO-*d*<sub>6</sub>): δ<sub>C</sub> (ppm) 99.40 (Ar), 101.68 (Ar), 105.49 (Ar), 127.72 (Ar), 153.75 (Ar-NH<sub>2</sub>), 162.14 (Ar-OH), 169.38 (C=O).

*2-Methoxybenzohydrazide (13)*. This compound was synthesized according to the general procedure described above using commercial methyl-2-methoxybenzoate (5 g, 30 mmol), hydrazine hydrate (7.53 g, 150 mmol) in ethanol (11 mL) except that no precipitate was formed after cooling the reaction mixture. After 2.5 h this mixture was evaporated under reduce pressure to afford a yellow oil which was extracted 3 times with Et<sub>2</sub>O/AcOEt. The organic layers were dried over Na<sub>2</sub>SO<sub>4</sub> and evaporated under reduce pressure. White crystals were obtained overnight from the resulting oil (4.03 g, 81 %). The title compound was used for the

following syntheses without any further purification.  $^1\text{H}$  NMR (400 MHz,  $\text{DMSO-}d_6$ ):  $\delta_{\text{H}}$  (ppm) 3.86 (s, 3H,  $\text{OCH}_3$ ), 4.51 (brs, 2H,  $\text{NH}_2$ ), 7.02 (td,  $J = 0.8$  Hz,  $J = 7.5$  Hz, 1H, ArH), 7.11 (d,  $J = 8.3$  Hz, 1H, ArH), 7.45 (ddd,  $J = 1$  Hz,  $J = 1.8$  Hz,  $J = 8.5$  Hz, 1H, ArH), 7.68 (dd,  $J = 1.8$  Hz,  $J = 7.6$  Hz, 1H, ArH), 9.20 (s, 1H, NH).  $^{13}\text{C}$  NMR (100 MHz,  $\text{DMSO-}d_6$ ):  $\delta_{\text{C}}$  (ppm) 55.72 ( $\text{OCH}_3$ ), 111.83 (Ar), 120.41 (Ar), 122.33 (Ar), 130.10 (Ar), 131.95 (Ar), 156.78 (Ar), 164.73 (C=O).

*3-Hydroxy-2-naphthohydrazide (50)*. This compound was synthesized according to the general procedure described above using commercial methyl-2-hydroxy-2-naphtoate (2 g, 9.89 mmol), hydrazine hydrate (2.47 g, 49.45 mmol) in ethanol (7 mL). After 1 h of reaction, the solvent was evaporated under reduced pressure. The solid was washed with cold water and a pale yellow powder was collected by filtration (1.5 g, 75 %). The title compound was used for the following syntheses without any further purification.  $^1\text{H}$  NMR (400 MHz,  $\text{DMSO-}d_6$ ):  $\delta_{\text{H}}$  (ppm) 4.80 (brs, 2H,  $\text{NH}_2$ ), 7.31 (dd,  $J = 7.4$  Hz, 1H, ArH), 7.47 (dd,  $J = 7.5$  Hz, 1H, ArH), 7.71 (d,  $J = 8.3$  Hz, 1H, ArH), 7.80 (d,  $J = 8.2$  Hz, 1H, ArH), 10.24 (s, 1H, ArH), 8.43 (s, 1H, NH), 11.47 (s, 1H, OH).  $^{13}\text{C}$  NMR (100 MHz,  $\text{DMSO-}d_6$ )  $\delta_{\text{C}}$  108.70 (Ar), 117.15 (Ar), 120.93 (Ar), 123.54 (Ar), 124.14 (Ar), 125.81 (Ar), 126.73 (Ar), 127.24 (Ar), 134.10 (Ar), 154.77 (Ar), 164.86 (Ar).

#### **Experimental data of thiosemicarbazides 15-28, 30-49 and 51-52.**

*1-Benzoyl-4-(2-chlorophenyl)-3-thiosemicarbazide (15)*.<sup>11</sup> This compound was synthesized according to the general procedure described above using commercial benzohydrazide **4** (0.25 g, 1.837 mmol) and 2-chlorophenyl isothiocyanate (0.31 g, 1.837 mmol) in methanol (20 mL). After 24 h of reaction, the pure product was collected as white powder without recrystallization (0.23 g, 34 %).  $R_f$  0.31 (PE/EtOAc 5:5). Mp: 149.3-151.6°C.  $^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta_{\text{H}}$  (ppm) 7.28 (ddd,  $J = 7.6$  Hz,  $J = 1.6$  Hz, 1H, ArH), 7.36 (dd,  $J = 7$  Hz, 1H, ArH), 7.45 (m, 1H, ArH), 7.51 (m, 3H, ArH), 7.60 (dd,  $J = 7.2$  Hz, 1H, ArH), 7.98 (d,  $J = 7.2$  Hz, 2H, ArH), 9.67 (s, 1H, NH), 9.88 (s, 1H, NH), 10.64 (s, 1H, NH).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta_{\text{C}}$  (ppm) 124.56 (Ar), 125.50 (Ar), 125.75 (Ar), 126.80 (Ar), 128.36 (Ar), 128.81 (Ar), 129.40 (Ar), 129.97 (Ar), 134.36 (Ar), 163.66 (C=O), 179.42 (C=S). HRMS (ESI<sup>+</sup>):  $m/z$  calcd for  $\text{C}_{14}\text{H}_{13}\text{ClN}_3\text{OS}$  (M+H)<sup>+</sup> 306.04624, found 306.04584.

*1-Benzoyl-4-(3-chlorophenyl)-3-thiosemicarbazide (16)*.<sup>11</sup> This compound was synthesized according to the general procedure described above using commercial benzohydrazide **4** (0.30 g, 2.2 mmol) and 3-chlorophenyl isothiocyanate (0.37 g, 2.2 mmol) in methanol (10 mL). After 24 h of reaction, the pure product was collected as white powder without recrystallization (0.57 g, 85 %).  $R_f$  0.26 (PE/EtOAc 5:5). Mp: 170.6-175.4°C.  $^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta_{\text{H}}$  (ppm) 7.21 (d,  $J = 7.8$  Hz, 1H, ArH), 7.37 (dd,  $J = 8.0$  Hz, 1H, ArH), 7.47 (d,  $J = 8.0$  Hz, 1H, ArH), 7.52 (dd,  $J = 7.2$  Hz, 2H, ArH), 7.60 (dddd,  $J = 7.3$  Hz,  $J = 1.3$  Hz, 2H, ArH), 7.97 (d,  $J = 7.32$  Hz, 2H, ArH), 9.90 (m, 2H, NH), 10.59 (s, 1H, NH).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta_{\text{C}}$  (ppm) 124.22 (Ar), 124.73 (Ar), 125.28 (Ar), 127.91 (Ar), 128.28 (Ar), 129.52 (Ar), 131.94 (Ar), 132.37 (Ar), 140.77 (Ar), 165.98 (C=O), 180.96 (C=S). HRMS (ESI<sup>+</sup>):  $m/z$  calcd for  $\text{C}_{14}\text{H}_{13}\text{ClN}_3\text{OS}$  (M+H)<sup>+</sup> 306.04624, found 306.04581.

*1-Benzoyl-4-(4-chlorophenyl)-3-thiosemicarbazide (17)*.<sup>11</sup> This compound was synthesized according to the general procedure described above using commercial benzohydrazide **4** (0.25 g, 1.837 mmol) and 3-chlorophenyl isothiocyanate (0.31 g, 1.837 mmol) in methanol (20 mL).

After 24 h of reaction, the pure product was collected as white powder without recrystallization (0.23 g, 35 %).  $R_f$  0.21 (PE/EtOAc 6:4). Mp: 169.1-170.5°C.  $^1\text{H}$  NMR (400 MHz,  $\text{DMSO-}d_6$ ):  $\delta_{\text{H}}$  (ppm) 7.39 (d,  $J = 8.4$  Hz, 2H, ArH), 7.52 (dd,  $J = 7.6$  Hz, 4H, ArH), 7.60 (dd,  $J = 7.6$  Hz, 1H, ArH), 7.97 (d,  $J = 7.6$  Hz, ArH), 9.85 (m, 2H, NH), 10.58 (s, 1H, NH).  $^{13}\text{C}$  NMR (100 MHz,  $\text{DMSO-}d_6$ ):  $\delta_{\text{C}}$  (ppm) 127.65 (Ar), 127.89 (Ar), 128.25 (Ar), 129.05 (Ar), 131.90 (Ar), 132.40 (Ar), 138.23 (Ar), 165.94 (C=O), 181.07 (C=S). HRMS (ESI<sup>+</sup>):  $m/z$  calcd for  $\text{C}_{14}\text{H}_{13}\text{ClN}_3\text{OS}$  (M+H)<sup>+</sup> 306.04624, found 306.04547.

*1-Benzoyl-4-(2-fluorophenyl)-3-thiosemicarbazide (18)*.<sup>11</sup> This compound was synthesized according to the general procedure described above using commercial benzohydrazide **4** (0.30 g, 2.2 mmol) and 2-fluorophenyl isothiocyanate (0.34 g, 2.2 mmol) in methanol (20 mL). After 24 h of reaction, the pure product was collected as white powder without recrystallization (0.28 g, 44 %).  $R_f$  0.25 (PE/EtOAc 5:5). Mp: 155.0-156.0°C.  $^1\text{H}$  NMR (400 MHz,  $\text{DMSO-}d_6$ ):  $\delta_{\text{H}}$  (ppm) 7.28 (dt,  $J = 7.6$  Hz,  $J = 1.2$  Hz, 1H, ArH), 7.36 (dd,  $J = 6.8$  Hz, 1H, ArH), 7.44 (m, 1H, ArH), 7.51 (m, 3H, ArH), 7.60 (dd,  $J = 7.2$  Hz, 1H, ArH), 7.98 (d,  $J = 7.2$  Hz, 2H, ArH), 9.67 (s, 1H, NH), 9.88 (s, 1H, NH), 10.63 (s, 1H, NH).  $^{13}\text{C}$  NMR (100 MHz,  $\text{DMSO-}d_6$ ):  $\delta_{\text{C}}$  (ppm) 115.57 (Ar), 115.78 (Ar), 123.89 (Ar), 127.20 (Ar), 127.97 (Ar), 128.21 (Ar), 130.64 (Ar), 131.89 (Ar), 132.39 (Ar), 157.38 (d,  $J = 247.6$  Hz, Ar), 166.05 (C=O), 182.20 (C=S). HRMS (ESI<sup>+</sup>):  $m/z$  calcd for  $\text{C}_{14}\text{H}_{13}\text{FN}_3\text{OS}$  (M+H)<sup>+</sup> 290.07579, found 290.07532.

*1-Benzoyl-4-(3-fluorophenyl)-3-thiosemicarbazide (19)*.<sup>11</sup> This compound was synthesized according to the general procedure described above using commercial benzohydrazide **4** (0.22 g, 1.6 mmol) and 3-fluorophenyl isothiocyanate (0.25 g, 1.6 mmol) in methanol (20 mL). After 24 h of reaction, the pure product was collected as white powder without recrystallization (0.20 g, 31 %).  $R_f$  0.21 (PE/EtOAc 6:4). Mp: 168.1-169.5°C.  $^1\text{H}$  NMR (400 MHz,  $\text{DMSO-}d_6$ ):  $\delta_{\text{H}}$  (ppm) 7.00 (dd,  $J = 7.84$  Hz, 1H, ArH), 7.29 - 7.42 (m, 2H, ArH), 7.46 - 7.57 (m, 3H, ArH), 7.60 (dd,  $J = 7.0$  Hz, 2H, ArH), 7.98 (d,  $J = 7.6$  Hz, 2H, ArH), 9.90 (m, 2H, NH), 10.60 (s, 1H,

NH).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta_{\text{C}}$  (ppm) 115.51 (Ar), 112.45 (Ar), 121.55 (Ar), 127.88 (Ar), 128.26 (Ar), 129.41 (Ar), 131.90 (Ar), 132.40 (Ar), 141.03 (Ar), 161.45 (d,  $J = 238$  Hz, Ar), 165.96 (C=O), 180.93 (C=S). HRMS (ESI $^+$ ):  $m/z$  calcd for  $\text{C}_{14}\text{H}_{13}\text{FN}_3\text{OS}$  (M+H) $^+$  290.07579, found 290.07513.

*1-Benzoyl-4-(4-fluorophenyl)-3-thiosemicarbazide (20)*. This compound was synthesized according to the general procedure described above using commercial benzohydrazide **4** (0.25 g, 1.837 mmol) and 3-fluorophenyl isothiocyanate (0.28 g, 1.837 mmol) in methanol (20 mL). After 24 h of reaction, the pure product was collected as white powder without recrystallization (0.078 g, 13 %).  $R_f$  0.21 (PE/EtOAc 4:6). Mp: 165.0-169.1 $^\circ\text{C}$ .  $^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta_{\text{H}}$  (ppm) 7.17 (dd,  $J = 8.8$  Hz, 2H, ArH), 7.39-7.48 (m, 2H, ArH), 7.51 (dd,  $J = 8$  Hz, 2H, ArH), 7.60 (dddd,  $J = 7.4$  Hz,  $J = 1.2$  Hz, 1H, ArH), 7.97 (d,  $J = 7.2$  Hz, 2H, ArH), 9.77 (s, 1H, NH), 9.83 (brs, 1H, NH), 10.56 (s, 1H, NH).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta_{\text{C}}$  (ppm) 113.12 (Ar), 113.33 (Ar), 126.50 (Ar), 126.83 (Ar), 130.47 (Ar), 131.04 (Ar), 134.16 (Ar), 158.06 (d,  $J = 240$  Hz, Ar), 164.56 (C=O), 180.00 (C=S). HRMS (ESI $^+$ ):  $m/z$  calcd for  $\text{C}_{14}\text{H}_{13}\text{FN}_3\text{OS}$  (M+H) $^+$  290.07579, found 290.07532.

*1-Benzoyl-4-(3,4-dichlorophenyl)-3-thiosemicarbazide (21)*.<sup>11</sup> This compound was synthesized according to the general procedure described above using commercial benzohydrazide **4** (0.48 g, 3.5 mmol) and 3,4-dichlorophenyl isothiocyanate (0.72 g, 3.5 mmol) in methanol (30 mL). After 4 h of reaction, the pure product was collected as white powder (0.88 g, 73 %).  $R_f$  0.62 (PE/EtOAc 5:5). Mp: 198.5-199.0 $^\circ\text{C}$ .  $^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta_{\text{H}}$  (ppm) 7.48-7.56 (m, 3H, ArH), 7.57-7.62 (m, 2H, ArH), 7.82 (s, 1H), 7.96 (d,  $J = 7.6$  Hz, 2H), 9.92 (brs, 1H, NH), 9.99 (brs, 1H, NH), 10.60 (s, 1H, NH).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta_{\text{C}}$  (ppm) 125.75 (Ar), 127.00 (Ar), 127.99 (Ar), 128.40 (Ar), 129.82 (Ar), 130.07 (Ar), 132.09 (Ar), 132.38 (Ar), 139.51 (Ar), 166.08 (C=O), 181.02 (C=S). HRMS (ESI $^+$ ):  $m/z$  calcd for  $\text{C}_{14}\text{H}_{12}\text{Cl}_2\text{N}_3\text{OS}$  (M+H) $^+$  340.00726, found 340.00731.

*4-(2-Chlorophenyl)-1-(2-hydroxybenzoyl)-3-thiosemicarbazide (22)*. This compound was synthesized according to the general procedure described above using synthesized 2-hydroxybenzohydrazide **5** (0.4 g, 2.38 mmol) and 2-chlorophenyl isothiocyanate (0.4 g, 2.38 mmol) in methanol (10 mL). After 21 h of reaction, the pure product was collected as white needles (0.27 g, 35 %).  $R_f$  0.38 (PE/EtOAc 5:5). Mp: 175.4-178.2°C.  $^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta_{\text{H}}$  (ppm) 6.91-7.02 (m, 2H, Ar), 7.28 (dd,  $J = 7.2$  Hz, 1H, ArH), 7.36 (dd,  $J = 7.4$  Hz, 1H, ArH), 7.40-7.58 (m, 3H, ArH), 7.92 (m, 1H, ArH), 9.60-9.85 (brs, 0.3H and 0.7H, NH), 9.96 (s, 0.65H, NH), 10.7-11.05 (brs, 0.7H and 0.3H, NH), 11.38 (s, 0.35H, NH), 11.90 (brs, 0.3H and 0.7H, OH).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta_{\text{C}}$  (ppm) 114.82 (Ar), 117.14 (Ar), 118.72 (Ar), 127.08 (Ar), 128.07 (Ar), 128.73 (Ar), 129.33 (Ar), 130.90 (Ar), 131.27 (Ar), 134.17 (Ar), 136.67 (Ar), 159.62 (Ar), 168.90 (C=O), 182.00 (C=S). HRMS (ESI $^+$ ):  $m/z$  calcd for  $\text{C}_{14}\text{H}_{13}\text{ClN}_3\text{O}_2\text{S}$  (M+H) $^+$  322.04282, found 322.04047.

*4-(3-Chlorophenyl)-1-(2-hydroxybenzoyl)-3-thiosemicarbazide (23)*. This compound was synthesized according to the general procedure described above using synthesized 2-hydroxybenzohydrazide **5** (0.4 g, 2.38 mmol) and 3-chlorophenyl isothiocyanate (0.403 g, 2.38 mmol) in methanol (10 mL). After 18 h of reaction, the pure product was collected as white needles (0.20 g, 26 %).  $R_f$  0.19 (PE/EtOAc 5:5). Mp: 175.8-180.5°C.  $^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta_{\text{H}}$  (ppm) 6.93-7.04 (m, 2H, ArH), 7.22 (d,  $J = 7.2$  Hz, 1H, ArH), 7.37 (dd,  $J = 7.8$  Hz, 1H, ArH), 7.48 (m, 2H, ArH), 7.72 (m, 1H, ArH), 7.91 (brs, 1H, ArH), 9.97 (m, 2H, NH), 10.74 (brs, 0.8H, NH), 11.26 (brs, 0.2H, NH), 11.90 (s, 1H, OH).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta_{\text{C}}$  (ppm) 115.02 (Ar), 117.16 (Ar), 118.94 (Ar), 124.05 (Ar), 124.68 (Ar), 125.04 (Ar), 128.88 (Ar), 129.69 (Ar), 132.13 (Ar), 134.09 (Ar), 140.63 (Ar), 159.45 (Ar), 168.89 (C=O), 180.87 (C=S). HRMS (ESI $^+$ ):  $m/z$  calcd for  $\text{C}_{14}\text{H}_{13}\text{ClN}_3\text{O}_2\text{S}$  (M+H) $^+$  322.04282, found 322.04111.



*4-(4-Chlorophenyl)-1-(2-hydroxybenzoyl)-3-thiosemicarbazide (24)*.<sup>12</sup> This compound was synthesized according to the general procedure described above using synthesized 2-hydroxybenzohydrazide **5** (0.39 g, 2.3 mmol) and 4-chlorophenyl isothiocyanate (0.38 g, 2.26 mmol) in methanol (10 mL). After 24 h of reaction, the pure product was collected as white powder (0.15 g, 20 %).  $R_f$  0.21 (PE/EtOAc 5:5). Mp: 195.0-205.0°C.  $^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta_{\text{H}}$  (ppm) 6.92-7.01 (m, 2H, ArH), 7.40 (d,  $J = 8.4$  Hz, 2H, ArH), 7.46 (ddd,  $J = 7.7$  Hz,  $J = 1.3$  Hz, 1H, ArH), 7.52 (m, 2H, ArH), 7.90 (d,  $J = 5.4$  Hz, 1H, ArH), 9.94 (m, 2H, NH), 10.74 (brs, 1H, NH), 11.90 (s, 1H, OH).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta_{\text{C}}$  (ppm) 115.00 (Ar), 117.17 (Ar), 118.89 (Ar), 127.47 (Ar), 128.00 (Ar), 128.80 (Ar), 134.11 (Ar), 138.09 (Ar), 159.62 (Ar), 168.99 (C=O), 180.98 (C=S). HRMS (ESI<sup>+</sup>):  $m/z$  calcd for  $\text{C}_{14}\text{H}_{13}\text{ClN}_3\text{O}_2\text{S}$  (M+H)<sup>+</sup> 322.04282, found 322.04105.

*4-(2-Fluorophenyl)-1-(2-hydroxybenzoyl)-3-thiosemicarbazide (25)*. This compound was synthesized according to the general procedure described above using synthesized 2-hydroxybenzohydrazide **5** (0.4 g, 2.38 mmol) and 2-fluorophenyl isothiocyanate (0.364 g, 2.38 mmol) in methanol (10 mL). After 5 h of reaction, the pure product was collected as white needles (0.12 g, 17 %).  $R_f$  0.4 (PE/EtOAc 5:5). Mp: 178.2-180.2°C.  $^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta_{\text{H}}$  (ppm) 6.91-7.11 (m, 2H, ArH), 7.19 (dd,  $J = 7.8$  Hz, 1H, ArH), 7.23-7.42 (m, 3H, Ar), 7.46 (dd,  $J = 7.7$  Hz, 1H, ArH), 7.92 (brs, 1H, ArH), 9.72 (s, 1H, NH), 9.98 (brs, 0.7H, NH), 10.6-10.9 (m, 1H, NH), 11.3 (brs, 0.3H, NH), 11.96 (brs, 1H, OH).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta_{\text{C}}$  (ppm) 114.66 (Ar), 115.57 (Ar), 115.76 (Ar), 117.16 (Ar), 118.71 (Ar), 123.94 (Ar), 127.00 (Ar), 128.13 (Ar), 128.68 (Ar), 130.45 (Ar), 134.19 (Ar), 159.71 (Ar), 168.98 (C=O), 182.26 (C=S). HRMS (ESI<sup>+</sup>):  $m/z$  calcd for  $\text{C}_{14}\text{H}_{13}\text{FN}_3\text{O}_2\text{S}$  (M+H)<sup>+</sup> 306.07070, found 306.07074.

*4-(3-Fluorophenyl)-1-(2-hydroxybenzoyl)-3-thiosemicarbazide (26)*. This compound was synthesized according to the general procedure described above using synthesized 2-

hydroxybenzohydrazide **5** (0.5 g, 2.97 mmol) and 3-fluorophenyl isothiocyanate (0.455 g, 2.97 mmol) in methanol (10 mL). After 5 h 30 of reaction, the pure product was collected as white powder without recrystallization (0.29 g, 32 %).  $R_f$  0.25 (PE/EtOAc 5:5). Mp: 174.9-179.1°C.  $^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta_{\text{H}}$  (ppm) 6.93-7.03 (m, 3H, ArH), 7.31 (dt,  $J = 7$  Hz,  $J = 1.5$  Hz, 1H, ArH), 7.37 (qd,  $J = 7.7$  Hz,  $J = 1.02$  Hz, 1H, ArH), 7.48 (ddd,  $J = 7.8$  Hz,  $J = 1.5$  Hz, 1H, ArH), 7.51 (brs, 1H, ArH), 7.89 (brs, 1H, ArH), 9.79-10.60 (brs, 1H, NH), 10.60-11.50 (brs, 1H, NH), 11.88 (s, 1H, OH).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta_{\text{C}}$  (ppm) 108.98 (Ar), 111.48 (Ar), 112.11 (Ar), 115.10 (Ar), 117.16 (Ar), 118.93 (Ar), 121.18 (Ar), 128.82 (Ar), 129.51 (Ar), 134.08 (Ar), 140.90 (d,  $J = 10,8$  Hz, Ar), 159.39 (Ar), 161.51 (d,  $J = 242$  Hz, Ar), 168.84 (C=O), 180.75 (C=S). HRMS (ESI $^+$ ):  $m/z$  calcd for  $\text{C}_{14}\text{H}_{13}\text{FN}_3\text{O}_2\text{S}$  (M+H) $^+$  306.07070, found 306.07071.

*4-(4-Fluorophenyl)-1-(2-hydroxybenzoyl)-3-thiosemicarbazide (27)*.<sup>13</sup> This compound was synthesized according to the general procedure described above using synthesized 2-hydroxybenzohydrazide **5** (0.4 g, 2.38 mmol) and 4-fluorophenyl isothiocyanate (0.364 g, 2.38 mmol) in methanol (10 mL). After 5 h 30 of reaction, the pure product was collected as white powder without recrystallization (0.46 g, 63 %).  $R_f$  0.25 (PE/EtOAc 5:5). Mp: 184.6-185.1°C.  $^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta_{\text{H}}$  (ppm) 6.92-7.01 (m, 2H, ArH), 7.18 (dd,  $J = 8.8$  Hz, 2H, ArH), 7.37-7.53 (m, 3H, ArH), 7.91 (d,  $J = 8.4$  Hz, 1H, ArH), 9.89 (m, 2H, NH), 10.6-11.1 (m, 1H, NH), 11.92 (s, 1H, OH).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta_{\text{C}}$  (ppm) 114.74 (d,  $J = 25$  Hz, Ar), 117.16 (Ar), 118.85 (Ar), 127.15 (Ar), 127.90 (Ar), 128.76 (Ar), 134.08 (Ar), 135.40 (Ar), 159.43 (d,  $J = 242$  Hz, Ar), 159.50 (Ar), 168.94 (C=O), 181.26 (C=S). HRMS (ESI $^+$ ):  $m/z$  calcd for  $\text{C}_{14}\text{H}_{13}\text{FN}_3\text{O}_2\text{S}$  (M+H) $^+$  306.07070, found 306.07074.

*4-(2,4-Dichlorophenyl)-1-(2-hydroxybenzoyl)-3-thiosemicarbazide (28)*.<sup>14</sup> This compound was synthesized according to the general procedure described above using synthesized 2-hydroxybenzohydrazide **5** (0.4 g, 2.38 mmol) and 2,4-dichlorophenyl isothiocyanate (0.51 g,

2.26 mmol) in methanol (10 mL). After 24 h of reaction, the pure product was collected as white powder (0.25 g, 29 %).  $R_f$  0.45 (PE/EtOAc 5:5). Mp: 188.0-191.0°C.  $^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta_{\text{H}}$  (ppm) 6.90-7.00 (m, 2H, ArH), 7.35-7.49 (m, 3H, ArH), 7.67 (s, 1H, ArH), 7.74-8.00 (m, 1H, ArH), 9.65 (s, 0.3H, NH), 9.76 (s, 0.7H, NH), 10.03 (s, 0.7H, NH), 10.78 (s, 0.7H, NH), 10.95 (s, 0.3H, NH), 11.34 (s, 0.3H, NH), 11.83 (s, 0.3H, OH), 11.91 (s, 0.7H, OH).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta_{\text{C}}$  (ppm) 114.64 (Ar), 117.20 (Ar), 118.72 (Ar), 127.27 (Ar), 128.78 (Ar), 129.56 (Ar), 131.54 (Ar), 132.20 (Ar), 132.47 (Ar), 134.23 (Ar), 135.99 (Ar), 159.61 (Ar), 168.88 (C=O), 182.04 (C=S). HRMS (ESI $^+$ ):  $m/z$  calcd for  $\text{C}_{14}\text{H}_{12}\text{Cl}_2\text{N}_3\text{O}_2\text{S}$  (M+H) $^+$  356.00218, found 356.00137.

*1-(2-Hydroxybenzoyl)-4-(2-methoxyphenyl)-3-thiosemicarbazide (30)*. This compound was synthesized according to the general procedure described above using synthesized 2-hydroxybenzohydrazide **5** (0.30 g, 1.93 mmol) and 2-methoxyphenyl isothiocyanate (0.32 g, 1.93 mmol) in methanol (20 mL). After 18 h of reaction, the pure product was collected as white powder without recrystallization (0.53 g, 86 %).  $R_f$  0.41 (PE/EtOAc 5:5). Mp: 162.9-164°C.  $^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta_{\text{H}}$  (ppm) 3.75 (s, 3H, OCH $_3$ ), 6.82-7.02 (m, 3H, ArH), 7.05 (d,  $J$  = 7.84 Hz, 1H, ArH), 7.16 (dd,  $J$  = 7.6 Hz, 1H, ArH), 7.44 (ddd,  $J$  = 7.74 Hz,  $J$  = 1.36 Hz, 1H, ArH), 7.60-8.20 (m, 2H, ArH), 9.21-9.53 (m, 1H, NH), 9.84 (brs, 0.5 H, NH), 10.53-10.99 (m, 1H, NH), 11.37 (brs, 0.5H, NH), 11.79 (s, 1H, OH).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta_{\text{C}}$  (ppm) 55.66 (OCH $_3$ ), 111.43 (Ar), 115.48 (Ar), 117.01 (Ar), 119.22 (Ar), 119.78 (Ar), 125.37 (Ar), 126.95 (Ar), 127.64 (Ar), 129.41 (Ar), 133.90 (Ar), 152.71 (Ar), 159.18 (Ar), 168.64 (C=O), 180.97 (C=S). HRMS (ESI $^+$ ):  $m/z$  calcd for  $\text{C}_{15}\text{H}_{16}\text{N}_3\text{O}_3\text{S}$  (M+H) $^+$  318.09069, found 318.09015.

*1-(2-Hydroxybenzoyl)-4-(4-methoxyphenyl)-3-thiosemicarbazide (31)*.<sup>15</sup> This compound was synthesized according to the general procedure described above using synthesized 2-hydroxybenzohydrazide **5** (0.30 g, 1.97 mmol) and 4-methoxyphenyl isothiocyanate (0.33 g, 1.97 mmol) in methanol (15 mL). After 24 h of reaction, the pure product was collected as white

powder without recrystallization (0.49 g, 78 %).  $R_f$  0.33 (PE/EtOAc 5:5). Mp: 199.9-200.8°C.  $^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta_{\text{H}}$  (ppm) 3.75 (s, 3H, OCH<sub>3</sub>), 6.86-7.02 (m, 4H, ArH), 7.31 (d,  $J = 7.04$  Hz, 2H, ArH), 7.45 (ddd,  $J = 7.72$  Hz,  $J = 1.52$  Hz, 1H, ArH), 7.90 (d,  $J = 7.36$  Hz, 1H, ArH), 9.63-9.97 (m, 2H, NH), 10.75 (brs, 1H, NH), 11.95 (s, 1H, OH).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta_{\text{C}}$  (ppm) 55.12 (OCH<sub>3</sub>), 113.21 (Ar), 115.04 (Ar), 117.22 (Ar), 118.92 (Ar), 127.34 (Ar), 128.83 (Ar), 131.80 (Ar), 134.08 (Ar), 156.67 (Ar), 159.39 (C=O), 180.99 (C=S). HRMS (ESI<sup>+</sup>):  $m/z$  calcd for C<sub>15</sub>H<sub>16</sub>N<sub>3</sub>O<sub>3</sub>S (M+H)<sup>+</sup> 318.09069, found 318.09019.

*4-(4-Cyanophenyl)-1-(2-hydroxybenzoyl)-3-thiosemicarbazide (32)*. This compound was synthesized according to the general procedure described above using synthesized 2-hydroxybenzohydrazide **5** (0.31 g, 2.01 mmol) and 4-cyanophenyl isothiocyanate (0.33 g, 2.01 mmol) in methanol (15 mL). After 24 h of reaction, the pure product was collected as white powder without recrystallization (0.60 g, 96 %).  $R_f$  0.28 (PE/EtOAc 5:5). Mp: 187.6-188.0°C.  $^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta_{\text{H}}$  (ppm) 6.85 (d,  $J = 8.8$  Hz, 2H, Ar), 7.75-7.90 (m, 6H, Ar), 9.99 (m, 2H, NH), 10.14 (s, 1H, NH), 10.36 (s, 1H, OH).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta_{\text{C}}$  (ppm) 114.76 (Ar), 118.77 (Ar), 119.02 (CN), 121.46 (Ar), 122.98 (Ar), 125.22 (Ar), 129.94 (Ar), 132.06 (Ar), 133.05 (Ar), 143.89 (Ar), 160.75 (C=O), 165.71 (Ar), 180.86 (C=S). HRMS (ESI<sup>+</sup>):  $m/z$  calcd for C<sub>15</sub>H<sub>13</sub>N<sub>4</sub>O<sub>2</sub>S (M+H)<sup>+</sup> 313.07537, found 313.07534.

*1-(2-Hydroxybenzoyl)-4-pentyl-3-thiosemicarbazide (33)*. This compound was synthesized according to the general procedure described above using synthesized 2-hydroxybenzohydrazide **5** (0.40 g, 2.38 mmol) and pentyl isothiocyanate (0.31 g, 2.38 mmol) in methanol (10 mL). The reaction was stopped after 24 h. The pure product was collected as white powder after evaporation of the solvent under reduced pressure and recrystallization from ethanol (0.19 g, 29 %).  $R_f$  0.85 (EtOAc). Mp: 183.4-188.8°C.  $^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta_{\text{H}}$  (ppm) 0.87 (t,  $J = 7$  Hz, 3H, CH<sub>3</sub>), 1.20-1.35 (m, 4H, CH<sub>2</sub>), 1.49 (qt,  $J = 7.6$  Hz, 2H, CH<sub>2</sub>), 3.42 (q,  $J = 6.6$  Hz, 2H, CH<sub>2</sub>), 6.90-6.98 (m, 2H, ArH), 7.45 (ddd,  $J = 7.6$  Hz,  $J = 1.6$  Hz, 1H,

ArH), 7.86 (d,  $J = 7.6$  Hz, 1H, Ar), 8.15 (s, 1H, NH), 9.39 (brs, 1H, NH), 10.54 (brs, 1H, NH), 11.94 (s, 1H, OH).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta_{\text{C}}$  (ppm) 13.9 (CH<sub>3</sub>), 21.9 (CH<sub>2</sub>), 28.3 (CH<sub>2</sub>), 28.4 (CH<sub>2</sub>), 43.7 (CH<sub>2</sub>-N), 99.5 (Ar), 114.8 (Ar), 117.2 (Ar), 118.8 (Ar), 128.5 (Ar), 134.0 (Ar), 159.63 (C=O), 181.2 (C=S). HRMS (ESI<sup>+</sup>):  $m/z$  calcd for C<sub>13</sub>H<sub>20</sub>N<sub>3</sub>O<sub>2</sub>S (M+H)<sup>+</sup> 282.12707, found 282.12732.

*1-(2-Hydroxybenzoyl)-4-(3-morpholinopropyl)-3-thiosemicarbazide (34)*. This compound was synthesized according to the general procedure described above using synthesized 2-hydroxybenzohydrazide **5** (0.5 g, 2.97 mmol), 3-(4-morpholinopropyl) isothiocyanate (0.55 g, 2.97 mmol) in methanol (10 mL). The reaction was stopped after 24 h. The pure product was collected as white solid after evaporation of the solvent under reduced pressure, precipitation of the compound in EtOAc and filtration (0.083 g, 8 %).  $R_f$  0.15 (EtOAc). Mp: 119.2-126.1 °C.  $^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta_{\text{H}}$  (ppm) 1.64 (qt,  $J = 6.6$  Hz, 2H, CH<sub>2</sub>), 2.00-2.18 (m, 6H, CH<sub>2</sub>), 3.40 (m, 4H, CH<sub>2</sub>), 3.86-3.94 (dd,  $J = 8.0$  Hz, 2H, CH<sub>2</sub>), 6.95 (dd,  $J = 7.4$  Hz, 1H, ArH), 7.02 (d,  $J = 8.0$  Hz, 1H, ArH), 7.33 (dd,  $J = 7.6$  Hz,  $J = 1.2$  Hz, 1H, ArH), 7.42 (ddd,  $J = 1.2$  Hz,  $J = 7.8$  Hz, 1H, ArH) 10.35 (s, 1H, OH).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta_{\text{C}}$  (ppm) 25.48 (CH<sub>2</sub>), 43.21 (CH<sub>2</sub>), 54.08 (CH<sub>2</sub>), 55.95 (CH<sub>2</sub>), 67.40 (CH<sub>2</sub>), 114.65 (Ar), 117.30 (Ar), 120.65 (Ar), 132.84 (Ar), 133.75 (Ar), 151.23 (Ar), 157.20 (C=O), 167.66 (C=S). HRMS (ESI<sup>+</sup>):  $m/z$  calcd for C<sub>15</sub>H<sub>23</sub>N<sub>4</sub>O<sub>3</sub>S (M+H)<sup>+</sup> 339.14854, found 339.14881.

*1-(2-Hydroxybenzoyl)-4-(1-naphtyl)-3-thiosemicarbazide (35)*.<sup>13</sup> This compound was synthesized according to the general procedure described above using synthesized 2-hydroxybenzohydrazide **5** (0.5 g, 2.97 mmol) and naphtyl isothiocyanate (0.55 g, 2.97 mmol) in methanol (10 mL) at reflux. After 1 h 30 of reaction, the pure product was collected as white crystals (0.30 g, 31 %).  $R_f$  0.26 (PE/EtOAc 4:6). Mp: 194.3-198.9 °C.  $^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta_{\text{H}}$  (ppm) 6.91-7.00 (m, 2H, ArH), 7.39 (brs, 1H, ArH), 7.46 (ddd,  $J = 1.06$  Hz,  $J = 7.8$  Hz, 1H, ArH), 7.54 (m, 3H, ArH), 7.87 (d,  $J = 8.4$  Hz, 1H, ArH), 7.91-8.03 (m, 3H, ArH),

9.92 (s, 1H, NH), 10.12 (s, 1H, NH), 10.92 (brs, 0.7H, NH), 11.22 (brs, 0.3H, NH), 12.00 (brs, 1H, OH).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta_{\text{C}}$  (ppm) 99.59 (Ar), 114.89 (Ar), 117.24 (Ar), 118.80 (Ar), 123.76 (Ar), 125.51 (Ar), 125.94 (Ar), 126.42 (Ar), 126.94 (Ar), 127.97 (Ar), 128.70 (Ar), 130.67 (Ar), 133.76 (Ar), 134.18 (Ar), 135.58 (Ar), 159.70 (Ar), 169.10 (C=O), 182.63 (C=S). HRMS (ESI $^{+}$ ):  $m/z$  calcd for  $\text{C}_{18}\text{H}_{16}\text{N}_3\text{O}_2\text{S}$  (M+H) $^{+}$  338.09577, found 338.09609.

*1-(2-Hydroxybenzoyl)-4-(3-iodophenyl)-3-thiosemicarbazide (36)*. This compound was synthesized according to the general procedure described above using synthesized 2-hydroxybenzohydrazide **5** (1 g, 6.58 mmol) and 3-iodophenyl isothiocyanate (1.72 g, 6.58 mmol) in methanol (15 mL). After 30 min of reaction, the pure product was collected by filtration as white powder without recrystallization (2.18 g, 83 %).  $R_f$  0.68 (PE/EtOAc 1:1). Mp: 184.8-188.8°C.  $^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta_{\text{H}}$  (ppm) 6.92 (d,  $J = 7.5$  Hz, 1H, ArH), 6.95 (d,  $J = 8.0$  Hz, 1H, ArH), 7.12 (dd,  $J = 8.0$  Hz, 1H, ArH), 7.44 (dd,  $J = 8.0$  Hz, 1H, ArH), 7.51 (m, 2H, ArH), 7.70-8.21 (m, 2H), 9.62-10.24 (m, 1.75H), 10.50 (s, 0.25H), 10.69 (s, 0.75H), 11.21 (s, 0.25H), 11.87 (s, 1H).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta_{\text{C}}$  (ppm) 93.28 (Ar-I), 114.95 (Ar), 117.19 (Ar), 118.89 (Ar), 122.14 (Ar), 125.04 (Ar), 128.79 (Ar), 129.96 (Ar), 133.67 (Ar), 134.14 (Ar), 140.54 (Ar), 159.60 (Ar-OH), 168.92 (C=O), 180.85 (C=S). HRMS (ESI $^{+}$ ):  $m/z$  calcd for  $\text{C}_{14}\text{H}_{13}\text{IN}_3\text{O}_2\text{S}$  (M+H) $^{+}$  413.97677, found 413.97610.

*1-(2-Hydroxybenzoyl)-4-(4-acetylphenyl)-3-thiosemicarbazide (37)*. This compound was synthesized according to the general procedure described above using synthesized 2-hydroxybenzohydrazide **5** (1 g, 6.58 mmol) and 4-acetylphenyl isothiocyanate (1.16 g, 6.58 mmol) in methanol (20 mL). After 1 h 30 of reaction, the pure product was collected by filtration as white powder after washing with EtOH (1.82 g, 84%).  $R_f$  0.22 (PE/EtOAc 1:2). Mp: 190.6-193.8°C.  $^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta_{\text{H}}$  (ppm) 2.55 (s, 3H, CH $_3$ ), 6.95 (d,  $J = 7.5$  Hz, 1H, ArH), 6.98 (d,  $J = 7.9$  Hz, 1H, ArH), 7.45 (ddd,  $J = 7.7, 1.2$  Hz, 1H, ArH), 7.62-7.83 (m, 2H, ArH), 7.84-7.91 (m, 1H, ArH), 7.94 (d,  $J = 8.6$  Hz, 2H, ArH), 9.72-10.50 (m, 2H, NH), 10.74

(s, 0.7H, NH), 11.09-11.54 (m, 0.3H, NH), 11.87 (s, 1H, OH).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta_{\text{C}}$  (ppm) 26.63 (CH<sub>3</sub>), 115.29 (Ar), 117.36 (2 Ar), 119.00 (Ar), 120.83 (Ar), 124.68 (Ar), 128.46 (Ar), 128.94 (Ar), 134.15 (Ar), 143.75 (2 Ar), 159.51 (Ar-OH), 168.95 (C=O), 180.90 (C=S), 196.93 (C=O). HRMS (ESI<sup>+</sup>):  $m/z$  calcd for C<sub>16</sub>H<sub>16</sub>N<sub>3</sub>O<sub>3</sub>S (M+H)<sup>+</sup> 330.09069, found 330.09028.

*1-(2-Hydroxybenzoyl)-4-(4-trifluoromethoxyphenyl)-3-thiosemicarbazide* (**38**). This compound was synthesized according to the general procedure described above using synthesized 2-hydroxy-benzohydrazide **5** (0.51 g, 3.37 mmol) and 4-trifluoromethoxy isothiocyanate (0.88 g, 4.04 mmol) in methanol (15 mL) at reflux. After 4 h 30 of reaction, pure product was collected by filtration as white solid without recrystallization after washing with cold methanol (0.77 g, 62%).  $R_f$  0.51 (PE/EtOAc 2:3). Mp: 187.7-188.9°C.  $^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta_{\text{H}}$  (ppm) 6.90-7.00 (m, 2H, ArH), 7.34 (d,  $J = 8.6$  Hz, 2H, ArH), 7.45 (ddd,  $J = 7.7, 0.9$  Hz, 1H, ArH), 7.51-7.73 (m, 2H, ArH), 7.90 (s, 1H, ArH), 9.68-10.26 (m, 1.7H, NH), 10.50 (brs, 0.3H, NH), 10.74 (brs, 0.7H, NH), 11.08 (brs, 0.3H, NH), 11.89 (s, 1H, OH).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta_{\text{C}}$  (ppm) 115.24 (Ar), 117.45 (Ar), 120.38 (q,  $J = 255.9$  Hz, CF<sub>3</sub>), 121.05 (Ar), 124.34 (Ar), 127.67 (Ar), 129.07 (Ar), 134.40 (Ar), 138.60 (Ar), 145.39 (Ar), 159.87 (Ar-OH), 169.17 (C=O), 181.42 (C=S). HRMS (ESI<sup>+</sup>):  $m/z$  calcd for C<sub>15</sub>H<sub>13</sub>F<sub>3</sub>N<sub>3</sub>O<sub>3</sub>S (M+H)<sup>+</sup> 372.06242, found 372.06203.

*1-(2-Hydroxy)-4-(4-(benzyloxy)phenyl)-3-thiosemicarbazide* (**39**). This compound was synthesized according to the general procedure described above using synthesized 2-hydroxy-benzohydrazide **5** (0.63 g, 4.15 mmol) and 4-(benzyloxy)phenyl isothiocyanate (1 g, 4.15 mmol) in methanol (15 mL) at reflux. After 1 h 30 of reaction, pure product was collected by filtration as white solid without recrystallization (1.51 g, 92%).  $R_f$  0.52 (PE/EtOAc 1:1). Mp: 207.7-209.1°C.  $^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta_{\text{H}}$  (ppm) 5.09 (s, 2H, CH<sub>2</sub>), 6.90-7.03 (m, 4H, ArH), 7.22-7.36 (m, 3H, ArH), 7.39 (dd,  $J = 7.3$  Hz, 2H, ArH), 7.42-7.48 (m, 3H, ArH), 7.89

(d,  $J = 7.2$  Hz, 1H, ArH), 9.56-10.34 (m, 2H, NH), 10.72 (brs, 0.7H, NH), 11.06 (br, 0.3H, NH), 11.94 (brs, 1H, OH).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta_{\text{C}}$  (ppm) 69.30 (CH<sub>2</sub>), 114.19 (Ar), 114.98 (Ar), 117.12 (Ar), 118.83 (Ar), 127.24 (Ar), 127.68 (Ar), 127.81 (Ar), 128.41 (Ar), 128.77 (Ar), 132.08 (Ar), 134.00 (Ar), 137.06 (Ar), 155.77 (Ar), 159.27 (Ar-OH), 168.88 (C=O), 180.93 (C=S). HRMS (ESI<sup>+</sup>):  $m/z$  calcd for C<sub>21</sub>H<sub>20</sub>N<sub>3</sub>O<sub>3</sub>S (M+H)<sup>+</sup> 394.12199, found 394.12132.

*1-(2-Hydroxybenzoyl)-4-(pyridin-3-yl)-3-thiosemicarbazide (40)*. This compound was synthesized according to the general procedure described above using synthesized 2-hydroxybenzohydrazide **5** (0.51 g, 3.35 mmol) and pyridin-3-yl isothiocyanate (0.55 g, 4.02 mmol) in methanol (15 mL) at reflux. After 2 h 45 of reaction, pure product was collected by filtration as white solid without recrystallization after washing with cold methanol (0.88 g, 92%).  $R_f$  0.34 (PE/EtOAc 2:3). Mp: 205.7-208.8°C.  $^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta_{\text{H}}$  (ppm) 6.87-7.09 (m, 2H, ArH), 7.40 (dd,  $J = 7.9, 4.8$  Hz, 1H, ArH), 7.47 (dd,  $J = 7.7$  Hz, 1H, ArH), 7.79-8.17 (m, 2H, ArH), 8.37 (d,  $J = 4.6$  Hz, 1H, ArH), 8.62 (s, 1H, ArH), 9.83 -10.42 (m, 2H, NH), 10.42 -12.80 (m, 2H, NH and OH).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta_{\text{C}}$  (ppm) 114.92 (ArH), 117.20 (ArH), 118.93 (ArH), 123.01 (ArH), 128.81 (ArH), 133.43 (ArH), 134.20 (ArH), 135.94 (ArH), 145.87 (ArH), 146.88 (ArH), 159.40 (Ar-OH), 168.79 (C=O), 181.48 (C=S). HRMS (ESI<sup>+</sup>):  $m/z$  calcd for C<sub>13</sub>H<sub>13</sub>N<sub>4</sub>O<sub>2</sub>S (M+H)<sup>+</sup> 289.07537, found 289.07532.

*1-(2-Hydroxy-4-iodobenzoyl)-4-(3,4-dichlorophenyl)-3-thiosemicarbazide (41)*. This compound was synthesized according to the general procedure described above using synthesized 2-hydroxy-4-iodobenzohydrazide **11** (0.4 g, 1.45 mmol) and 3,4-dichlorophenyl isothiocyanate (0.35 g, 1.75 mmol) in methanol (20 mL). After 5 h of reaction, pure product was collected by filtration as white solid without recrystallization (0.29 g, 43%).  $R_f$  0.39 (PE/EtOAc 1:1). Mp: 228.1-230.0°C.  $^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta_{\text{H}}$  (ppm) 7.35 (dd,  $J = 8.3, 1.4$  Hz, 1H, ArH), 7.39 (s, 1H, ArH), 7.53 (dd,  $J = 8.7, 1.7$  Hz, 1H, ArH), 7.60 (d,  $J = 8.7$



Hz, 1H, ArH), 7.62-7.73 (m, 1H, ArH), 7.75-8.10 (m, 1H, ArH), 9.77-10.32 (m, 1.7H, NH), 10.98 – 10.49 (m, 1H, NH), 11.23 (brs, 0.3H, NH), 12.00 (brs, 1H, OH). <sup>13</sup>C NMR (100 MHz, DMSO-*d*<sub>6</sub>): δ<sub>c</sub> (ppm) 101.12 (Ar-I), 115.29 (Ar), 125.70 (Ar), 126.82 (Ar), 128.00 (Ar), 129.87 (Ar), 129.98 (Ar), 130.14 (Ar), 130.52 (Ar), 130.63 (Ar), 139.31 (Ar), 159.31 (Ar), 167.95 (C=O), 180.76 (C=S). HRMS (ESI<sup>+</sup>): *m/z* calcd for C<sub>14</sub>H<sub>11</sub>Cl<sub>2</sub>IN<sub>3</sub>O<sub>2</sub>S (M+H)<sup>+</sup> 481.89882, found 481.89792.

*1-(2-Hydroxy-4-aminobenzoyl)-4-(3,4-dichlorophenyl)-3-thiosemicarbazide (42)*. This compound was synthesized according to the general procedure described above using synthesized 2-hydroxy-4-aminobenzohydrazide **12** (0.92 g, 5.51 mmol) and 3,4-dichlorophenyl isothiocyanate (1.35 g, 6.61 mmol) in methanol (15 mL). After 1 h 30 of reaction, pure product was collected by filtration as white solid from recrystallization in EtOH (0.31 g, 15%). R<sub>f</sub> 0.28 (PE/EtOAc 1:1). Mp: 235.2-237.9°C. <sup>1</sup>H NMR (400 MHz, DMSO-*d*<sub>6</sub>): δ<sub>H</sub> (ppm) 7.32 (d, *J* = 8.4 Hz, 1H, ArH), 7.36 (s, 1H, ArH), 7.51 (d, *J* = 8.9 Hz, 1H, ArH), 7.56 (d, *J* = 8.6 Hz, 1H, ArH), 7.64 (d, *J* = 6.3 Hz, 1H, ArH), 8.12 – 7.71 (m, 1H, ArH), 9.62-10.22 (m, 1.6H, NH), 10.70 (brs, 1H, NH), 11.27 (brs, 0.4H, NH), 12.01 (brs, 1H, OH). <sup>13</sup>C NMR (100 MHz, DMSO-*d*<sub>6</sub>): δ<sub>c</sub> (ppm) 101.34 (Ar), 115.68 (Ar), 125.89 (Ar), 126.10 (Ar), 127.15 (Ar), 128.45 (Ar), 130.28 (Ar), 130.59 (Ar), 130.98 (Ar), 139.61 (Ar), 139.74 (Ar), 159.62 (Ar), 168.31 (C=O), 181.14 (C=S).

*4-(3,4-Dichlorophenyl)-1-(3-hydroxybenzoyl)-3-thiosemicarbazide (43)*.<sup>14</sup> This compound was synthesized according to the general procedure described above using synthesized 3-hydroxybenzohydrazide **6** (0.5 g, 3.29 mmol) and 3,4-dichlorophenyl isothiocyanate (0.67 g, 3.29 mmol) in methanol (13 mL). After 24 h of reaction, the pure product was collected as white powder (0.55 g, 47 %). R<sub>f</sub> 0.48 (PE/EtOAc 4:6). Mp: 197.8-199.8°C. <sup>1</sup>H NMR (400 MHz, DMSO- *d*<sub>6</sub>): δ<sub>H</sub> (ppm) 6.96 (dd, *J* = 8.0 Hz, *J* = 1.7 Hz, 1H, ArH), 7.28 (dd, *J* = 7.8 Hz, 1H, ArH), 7.40-7.31 (m, 2H, ArH), 7.52 (dd, *J* = 8.8 Hz, *J* = 2.28 Hz, 1H, ArH), 7.57 (d, *J* = 8.72

Hz, 1H, ArH), 7.80 (brs, 1H, ArH), 9.72 (s, 1H, NH), 9.87 (brs, 1H, NH), 9.94 (s, 1H, NH), 10.47 (s, 1H, OH). <sup>13</sup>C NMR (100 MHz, DMSO-*d*<sub>6</sub>): δ<sub>C</sub> (ppm) 99.49 (Ar), 114.87 (Ar), 118.37 (Ar), 118.83 (Ar), 125.58 (Ar), 126.79 (Ar), 129.28 (Ar), 129.69 (Ar), 129.97 (Ar), 133.73 (Ar), 139.48 (Ar), 157.27 (Ar), 166.02 (C=O), 180.84 (C=S). HRMS (ESI<sup>+</sup>): *m/z* calcd for C<sub>14</sub>H<sub>12</sub>Cl<sub>2</sub>N<sub>3</sub>O<sub>2</sub>S (M+H)<sup>+</sup> 356.00218, found 356.00118.

*4-(3,4-Dichlorophenyl)-1-(4-hydroxybenzoyl)-3-thiosemicarbazide (44)*.<sup>14</sup> This compound was synthesized according to the general procedure described above using synthesized 4-hydroxybenzohydrazide **7** (0.5 g, 3.29 mmol) and 3,4-dichlorophenyl isothiocyanate (0.67 g, 3.29 mmol) in methanol (20 mL) at reflux. The reaction was stopped after 24 h. The pure product was collected as pale yellow powder after evaporation of the solvent under reduced pressure and trituration with cold ethanol (0.33 g, 28 %). R<sub>f</sub> 0.75 (EtOAc). Mp: 188.1-190.4°C. <sup>1</sup>H NMR (400 MHz, DMSO-*d*<sub>6</sub>): δ<sub>H</sub> (ppm) 6.86 (d, *J* = 8.72 Hz, 2H, ArH), 7.49-7.63 (m, 2H, ArH), 7.76-7.92 (m, 3H, ArH), 9.69-10.03 (m, 2H, NH), 10.19 (s, 1H, NH), 10.36 (s, 1H, OH). <sup>13</sup>C NMR (100 MHz, DMSO-*d*<sub>6</sub>): δ<sub>C</sub> (ppm) 114.72 (Ar), 114.86 (Ar), 122.92 (Ar), 125.57 (Ar), 126.76 (Ar), 128.96 (Ar), 129.65 (Ar), 129.96 (Ar), 139.51 (Ar), 160.89 (Ar), 165.77 (C=O), 180.91 (C=S). HRMS (ESI<sup>+</sup>): *m/z* calcd for C<sub>14</sub>H<sub>12</sub>Cl<sub>2</sub>N<sub>3</sub>O<sub>2</sub>S (M+H)<sup>+</sup> 356.00218, found 356.00156.

*1-(4-Hydroxybenzoyl)-4-(4-nitrophenyl)-3-thiosemicarbazide (45)*.<sup>16</sup> This compound was synthesized according to the general procedure described above using synthesized 4-hydroxybenzohydrazide **7** (0.25 g, 1.67 mmol) and 4-nitrophenyl isothiocyanate (0.29 g, 1.67 mmol) in methanol (15 mL). After 24 h of reaction, the pure product was collected as yellow powder without recrystallization (0.38 g, 68 %). R<sub>f</sub> 0.43 (PE/EtOAc 4:6). Mp: 207.0-209.5°C. <sup>1</sup>H NMR (400 MHz, DMSO-*d*<sub>6</sub>): δ<sub>H</sub> (ppm) 6.85 (ddd, *J* = 8.7 Hz, *J* = 2.7 Hz 2H, ArH), 7.83 (d, *J* = 8.6 Hz, 2H, ArH), 7.92 (d, *J* = 8.6 Hz, 2H, ArH), 8.21 (d, *J* = 9.1 Hz, 2H, ArH), 10.01-10.12 (m, 2H, NH), 10.14 (s, 1H, NH), 10.38 (brs, 1H, OH). <sup>13</sup>C NMR (100 MHz, DMSO-*d*<sub>6</sub>): δ<sub>C</sub>

(ppm) 114.93 (Ar), 122.90 (Ar), 123.59 (Ar), 124.77 (Ar), 130.06 (Ar), 143.26 (Ar), 145.81 (Ar), 160.91 (Ar), 165.72 (C=O), 180.77 (C=S). HRMS (ESI<sup>+</sup>): *m/z* calcd for C<sub>14</sub>H<sub>13</sub>N<sub>4</sub>O<sub>4</sub>S (M+H)<sup>+</sup> 333.06520, found 333.06515.

*4-(3,4-Dichlorophenyl)-1-(2-fluorobenzoyl)-3-thiosemicarbazide (46)*. This compound was synthesized using commercial 2-fluorobenzohydrazide **8** (0.26 g, 1.69 mmol) and 3,4-dichlorophenyl isothiocyanate (0.34 g, 1.69 mmol) in methanol (10 mL). The reaction was stopped after 24 h. The pure product was collected as pale yellow powder after evaporation of the solvent under reduced pressure and trituration with cold ethanol (0.16 g, 25 %). *R<sub>f</sub>* 0.56 (PE/EtOAc 4:6). Mp: 180.8-182.1°C. <sup>1</sup>H NMR (400 MHz, DMSO-*d*<sub>6</sub>): δ<sub>H</sub> (ppm) 7.31-7.38 (m, 2H, ArH), 7.53 (dd, *J* = 8.8 Hz, *J* = 2.28 Hz, 1H, ArH), 7.58-7.65 (m, 2H, ArH), 7.76-7.96 (m, 2H, ArH), 9.86 (brs, 1H, NH), 10.09 (s, 1H, NH), 10.35 (brs, 1H, NH). <sup>13</sup>C NMR (100 MHz, DMSO-*d*<sub>6</sub>): δ<sub>C</sub> (ppm) 116.29 (d, *J* = 22 Hz, Ar), 124.37 (Ar), 124.48 (Ar), 125.60 (Ar), 126.86 (Ar), 130.10 (Ar), 130.83 (Ar), 133.46 (Ar), 133.61 (Ar), 139.37 (Ar), 158.50 (d, *J* = 32 Hz, Ar), 162.19 (d, *J* = 259 Hz, Ar), 165.00 (C=O), 180.91 (C=S). HRMS (ESI<sup>+</sup>): *m/z* calcd for C<sub>14</sub>H<sub>11</sub>Cl<sub>2</sub>FN<sub>3</sub>OS (M+H)<sup>+</sup> 357.99784, found 357.99661.

*4-(3,4-Dichlorophenyl)-1-(3-fluorobenzoyl)-3-thiosemicarbazide (47)*. This compound was synthesized according to the general procedure described above using synthesized 3-fluorobenzohydrazide **9** (0.3 g, 1.93 mmol) and 3,4-dichlorophenyl isothiocyanate (0.395 g, 1.93 mmol) in methanol (15 mL) at reflux. After 24 h of reaction, pure product was collected as white solid without recrystallization (0.25 g, 48 %). *R<sub>f</sub>* 0.13 (PE/EtOAc 4:6). Mp: 181.9-188.9°C. <sup>1</sup>H NMR (400 MHz, DMSO-*d*<sub>6</sub>): δ<sub>H</sub> (ppm) 7.47 (ddd, *J* = 8.5 Hz, *J* = 2.2 Hz, 1H, ArH), 7.54 (dd, *J* = 8.6 Hz, *J* = 2.2 Hz, 1H, ArH), 7.56-7.63 (m, 2H, ArH), 7.77 (d, *J* = 9.9 Hz, 1H, ArH), 7.81 (d, *J* = 7.8 Hz, 1H, ArH), 9.93 (brs, 1H, NH), 10.03 (s, 1H, NH), 10.71 (s, 1H, NH). <sup>13</sup>C NMR (100 MHz, DMSO-*d*<sub>6</sub>): δ<sub>C</sub> (ppm) 114.30 (d, *J* = 22 Hz, Ar), 118.87 (d, *J* = 21 Hz, Ar), 124.07 (Ar), 129.05 (Ar), 125.68 (Ar), 126.95 (Ar), 129.76 (Ar), 130.04 (Ar), 130.51

(Ar), 130.58 (Ar), 134.63 (Ar), 139.33 (Ar), 161.81 (d,  $J = 243$  Hz, Ar), 164.76 (C=O), 180.88 (C=S). HRMS (ESI<sup>+</sup>):  $m/z$  calcd for C<sub>14</sub>H<sub>11</sub>Cl<sub>2</sub>FN<sub>3</sub>OS (M+H)<sup>+</sup> 357.99784, found 357.99683.

*4-(3,4-Dichlorophenyl)-1-(4-fluorobenzoyl)-3-thiosemicarbazide (48)*.<sup>17</sup> This compound was synthesized according to the general procedure described above using synthesized 4-fluorobenzohydrazide **10** (0.3 g, 1.93 mmol) and 3,4-dichlorophenyl isothiocyanate (0.39 g, 1.93 mmol) in methanol (15 mL) at reflux. After 24 h of reaction, pure product was collected as white solid without recrystallization (0.21 g, 30 %).  $R_f$  0.23 (PE/EtOAc 4:6). Mp: 199.0-199.6°C. <sup>1</sup>H NMR (400 MHz, DMSO-*d*<sub>6</sub>):  $\delta_H$  (ppm) 7.37 (ddd,  $J = 8.8$  Hz,  $J = 2.8$  Hz, 2H, ArH), 7.54 (dd,  $J = 8.6$  Hz,  $J = 2.2$  Hz, 1H, ArH), 7.60 (d,  $J = 8.7$  Hz, 1H, ArH), 7.83 (brs, 1H, ArH), 8.03 (dd,  $J = 8.7$  Hz,  $J = 5.6$  Hz, ArH), 9.93 (brs, 1H, NH), 10.00 (s, 1H, NH), 10.64 (s, 1H, NH). <sup>13</sup>C NMR (100 MHz, DMSO-*d*<sub>6</sub>):  $\delta_C$  (ppm) 115.19 (Ar), 115.41 (Ar), 125.65 (Ar), 126.88 (Ar), 128.82 (Ar), 129.74 (Ar), 130.00 (Ar), 130.69 (Ar), 164.29 (d,  $J = 248.2$  Hz, Ar), 165.01 (C=O), 180.88 (C=S). HRMS (ESI<sup>+</sup>):  $m/z$  calcd for C<sub>14</sub>H<sub>11</sub>Cl<sub>2</sub>FN<sub>3</sub>OS (M+H)<sup>+</sup> 357.99784, found 357.99677.

*4-(3,4-Dichlorophenyl)-1-(2-methoxybenzoyl)-3-thiosemicarbazide (49)*. This compound was synthesized according to the general procedure described above using synthesized 2-methoxybenzohydrazide **13** (3.06 g, 18.4 mmol) and 3,4-dichlorophenyl isothiocyanate (3.76 g, 18.4 mmol) in ethanol (10 mL) at reflux. After 1 h of reaction, pure product was collected by filtration as a white solid after washing with hot ethanol (4.75 g, 70 %).  $R_f$  0.27 (PE/EtOAc 1:3). Mp: 197.2-198.3°C. <sup>1</sup>H NMR (400 MHz, DMSO-*d*<sub>6</sub>):  $\delta_H$  (ppm) 3.93 (s, 3H, OCH<sub>3</sub>), 7.09 (dd,  $J = 7.4$  Hz, 1H, ArH), 7.2 (d,  $J = 8.2$  Hz, 1H, ArH), 7.47-7.64 (m, 3H, ArH), 7.79-8.12 (m, 2H, ArH), 9.71 (brs, 0.7H, NH), 9.78-10.59 (m, 2H, NH), 11.00 (brs, 0.3H, NH). <sup>13</sup>C NMR (100 MHz, DMSO-*d*<sub>6</sub>):  $\delta_C$  (ppm) 56.54 (OCH<sub>3</sub>), 112.65 (Ar), 121.12 (Ar), 121.17 (Ar), 125.85 (Ar), 127.08 (Ar), 130.54 (Ar), 131.48 (Ar), 133.76 (Ar), 139.85 (Ar), 157.77 (Ar-OCH<sub>3</sub>),

165.95 (C=O), 181.40 (C=S). HRMS (ESI<sup>+</sup>):  $m/z$  calcd for C<sub>15</sub>H<sub>14</sub>Cl<sub>2</sub>N<sub>3</sub>O<sub>2</sub>S (M+H)<sup>+</sup> 370.01783, found 370.01758.

*1-(3-Hydroxy-2-naphthoyl)-4-(3,4-dichlorophenyl)-3-thiosemicarbazide (51)*. This compound was synthesized according to the general procedure described above using synthesized 3-hydroxy-2-naphthohydrazide **50** (0.51 g, 1.74 mmol) and 3,4-dichlorophenyl isothiocyanate (0.43 g, 2.08 mmol) in methanol (15 mL) at reflux. After 20 h of reaction, pure product was collected by filtration as yellowish solid after washing with cold methanol (0.58 g, 82%).  $R_f$  0.21 (PE/EtOAc 2:3). Mp: 214.6-218.7°C. <sup>1</sup>H NMR (400 MHz, DMSO-*d*<sub>6</sub>):  $\delta_H$  (ppm) 7.33 (s, 1H, ArH), 7.37 (dd,  $J = 7.5$  Hz, 1H, ArH), 7.49-7.57 (m, 2H, ArH), 7.60 (d,  $J = 8.7$  Hz, 1H, ArH), 7.77 (d,  $J = 8.3$  Hz, 1H, ArH), 7.81-8.15 (m, 2H, ArH), 8.54 (brs, 1H, ArH), 9.96 (brs, 0.7H, NH), 10.17 (brs, 1H, NH), 10.81 (brs, 1H, NH), 11.19-11.96 (m, 1.7H, OH and NH). <sup>13</sup>C NMR (100 MHz, DMSO-*d*<sub>6</sub>):  $\delta_C$  (ppm) 110.71 (Ar), 118.75 (Ar), 124.03 (Ar), 125.59 (Ar), 125.94 (Ar), 126.83 (Ar), 128.58 (Ar), 128.91 (Ar), 130.30 (Ar), 130.92 (Ar), 136.13 (Ar), 139.40 (Ar), 154.37 (Ar-OH), 167.81 (C=O), 180.84 (C=S). HRMS (ESI<sup>+</sup>):  $m/z$  calcd for C<sub>18</sub>H<sub>14</sub>Cl<sub>2</sub>N<sub>3</sub>O<sub>2</sub>S (M+H)<sup>+</sup> 406.01783, found 406.01713.

*1-(4-Oxoquinazolin-3(4H)-yl)-3-phenylthiourea (52)*.<sup>18</sup> This compound was synthesized according to the general procedure described above using phenyl isothiocyanate (0.42 g, 3.1 mmol) and 3-aminoquinazoline-4(3H)one (0.5 g, 3.1 mmol) in ethanol (40 mL) at reflux. After 4 h of reaction, pure product was collected as white crystals after evaporation of the solvent under reduced pressure, recrystallization from ethanol and then a column chromatography (EtOAc/EP 8:2) (0.088 g, 10 %).  $R_f$  0.19 (PE/EtOAc 5:5). Mp: 165.2-167.1°C. <sup>1</sup>H NMR (400 MHz, DMSO-*d*<sub>6</sub>):  $\delta_H$  (ppm) 7.22 (dd,  $J = 7.4$  Hz, 1H, ArH), 7.39 (dd,  $J = 7.6$  Hz, 2H, ArH), 7.43-7.57 (m, 2H, ArH), 7.61 (ddd,  $J = 7.2$  Hz,  $J = 1.0$  Hz, 1H, ArH), 7.75 (d,  $J = 8.0$  Hz, 1H, ArH), 7.90 (ddd,  $J = 7.5$  Hz,  $J = 1.5$  Hz, 1H, ArH), 8.21 (dd,  $J = 8.0$  Hz,  $J = 1.2$  Hz, 1H, ArH), 8.32 (brs, 1H, CH), 10.00-11.00 (m, 2H, NH). <sup>13</sup>C NMR (100 MHz, DMSO-*d*<sub>6</sub>):  $\delta_C$  (ppm)

122.58 (Ar), 124.82 (Ar), 125.57 (Ar), 126.42 (Ar), 127.33 (Ar), 127.48 (Ar), 128.62 (Ar), 134.80 (Ar), 138.48 (Ar), 147.33 (CH), 149.48 (Ar), 158.89 (C=O), 182.47 (C=S). HRMS (ESI<sup>+</sup>): *m/z* calcd for C<sub>15</sub>H<sub>13</sub>N<sub>4</sub>OS (M+H)<sup>+</sup> 297.08046, found 297.08016.

### PDB Coordinates for Computational Models.

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MOE	17							
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MOE	8							
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MOE								
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MOE								
SHEET	3		TRP A	49	GLN A	52		Generated by
MOE								
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MOE								
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SHEET	12		GLY A	237	VAL A	239		Generated by
MOE								
SHEET	13		LEU A	259	GLN A	260		Generated by
MOE								
SHEET	14		GLY A	288	VAL A	296		Generated by
MOE								

SHEET	15		ILE A 302	ASN A 308					Generated by
MOE									
SHEET	16		GLU B 4	GLY B 11					Generated by
MOE									
SHEET	17		TYR B 36	ILE B 43					Generated by
MOE									
SHEET	18		TRP B 49	GLN B 52					Generated by
MOE									
SHEET	19		ALA B 90	PRO B 93					Generated by
MOE									
SHEET	20		TYR B 147	LEU B 151					Generated by
MOE									
SHEET	21		VAL B 174	PRO B 178					Generated by
MOE									
SHEET	22		SER B 188	CYS B 190					Generated by
MOE									
SHEET	23		LYS B 209	GLN B 214					Generated by
MOE									
SHEET	24		ARG B 219	GLY B 227					Generated by
MOE									
SHEET	25		GLU B 232	ALA B 233					Generated by
MOE									
SHEET	26		GLY B 237	VAL B 239					Generated by
MOE									
SHEET	27		LEU B 259	GLN B 260					Generated by
MOE									
SHEET	28		GLY B 288	VAL B 296					Generated by
MOE									
SHEET	29		ILE B 302	ASN B 308					Generated by
MOE									
ATOM	1	N	LYS A 3		23.554	16.188	-14.718	1.00	0.00
N									
ATOM	2	CA	LYS A 3		23.236	14.897	-14.027	1.00	0.00
C									
ATOM	3	C	LYS A 3		23.587	14.867	-12.526	1.00	0.00
C									
ATOM	4	O	LYS A 3		24.606	15.403	-12.083	1.00	0.00
O									
ATOM	5	CB	LYS A 3		23.948	13.739	-14.715	1.00	0.00
C									
ATOM	6	CG	LYS A 3		23.572	13.606	-16.165	1.00	0.00
C									
ATOM	7	CD	LYS A 3		24.209	12.367	-16.743	1.00	0.00
C									
ATOM	8	CE	LYS A 3		24.016	12.284	-18.252	1.00	0.00
C									
ATOM	9	NZ	LYS A 3		25.079	11.433	-18.874	1.00	0.00
N1+									
ATOM	10	H1	LYS A 3		24.549	16.375	-14.645	1.00	0.00
H									
ATOM	11	H2	LYS A 3		23.293	16.122	-15.697	1.00	0.00
H									
ATOM	12	HA	LYS A 3		22.164	14.728	-14.119	1.00	0.00
H									
ATOM	13	HB2	LYS A 3		23.687	12.815	-14.201	1.00	0.00
H									



ATOM	14	HB3	LYS	A	3	25.023	13.901	-14.647	1.00	0.00
H										
ATOM	15	HG2	LYS	A	3	23.921	14.481	-16.711	1.00	0.00
H										
ATOM	16	HG3	LYS	A	3	22.489	13.531	-16.253	1.00	0.00
H										
ATOM	17	HD2	LYS	A	3	23.758	11.490	-16.281	1.00	0.00
H										
ATOM	18	HD3	LYS	A	3	25.276	12.384	-16.524	1.00	0.00
H										
ATOM	19	HE2	LYS	A	3	24.067	13.287	-18.675	1.00	0.00
H										
ATOM	20	HE3	LYS	A	3	23.041	11.850	-18.465	1.00	0.00
H										
ATOM	21	HZ1	LYS	A	3	25.034	10.497	-18.485	1.00	0.00
H										
ATOM	22	HZ2	LYS	A	3	24.934	11.390	-19.878	1.00	0.00
H										
ATOM	23	HZ3	LYS	A	3	25.991	11.836	-18.681	1.00	0.00
H										
ATOM	24	N	GLU	A	4	22.714	14.243	-11.753	1.00	0.00
N										
ATOM	25	CA	GLU	A	4	23.052	13.859	-10.377	1.00	0.00
C										
ATOM	26	C	GLU	A	4	23.714	12.522	-10.413	1.00	0.00
C										
ATOM	27	O	GLU	A	4	23.661	11.850	-11.428	1.00	0.00
O										
ATOM	28	CB	GLU	A	4	21.800	13.845	-9.515	1.00	0.00
C										
ATOM	29	CG	GLU	A	4	21.229	15.241	-9.317	1.00	0.00
C										
ATOM	30	CD	GLU	A	4	20.044	15.263	-8.344	1.00	0.00
C										
ATOM	31	OE1	GLU	A	4	19.594	14.212	-7.909	1.00	0.00
O										
ATOM	32	OE2	GLU	A	4	19.551	16.353	-8.013	1.00	0.00
O1-										
ATOM	33	H	GLU	A	4	21.793	14.026	-12.118	1.00	0.00
H										
ATOM	34	HA	GLU	A	4	23.752	14.588	-9.970	1.00	0.00
H										
ATOM	35	HB2	GLU	A	4	22.048	13.426	-8.541	1.00	0.00
H										
ATOM	36	HB3	GLU	A	4	21.048	13.223	-9.998	1.00	0.00
H										
ATOM	37	HG2	GLU	A	4	20.895	15.621	-10.281	1.00	0.00
H										
ATOM	38	HG3	GLU	A	4	22.014	15.886	-8.925	1.00	0.00
H										
ATOM	39	N	ASN	A	5	24.350	12.148	-9.303	1.00	0.00
N										
ATOM	40	CA	ASN	A	5	25.240	11.008	-9.256	1.00	0.00
C										
ATOM	41	C	ASN	A	5	24.776	9.983	-8.239	1.00	0.00
C										

ATOM	42	O	ASN	A	5	24.556	10.330	-7.092	1.00	0.00
O										
ATOM	43	CB	ASN	A	5	26.642	11.483	-8.908	1.00	0.00
C										
ATOM	44	CG	ASN	A	5	27.255	12.349	-10.016	1.00	0.00
C										
ATOM	45	OD1	ASN	A	5	27.962	11.852	-10.881	1.00	0.00
O										
ATOM	46	ND2	ASN	A	5	26.974	13.635	-9.986	1.00	0.00
N										
ATOM	47	H	ASN	A	5	24.204	12.686	-8.455	1.00	0.00
H										
ATOM	48	HA	ASN	A	5	25.263	10.541	-10.239	1.00	0.00
H										
ATOM	49	HB2	ASN	A	5	27.278	10.613	-8.751	1.00	0.00
H										
ATOM	50	HB3	ASN	A	5	26.596	12.069	-7.991	1.00	0.00
H										
ATOM	51	HD21	ASN	A	5	27.354	14.254	-10.695	1.00	0.00
H										
ATOM	52	HD22	ASN	A	5	26.378	14.008	-9.254	1.00	0.00
H										
ATOM	53	N	ILE	A	6	24.577	8.740	-8.683	1.00	0.00
N										
ATOM	54	CA	ILE	A	6	23.968	7.679	-7.856	1.00	0.00
C										
ATOM	55	C	ILE	A	6	24.920	6.517	-7.846	1.00	0.00
C										
ATOM	56	O	ILE	A	6	25.654	6.284	-8.831	1.00	0.00
O										
ATOM	57	CB	ILE	A	6	22.579	7.227	-8.403	1.00	0.00
C										
ATOM	58	CG1	ILE	A	6	21.712	8.431	-8.693	1.00	0.00
C										
ATOM	59	CG2	ILE	A	6	21.802	6.230	-7.439	1.00	0.00
C										
ATOM	60	CD1	ILE	A	6	21.176	9.111	-7.430	1.00	0.00
C										
ATOM	61	H	ILE	A	6	24.857	8.514	-9.632	1.00	0.00
H										
ATOM	62	HA	ILE	A	6	23.846	8.048	-6.838	1.00	0.00
H										
ATOM	63	HB	ILE	A	6	22.749	6.709	-9.345	1.00	0.00
H										
ATOM	64	HG12	ILE	A	6	20.866	8.110	-9.298	1.00	0.00
H										
ATOM	65	HG13	ILE	A	6	22.303	9.156	-9.251	1.00	0.00
H										
ATOM	66	HG21	ILE	A	6	21.629	6.714	-6.479	1.00	0.00
H										
ATOM	67	HG22	ILE	A	6	20.847	5.962	-7.888	1.00	0.00
H										
ATOM	68	HG23	ILE	A	6	22.398	5.331	-7.290	1.00	0.00
H										
ATOM	69	HD11	ILE	A	6	22.011	9.449	-6.817	1.00	0.00
H										

ATOM	70	HD12	ILE	A	6	20.563	9.966	-7.710	1.00	0.00
H										
ATOM	71	HD13	ILE	A	6	20.573	8.402	-6.864	1.00	0.00
H										
ATOM	72	N	CYS	A	7	24.980	5.832	-6.713	1.00	0.00
N										
ATOM	73	CA	CYS	A	7	25.676	4.554	-6.654	1.00	0.00
C										
ATOM	74	C	CYS	A	7	24.704	3.491	-6.159	1.00	0.00
C										
ATOM	75	O	CYS	A	7	23.831	3.794	-5.358	1.00	0.00
O										
ATOM	76	CB	CYS	A	7	26.890	4.678	-5.734	1.00	0.00
C										
ATOM	77	SG	CYS	A	7	27.950	3.330	-5.721	1.00	0.00
S										
ATOM	78	H	CYS	A	7	24.537	6.202	-5.878	1.00	0.00
H										
ATOM	79	HA	CYS	A	7	26.014	4.288	-7.654	1.00	0.00
H										
ATOM	80	HB2	CYS	A	7	26.527	4.829	-4.718	1.00	0.00
H										
ATOM	81	HB3	CYS	A	7	27.461	5.550	-6.048	1.00	0.00
H										
ATOM	82	HG	CYS	A	7	28.453	3.119	-7.010	1.00	0.00
H										
ATOM	83	N	ILE	A	8	24.804	2.270	-6.695	1.00	0.00
N										
ATOM	84	CA	ILE	A	8	24.082	1.131	-6.143	1.00	0.00
C										
ATOM	85	C	ILE	A	8	25.111	0.119	-5.651	1.00	0.00
C										
ATOM	86	O	ILE	A	8	26.014	-0.301	-6.424	1.00	0.00
O										
ATOM	87	CB	ILE	A	8	23.233	0.454	-7.205	1.00	0.00
C										
ATOM	88	CG1	ILE	A	8	22.262	1.447	-7.842	1.00	0.00
C										
ATOM	89	CG2	ILE	A	8	22.493	-0.737	-6.623	1.00	0.00
C										
ATOM	90	CD1	ILE	A	8	21.576	0.907	-9.098	1.00	0.00
C										
ATOM	91	H	ILE	A	8	25.398	2.133	-7.507	1.00	0.00
H										
ATOM	92	HA	ILE	A	8	23.453	1.455	-5.315	1.00	0.00
H										
ATOM	93	HB	ILE	A	8	23.899	0.088	-7.985	1.00	0.00
H										
ATOM	94	HG12	ILE	A	8	22.815	2.346	-8.110	1.00	0.00
H										
ATOM	95	HG13	ILE	A	8	21.495	1.697	-7.111	1.00	0.00
H										
ATOM	96	HG21	ILE	A	8	21.844	-0.402	-5.815	1.00	0.00
H										
ATOM	97	HG22	ILE	A	8	21.892	-1.206	-7.401	1.00	0.00
H										

ATOM	98	HG23	ILE	A	8	23.212	-1.457	-6.236	1.00	0.00
H										
ATOM	99	HD11	ILE	A	8	21.009	0.012	-8.846	1.00	0.00
H										
ATOM	100	HD12	ILE	A	8	20.902	1.663	-9.497	1.00	0.00
H										
ATOM	101	HD13	ILE	A	8	22.329	0.661	-9.845	1.00	0.00
H										
ATOM	102	N	VAL	A	9	24.981	-0.252	-4.388	1.00	0.00
N										
ATOM	103	CA	VAL	A	9	25.827	-1.267	-3.779	1.00	0.00
C										
ATOM	104	C	VAL	A	9	24.937	-2.443	-3.614	1.00	0.00
C										
ATOM	105	O	VAL	A	9	23.770	-2.287	-3.205	1.00	0.00
O										
ATOM	106	CB	VAL	A	9	26.374	-0.837	-2.373	1.00	0.00
C										
ATOM	107	CG1	VAL	A	9	27.265	-1.891	-1.789	1.00	0.00
C										
ATOM	108	CG2	VAL	A	9	27.073	0.515	-2.475	1.00	0.00
C										
ATOM	109	H	VAL	A	9	24.263	0.189	-3.822	1.00	0.00
H										
ATOM	110	HA	VAL	A	9	26.654	-1.513	-4.443	1.00	0.00
H										
ATOM	111	HB	VAL	A	9	25.520	-0.719	-1.707	1.00	0.00
H										
ATOM	112	HG11	VAL	A	9	28.111	-2.059	-2.453	1.00	0.00
H										
ATOM	113	HG12	VAL	A	9	27.627	-1.562	-0.816	1.00	0.00
H										
ATOM	114	HG13	VAL	A	9	26.704	-2.817	-1.674	1.00	0.00
H										
ATOM	115	HG21	VAL	A	9	26.365	1.264	-2.828	1.00	0.00
H										
ATOM	116	HG22	VAL	A	9	27.449	0.804	-1.495	1.00	0.00
H										
ATOM	117	HG23	VAL	A	9	27.904	0.442	-3.175	1.00	0.00
H										
ATOM	118	N	PHE	A	10	25.461	-3.610	-3.981	1.00	0.00
N										
ATOM	119	CA	PHE	A	10	24.637	-4.793	-4.135	1.00	0.00
C										
ATOM	120	C	PHE	A	10	25.544	-6.030	-4.084	1.00	0.00
C										
ATOM	121	O	PHE	A	10	26.752	-5.898	-4.103	1.00	0.00
O										
ATOM	122	CB	PHE	A	10	23.804	-4.717	-5.442	1.00	0.00
C										
ATOM	123	CG	PHE	A	10	24.628	-4.932	-6.683	1.00	0.00
C										
ATOM	124	CD1	PHE	A	10	25.511	-3.986	-7.103	1.00	0.00
C										
ATOM	125	CD2	PHE	A	10	24.552	-6.136	-7.380	1.00	0.00
C										

ATOM	126	CE1	PHE	A	10	26.303	-4.198	-8.163	1.00	0.00
C										
ATOM	127	CE2	PHE	A	10	25.330	-6.325	-8.475	1.00	0.00
C										
ATOM	128	CZ	PHE	A	10	26.216	-5.347	-8.858	1.00	0.00
C										
ATOM	129	H	PHE	A	10	26.459	-3.673	-4.157	1.00	0.00
H										
ATOM	130	HA	PHE	A	10	23.948	-4.841	-3.293	1.00	0.00
H										
ATOM	131	HB2	PHE	A	10	23.340	-3.733	-5.500	1.00	0.00
H										
ATOM	132	HB3	PHE	A	10	23.029	-5.482	-5.404	1.00	0.00
H										
ATOM	133	HD1	PHE	A	10	25.575	-3.040	-6.568	1.00	0.00
H										
ATOM	134	HD2	PHE	A	10	23.873	-6.920	-7.048	1.00	0.00
H										
ATOM	135	HE1	PHE	A	10	27.021	-3.436	-8.463	1.00	0.00
H										
ATOM	136	HE2	PHE	A	10	25.253	-7.248	-9.048	1.00	0.00
H										
ATOM	137	HZ	PHE	A	10	26.851	-5.503	-9.729	1.00	0.00
H										
ATOM	138	N	GLY	A	11	24.937	-7.208	-3.979	1.00	0.00
N										
ATOM	139	CA	GLY	A	11	25.670	-8.492	-3.820	1.00	0.00
C										
ATOM	140	C	GLY	A	11	25.661	-8.878	-2.353	1.00	0.00
C										
ATOM	141	O	GLY	A	11	24.598	-8.946	-1.744	1.00	0.00
O										
ATOM	142	H	GLY	A	11	23.923	-7.232	-4.009	1.00	0.00
H										
ATOM	143	HA2	GLY	A	11	26.697	-8.373	-4.161	1.00	0.00
H										
ATOM	144	HA3	GLY	A	11	25.181	-9.269	-4.406	1.00	0.00
H										
ATOM	145	N	GLY	A	12	26.842	-9.057	-1.770	1.00	0.00
N										
ATOM	146	CA	GLY	A	12	26.976	-9.343	-0.342	1.00	0.00
C										
ATOM	147	C	GLY	A	12	27.045	-10.832	0.031	1.00	0.00
C										
ATOM	148	O	GLY	A	12	26.307	-11.666	-0.487	1.00	0.00
O										
ATOM	149	H	GLY	A	12	27.682	-8.993	-2.337	1.00	0.00
H										
ATOM	150	HA2	GLY	A	12	26.118	-8.909	0.169	1.00	0.00
H										
ATOM	151	HA3	GLY	A	12	27.889	-8.866	0.012	1.00	0.00
H										
ATOM	152	N	LYS	A	13	27.925	-11.137	0.980	1.00	0.00
N										
ATOM	153	CA	LYS	A	13	28.090	-12.499	1.530	1.00	0.00
C										

ATOM	154	C	LYS	A	13	26.761	-13.222	1.756	1.00	0.00
C										
ATOM	155	O	LYS	A	13	26.564	-14.336	1.260	1.00	0.00
O										
ATOM	156	CB	LYS	A	13	28.946	-12.478	2.823	1.00	0.00
C										
ATOM	157	CG	LYS	A	13	30.441	-12.760	2.548	1.00	0.00
C										
ATOM	158	CD	LYS	A	13	31.402	-12.462	3.724	1.00	0.00
C										
ATOM	159	CE	LYS	A	13	31.834	-10.968	3.768	1.00	0.00
C										
ATOM	160	NZ	LYS	A	13	33.284	-10.841	4.276	1.00	0.00
N1+										
ATOM	161	H	LYS	A	13	28.514	-10.396	1.346	1.00	0.00
H										
ATOM	162	HA	LYS	A	13	28.644	-13.076	0.791	1.00	0.00
H										
ATOM	163	HB2	LYS	A	13	28.567	-13.238	3.505	1.00	0.00
H										
ATOM	164	HB3	LYS	A	13	28.855	-11.497	3.286	1.00	0.00
H										
ATOM	165	HG2	LYS	A	13	30.747	-12.149	1.701	1.00	0.00
H										
ATOM	166	HG3	LYS	A	13	30.542	-13.814	2.291	1.00	0.00
H										
ATOM	167	HD2	LYS	A	13	32.291	-13.081	3.615	1.00	0.00
H										
ATOM	168	HD3	LYS	A	13	30.900	-12.709	4.658	1.00	0.00
H										
ATOM	169	HE2	LYS	A	13	31.170	-10.423	4.437	1.00	0.00
H										
ATOM	170	HE3	LYS	A	13	31.767	-10.546	2.767	1.00	0.00
H										
ATOM	171	HZ1	LYS	A	13	33.906	-11.346	3.653	1.00	0.00
H										
ATOM	172	HZ2	LYS	A	13	33.550	-9.862	4.299	1.00	0.00
H										
ATOM	173	HZ3	LYS	A	13	33.350	-11.232	5.210	1.00	0.00
H										
ATOM	174	N	SER	A	14	25.851	-12.572	2.472	1.00	0.00
N										
ATOM	175	CA	SER	A	14	24.539	-13.168	2.762	1.00	0.00
C										
ATOM	176	C	SER	A	14	23.962	-13.986	1.594	1.00	0.00
C										
ATOM	177	O	SER	A	14	24.204	-13.670	0.400	1.00	0.00
O										
ATOM	178	CB	SER	A	14	23.521	-12.080	3.110	1.00	0.00
C										
ATOM	179	OG	SER	A	14	22.192	-12.580	2.980	1.00	0.00
O										
ATOM	180	H	SER	A	14	26.065	-11.646	2.826	1.00	0.00
H										
ATOM	181	HA	SER	A	14	24.644	-13.827	3.623	1.00	0.00
H										

ATOM	182	HB2	SER	A	14	23.654	-11.236	2.435	1.00	0.00
H										
ATOM	183	HB3	SER	A	14	23.682	-11.754	4.136	1.00	0.00
H										
ATOM	184	HG	SER	A	14	22.066	-13.349	3.596	1.00	0.00
H										
ATOM	185	N	ALA	A	15	23.171	-14.996	1.973	1.00	0.00
N										
ATOM	186	CA	ALA	A	15	22.359	-15.840	1.083	1.00	0.00
C										
ATOM	187	C	ALA	A	15	21.303	-15.103	0.202	1.00	0.00
C										
ATOM	188	O	ALA	A	15	20.667	-15.731	-0.643	1.00	0.00
O										
ATOM	189	CB	ALA	A	15	21.676	-16.921	1.927	1.00	0.00
C										
ATOM	190	H	ALA	A	15	23.127	-15.199	2.967	1.00	0.00
H										
ATOM	191	HA	ALA	A	15	23.045	-16.347	0.406	1.00	0.00
H										
ATOM	192	HB1	ALA	A	15	21.039	-16.450	2.675	1.00	0.00
H										
ATOM	193	HB2	ALA	A	15	21.070	-17.556	1.282	1.00	0.00
H										
ATOM	194	HB3	ALA	A	15	22.433	-17.526	2.424	1.00	0.00
H										
ATOM	195	N	GLU	A	16	21.122	-13.788	0.398	1.00	0.00
N										
ATOM	196	CA	GLU	A	16	20.318	-12.968	-0.512	1.00	0.00
C										
ATOM	197	C	GLU	A	16	21.072	-12.576	-1.785	1.00	0.00
C										
ATOM	198	O	GLU	A	16	20.543	-11.826	-2.597	1.00	0.00
O										
ATOM	199	CB	GLU	A	16	19.836	-11.674	0.179	1.00	0.00
C										
ATOM	200	CG	GLU	A	16	18.422	-11.725	0.840	1.00	0.00
C										
ATOM	201	CD	GLU	A	16	18.451	-11.962	2.357	1.00	0.00
C										
ATOM	202	OE1	GLU	A	16	19.543	-11.851	2.956	1.00	0.00
O										
ATOM	203	OE2	GLU	A	16	17.378	-12.275	2.947	1.00	0.00
O1-										
ATOM	204	H	GLU	A	16	21.556	-13.347	1.203	1.00	0.00
H										
ATOM	205	HA	GLU	A	16	19.440	-13.545	-0.802	1.00	0.00
H										
ATOM	206	HB2	GLU	A	16	19.823	-10.884	-0.570	1.00	0.00
H										
ATOM	207	HB3	GLU	A	16	20.556	-11.426	0.957	1.00	0.00
H										
ATOM	208	HG2	GLU	A	16	17.856	-12.533	0.378	1.00	0.00
H										
ATOM	209	HG3	GLU	A	16	17.921	-10.777	0.651	1.00	0.00
H										

ATOM	210	N	HIS	A	17	22.292	-13.065	-1.956	1.00	0.00
N										
ATOM	211	CA	HIS	A	17	23.196	-12.586	-2.996	1.00	0.00
C										
ATOM	212	C	HIS	A	17	22.537	-12.362	-4.356	1.00	0.00
C										
ATOM	213	O	HIS	A	17	22.756	-11.327	-4.963	1.00	0.00
O										
ATOM	214	CB	HIS	A	17	24.352	-13.567	-3.130	1.00	0.00
C										
ATOM	215	CG	HIS	A	17	25.541	-13.042	-3.885	1.00	0.00
C										
ATOM	216	ND1	HIS	A	17	26.335	-12.015	-3.414	1.00	0.00
N										
ATOM	217	CD2	HIS	A	17	26.122	-13.472	-5.032	1.00	0.00
C										
ATOM	218	CE1	HIS	A	17	27.340	-11.821	-4.250	1.00	0.00
C										
ATOM	219	NE2	HIS	A	17	27.227	-12.684	-5.246	1.00	0.00
N										
ATOM	220	H	HIS	A	17	22.610	-13.804	-1.337	1.00	0.00
H										
ATOM	221	HA	HIS	A	17	23.606	-11.633	-2.665	1.00	0.00
H										
ATOM	222	HB2	HIS	A	17	23.986	-14.453	-3.648	1.00	0.00
H										
ATOM	223	HB3	HIS	A	17	24.681	-13.842	-2.129	1.00	0.00
H										
ATOM	224	HD1	HIS	A	17	26.172	-11.492	-2.560	1.00	0.00
H										
ATOM	225	HD2	HIS	A	17	25.778	-14.289	-5.665	1.00	0.00
H										
ATOM	226	HE1	HIS	A	17	28.127	-11.077	-4.138	1.00	0.00
H										
ATOM	227	N	GLU	A	18	21.726	-13.315	-4.837	1.00	0.00
N										
ATOM	228	CA	GLU	A	18	21.194	-13.251	-6.217	1.00	0.00
C										
ATOM	229	C	GLU	A	18	19.918	-12.454	-6.377	1.00	0.00
C										
ATOM	230	O	GLU	A	18	19.688	-11.872	-7.431	1.00	0.00
O										
ATOM	231	CB	GLU	A	18	21.017	-14.639	-6.832	1.00	0.00
C										
ATOM	232	CG	GLU	A	18	22.332	-15.198	-7.451	1.00	0.00
C										
ATOM	233	CD	GLU	A	18	22.893	-16.386	-6.697	1.00	0.00
C										
ATOM	234	OE1	GLU	A	18	22.386	-16.694	-5.589	1.00	0.00
O										
ATOM	235	OE2	GLU	A	18	23.821	-17.036	-7.234	1.00	0.00
O1-										
ATOM	236	H	GLU	A	18	21.471	-14.097	-4.242	1.00	0.00
H										
ATOM	237	HA	GLU	A	18	21.950	-12.744	-6.815	1.00	0.00
H										



ATOM	238	HB2	GLU	A	18	20.262	-14.579	-7.615	1.00	0.00
H										
ATOM	239	HB3	GLU	A	18	20.680	-15.324	-6.055	1.00	0.00
H										
ATOM	240	HG2	GLU	A	18	23.078	-14.405	-7.451	1.00	0.00
H										
ATOM	241	HG3	GLU	A	18	22.128	-15.505	-8.476	1.00	0.00
H										
ATOM	242	N	VAL	A	19	19.082	-12.417	-5.352	1.00	0.00
N										
ATOM	243	CA	VAL	A	19	18.009	-11.422	-5.318	1.00	0.00
C										
ATOM	244	C	VAL	A	19	18.616	-10.031	-5.406	1.00	0.00
C										
ATOM	245	O	VAL	A	19	18.176	-9.174	-6.165	1.00	0.00
O										
ATOM	246	CB	VAL	A	19	17.168	-11.553	-4.038	1.00	0.00
C										
ATOM	247	CG1	VAL	A	19	16.232	-10.399	-3.891	1.00	0.00
C										
ATOM	248	CG2	VAL	A	19	16.352	-12.867	-4.094	1.00	0.00
C										
ATOM	249	H	VAL	A	19	19.185	-13.079	-4.589	1.00	0.00
H										
ATOM	250	HA	VAL	A	19	17.361	-11.576	-6.180	1.00	0.00
H										
ATOM	251	HB	VAL	A	19	17.833	-11.584	-3.176	1.00	0.00
H										
ATOM	252	HG11	VAL	A	19	15.560	-10.365	-4.748	1.00	0.00
H										
ATOM	253	HG12	VAL	A	19	15.650	-10.518	-2.978	1.00	0.00
H										
ATOM	254	HG13	VAL	A	19	16.802	-9.473	-3.840	1.00	0.00
H										
ATOM	255	HG21	VAL	A	19	17.032	-13.714	-4.171	1.00	0.00
H										
ATOM	256	HG22	VAL	A	19	15.755	-12.963	-3.188	1.00	0.00
H										
ATOM	257	HG23	VAL	A	19	15.694	-12.850	-4.962	1.00	0.00
H										
ATOM	258	N	SER	A	20	19.677	-9.824	-4.643	1.00	0.00
N										
ATOM	259	CA	SER	A	20	20.308	-8.547	-4.615	1.00	0.00
C										
ATOM	260	C	SER	A	20	20.781	-8.141	-6.054	1.00	0.00
C										
ATOM	261	O	SER	A	20	20.617	-6.986	-6.460	1.00	0.00
O										
ATOM	262	CB	SER	A	20	21.442	-8.570	-3.583	1.00	0.00
C										
ATOM	263	OG	SER	A	20	22.063	-7.309	-3.515	1.00	0.00
O										
ATOM	264	H	SER	A	20	20.044	-10.580	-4.074	1.00	0.00
H										
ATOM	265	HA	SER	A	20	19.570	-7.816	-4.286	1.00	0.00
H										

ATOM	266	HB2	SER	A	20	22.178	-9.318	-3.874	1.00	0.00
H										
ATOM	267	HB3	SER	A	20	21.034	-8.823	-2.606	1.00	0.00
H										
ATOM	268	HG	SER	A	20	21.395	-6.625	-3.248	1.00	0.00
H										
ATOM	269	N	ILE	A	21	21.373	-9.090	-6.796	1.00	0.00
N										
ATOM	270	CA	ILE	A	21	21.819	-8.867	-8.160	1.00	0.00
C										
ATOM	271	C	ILE	A	21	20.632	-8.501	-9.068	1.00	0.00
C										
ATOM	272	O	ILE	A	21	20.695	-7.527	-9.787	1.00	0.00
O										
ATOM	273	CB	ILE	A	21	22.619	-10.138	-8.746	1.00	0.00
C										
ATOM	274	CG1	ILE	A	21	23.981	-10.323	-8.021	1.00	0.00
C										
ATOM	275	CG2	ILE	A	21	22.812	-10.019	-10.287	1.00	0.00
C										
ATOM	276	CD1	ILE	A	21	24.667	-11.695	-8.264	1.00	0.00
C										
ATOM	277	H	ILE	A	21	21.516	-10.007	-6.384	1.00	0.00
H										
ATOM	278	HA	ILE	A	21	22.503	-8.020	-8.151	1.00	0.00
H										
ATOM	279	HB	ILE	A	21	22.018	-11.026	-8.554	1.00	0.00
H										
ATOM	280	HG12	ILE	A	21	23.813	-10.213	-6.951	1.00	0.00
H										
ATOM	281	HG13	ILE	A	21	24.657	-9.541	-8.364	1.00	0.00
H										
ATOM	282	HG21	ILE	A	21	23.379	-9.117	-10.513	1.00	0.00
H										
ATOM	283	HG22	ILE	A	21	23.354	-10.890	-10.653	1.00	0.00
H										
ATOM	284	HG23	ILE	A	21	21.838	-9.967	-10.772	1.00	0.00
H										
ATOM	285	HD11	ILE	A	21	24.858	-11.822	-9.329	1.00	0.00
H										
ATOM	286	HD12	ILE	A	21	25.609	-11.732	-7.719	1.00	0.00
H										
ATOM	287	HD13	ILE	A	21	24.015	-12.494	-7.915	1.00	0.00
H										
ATOM	288	N	LEU	A	22	19.558	-9.283	-9.032	1.00	0.00
N										
ATOM	289	CA	LEU	A	22	18.334	-8.975	-9.826	1.00	0.00
C										
ATOM	290	C	LEU	A	22	17.790	-7.596	-9.538	1.00	0.00
C										
ATOM	291	O	LEU	A	22	17.276	-6.914	-10.409	1.00	0.00
O										
ATOM	292	CB	LEU	A	22	17.202	-9.951	-9.504	1.00	0.00
C										
ATOM	293	CG	LEU	A	22	16.956	-11.066	-10.471	1.00	0.00
C										

ATOM	294	CD1	LEU	A	22	15.967	-12.111	-9.813	1.00	0.00
C										
ATOM	295	CD2	LEU	A	22	16.440	-10.531	-11.831	1.00	0.00
C										
ATOM	296	H	LEU	A	22	19.571	-10.113	-8.448	1.00	0.00
H										
ATOM	297	HA	LEU	A	22	18.572	-9.047	-10.886	1.00	0.00
H										
ATOM	298	HB2	LEU	A	22	16.282	-9.372	-9.433	1.00	0.00
H										
ATOM	299	HB3	LEU	A	22	17.424	-10.401	-8.537	1.00	0.00
H										
ATOM	300	HG	LEU	A	22	17.905	-11.570	-10.648	1.00	0.00
H										
ATOM	301	HD11	LEU	A	22	15.025	-11.619	-9.573	1.00	0.00
H										
ATOM	302	HD12	LEU	A	22	15.783	-12.926	-10.511	1.00	0.00
H										
ATOM	303	HD13	LEU	A	22	16.412	-12.508	-8.901	1.00	0.00
H										
ATOM	304	HD21	LEU	A	22	17.180	-9.858	-12.261	1.00	0.00
H										
ATOM	305	HD22	LEU	A	22	16.272	-11.366	-12.509	1.00	0.00
H										
ATOM	306	HD23	LEU	A	22	15.505	-9.993	-11.679	1.00	0.00
H										
ATOM	307	N	THR	A	23	17.866	-7.224	-8.279	1.00	0.00
N										
ATOM	308	CA	THR	A	23	17.269	-6.003	-7.802	1.00	0.00
C										
ATOM	309	C	THR	A	23	18.091	-4.814	-8.266	1.00	0.00
C										
ATOM	310	O	THR	A	23	17.537	-3.775	-8.606	1.00	0.00
O										
ATOM	311	CB	THR	A	23	17.191	-6.014	-6.269	1.00	0.00
C										
ATOM	312	OG1	THR	A	23	16.469	-7.180	-5.853	1.00	0.00
O										
ATOM	313	CG2	THR	A	23	16.516	-4.684	-5.719	1.00	0.00
C										
ATOM	314	H	THR	A	23	18.362	-7.817	-7.621	1.00	0.00
H										
ATOM	315	HA	THR	A	23	16.262	-5.918	-8.208	1.00	0.00
H										
ATOM	316	HB	THR	A	23	18.203	-6.076	-5.873	1.00	0.00
H										
ATOM	317	HG21	THR	A	23	15.506	-4.598	-6.118	1.00	0.00
H										
ATOM	318	HG22	THR	A	23	16.474	-4.721	-4.631	1.00	0.00
H										
ATOM	319	HG23	THR	A	23	17.104	-3.822	-6.031	1.00	0.00
H										
ATOM	320	HG1	THR	A	23	16.941	-7.993	-6.172	1.00	0.00
H										
ATOM	321	N	ALA	A	24	19.414	-4.955	-8.262	1.00	0.00
N										

ATOM	322	CA	ALA	A	24	20.269	-3.896	-8.812	1.00	0.00
C										
ATOM	323	C	ALA	A	24	19.893	-3.663	-10.253	1.00	0.00
C										
ATOM	324	O	ALA	A	24	19.723	-2.527	-10.687	1.00	0.00
O										
ATOM	325	CB	ALA	A	24	21.789	-4.246	-8.672	1.00	0.00
C										
ATOM	326	H	ALA	A	24	19.833	-5.796	-7.878	1.00	0.00
H										
ATOM	327	HA	ALA	A	24	20.077	-2.979	-8.257	1.00	0.00
H										
ATOM	328	HB1	ALA	A	24	22.000	-5.170	-9.209	1.00	0.00
H										
ATOM	329	HB2	ALA	A	24	22.388	-3.438	-9.090	1.00	0.00
H										
ATOM	330	HB3	ALA	A	24	22.037	-4.374	-7.619	1.00	0.00
H										
ATOM	331	N	GLN	A	25	19.712	-4.756	-10.968	1.00	0.00
N										
ATOM	332	CA	GLN	A	25	19.394	-4.740	-12.402	1.00	0.00
C										
ATOM	333	C	GLN	A	25	18.109	-3.973	-12.652	1.00	0.00
C										
ATOM	334	O	GLN	A	25	18.079	-3.065	-13.488	1.00	0.00
O										
ATOM	335	CB	GLN	A	25	19.273	-6.181	-12.913	1.00	0.00
C										
ATOM	336	CG	GLN	A	25	18.960	-6.264	-14.425	1.00	0.00
C										
ATOM	337	CD	GLN	A	25	18.715	-7.657	-14.958	1.00	0.00
C										
ATOM	338	OE1	GLN	A	25	17.994	-8.478	-14.343	1.00	0.00
O										
ATOM	339	NE2	GLN	A	25	19.262	-7.921	-16.146	1.00	0.00
N										
ATOM	340	H	GLN	A	25	19.797	-5.655	-10.504	1.00	0.00
H										
ATOM	341	HA	GLN	A	25	20.206	-4.247	-12.935	1.00	0.00
H										
ATOM	342	HB2	GLN	A	25	18.473	-6.677	-12.366	1.00	0.00
H										
ATOM	343	HB3	GLN	A	25	20.214	-6.696	-12.725	1.00	0.00
H										
ATOM	344	HG2	GLN	A	25	19.804	-5.840	-14.967	1.00	0.00
H										
ATOM	345	HG3	GLN	A	25	18.069	-5.669	-14.617	1.00	0.00
H										
ATOM	346	HE21	GLN	A	25	19.141	-8.836	-16.569	1.00	0.00
H										
ATOM	347	HE22	GLN	A	25	19.800	-7.207	-16.627	1.00	0.00
H										
ATOM	348	N	ASN	A	26	17.057	-4.332	-11.917	1.00	0.00
N										
ATOM	349	CA	ASN	A	26	15.775	-3.617	-11.975	1.00	0.00
C										

ATOM	350	C	ASN	A	26	15.949	-2.125	-11.668	1.00	0.00
C										
ATOM	351	O	ASN	A	26	15.507	-1.250	-12.414	1.00	0.00
O										
ATOM	352	CB	ASN	A	26	14.794	-4.187	-10.967	1.00	0.00
C										
ATOM	353	CG	ASN	A	26	14.097	-5.443	-11.443	1.00	0.00
C										
ATOM	354	OD1	ASN	A	26	12.912	-5.414	-11.759	1.00	0.00
O										
ATOM	355	ND2	ASN	A	26	14.802	-6.566	-11.429	1.00	0.00
N										
ATOM	356	H	ASN	A	26	17.145	-5.129	-11.294	1.00	0.00
H										
ATOM	357	HA	ASN	A	26	15.356	-3.725	-12.974	1.00	0.00
H										
ATOM	358	HB2	ASN	A	26	14.038	-3.432	-10.758	1.00	0.00
H										
ATOM	359	HB3	ASN	A	26	15.337	-4.420	-10.052	1.00	0.00
H										
ATOM	360	HD21	ASN	A	26	14.379	-7.435	-11.739	1.00	0.00
H										
ATOM	361	HD22	ASN	A	26	15.765	-6.557	-11.108	1.00	0.00
H										
ATOM	362	N	VAL	A	27	16.622	-1.832	-10.563	1.00	0.00
N										
ATOM	363	CA	VAL	A	27	16.769	-0.444	-10.144	1.00	0.00
C										
ATOM	364	C	VAL	A	27	17.555	0.348	-11.241	1.00	0.00
C										
ATOM	365	O	VAL	A	27	17.156	1.443	-11.650	1.00	0.00
O										
ATOM	366	CB	VAL	A	27	17.303	-0.356	-8.686	1.00	0.00
C										
ATOM	367	CG1	VAL	A	27	17.535	1.052	-8.250	1.00	0.00
C										
ATOM	368	CG2	VAL	A	27	16.279	-0.990	-7.726	1.00	0.00
C										
ATOM	369	H	VAL	A	27	17.035	-2.575	-10.009	1.00	0.00
H										
ATOM	370	HA	VAL	A	27	15.765	-0.024	-10.126	1.00	0.00
H										
ATOM	371	HB	VAL	A	27	18.240	-0.907	-8.618	1.00	0.00
H										
ATOM	372	HG11	VAL	A	27	16.599	1.606	-8.300	1.00	0.00
H										
ATOM	373	HG12	VAL	A	27	17.907	1.059	-7.226	1.00	0.00
H										
ATOM	374	HG13	VAL	A	27	18.268	1.519	-8.906	1.00	0.00
H										
ATOM	375	HG21	VAL	A	27	16.127	-2.034	-7.995	1.00	0.00
H										
ATOM	376	HG22	VAL	A	27	16.652	-0.929	-6.705	1.00	0.00
H										
ATOM	377	HG23	VAL	A	27	15.333	-0.455	-7.799	1.00	0.00
H										

ATOM	378	N	LEU	A	28	18.637	-0.242	-11.728	1.00	0.00
N										
ATOM	379	CA	LEU	A	28	19.442	0.356	-12.787	1.00	0.00
C										
ATOM	380	C	LEU	A	28	18.583	0.677	-13.984	1.00	0.00
C										
ATOM	381	O	LEU	A	28	18.586	1.797	-14.450	1.00	0.00
O										
ATOM	382	CB	LEU	A	28	20.557	-0.586	-13.235	1.00	0.00
C										
ATOM	383	CG	LEU	A	28	21.800	-0.651	-12.360	1.00	0.00
C										
ATOM	384	CD1	LEU	A	28	22.751	-1.746	-12.842	1.00	0.00
C										
ATOM	385	CD2	LEU	A	28	22.455	0.721	-12.378	1.00	0.00
C										
ATOM	386	H	LEU	A	28	18.915	-1.142	-11.351	1.00	0.00
H										
ATOM	387	HA	LEU	A	28	19.887	1.278	-12.415	1.00	0.00
H										
ATOM	388	HB2	LEU	A	28	20.872	-0.273	-14.230	1.00	0.00
H										
ATOM	389	HB3	LEU	A	28	20.138	-1.590	-13.286	1.00	0.00
H										
ATOM	390	HG	LEU	A	28	21.496	-0.878	-11.339	1.00	0.00
H										
ATOM	391	HD11	LEU	A	28	23.055	-1.537	-13.867	1.00	0.00
H										
ATOM	392	HD12	LEU	A	28	23.631	-1.771	-12.200	1.00	0.00
H										
ATOM	393	HD13	LEU	A	28	22.245	-2.709	-12.803	1.00	0.00
H										
ATOM	394	HD21	LEU	A	28	21.758	1.461	-11.989	1.00	0.00
H										
ATOM	395	HD22	LEU	A	28	23.350	0.704	-11.758	1.00	0.00
H										
ATOM	396	HD23	LEU	A	28	22.726	0.980	-13.400	1.00	0.00
H										
ATOM	397	N	ASN	A	29	17.826	-0.297	-14.452	1.00	0.00
N										
ATOM	398	CA	ASN	A	29	17.017	-0.109	-15.650	1.00	0.00
C										
ATOM	399	C	ASN	A	29	15.855	0.819	-15.454	1.00	0.00
C										
ATOM	400	O	ASN	A	29	15.127	1.111	-16.400	1.00	0.00
O										
ATOM	401	CB	ASN	A	29	16.497	-1.444	-16.178	1.00	0.00
C										
ATOM	402	CG	ASN	A	29	17.606	-2.355	-16.599	1.00	0.00
C										
ATOM	403	OD1	ASN	A	29	18.714	-1.888	-16.873	1.00	0.00
O										
ATOM	404	ND2	ASN	A	29	17.346	-3.663	-16.609	1.00	0.00
N										
ATOM	405	H	ASN	A	29	17.807	-1.190	-13.971	1.00	0.00
H										

ATOM	406	HA	ASN	A	29	17.658	0.322	-16.417	1.00	0.00
H										
ATOM	407	HB2	ASN	A	29	15.853	-1.255	-17.036	1.00	0.00
H										
ATOM	408	HB3	ASN	A	29	15.922	-1.932	-15.393	1.00	0.00
H										
ATOM	409	HD21	ASN	A	29	18.067	-4.322	-16.887	1.00	0.00
H										
ATOM	410	HD22	ASN	A	29	16.428	-4.000	-16.338	1.00	0.00
H										
ATOM	411	N	ALA	A	30	15.642	1.257	-14.226	1.00	0.00
N										
ATOM	412	CA	ALA	A	30	14.570	2.173	-13.926	1.00	0.00
C										
ATOM	413	C	ALA	A	30	15.128	3.553	-13.679	1.00	0.00
C										
ATOM	414	O	ALA	A	30	14.386	4.453	-13.387	1.00	0.00
O										
ATOM	415	CB	ALA	A	30	13.790	1.674	-12.694	1.00	0.00
C										
ATOM	416	H	ALA	A	30	16.248	0.941	-13.475	1.00	0.00
H										
ATOM	417	HA	ALA	A	30	13.893	2.214	-14.778	1.00	0.00
H										
ATOM	418	HB1	ALA	A	30	14.462	1.613	-11.839	1.00	0.00
H										
ATOM	419	HB2	ALA	A	30	12.981	2.368	-12.471	1.00	0.00
H										
ATOM	420	HB3	ALA	A	30	13.375	0.689	-12.902	1.00	0.00
H										
ATOM	421	N	ILE	A	31	16.439	3.721	-13.795	1.00	0.00
N										
ATOM	422	CA	ILE	A	31	17.057	5.034	-13.633	1.00	0.00
C										
ATOM	423	C	ILE	A	31	17.364	5.686	-14.967	1.00	0.00
C										
ATOM	424	O	ILE	A	31	18.123	5.135	-15.772	1.00	0.00
O										
ATOM	425	CB	ILE	A	31	18.361	4.921	-12.857	1.00	0.00
C										
ATOM	426	CG1	ILE	A	31	18.047	4.589	-11.381	1.00	0.00
C										
ATOM	427	CG2	ILE	A	31	19.218	6.201	-12.994	1.00	0.00
C										
ATOM	428	CD1	ILE	A	31	19.262	4.151	-10.605	1.00	0.00
C										
ATOM	429	H	ILE	A	31	17.026	2.919	-14.001	1.00	0.00
H										
ATOM	430	HA	ILE	A	31	16.374	5.676	-13.079	1.00	0.00
H										
ATOM	431	HB	ILE	A	31	18.929	4.091	-13.274	1.00	0.00
H										
ATOM	432	HG12	ILE	A	31	17.311	3.787	-11.355	1.00	0.00
H										
ATOM	433	HG13	ILE	A	31	17.633	5.477	-10.906	1.00	0.00
H										

ATOM	434	HG21	ILE	A	31	18.661	7.054	-12.608	1.00	0.00
H										
ATOM	435	HG22	ILE	A	31	20.140	6.083	-12.427	1.00	0.00
H										
ATOM	436	HG23	ILE	A	31	19.456	6.368	-14.044	1.00	0.00
H										
ATOM	437	HD11	ILE	A	31	20.005	4.947	-10.614	1.00	0.00
H										
ATOM	438	HD12	ILE	A	31	18.977	3.933	-9.577	1.00	0.00
H										
ATOM	439	HD13	ILE	A	31	19.682	3.257	-11.063	1.00	0.00
H										
ATOM	440	N	ASP	A	32	16.811	6.879	-15.177	1.00	0.00
N										
ATOM	441	CA	ASP	A	32	17.006	7.613	-16.420	1.00	0.00
C										
ATOM	442	C	ASP	A	32	18.405	8.160	-16.463	1.00	0.00
C										
ATOM	443	O	ASP	A	32	18.778	8.987	-15.635	1.00	0.00
O										
ATOM	444	CB	ASP	A	32	15.998	8.777	-16.547	1.00	0.00
C										
ATOM	445	CG	ASP	A	32	16.110	9.508	-17.896	1.00	0.00
C										
ATOM	446	OD1	ASP	A	32	15.309	10.456	-18.108	1.00	0.00
O										
ATOM	447	OD2	ASP	A	32	17.000	9.131	-18.719	1.00	0.00
O1-										
ATOM	448	H	ASP	A	32	16.236	7.290	-14.448	1.00	0.00
H										
ATOM	449	HA	ASP	A	32	16.867	6.932	-17.258	1.00	0.00
H										
ATOM	450	HB2	ASP	A	32	16.186	9.491	-15.746	1.00	0.00
H										
ATOM	451	HB3	ASP	A	32	14.990	8.378	-16.448	1.00	0.00
H										
ATOM	452	N	LYS	A	33	19.159	7.704	-17.454	1.00	0.00
N										
ATOM	453	CA	LYS	A	33	20.554	7.947	-17.531	1.00	0.00
C										
ATOM	454	C	LYS	A	33	20.884	9.303	-18.087	1.00	0.00
C										
ATOM	455	O	LYS	A	33	22.034	9.704	-18.063	1.00	0.00
O										
ATOM	456	CB	LYS	A	33	21.250	6.880	-18.390	1.00	0.00
C										
ATOM	457	CG	LYS	A	33	20.893	5.413	-18.071	1.00	0.00
C										
ATOM	458	CD	LYS	A	33	21.343	4.940	-16.703	1.00	0.00
C										
ATOM	459	CE	LYS	A	33	20.494	3.725	-16.284	1.00	0.00
C										
ATOM	460	NZ	LYS	A	33	21.167	2.420	-16.390	1.00	0.00
N1+										
ATOM	461	H	LYS	A	33	18.720	7.158	-18.188	1.00	0.00
H										



ATOM	462	HA	LYS	A	33	20.963	7.888	-16.523	1.00	0.00
H										
ATOM	463	HB2	LYS	A	33	22.325	6.997	-18.259	1.00	0.00
H										
ATOM	464	HB3	LYS	A	33	20.988	7.068	-19.430	1.00	0.00
H										
ATOM	465	HG2	LYS	A	33	21.362	4.778	-18.822	1.00	0.00
H										
ATOM	466	HG3	LYS	A	33	19.811	5.306	-18.129	1.00	0.00
H										
ATOM	467	HD2	LYS	A	33	21.213	5.743	-15.979	1.00	0.00
H										
ATOM	468	HD3	LYS	A	33	22.393	4.654	-16.743	1.00	0.00
H										
ATOM	469	HE2	LYS	A	33	19.609	3.699	-16.917	1.00	0.00
H										
ATOM	470	HE3	LYS	A	33	20.195	3.866	-15.246	1.00	0.00
H										
ATOM	471	HZ1	LYS	A	33	21.990	2.415	-15.796	1.00	0.00
H										
ATOM	472	HZ2	LYS	A	33	20.531	1.686	-16.094	1.00	0.00
H										
ATOM	473	HZ3	LYS	A	33	21.444	2.259	-17.353	1.00	0.00
H										
ATOM	474	N	ASP	A	34	19.900	10.003	-18.622	1.00	0.00
N										
ATOM	475	CA	ASP	A	34	20.098	11.372	-19.058	1.00	0.00
C										
ATOM	476	C	ASP	A	34	20.007	12.292	-17.865	1.00	0.00
C										
ATOM	477	O	ASP	A	34	20.537	13.391	-17.900	1.00	0.00
O										
ATOM	478	CB	ASP	A	34	19.039	11.768	-20.098	1.00	0.00
C										
ATOM	479	CG	ASP	A	34	19.212	11.046	-21.420	1.00	0.00
C										
ATOM	480	OD1	ASP	A	34	20.359	10.797	-21.855	1.00	0.00
O										
ATOM	481	OD2	ASP	A	34	18.188	10.713	-22.010	1.00	0.00
O1-										
ATOM	482	H	ASP	A	34	18.987	9.574	-18.730	1.00	0.00
H										
ATOM	483	HA	ASP	A	34	21.087	11.464	-19.504	1.00	0.00
H										
ATOM	484	HB2	ASP	A	34	19.110	12.840	-20.276	1.00	0.00
H										
ATOM	485	HB3	ASP	A	34	18.054	11.531	-19.699	1.00	0.00
H										
ATOM	486	N	LYS	A	35	19.345	11.820	-16.804	1.00	0.00
N										
ATOM	487	CA	LYS	A	35	19.156	12.567	-15.565	1.00	0.00
C										
ATOM	488	C	LYS	A	35	20.143	12.145	-14.461	1.00	0.00
C										
ATOM	489	O	LYS	A	35	20.342	12.866	-13.473	1.00	0.00
O										

ATOM	490	CB	LYS	A	35	17.775	12.273	-15.004	1.00	0.00
C										
ATOM	491	CG	LYS	A	35	16.606	12.654	-15.859	1.00	0.00
C										
ATOM	492	CD	LYS	A	35	15.313	12.522	-15.011	1.00	0.00
C										
ATOM	493	CE	LYS	A	35	15.240	13.471	-13.757	1.00	0.00
C										
ATOM	494	NZ	LYS	A	35	15.354	12.814	-12.413	1.00	0.00
N1+										
ATOM	495	H	LYS	A	35	18.951	10.887	-16.864	1.00	0.00
H										
ATOM	496	HA	LYS	A	35	19.255	13.634	-15.759	1.00	0.00
H										
ATOM	497	HB2	LYS	A	35	17.682	12.808	-14.060	1.00	0.00
H										
ATOM	498	HB3	LYS	A	35	17.715	11.201	-14.821	1.00	0.00
H										
ATOM	499	HG2	LYS	A	35	16.550	11.991	-16.721	1.00	0.00
H										
ATOM	500	HG3	LYS	A	35	16.719	13.683	-16.199	1.00	0.00
H										
ATOM	501	HD2	LYS	A	35	15.242	11.493	-14.661	1.00	0.00
H										
ATOM	502	HD3	LYS	A	35	14.463	12.746	-15.654	1.00	0.00
H										
ATOM	503	HE2	LYS	A	35	14.284	13.992	-13.791	1.00	0.00
H										
ATOM	504	HE3	LYS	A	35	16.050	14.194	-13.842	1.00	0.00
H										
ATOM	505	HZ1	LYS	A	35	16.246	12.334	-12.346	1.00	0.00
H										
ATOM	506	HZ2	LYS	A	35	15.294	13.519	-11.685	1.00	0.00
H										
ATOM	507	HZ3	LYS	A	35	14.600	12.145	-12.299	1.00	0.00
H										
ATOM	508	N	TYR	A	36	20.702	10.944	-14.581	1.00	0.00
N										
ATOM	509	CA	TYR	A	36	21.520	10.420	-13.517	1.00	0.00
C										
ATOM	510	C	TYR	A	36	22.723	9.743	-14.020	1.00	0.00
C										
ATOM	511	O	TYR	A	36	22.613	8.897	-14.868	1.00	0.00
O										
ATOM	512	CB	TYR	A	36	20.749	9.387	-12.719	1.00	0.00
C										
ATOM	513	CG	TYR	A	36	19.656	9.989	-11.890	1.00	0.00
C										
ATOM	514	CD1	TYR	A	36	18.317	9.829	-12.250	1.00	0.00
C										
ATOM	515	CD2	TYR	A	36	19.965	10.724	-10.749	1.00	0.00
C										
ATOM	516	CE1	TYR	A	36	17.296	10.368	-11.456	1.00	0.00
C										
ATOM	517	CE2	TYR	A	36	18.965	11.261	-9.965	1.00	0.00
C										

ATOM	518	CZ	TYR	A	36	17.622	11.076	-10.319	1.00	0.00
C										
ATOM	519	OH	TYR	A	36	16.637	11.623	-9.539	1.00	0.00
O										
ATOM	520	H	TYR	A	36	20.552	10.397	-15.422	1.00	0.00
H										
ATOM	521	HA	TYR	A	36	21.816	11.235	-12.858	1.00	0.00
H										
ATOM	522	HB2	TYR	A	36	21.443	8.870	-12.057	1.00	0.00
H										
ATOM	523	HB3	TYR	A	36	20.307	8.672	-13.411	1.00	0.00
H										
ATOM	524	HD1	TYR	A	36	18.064	9.281	-13.156	1.00	0.00
H										
ATOM	525	HD2	TYR	A	36	21.007	10.877	-10.472	1.00	0.00
H										
ATOM	526	HE1	TYR	A	36	16.253	10.229	-11.735	1.00	0.00
H										
ATOM	527	HE2	TYR	A	36	19.219	11.829	-9.071	1.00	0.00
H										
ATOM	528	HH	TYR	A	36	16.040	10.903	-9.207	1.00	0.00
H										
ATOM	529	N	HIS	A	37	23.859	10.060	-13.422	1.00	0.00
N										
ATOM	530	CA	HIS	A	37	25.108	9.340	-13.681	1.00	0.00
C										
ATOM	531	C	HIS	A	37	25.158	8.286	-12.598	1.00	0.00
C										
ATOM	532	O	HIS	A	37	24.823	8.588	-11.454	1.00	0.00
O										
ATOM	533	CB	HIS	A	37	26.309	10.300	-13.609	1.00	0.00
C										
ATOM	534	CG	HIS	A	37	27.643	9.617	-13.736	1.00	0.00
C										
ATOM	535	ND1	HIS	A	37	28.519	9.874	-14.762	1.00	0.00
N										
ATOM	536	CD2	HIS	A	37	28.257	8.707	-12.948	1.00	0.00
C										
ATOM	537	CE1	HIS	A	37	29.608	9.150	-14.605	1.00	0.00
C										
ATOM	538	NE2	HIS	A	37	29.473	8.431	-13.511	1.00	0.00
N										
ATOM	539	H	HIS	A	37	23.866	10.830	-12.760	1.00	0.00
H										
ATOM	540	HA	HIS	A	37	25.069	8.866	-14.661	1.00	0.00
H										
ATOM	541	HB2	HIS	A	37	26.278	10.817	-12.651	1.00	0.00
H										
ATOM	542	HB3	HIS	A	37	26.217	11.026	-14.416	1.00	0.00
H										
ATOM	543	HD1	HIS	A	37	28.353	10.523	-15.525	1.00	0.00
H										
ATOM	544	HD2	HIS	A	37	27.858	8.273	-12.033	1.00	0.00
H										
ATOM	545	HE1	HIS	A	37	30.472	9.147	-15.268	1.00	0.00
H										

ATOM	546	N	VAL	A	38	25.578	7.071	-12.943	1.00	0.00
N										
ATOM	547	CA	VAL	A	38	25.359	5.894	-12.113	1.00	0.00
C										
ATOM	548	C	VAL	A	38	26.494	4.923	-12.147	1.00	0.00
C										
ATOM	549	O	VAL	A	38	26.816	4.364	-13.216	1.00	0.00
O										
ATOM	550	CB	VAL	A	38	24.128	5.098	-12.561	1.00	0.00
C										
ATOM	551	CG1	VAL	A	38	23.643	4.118	-11.420	1.00	0.00
C										
ATOM	552	CG2	VAL	A	38	23.028	6.013	-13.028	1.00	0.00
C										
ATOM	553	H	VAL	A	38	26.073	6.960	-13.823	1.00	0.00
H										
ATOM	554	HA	VAL	A	38	25.209	6.217	-11.084	1.00	0.00
H										
ATOM	555	HB	VAL	A	38	24.427	4.487	-13.411	1.00	0.00
H										
ATOM	556	HG11	VAL	A	38	23.383	4.694	-10.533	1.00	0.00
H										
ATOM	557	HG12	VAL	A	38	22.770	3.566	-11.763	1.00	0.00
H										
ATOM	558	HG13	VAL	A	38	24.442	3.419	-11.178	1.00	0.00
H										
ATOM	559	HG21	VAL	A	38	23.383	6.607	-13.869	1.00	0.00
H										
ATOM	560	HG22	VAL	A	38	22.170	5.420	-13.339	1.00	0.00
H										
ATOM	561	HG23	VAL	A	38	22.736	6.675	-12.214	1.00	0.00
H										
ATOM	562	N	ASP	A	39	27.079	4.699	-10.962	1.00	0.00
N										
ATOM	563	CA	ASP	A	39	28.111	3.689	-10.753	1.00	0.00
C										
ATOM	564	C	ASP	A	39	27.471	2.593	-9.918	1.00	0.00
C										
ATOM	565	O	ASP	A	39	26.501	2.846	-9.223	1.00	0.00
O										
ATOM	566	CB	ASP	A	39	29.282	4.253	-9.927	1.00	0.00
C										
ATOM	567	CG	ASP	A	39	29.964	5.449	-10.579	1.00	0.00
C										
ATOM	568	OD1	ASP	A	39	29.948	5.542	-11.827	1.00	0.00
O										
ATOM	569	OD2	ASP	A	39	30.541	6.281	-9.813	1.00	0.00
O1-										
ATOM	570	H	ASP	A	39	26.789	5.261	-10.168	1.00	0.00
H										
ATOM	571	HA	ASP	A	39	28.464	3.294	-11.704	1.00	0.00
H										
ATOM	572	HB2	ASP	A	39	30.022	3.465	-9.794	1.00	0.00
H										
ATOM	573	HB3	ASP	A	39	28.901	4.561	-8.954	1.00	0.00
H										

ATOM	574	N	ILE	A	40	28.055	1.409	-9.916	1.00	0.00
N										
ATOM	575	CA	ILE	A	40	27.609	0.333	-9.048	1.00	0.00
C										
ATOM	576	C	ILE	A	40	28.793	-0.299	-8.362	1.00	0.00
C										
ATOM	577	O	ILE	A	40	29.908	-0.236	-8.847	1.00	0.00
O										
ATOM	578	CB	ILE	A	40	26.726	-0.708	-9.815	1.00	0.00
C										
ATOM	579	CG1	ILE	A	40	27.501	-1.447	-10.928	1.00	0.00
C										
ATOM	580	CG2	ILE	A	40	25.530	-0.004	-10.454	1.00	0.00
C										
ATOM	581	CD1	ILE	A	40	26.686	-2.555	-11.613	1.00	0.00
C										
ATOM	582	H	ILE	A	40	28.839	1.246	-10.540	1.00	0.00
H										
ATOM	583	HA	ILE	A	40	26.986	0.778	-8.274	1.00	0.00
H										
ATOM	584	HB	ILE	A	40	26.357	-1.443	-9.102	1.00	0.00
H										
ATOM	585	HG12	ILE	A	40	28.391	-1.896	-10.488	1.00	0.00
H										
ATOM	586	HG13	ILE	A	40	27.797	-0.720	-11.683	1.00	0.00
H										
ATOM	587	HG21	ILE	A	40	25.885	0.751	-11.154	1.00	0.00
H										
ATOM	588	HG22	ILE	A	40	24.921	-0.734	-10.985	1.00	0.00
H										
ATOM	589	HG23	ILE	A	40	24.932	0.472	-9.678	1.00	0.00
H										
ATOM	590	HD11	ILE	A	40	25.797	-2.123	-12.068	1.00	0.00
H										
ATOM	591	HD12	ILE	A	40	27.294	-3.030	-12.382	1.00	0.00
H										
ATOM	592	HD13	ILE	A	40	26.391	-3.298	-10.874	1.00	0.00
H										
ATOM	593	N	ILE	A	41	28.529	-0.880	-7.195	1.00	0.00
N										
ATOM	594	CA	ILE	A	41	29.516	-1.558	-6.397	1.00	0.00
C										
ATOM	595	C	ILE	A	41	28.940	-2.915	-5.994	1.00	0.00
C										
ATOM	596	O	ILE	A	41	27.914	-3.048	-5.326	1.00	0.00
O										
ATOM	597	CB	ILE	A	41	29.942	-0.775	-5.156	1.00	0.00
C										
ATOM	598	CG1	ILE	A	41	30.527	0.573	-5.543	1.00	0.00
C										
ATOM	599	CG2	ILE	A	41	30.961	-1.584	-4.373	1.00	0.00
C										
ATOM	600	CD1	ILE	A	41	30.828	1.493	-4.338	1.00	0.00
C										
ATOM	601	H	ILE	A	41	27.576	-0.843	-6.847	1.00	0.00
H										

ATOM	602	HA	ILE	A	41	30.397	-1.729	-7.014	1.00	0.00
H										
ATOM	603	HB	ILE	A	41	29.068	-0.611	-4.528	1.00	0.00
H										
ATOM	604	HG12	ILE	A	41	29.817	1.081	-6.194	1.00	0.00
H										
ATOM	605	HG13	ILE	A	41	31.457	0.401	-6.084	1.00	0.00
H										
ATOM	606	HG21	ILE	A	41	31.832	-1.775	-4.999	1.00	0.00
H										
ATOM	607	HG22	ILE	A	41	31.265	-1.026	-3.488	1.00	0.00
H										
ATOM	608	HG23	ILE	A	41	30.517	-2.531	-4.070	1.00	0.00
H										
ATOM	609	HD11	ILE	A	41	31.547	1.006	-3.680	1.00	0.00
H										
ATOM	610	HD12	ILE	A	41	31.243	2.435	-4.695	1.00	0.00
H										
ATOM	611	HD13	ILE	A	41	29.907	1.686	-3.790	1.00	0.00
H										
ATOM	612	N	TYR	A	42	29.639	-3.936	-6.440	1.00	0.00
N										
ATOM	613	CA	TYR	A	42	29.277	-5.259	-6.156	1.00	0.00
C										
ATOM	614	C	TYR	A	42	30.144	-5.755	-5.034	1.00	0.00
C										
ATOM	615	O	TYR	A	42	31.373	-5.666	-5.096	1.00	0.00
O										
ATOM	616	CB	TYR	A	42	29.516	-6.060	-7.379	1.00	0.00
C										
ATOM	617	CG	TYR	A	42	29.252	-7.499	-7.216	1.00	0.00
C										
ATOM	618	CD1	TYR	A	42	27.958	-7.983	-7.078	1.00	0.00
C										
ATOM	619	CD2	TYR	A	42	30.294	-8.395	-7.240	1.00	0.00
C										
ATOM	620	CE1	TYR	A	42	27.716	-9.356	-6.976	1.00	0.00
C										
ATOM	621	CE2	TYR	A	42	30.070	-9.733	-7.146	1.00	0.00
C										
ATOM	622	CZ	TYR	A	42	28.792	-10.216	-7.018	1.00	0.00
C										
ATOM	623	OH	TYR	A	42	28.665	-11.576	-6.928	1.00	0.00
O										
ATOM	624	H	TYR	A	42	30.464	-3.761	-7.005	1.00	0.00
H										
ATOM	625	HA	TYR	A	42	28.227	-5.310	-5.872	1.00	0.00
H										
ATOM	626	HB2	TYR	A	42	30.558	-5.934	-7.672	1.00	0.00
H										
ATOM	627	HB3	TYR	A	42	28.869	-5.681	-8.168	1.00	0.00
H										
ATOM	628	HD1	TYR	A	42	27.122	-7.285	-7.049	1.00	0.00
H										
ATOM	629	HD2	TYR	A	42	31.315	-8.028	-7.336	1.00	0.00
H										

ATOM	630	HE1	TYR	A	42	26.702	-9.737	-6.866	1.00	0.00
H										
ATOM	631	HE2	TYR	A	42	30.910	-10.426	-7.173	1.00	0.00
H										
ATOM	632	HH	TYR	A	42	28.101	-11.906	-7.676	1.00	0.00
H										
ATOM	633	N	ILE	A	43	29.494	-6.270	-3.993	1.00	0.00
N										
ATOM	634	CA	ILE	A	43	30.215	-6.931	-2.911	1.00	0.00
C										
ATOM	635	C	ILE	A	43	30.236	-8.421	-3.218	1.00	0.00
C										
ATOM	636	O	ILE	A	43	29.224	-9.053	-3.520	1.00	0.00
O										
ATOM	637	CB	ILE	A	43	29.567	-6.590	-1.552	1.00	0.00
C										
ATOM	638	CG1	ILE	A	43	29.701	-5.072	-1.327	1.00	0.00
C										
ATOM	639	CG2	ILE	A	43	30.179	-7.430	-0.449	1.00	0.00
C										
ATOM	640	CD1	ILE	A	43	29.084	-4.484	0.033	1.00	0.00
C										
ATOM	641	H	ILE	A	43	28.482	-6.202	-3.951	1.00	0.00
H										
ATOM	642	HA	ILE	A	43	31.241	-6.565	-2.906	1.00	0.00
H										
ATOM	643	HB	ILE	A	43	28.507	-6.831	-1.613	1.00	0.00
H										
ATOM	644	HG12	ILE	A	43	29.205	-4.571	-2.157	1.00	0.00
H										
ATOM	645	HG13	ILE	A	43	30.763	-4.830	-1.339	1.00	0.00
H										
ATOM	646	HG21	ILE	A	43	31.248	-7.231	-0.392	1.00	0.00
H										
ATOM	647	HG22	ILE	A	43	29.711	-7.178	0.501	1.00	0.00
H										
ATOM	648	HG23	ILE	A	43	30.017	-8.485	-0.664	1.00	0.00
H										
ATOM	649	HD11	ILE	A	43	29.573	-4.952	0.886	1.00	0.00
H										
ATOM	650	HD12	ILE	A	43	29.244	-3.408	0.069	1.00	0.00
H										
ATOM	651	HD13	ILE	A	43	28.016	-4.694	0.067	1.00	0.00
H										
ATOM	652	N	THR	A	44	31.421	-8.993	-3.176	1.00	0.00
N										
ATOM	653	CA	THR	A	44	31.583	-10.374	-3.535	1.00	0.00
C										
ATOM	654	C	THR	A	44	31.205	-11.212	-2.316	1.00	0.00
C										
ATOM	655	O	THR	A	44	31.187	-10.710	-1.168	1.00	0.00
O										
ATOM	656	CB	THR	A	44	33.044	-10.688	-3.985	1.00	0.00
C										
ATOM	657	OG1	THR	A	44	33.934	-10.525	-2.878	1.00	0.00
O										

ATOM	658	CG2	THR	A	44	33.484	-9.774	-5.142	1.00	0.00
C										
ATOM	659	H	THR	A	44	32.230	-8.452	-2.887	1.00	0.00
H										
ATOM	660	HA	THR	A	44	30.903	-10.610	-4.352	1.00	0.00
H										
ATOM	661	HB	THR	A	44	33.091	-11.723	-4.321	1.00	0.00
H										
ATOM	662	HG21	THR	A	44	33.438	-8.735	-4.821	1.00	0.00
H										
ATOM	663	HG22	THR	A	44	34.505	-10.020	-5.430	1.00	0.00
H										
ATOM	664	HG23	THR	A	44	32.821	-9.922	-5.993	1.00	0.00
H										
ATOM	665	HG1	THR	A	44	33.673	-11.147	-2.149	1.00	0.00
H										
ATOM	666	N	ASN	A	45	30.887	-12.475	-2.584	1.00	0.00
N										
ATOM	667	CA	ASN	A	45	30.620	-13.459	-1.547	1.00	0.00
C										
ATOM	668	C	ASN	A	45	31.762	-13.510	-0.547	1.00	0.00
C										
ATOM	669	O	ASN	A	45	31.547	-13.811	0.603	1.00	0.00
O										
ATOM	670	CB	ASN	A	45	30.463	-14.861	-2.149	1.00	0.00
C										
ATOM	671	CG	ASN	A	45	29.244	-14.984	-3.067	1.00	0.00
C										
ATOM	672	OD1	ASN	A	45	28.154	-14.530	-2.727	1.00	0.00
O										
ATOM	673	ND2	ASN	A	45	29.430	-15.624	-4.229	1.00	0.00
N										
ATOM	674	H	ASN	A	45	30.828	-12.765	-3.555	1.00	0.00
H										
ATOM	675	HA	ASN	A	45	29.702	-13.189	-1.027	1.00	0.00
H										
ATOM	676	HB2	ASN	A	45	30.359	-15.579	-1.336	1.00	0.00
H										
ATOM	677	HB3	ASN	A	45	31.357	-15.093	-2.726	1.00	0.00
H										
ATOM	678	HD21	ASN	A	45	28.657	-15.735	-4.877	1.00	0.00
H										
ATOM	679	HD22	ASN	A	45	30.345	-15.998	-4.462	1.00	0.00
H										
ATOM	680	N	ASP	A	46	32.985	-13.229	-0.981	1.00	0.00
N										
ATOM	681	CA	ASP	A	46	34.114	-13.205	-0.051	1.00	0.00
C										
ATOM	682	C	ASP	A	46	34.331	-11.846	0.600	1.00	0.00
C										
ATOM	683	O	ASP	A	46	35.326	-11.650	1.274	1.00	0.00
O										
ATOM	684	CB	ASP	A	46	35.385	-13.669	-0.771	1.00	0.00
C										
ATOM	685	CG	ASP	A	46	35.191	-14.996	-1.492	1.00	0.00
C										



ATOM	686	OD1	ASP	A	46	34.598	-15.931	-0.887	1.00	0.00
O										
ATOM	687	OD2	ASP	A	46	35.620	-15.099	-2.665	1.00	0.00
O1-										
ATOM	688	H	ASP	A	46	33.138	-13.030	-1.964	1.00	0.00
H										
ATOM	689	HA	ASP	A	46	33.904	-13.921	0.742	1.00	0.00
H										
ATOM	690	HB2	ASP	A	46	36.181	-13.783	-0.037	1.00	0.00
H										
ATOM	691	HB3	ASP	A	46	35.670	-12.913	-1.501	1.00	0.00
H										
ATOM	692	N	GLY	A	47	33.409	-10.907	0.393	1.00	0.00
N										
ATOM	693	CA	GLY	A	47	33.516	-9.548	0.955	1.00	0.00
C										
ATOM	694	C	GLY	A	47	34.228	-8.428	0.196	1.00	0.00
C										
ATOM	695	O	GLY	A	47	34.339	-7.316	0.723	1.00	0.00
O										
ATOM	696	H	GLY	A	47	32.600	-11.137	-0.175	1.00	0.00
H										
ATOM	697	HA2	GLY	A	47	34.031	-9.649	1.909	1.00	0.00
H										
ATOM	698	HA3	GLY	A	47	32.497	-9.205	1.127	1.00	0.00
H										
ATOM	699	N	ASP	A	48	34.706	-8.676	-1.018	1.00	0.00
N										
ATOM	700	CA	ASP	A	48	35.477	-7.656	-1.747	1.00	0.00
C										
ATOM	701	C	ASP	A	48	34.535	-6.711	-2.482	1.00	0.00
C										
ATOM	702	O	ASP	A	48	33.595	-7.153	-3.075	1.00	0.00
O										
ATOM	703	CB	ASP	A	48	36.406	-8.289	-2.788	1.00	0.00
C										
ATOM	704	CG	ASP	A	48	37.286	-9.365	-2.224	1.00	0.00
C										
ATOM	705	OD1	ASP	A	48	38.004	-9.057	-1.257	1.00	0.00
O										
ATOM	706	OD2	ASP	A	48	37.270	-10.487	-2.787	1.00	0.00
O1-										
ATOM	707	H	ASP	A	48	34.538	-9.580	-1.448	1.00	0.00
H										
ATOM	708	HA	ASP	A	48	36.074	-7.085	-1.037	1.00	0.00
H										
ATOM	709	HB2	ASP	A	48	37.040	-7.508	-3.205	1.00	0.00
H										
ATOM	710	HB3	ASP	A	48	35.795	-8.722	-3.579	1.00	0.00
H										
ATOM	711	N	TRP	A	49	34.809	-5.415	-2.429	1.00	0.00
N										
ATOM	712	CA	TRP	A	49	34.077	-4.402	-3.168	1.00	0.00
C										
ATOM	713	C	TRP	A	49	34.675	-4.298	-4.567	1.00	0.00
C										

ATOM	714	O	TRP	A	49	35.874	-4.233	-4.711	1.00	0.00
O										
ATOM	715	CB	TRP	A	49	34.118	-3.059	-2.407	1.00	0.00
C										
ATOM	716	CG	TRP	A	49	33.366	-3.148	-1.119	1.00	0.00
C										
ATOM	717	CD1	TRP	A	49	33.290	-4.249	-0.269	1.00	0.00
C										
ATOM	718	CD2	TRP	A	49	32.543	-2.150	-0.530	1.00	0.00
C										
ATOM	719	NE1	TRP	A	49	32.449	-3.979	0.768	1.00	0.00
N										
ATOM	720	CE2	TRP	A	49	32.024	-2.689	0.671	1.00	0.00
C										
ATOM	721	CE3	TRP	A	49	32.166	-0.865	-0.903	1.00	0.00
C										
ATOM	722	CZ2	TRP	A	49	31.149	-1.987	1.486	1.00	0.00
C										
ATOM	723	CZ3	TRP	A	49	31.292	-0.172	-0.088	1.00	0.00
C										
ATOM	724	CH2	TRP	A	49	30.804	-0.742	1.098	1.00	0.00
C										
ATOM	725	H	TRP	A	49	35.576	-5.113	-1.837	1.00	0.00
H										
ATOM	726	HA	TRP	A	49	33.039	-4.719	-3.257	1.00	0.00
H										
ATOM	727	HB2	TRP	A	49	33.670	-2.285	-3.028	1.00	0.00
H										
ATOM	728	HB3	TRP	A	49	35.155	-2.801	-2.196	1.00	0.00
H										
ATOM	729	HD1	TRP	A	49	33.824	-5.187	-0.412	1.00	0.00
H										
ATOM	730	HE1	TRP	A	49	32.182	-4.634	1.496	1.00	0.00
H										
ATOM	731	HE3	TRP	A	49	32.551	-0.415	-1.817	1.00	0.00
H										
ATOM	732	HZ2	TRP	A	49	30.756	-2.424	2.403	1.00	0.00
H										
ATOM	733	HZ3	TRP	A	49	30.977	0.832	-0.370	1.00	0.00
H										
ATOM	734	HH2	TRP	A	49	30.127	-0.162	1.723	1.00	0.00
H										
ATOM	735	N	ARG	A	50	33.820	-4.309	-5.586	1.00	0.00
N										
ATOM	736	CA	ARG	A	50	34.223	-4.156	-6.990	1.00	0.00
C										
ATOM	737	C	ARG	A	50	33.344	-3.106	-7.691	1.00	0.00
C										
ATOM	738	O	ARG	A	50	32.161	-3.340	-7.923	1.00	0.00
O										
ATOM	739	CB	ARG	A	50	34.051	-5.491	-7.732	1.00	0.00
C										
ATOM	740	CG	ARG	A	50	34.828	-6.659	-7.158	1.00	0.00
C										
ATOM	741	CD	ARG	A	50	36.270	-6.413	-7.319	1.00	0.00
C										

ATOM	742	NE	ARG	A	50	37.047	-7.582	-6.943	1.00	0.00
N1+										
ATOM	743	CZ	ARG	A	50	37.874	-7.653	-5.923	1.00	0.00
C1+										
ATOM	744	NH1	ARG	A	50	38.083	-6.614	-5.119	1.00	0.00
N1+										
ATOM	745	NH2	ARG	A	50	38.516	-8.786	-5.732	1.00	0.00
N1+										
ATOM	746	H	ARG	A	50	32.834	-4.430	-5.382	1.00	0.00
H										
ATOM	747	HA	ARG	A	50	35.266	-3.846	-7.037	1.00	0.00
H										
ATOM	748	HB2	ARG	A	50	34.374	-5.347	-8.762	1.00	0.00
H										
ATOM	749	HB3	ARG	A	50	32.994	-5.751	-7.716	1.00	0.00
H										
ATOM	750	HG2	ARG	A	50	34.554	-7.572	-7.685	1.00	0.00
H										
ATOM	751	HG3	ARG	A	50	34.594	-6.767	-6.100	1.00	0.00
H										
ATOM	752	HD2	ARG	A	50	36.561	-5.575	-6.687	1.00	0.00
H										
ATOM	753	HD3	ARG	A	50	36.475	-6.170	-8.361	1.00	0.00
H										
ATOM	754	HE2	ARG	A	50	36.943	-8.414	-7.516	1.00	0.00
H										
ATOM	755	HE3	ARG	A	50	36.291	-7.895	-6.351	1.00	0.00
H										
ATOM	756	HH11	ARG	A	50	38.728	-6.697	-4.339	1.00	0.00
H										
ATOM	757	HH12	ARG	A	50	37.599	-5.738	-5.285	1.00	0.00
H										
ATOM	758	HH13	ARG	A	50	38.841	-6.308	-5.712	1.00	0.00
H										
ATOM	759	HH21	ARG	A	50	39.162	-8.879	-4.955	1.00	0.00
H										
ATOM	760	HH22	ARG	A	50	38.363	-9.568	-6.362	1.00	0.00
H										
ATOM	761	HH23	ARG	A	50	37.762	-9.113	-5.144	1.00	0.00
H										
ATOM	762	N	LYS	A	51	33.924	-1.975	-8.043	1.00	0.00
N										
ATOM	763	CA	LYS	A	51	33.193	-0.887	-8.691	1.00	0.00
C										
ATOM	764	C	LYS	A	51	33.169	-1.027	-10.204	1.00	0.00
C										
ATOM	765	O	LYS	A	51	34.148	-1.402	-10.818	1.00	0.00
O										
ATOM	766	CB	LYS	A	51	33.771	0.475	-8.299	1.00	0.00
C										
ATOM	767	CG	LYS	A	51	32.851	1.633	-8.507	1.00	0.00
C										
ATOM	768	CD	LYS	A	51	33.552	2.918	-8.113	1.00	0.00
C										
ATOM	769	CE	LYS	A	51	32.510	4.039	-7.935	1.00	0.00
C										

ATOM	770	NZ	LYS	A	51	33.043	5.488	-7.794	1.00	0.00
N1+										
ATOM	771	H	LYS	A	51	34.915	-1.855	-7.857	1.00	0.00
H										
ATOM	772	HA	LYS	A	51	32.164	-0.924	-8.338	1.00	0.00
H										
ATOM	773	HB2	LYS	A	51	34.669	0.645	-8.893	1.00	0.00
H										
ATOM	774	HB3	LYS	A	51	34.036	0.439	-7.243	1.00	0.00
H										
ATOM	775	HG2	LYS	A	51	31.961	1.503	-7.893	1.00	0.00
H										
ATOM	776	HG3	LYS	A	51	32.565	1.684	-9.556	1.00	0.00
H										
ATOM	777	HD2	LYS	A	51	34.259	3.200	-8.893	1.00	0.00
H										
ATOM	778	HD3	LYS	A	51	34.087	2.767	-7.176	1.00	0.00
H										
ATOM	779	HE2	LYS	A	51	31.936	3.813	-7.038	1.00	0.00
H										
ATOM	780	HE3	LYS	A	51	31.852	4.015	-8.803	1.00	0.00
H										
ATOM	781	HZ1	LYS	A	51	33.569	5.737	-8.625	1.00	0.00
H										
ATOM	782	HZ2	LYS	A	51	32.262	6.127	-7.684	1.00	0.00
H										
ATOM	783	HZ3	LYS	A	51	33.647	5.549	-6.981	1.00	0.00
H										
ATOM	784	N	GLN	A	52	31.991	-0.792	-10.773	1.00	0.00
N										
ATOM	785	CA	GLN	A	52	31.785	-0.641	-12.184	1.00	0.00
C										
ATOM	786	C	GLN	A	52	31.171	0.748	-12.379	1.00	0.00
C										
ATOM	787	O	GLN	A	52	30.057	1.069	-11.871	1.00	0.00
O										
ATOM	788	CB	GLN	A	52	30.868	-1.726	-12.723	1.00	0.00
C										
ATOM	789	CG	GLN	A	52	30.500	-1.564	-14.224	1.00	0.00
C										
ATOM	790	CD	GLN	A	52	29.616	-2.681	-14.742	1.00	0.00
C										
ATOM	791	OE1	GLN	A	52	29.154	-3.529	-13.979	1.00	0.00
O										
ATOM	792	NE2	GLN	A	52	29.349	-2.672	-16.030	1.00	0.00
N										
ATOM	793	H	GLN	A	52	31.182	-0.714	-10.166	1.00	0.00
H										
ATOM	794	HA	GLN	A	52	32.743	-0.689	-12.698	1.00	0.00
H										
ATOM	795	HB2	GLN	A	52	29.947	-1.714	-12.143	1.00	0.00
H										
ATOM	796	HB3	GLN	A	52	31.365	-2.687	-12.595	1.00	0.00
H										
ATOM	797	HG2	GLN	A	52	31.420	-1.551	-14.807	1.00	0.00
H										

ATOM	798	HG3	GLN	A	52	29.976	-0.618	-14.352	1.00	0.00
H										
ATOM	799	HE21	GLN	A	52	28.762	-3.396	-16.432	1.00	0.00
H										
ATOM	800	HE22	GLN	A	52	29.732	-1.942	-16.622	1.00	0.00
H										
ATOM	801	N	ASN	A	53	31.907	1.568	-13.122	1.00	0.00
N										
ATOM	802	CA	ASN	A	53	31.583	2.983	-13.311	1.00	0.00
C										
ATOM	803	C	ASN	A	53	30.611	3.231	-14.434	1.00	0.00
C										
ATOM	804	O	ASN	A	53	30.648	2.528	-15.444	1.00	0.00
O										
ATOM	805	CB	ASN	A	53	32.865	3.750	-13.635	1.00	0.00
C										
ATOM	806	CG	ASN	A	53	33.897	3.625	-12.546	1.00	0.00
C										
ATOM	807	OD1	ASN	A	53	33.578	3.718	-11.371	1.00	0.00
O										
ATOM	808	ND2	ASN	A	53	35.141	3.435	-12.931	1.00	0.00
N										
ATOM	809	H	ASN	A	53	32.733	1.196	-13.580	1.00	0.00
H										
ATOM	810	HA	ASN	A	53	31.161	3.375	-12.387	1.00	0.00
H										
ATOM	811	HB2	ASN	A	53	32.619	4.803	-13.765	1.00	0.00
H										
ATOM	812	HB3	ASN	A	53	33.283	3.357	-14.560	1.00	0.00
H										
ATOM	813	HD21	ASN	A	53	35.878	3.344	-12.239	1.00	0.00
H										
ATOM	814	HD22	ASN	A	53	35.363	3.380	-13.920	1.00	0.00
H										
ATOM	815	N	ASN	A	54	29.735	4.223	-14.235	1.00	0.00
N										
ATOM	816	CA	ASN	A	54	29.090	4.937	-15.372	1.00	0.00
C										
ATOM	817	C	ASN	A	54	28.230	3.993	-16.190	1.00	0.00
C										
ATOM	818	O	ASN	A	54	28.526	3.733	-17.333	1.00	0.00
O										
ATOM	819	CB	ASN	A	54	30.183	5.576	-16.257	1.00	0.00
C										
ATOM	820	CG	ASN	A	54	29.640	6.600	-17.252	1.00	0.00
C										
ATOM	821	OD1	ASN	A	54	28.508	7.086	-17.134	1.00	0.00
O										
ATOM	822	ND2	ASN	A	54	30.471	6.926	-18.263	1.00	0.00
N										
ATOM	823	H	ASN	A	54	29.503	4.495	-13.285	1.00	0.00
H										
ATOM	824	HA	ASN	A	54	28.458	5.729	-14.973	1.00	0.00
H										
ATOM	825	HB2	ASN	A	54	30.681	4.785	-16.814	1.00	0.00
H										

ATOM	826	HB3	ASN	A	54	30.903	6.073	-15.610	1.00	0.00
H										
ATOM	827	HD21	ASN	A	54	30.178	7.601	-18.963	1.00	0.00
H										
ATOM	828	HD22	ASN	A	54	31.388	6.497	-18.324	1.00	0.00
H										
ATOM	829	N	ILE	A	55	27.193	3.433	-15.564	1.00	0.00
N										
ATOM	830	CA	ILE	A	55	26.251	2.568	-16.264	1.00	0.00
C										
ATOM	831	C	ILE	A	55	25.342	3.480	-17.059	1.00	0.00
C										
ATOM	832	O	ILE	A	55	24.748	4.428	-16.551	1.00	0.00
O										
ATOM	833	CB	ILE	A	55	25.422	1.660	-15.347	1.00	0.00
C										
ATOM	834	CG1	ILE	A	55	26.355	0.874	-14.393	1.00	0.00
C										
ATOM	835	CG2	ILE	A	55	24.544	0.726	-16.212	1.00	0.00
C										
ATOM	836	CD1	ILE	A	55	27.216	-0.167	-15.038	1.00	0.00
C										
ATOM	837	H	ILE	A	55	27.057	3.614	-14.575	1.00	0.00
H										
ATOM	838	HA	ILE	A	55	26.808	1.942	-16.960	1.00	0.00
H										
ATOM	839	HB	ILE	A	55	24.766	2.287	-14.745	1.00	0.00
H										
ATOM	840	HG12	ILE	A	55	25.733	0.379	-13.649	1.00	0.00
H										
ATOM	841	HG13	ILE	A	55	27.010	1.591	-13.900	1.00	0.00
H										
ATOM	842	HG21	ILE	A	55	25.182	0.116	-16.850	1.00	0.00
H										
ATOM	843	HG22	ILE	A	55	23.954	0.080	-15.564	1.00	0.00
H										
ATOM	844	HG23	ILE	A	55	23.878	1.325	-16.831	1.00	0.00
H										
ATOM	845	HD11	ILE	A	55	27.863	0.304	-15.777	1.00	0.00
H										
ATOM	846	HD12	ILE	A	55	27.827	-0.654	-14.279	1.00	0.00
H										
ATOM	847	HD13	ILE	A	55	26.586	-0.908	-15.527	1.00	0.00
H										
ATOM	848	N	THR	A	56	25.295	3.171	-18.334	1.00	0.00
N										
ATOM	849	CA	THR	A	56	24.890	4.099	-19.362	1.00	0.00
C										
ATOM	850	C	THR	A	56	23.811	3.494	-20.272	1.00	0.00
C										
ATOM	851	O	THR	A	56	23.113	4.234	-20.997	1.00	0.00
O										
ATOM	852	CB	THR	A	56	26.192	4.542	-20.079	1.00	0.00
C										
ATOM	853	OG1	THR	A	56	26.445	5.916	-19.755	1.00	0.00
O										

ATOM	854	CG2	THR	A	56	26.171	4.297	-21.564	1.00	0.00
C										
ATOM	855	H	THR	A	56	25.558	2.231	-18.611	1.00	0.00
H										
ATOM	856	HA	THR	A	56	24.462	4.974	-18.873	1.00	0.00
H										
ATOM	857	HB	THR	A	56	27.008	3.954	-19.663	1.00	0.00
H										
ATOM	858	HG21	THR	A	56	25.347	4.851	-22.012	1.00	0.00
H										
ATOM	859	HG22	THR	A	56	27.111	4.630	-22.000	1.00	0.00
H										
ATOM	860	HG23	THR	A	56	26.039	3.233	-21.755	1.00	0.00
H										
ATOM	861	HG1	THR	A	56	26.550	6.010	-18.772	1.00	0.00
H										
ATOM	862	N	ALA	A	57	23.663	2.164	-20.215	1.00	0.00
N										
ATOM	863	CA	ALA	A	57	22.691	1.447	-21.041	1.00	0.00
C										
ATOM	864	C	ALA	A	57	21.825	0.509	-20.169	1.00	0.00
C										
ATOM	865	O	ALA	A	57	22.056	0.364	-18.945	1.00	0.00
O										
ATOM	866	CB	ALA	A	57	23.401	0.666	-22.152	1.00	0.00
C										
ATOM	867	H	ALA	A	57	24.247	1.634	-19.575	1.00	0.00
H										
ATOM	868	HA	ALA	A	57	22.035	2.180	-21.507	1.00	0.00
H										
ATOM	869	HB1	ALA	A	57	24.087	-0.054	-21.708	1.00	0.00
H										
ATOM	870	HB2	ALA	A	57	22.663	0.140	-22.755	1.00	0.00
H										
ATOM	871	HB3	ALA	A	57	23.959	1.357	-22.782	1.00	0.00
H										
ATOM	872	N	GLU	A	58	20.829	-0.104	-20.802	1.00	0.00
N										
ATOM	873	CA	GLU	A	58	19.949	-1.041	-20.128	1.00	0.00
C										
ATOM	874	C	GLU	A	58	20.737	-2.299	-19.858	1.00	0.00
C										
ATOM	875	O	GLU	A	58	21.528	-2.727	-20.683	1.00	0.00
O										
ATOM	876	CB	GLU	A	58	18.740	-1.381	-20.994	1.00	0.00
C										
ATOM	877	CG	GLU	A	58	17.636	-2.058	-20.215	1.00	0.00
C										
ATOM	878	CD	GLU	A	58	16.684	-2.843	-21.093	1.00	0.00
C										
ATOM	879	OE1	GLU	A	58	16.815	-2.794	-22.336	1.00	0.00
O										
ATOM	880	OE2	GLU	A	58	15.809	-3.523	-20.523	1.00	0.00
O1-										
ATOM	881	H	GLU	A	58	20.680	0.089	-21.787	1.00	0.00
H										

ATOM	882	HA	GLU	A	58	19.613	-0.612	-19.185	1.00	0.00
H										
ATOM	883	HB2	GLU	A	58	19.061	-2.047	-21.794	1.00	0.00
H										
ATOM	884	HB3	GLU	A	58	18.349	-0.460	-21.423	1.00	0.00
H										
ATOM	885	HG2	GLU	A	58	17.069	-1.295	-19.684	1.00	0.00
H										
ATOM	886	HG3	GLU	A	58	18.087	-2.741	-19.496	1.00	0.00
H										
ATOM	887	N	ILE	A	59	20.558	-2.872	-18.677	1.00	0.00
N										
ATOM	888	CA	ILE	A	59	21.179	-4.146	-18.374	1.00	0.00
C										
ATOM	889	C	ILE	A	59	20.127	-5.164	-18.772	1.00	0.00
C										
ATOM	890	O	ILE	A	59	19.137	-5.346	-18.072	1.00	0.00
O										
ATOM	891	CB	ILE	A	59	21.574	-4.289	-16.865	1.00	0.00
C										
ATOM	892	CG1	ILE	A	59	22.437	-3.105	-16.390	1.00	0.00
C										
ATOM	893	CG2	ILE	A	59	22.333	-5.584	-16.622	1.00	0.00
C										
ATOM	894	CD1	ILE	A	59	23.840	-3.029	-17.033	1.00	0.00
C										
ATOM	895	H	ILE	A	59	19.981	-2.415	-17.978	1.00	0.00
H										
ATOM	896	HA	ILE	A	59	22.064	-4.276	-18.995	1.00	0.00
H										
ATOM	897	HB	ILE	A	59	20.662	-4.309	-16.271	1.00	0.00
H										
ATOM	898	HG12	ILE	A	59	22.563	-3.188	-15.311	1.00	0.00
H										
ATOM	899	HG13	ILE	A	59	21.907	-2.183	-16.624	1.00	0.00
H										
ATOM	900	HG21	ILE	A	59	23.241	-5.591	-17.223	1.00	0.00
H										
ATOM	901	HG22	ILE	A	59	22.596	-5.659	-15.568	1.00	0.00
H										
ATOM	902	HG23	ILE	A	59	21.707	-6.430	-16.901	1.00	0.00
H										
ATOM	903	HD11	ILE	A	59	23.740	-2.932	-18.113	1.00	0.00
H										
ATOM	904	HD12	ILE	A	59	24.374	-2.166	-16.639	1.00	0.00
H										
ATOM	905	HD13	ILE	A	59	24.396	-3.936	-16.800	1.00	0.00
H										
ATOM	906	N	LYS	A	60	20.328	-5.814	-19.905	1.00	0.00
N										
ATOM	907	CA	LYS	A	60	19.340	-6.785	-20.386	1.00	0.00
C										
ATOM	908	C	LYS	A	60	19.497	-8.126	-19.681	1.00	0.00
C										
ATOM	909	O	LYS	A	60	18.555	-8.914	-19.577	1.00	0.00
O										



ATOM	910	CB	LYS	A	60	19.485	-6.986	-21.898	1.00	0.00
C										
ATOM	911	CG	LYS	A	60	19.347	-5.711	-22.715	1.00	0.00
C										
ATOM	912	CD	LYS	A	60	20.074	-5.820	-24.043	1.00	0.00
C										
ATOM	913	CE	LYS	A	60	19.858	-4.565	-24.852	1.00	0.00
C										
ATOM	914	NZ	LYS	A	60	18.421	-4.398	-25.247	1.00	0.00
N1+										
ATOM	915	H	LYS	A	60	21.170	-5.641	-20.445	1.00	0.00
H										
ATOM	916	HA	LYS	A	60	18.343	-6.398	-20.180	1.00	0.00
H										
ATOM	917	HB2	LYS	A	60	18.717	-7.685	-22.224	1.00	0.00
H										
ATOM	918	HB3	LYS	A	60	20.469	-7.411	-22.093	1.00	0.00
H										
ATOM	919	HG2	LYS	A	60	19.767	-4.881	-22.149	1.00	0.00
H										
ATOM	920	HG3	LYS	A	60	18.291	-5.524	-22.904	1.00	0.00
H										
ATOM	921	HD2	LYS	A	60	19.691	-6.677	-24.595	1.00	0.00
H										
ATOM	922	HD3	LYS	A	60	21.140	-5.953	-23.861	1.00	0.00
H										
ATOM	923	HE2	LYS	A	60	20.467	-4.617	-25.753	1.00	0.00
H										
ATOM	924	HE3	LYS	A	60	20.162	-3.705	-24.257	1.00	0.00
H										
ATOM	925	HZ1	LYS	A	60	17.845	-4.343	-24.413	1.00	0.00
H										
ATOM	926	HZ2	LYS	A	60	18.316	-3.546	-25.788	1.00	0.00
H										
ATOM	927	HZ3	LYS	A	60	18.130	-5.192	-25.808	1.00	0.00
H										
ATOM	928	N	SER	A	61	20.707	-8.385	-19.217	1.00	0.00
N										
ATOM	929	CA	SER	A	61	21.059	-9.686	-18.679	1.00	0.00
C										
ATOM	930	C	SER	A	61	22.121	-9.432	-17.632	1.00	0.00
C										
ATOM	931	O	SER	A	61	23.036	-8.647	-17.859	1.00	0.00
O										
ATOM	932	CB	SER	A	61	21.593	-10.590	-19.815	1.00	0.00
C										
ATOM	933	OG	SER	A	61	21.817	-11.929	-19.404	1.00	0.00
O										
ATOM	934	H	SER	A	61	21.410	-7.653	-19.238	1.00	0.00
H										
ATOM	935	HA	SER	A	61	20.186	-10.146	-18.218	1.00	0.00
H										
ATOM	936	HB2	SER	A	61	22.535	-10.176	-20.174	1.00	0.00
H										
ATOM	937	HB3	SER	A	61	20.866	-10.594	-20.625	1.00	0.00
H										

ATOM	938	HG	SER	A	61	20.965	-12.324	-19.082	1.00	0.00
H										
ATOM	939	N	THR	A	62	21.989	-10.084	-16.482	1.00	0.00
N										
ATOM	940	CA	THR	A	62	22.984	-10.000	-15.402	1.00	0.00
C										
ATOM	941	C	THR	A	62	24.450	-10.069	-15.871	1.00	0.00
C										
ATOM	942	O	THR	A	62	25.317	-9.456	-15.247	1.00	0.00
O										
ATOM	943	CB	THR	A	62	22.706	-11.084	-14.362	1.00	0.00
C										
ATOM	944	OG1	THR	A	62	21.885	-10.527	-13.330	1.00	0.00
O										
ATOM	945	CG2	THR	A	62	23.978	-11.631	-13.756	1.00	0.00
C										
ATOM	946	H	THR	A	62	21.168	-10.664	-16.343	1.00	0.00
H										
ATOM	947	HA	THR	A	62	22.847	-9.038	-14.911	1.00	0.00
H										
ATOM	948	HB	THR	A	62	22.165	-11.900	-14.840	1.00	0.00
H										
ATOM	949	HG21	THR	A	62	24.524	-10.825	-13.268	1.00	0.00
H										
ATOM	950	HG22	THR	A	62	23.731	-12.398	-13.023	1.00	0.00
H										
ATOM	951	HG23	THR	A	62	24.597	-12.065	-14.540	1.00	0.00
H										
ATOM	952	HG1	THR	A	62	21.031	-10.208	-13.723	1.00	0.00
H										
ATOM	953	N	ASP	A	63	24.712	-10.754	-16.990	1.00	0.00
N										
ATOM	954	CA	ASP	A	63	26.075	-10.971	-17.496	1.00	0.00
C										
ATOM	955	C	ASP	A	63	26.779	-9.704	-17.987	1.00	0.00
C										
ATOM	956	O	ASP	A	63	27.968	-9.752	-18.306	1.00	0.00
O										
ATOM	957	CB	ASP	A	63	26.102	-11.991	-18.663	1.00	0.00
C										
ATOM	958	CG	ASP	A	63	25.182	-13.198	-18.448	1.00	0.00
C										
ATOM	959	OD1	ASP	A	63	24.604	-13.373	-17.346	1.00	0.00
O										
ATOM	960	OD2	ASP	A	63	25.037	-13.978	-19.411	1.00	0.00
O1-										
ATOM	961	H	ASP	A	63	23.934	-11.142	-17.514	1.00	0.00
H										
ATOM	962	HA	ASP	A	63	26.669	-11.384	-16.682	1.00	0.00
H										
ATOM	963	HB2	ASP	A	63	27.123	-12.353	-18.780	1.00	0.00
H										
ATOM	964	HB3	ASP	A	63	25.792	-11.480	-19.573	1.00	0.00
H										
ATOM	965	N	GLU	A	64	26.060	-8.594	-18.106	1.00	0.00
N										

ATOM	966	CA	GLU	A	64	26.665	-7.356	-18.584	1.00	0.00
C										
ATOM	967	C	GLU	A	64	27.197	-6.555	-17.404	1.00	0.00
C										
ATOM	968	O	GLU	A	64	27.810	-5.490	-17.575	1.00	0.00
O										
ATOM	969	CB	GLU	A	64	25.636	-6.538	-19.357	1.00	0.00
C										
ATOM	970	CG	GLU	A	64	24.994	-7.291	-20.567	1.00	0.00
C										
ATOM	971	CD	GLU	A	64	23.642	-6.716	-20.992	1.00	0.00
C										
ATOM	972	OE1	GLU	A	64	23.451	-5.471	-20.894	1.00	0.00
O										
ATOM	973	OE2	GLU	A	64	22.772	-7.525	-21.416	1.00	0.00
O1-										
ATOM	974	H	GLU	A	64	25.075	-8.607	-17.861	1.00	0.00
H										
ATOM	975	HA	GLU	A	64	27.493	-7.601	-19.247	1.00	0.00
H										
ATOM	976	HB2	GLU	A	64	26.125	-5.642	-19.734	1.00	0.00
H										
ATOM	977	HB3	GLU	A	64	24.839	-6.255	-18.670	1.00	0.00
H										
ATOM	978	HG2	GLU	A	64	24.854	-8.335	-20.289	1.00	0.00
H										
ATOM	979	HG3	GLU	A	64	25.677	-7.229	-21.413	1.00	0.00
H										
ATOM	980	N	LEU	A	65	26.893	-7.058	-16.206	1.00	0.00
N										
ATOM	981	CA	LEU	A	65	27.455	-6.571	-14.948	1.00	0.00
C										
ATOM	982	C	LEU	A	65	28.794	-7.312	-14.731	1.00	0.00
C										
ATOM	983	O	LEU	A	65	28.848	-8.539	-14.777	1.00	0.00
O										
ATOM	984	CB	LEU	A	65	26.484	-6.831	-13.797	1.00	0.00
C										
ATOM	985	CG	LEU	A	65	25.010	-6.435	-13.999	1.00	0.00
C										
ATOM	986	CD1	LEU	A	65	24.178	-6.781	-12.807	1.00	0.00
C										
ATOM	987	CD2	LEU	A	65	24.879	-4.957	-14.334	1.00	0.00
C										
ATOM	988	H	LEU	A	65	26.232	-7.827	-16.166	1.00	0.00
H										
ATOM	989	HA	LEU	A	65	27.644	-5.501	-15.027	1.00	0.00
H										
ATOM	990	HB2	LEU	A	65	26.852	-6.283	-12.931	1.00	0.00
H										
ATOM	991	HB3	LEU	A	65	26.508	-7.899	-13.587	1.00	0.00
H										
ATOM	992	HG	LEU	A	65	24.628	-7.002	-14.846	1.00	0.00
H										
ATOM	993	HD11	LEU	A	65	24.559	-6.254	-11.933	1.00	0.00
H										

ATOM	994	HD12	LEU	A	65	23.145	-6.487	-12.987	1.00	0.00
H										
ATOM	995	HD13	LEU	A	65	24.224	-7.855	-12.632	1.00	0.00
H										
ATOM	996	HD21	LEU	A	65	25.426	-4.743	-15.251	1.00	0.00
H										
ATOM	997	HD22	LEU	A	65	23.828	-4.708	-14.471	1.00	0.00
H										
ATOM	998	HD23	LEU	A	65	25.291	-4.362	-13.520	1.00	0.00
H										
ATOM	999	N	HIS	A	66	29.860	-6.541	-14.547	1.00	0.00
N										
ATOM	1000	CA	HIS	A	66	31.206	-7.056	-14.251	1.00	0.00
C										
ATOM	1001	C	HIS	A	66	31.299	-7.897	-12.960	1.00	0.00
C										
ATOM	1002	O	HIS	A	66	32.087	-8.855	-12.874	1.00	0.00
O										
ATOM	1003	CB	HIS	A	66	32.172	-5.880	-14.108	1.00	0.00
C										
ATOM	1004	CG	HIS	A	66	32.334	-5.062	-15.352	1.00	0.00
C										
ATOM	1005	ND1	HIS	A	66	33.108	-3.918	-15.390	1.00	0.00
N										
ATOM	1006	CD2	HIS	A	66	31.809	-5.207	-16.593	1.00	0.00
C										
ATOM	1007	CE1	HIS	A	66	33.066	-3.406	-16.608	1.00	0.00
C										
ATOM	1008	NE2	HIS	A	66	32.287	-4.168	-17.358	1.00	0.00
N										
ATOM	1009	H	HIS	A	66	29.739	-5.536	-14.615	1.00	0.00
H										
ATOM	1010	HA	HIS	A	66	31.532	-7.671	-15.088	1.00	0.00
H										
ATOM	1011	HB2	HIS	A	66	33.148	-6.273	-13.828	1.00	0.00
H										
ATOM	1012	HB3	HIS	A	66	31.802	-5.229	-13.317	1.00	0.00
H										
ATOM	1013	HD1	HIS	A	66	33.626	-3.532	-14.607	1.00	0.00
H										
ATOM	1014	HD2	HIS	A	66	31.135	-5.997	-16.923	1.00	0.00
H										
ATOM	1015	HE1	HIS	A	66	33.585	-2.508	-16.939	1.00	0.00
H										
ATOM	1016	N	LEU	A	67	30.504	-7.502	-11.964	1.00	0.00
N										
ATOM	1017	CA	LEU	A	67	30.475	-8.136	-10.664	1.00	0.00
C										
ATOM	1018	C	LEU	A	67	31.880	-8.227	-10.038	1.00	0.00
C										
ATOM	1019	O	LEU	A	67	32.461	-7.195	-9.706	1.00	0.00
O										
ATOM	1020	CB	LEU	A	67	29.763	-9.489	-10.769	1.00	0.00
C										
ATOM	1021	CG	LEU	A	67	28.316	-9.472	-11.267	1.00	0.00
C										

ATOM	1022	CD1	LEU	A	67	27.834	-10.894	-11.517	1.00	0.00
C										
ATOM	1023	CD2	LEU	A	67	27.362	-8.742	-10.309	1.00	0.00
C										
ATOM	1024	H	LEU	A	67	29.886	-6.714	-12.127	1.00	0.00
H										
ATOM	1025	HA	LEU	A	67	29.873	-7.505	-10.012	1.00	0.00
H										
ATOM	1026	HB2	LEU	A	67	29.765	-9.940	-9.778	1.00	0.00
H										
ATOM	1027	HB3	LEU	A	67	30.339	-10.112	-11.452	1.00	0.00
H										
ATOM	1028	HG	LEU	A	67	28.299	-8.944	-12.219	1.00	0.00
H										
ATOM	1029	HD11	LEU	A	67	27.887	-11.464	-10.590	1.00	0.00
H										
ATOM	1030	HD12	LEU	A	67	26.805	-10.872	-11.871	1.00	0.00
H										
ATOM	1031	HD13	LEU	A	67	28.466	-11.365	-12.269	1.00	0.00
H										
ATOM	1032	HD21	LEU	A	67	27.685	-7.709	-10.193	1.00	0.00
H										
ATOM	1033	HD22	LEU	A	67	26.352	-8.764	-10.716	1.00	0.00
H										
ATOM	1034	HD23	LEU	A	67	27.373	-9.237	-9.339	1.00	0.00
H										
ATOM	1035	N	GLU	A	68	32.413	-9.451	-9.891	1.00	0.00
N										
ATOM	1036	CA	GLU	A	68	33.725	-9.710	-9.268	1.00	0.00
C										
ATOM	1037	C	GLU	A	68	34.883	-9.064	-10.031	1.00	0.00
C										
ATOM	1038	O	GLU	A	68	35.984	-8.947	-9.501	1.00	0.00
O										
ATOM	1039	CB	GLU	A	68	34.001	-11.240	-9.176	1.00	0.00
C										
ATOM	1040	CG	GLU	A	68	33.022	-12.020	-8.271	1.00	0.00
C										
ATOM	1041	CD	GLU	A	68	33.692	-13.181	-7.517	1.00	0.00
C										
ATOM	1042	OE1	GLU	A	68	33.548	-13.246	-6.261	1.00	0.00
O										
ATOM	1043	OE2	GLU	A	68	34.371	-14.012	-8.173	1.00	0.00
O1-										
ATOM	1044	H	GLU	A	68	31.881	-10.246	-10.229	1.00	0.00
H										
ATOM	1045	HA	GLU	A	68	33.711	-9.303	-8.258	1.00	0.00
H										
ATOM	1046	HB2	GLU	A	68	35.008	-11.380	-8.786	1.00	0.00
H										
ATOM	1047	HB3	GLU	A	68	33.940	-11.657	-10.180	1.00	0.00
H										
ATOM	1048	HG2	GLU	A	68	32.224	-12.425	-8.892	1.00	0.00
H										
ATOM	1049	HG3	GLU	A	68	32.601	-11.331	-7.541	1.00	0.00
H										

ATOM	1050	N	ASN	A	69	34.621	-8.695	-11.286	1.00	0.00
N										
ATOM	1051	CA	ASN	A	69	35.623	-8.194	-12.211	1.00	0.00
C										
ATOM	1052	C	ASN	A	69	35.557	-6.677	-12.428	1.00	0.00
C										
ATOM	1053	O	ASN	A	69	36.090	-6.167	-13.404	1.00	0.00
O										
ATOM	1054	CB	ASN	A	69	35.479	-8.948	-13.548	1.00	0.00
C										
ATOM	1055	CG	ASN	A	69	35.788	-10.440	-13.406	1.00	0.00
C										
ATOM	1056	OD1	ASN	A	69	36.815	-10.808	-12.842	1.00	0.00
O										
ATOM	1057	ND2	ASN	A	69	34.901	-11.296	-13.901	1.00	0.00
N										
ATOM	1058	H	ASN	A	69	33.663	-8.769	-11.615	1.00	0.00
H										
ATOM	1059	HA	ASN	A	69	36.603	-8.430	-11.800	1.00	0.00
H										
ATOM	1060	HB2	ASN	A	69	36.168	-8.515	-14.271	1.00	0.00
H										
ATOM	1061	HB3	ASN	A	69	34.457	-8.834	-13.907	1.00	0.00
H										
ATOM	1062	HD21	ASN	A	69	35.065	-12.295	-13.829	1.00	0.00
H										
ATOM	1063	HD22	ASN	A	69	34.059	-10.951	-14.351	1.00	0.00
H										
ATOM	1064	N	GLY	A	70	34.898	-5.963	-11.523	1.00	0.00
N										
ATOM	1065	CA	GLY	A	70	34.980	-4.514	-11.469	1.00	0.00
C										
ATOM	1066	C	GLY	A	70	36.283	-4.113	-10.790	1.00	0.00
C										
ATOM	1067	O	GLY	A	70	37.045	-4.991	-10.367	1.00	0.00
O										
ATOM	1068	H	GLY	A	70	34.316	-6.446	-10.846	1.00	0.00
H										
ATOM	1069	HA2	GLY	A	70	34.138	-4.122	-10.902	1.00	0.00
H										
ATOM	1070	HA3	GLY	A	70	34.957	-4.110	-12.480	1.00	0.00
H										
ATOM	1071	N	GLU	A	71	36.510	-2.796	-10.673	1.00	0.00
N										
ATOM	1072	CA	GLU	A	71	37.757	-2.245	-10.089	1.00	0.00
C										
ATOM	1073	C	GLU	A	71	37.815	-2.644	-8.611	1.00	0.00
C										
ATOM	1074	O	GLU	A	71	36.815	-2.540	-7.906	1.00	0.00
O										
ATOM	1075	CB	GLU	A	71	37.829	-0.685	-10.173	1.00	0.00
C										
ATOM	1076	CG	GLU	A	71	37.578	-0.020	-11.538	1.00	0.00
C										
ATOM	1077	CD	GLU	A	71	38.863	0.272	-12.327	1.00	0.00
C										

ATOM	1078	OE1	GLU	A	71	39.895	-0.448	-12.188	1.00	0.00
O										
ATOM	1079	OE2	GLU	A	71	38.819	1.226	-13.144	1.00	0.00
O1-										
ATOM	1080	H	GLU	A	71	35.798	-2.149	-10.998	1.00	0.00
H										
ATOM	1081	HA	GLU	A	71	38.614	-2.671	-10.608	1.00	0.00
H										
ATOM	1082	HB2	GLU	A	71	38.825	-0.389	-9.848	1.00	0.00
H										
ATOM	1083	HB3	GLU	A	71	37.088	-0.289	-9.479	1.00	0.00
H										
ATOM	1084	HG2	GLU	A	71	37.055	0.921	-11.371	1.00	0.00
H										
ATOM	1085	HG3	GLU	A	71	36.951	-0.683	-12.134	1.00	0.00
H										
ATOM	1086	N	ALA	A	72	38.989	-3.066	-8.148	1.00	0.00
N										
ATOM	1087	CA	ALA	A	72	39.206	-3.330	-6.720	1.00	0.00
C										
ATOM	1088	C	ALA	A	72	39.010	-2.025	-5.974	1.00	0.00
C										
ATOM	1089	O	ALA	A	72	39.490	-0.973	-6.365	1.00	0.00
O										
ATOM	1090	CB	ALA	A	72	40.590	-3.842	-6.478	1.00	0.00
C										
ATOM	1091	H	ALA	A	72	39.754	-3.209	-8.799	1.00	0.00
H										
ATOM	1092	HA	ALA	A	72	38.480	-4.063	-6.370	1.00	0.00
H										
ATOM	1093	HB1	ALA	A	72	41.314	-3.101	-6.812	1.00	0.00
H										
ATOM	1094	HB2	ALA	A	72	40.726	-4.030	-5.414	1.00	0.00
H										
ATOM	1095	HB3	ALA	A	72	40.736	-4.768	-7.032	1.00	0.00
H										
ATOM	1096	N	LEU	A	73	38.262	-2.095	-4.901	1.00	0.00
N										
ATOM	1097	CA	LEU	A	73	37.843	-0.906	-4.230	1.00	0.00
C										
ATOM	1098	C	LEU	A	73	38.133	-1.097	-2.776	1.00	0.00
C										
ATOM	1099	O	LEU	A	73	37.555	-1.977	-2.149	1.00	0.00
O										
ATOM	1100	CB	LEU	A	73	36.330	-0.674	-4.444	1.00	0.00
C										
ATOM	1101	CG	LEU	A	73	36.014	0.802	-4.375	1.00	0.00
C										
ATOM	1102	CD1	LEU	A	73	36.570	1.378	-5.685	1.00	0.00
C										
ATOM	1103	CD2	LEU	A	73	34.524	1.089	-4.165	1.00	0.00
C										
ATOM	1104	H	LEU	A	73	37.979	-3.002	-4.543	1.00	0.00
H										
ATOM	1105	HA	LEU	A	73	38.404	-0.052	-4.608	1.00	0.00
H										

ATOM	1106	HB2	LEU	A	73	35.773	-1.198	-3.669	1.00	0.00
H										
ATOM	1107	HB3	LEU	A	73	36.042	-1.058	-5.421	1.00	0.00
H										
ATOM	1108	HG	LEU	A	73	36.570	1.235	-3.544	1.00	0.00
H										
ATOM	1109	HD11	LEU	A	73	36.080	0.897	-6.530	1.00	0.00
H										
ATOM	1110	HD12	LEU	A	73	36.383	2.450	-5.718	1.00	0.00
H										
ATOM	1111	HD13	LEU	A	73	37.643	1.195	-5.736	1.00	0.00
H										
ATOM	1112	HD21	LEU	A	73	34.196	0.638	-3.230	1.00	0.00
H										
ATOM	1113	HD22	LEU	A	73	34.364	2.165	-4.124	1.00	0.00
H										
ATOM	1114	HD23	LEU	A	73	33.953	0.668	-4.991	1.00	0.00
H										
ATOM	1115	N	GLU	A	74	39.046	-0.292	-2.245	1.00	0.00
N										
ATOM	1116	CA	GLU	A	74	39.216	-0.218	-0.799	1.00	0.00
C										
ATOM	1117	C	GLU	A	74	38.086	0.655	-0.298	1.00	0.00
C										
ATOM	1118	O	GLU	A	74	37.558	1.432	-1.060	1.00	0.00
O										
ATOM	1119	CB	GLU	A	74	40.552	0.401	-0.409	1.00	0.00
C										
ATOM	1120	CG	GLU	A	74	41.744	-0.447	-0.750	1.00	0.00
C										
ATOM	1121	CD	GLU	A	74	41.673	-1.833	-0.123	1.00	0.00
C										
ATOM	1122	OE1	GLU	A	74	40.944	-2.027	0.878	1.00	0.00
O										
ATOM	1123	OE2	GLU	A	74	42.340	-2.734	-0.655	1.00	0.00
O1-										
ATOM	1124	H	GLU	A	74	39.630	0.276	-2.850	1.00	0.00
H										
ATOM	1125	HA	GLU	A	74	39.132	-1.214	-0.367	1.00	0.00
H										
ATOM	1126	HB2	GLU	A	74	40.550	0.570	0.667	1.00	0.00
H										
ATOM	1127	HB3	GLU	A	74	40.652	1.354	-0.926	1.00	0.00
H										
ATOM	1128	HG2	GLU	A	74	42.643	0.053	-0.391	1.00	0.00
H										
ATOM	1129	HG3	GLU	A	74	41.797	-0.556	-1.832	1.00	0.00
H										
ATOM	1130	N	ILE	A	75	37.738	0.473	0.984	1.00	0.00
N										
ATOM	1131	CA	ILE	A	75	36.900	1.394	1.760	1.00	0.00
C										
ATOM	1132	C	ILE	A	75	37.650	2.647	2.234	1.00	0.00
C										
ATOM	1133	O	ILE	A	75	38.646	2.556	2.970	1.00	0.00
O										



ATOM	1134	CB	ILE	A	75	36.255	0.630	2.969	1.00	0.00
C										
ATOM	1135	CG1	ILE	A	75	35.311	-0.476	2.432	1.00	0.00
C										
ATOM	1136	CG2	ILE	A	75	35.560	1.623	3.941	1.00	0.00
C										
ATOM	1137	CD1	ILE	A	75	34.199	0.092	1.602	1.00	0.00
C										
ATOM	1138	H	ILE	A	75	38.079	-0.361	1.451	1.00	0.00
H										
ATOM	1139	HA	ILE	A	75	36.090	1.724	1.112	1.00	0.00
H										
ATOM	1140	HB	ILE	A	75	37.059	0.140	3.517	1.00	0.00
H										
ATOM	1141	HG12	ILE	A	75	34.881	-1.013	3.277	1.00	0.00
H										
ATOM	1142	HG13	ILE	A	75	35.890	-1.166	1.820	1.00	0.00
H										
ATOM	1143	HG21	ILE	A	75	34.778	2.164	3.410	1.00	0.00
H										
ATOM	1144	HG22	ILE	A	75	35.121	1.071	4.771	1.00	0.00
H										
ATOM	1145	HG23	ILE	A	75	36.294	2.330	4.324	1.00	0.00
H										
ATOM	1146	HD11	ILE	A	75	34.618	0.626	0.750	1.00	0.00
H										
ATOM	1147	HD12	ILE	A	75	33.562	-0.717	1.246	1.00	0.00
H										
ATOM	1148	HD13	ILE	A	75	33.609	0.779	2.207	1.00	0.00
H										
ATOM	1149	N	SER	A	76	37.172	3.816	1.788	1.00	0.00
N										
ATOM	1150	CA	SER	A	76	37.817	5.121	2.054	1.00	0.00
C										
ATOM	1151	C	SER	A	76	36.856	6.298	1.864	1.00	0.00
C										
ATOM	1152	O	SER	A	76	35.700	6.087	1.557	1.00	0.00
O										
ATOM	1153	CB	SER	A	76	39.048	5.314	1.143	1.00	0.00
C										
ATOM	1154	OG	SER	A	76	38.732	5.635	-0.215	1.00	0.00
O										
ATOM	1155	H	SER	A	76	36.320	3.806	1.237	1.00	0.00
H										
ATOM	1156	HA	SER	A	76	38.158	5.126	3.088	1.00	0.00
H										
ATOM	1157	HB2	SER	A	76	39.625	4.391	1.150	1.00	0.00
H										
ATOM	1158	HB3	SER	A	76	39.652	6.122	1.553	1.00	0.00
H										
ATOM	1159	HG	SER	A	76	38.215	6.482	-0.243	1.00	0.00
H										
ATOM	1160	N	GLN	A	77	37.351	7.534	2.017	1.00	0.00
N										
ATOM	1161	CA	GLN	A	77	36.579	8.771	1.747	1.00	0.00
C										

ATOM	1162	C	GLN	A	77	36.064	8.793	0.295	1.00	0.00
C										
ATOM	1163	O	GLN	A	77	35.009	9.358	0.011	1.00	0.00
O										
ATOM	1164	CB	GLN	A	77	37.436	10.032	1.982	1.00	0.00
C										
ATOM	1165	CG	GLN	A	77	37.575	10.555	3.438	1.00	0.00
C										
ATOM	1166	CD	GLN	A	77	38.458	11.829	3.534	1.00	0.00
C										
ATOM	1167	OE1	GLN	A	77	38.821	12.432	2.498	1.00	0.00
O										
ATOM	1168	NE2	GLN	A	77	38.823	12.233	4.780	1.00	0.00
N										
ATOM	1169	H	GLN	A	77	38.310	7.629	2.336	1.00	0.00
H										
ATOM	1170	HA	GLN	A	77	35.724	8.801	2.420	1.00	0.00
H										
ATOM	1171	HB2	GLN	A	77	37.001	10.835	1.389	1.00	0.00
H										
ATOM	1172	HB3	GLN	A	77	38.439	9.815	1.618	1.00	0.00
H										
ATOM	1173	HG2	GLN	A	77	38.024	9.773	4.048	1.00	0.00
H										
ATOM	1174	HG3	GLN	A	77	36.583	10.789	3.821	1.00	0.00
H										
ATOM	1175	HE21	GLN	A	77	39.400	13.060	4.897	1.00	0.00
H										
ATOM	1176	HE22	GLN	A	77	38.519	11.708	5.593	1.00	0.00
H										
ATOM	1177	N	LEU	A	78	36.811	8.157	-0.613	1.00	0.00
N										
ATOM	1178	CA	LEU	A	78	36.446	8.090	-2.030	1.00	0.00
C										
ATOM	1179	C	LEU	A	78	35.078	7.450	-2.286	1.00	0.00
C										
ATOM	1180	O	LEU	A	78	34.483	7.697	-3.298	1.00	0.00
O										
ATOM	1181	CB	LEU	A	78	37.516	7.323	-2.809	1.00	0.00
C										
ATOM	1182	CG	LEU	A	78	37.528	7.388	-4.344	1.00	0.00
C										
ATOM	1183	CD1	LEU	A	78	38.023	8.735	-4.847	1.00	0.00
C										
ATOM	1184	CD2	LEU	A	78	38.422	6.243	-4.880	1.00	0.00
C										
ATOM	1185	H	LEU	A	78	37.666	7.702	-0.308	1.00	0.00
H										
ATOM	1186	HA	LEU	A	78	36.417	9.108	-2.416	1.00	0.00
H										
ATOM	1187	HB2	LEU	A	78	37.414	6.274	-2.537	1.00	0.00
H										
ATOM	1188	HB3	LEU	A	78	38.482	7.694	-2.469	1.00	0.00
H										
ATOM	1189	HG	LEU	A	78	36.513	7.234	-4.706	1.00	0.00
H										

ATOM	1190	HD11	LEU	A	78	39.038	8.906	-4.489	1.00	0.00
H										
ATOM	1191	HD12	LEU	A	78	38.017	8.741	-5.936	1.00	0.00
H										
ATOM	1192	HD13	LEU	A	78	37.370	9.524	-4.476	1.00	0.00
H										
ATOM	1193	HD21	LEU	A	78	38.021	5.285	-4.553	1.00	0.00
H										
ATOM	1194	HD22	LEU	A	78	38.441	6.276	-5.968	1.00	0.00
H										
ATOM	1195	HD23	LEU	A	78	39.434	6.363	-4.496	1.00	0.00
H										
ATOM	1196	N	LEU	A	79	34.587	6.617	-1.391	1.00	0.00
N										
ATOM	1197	CA	LEU	A	79	33.260	6.058	-1.569	1.00	0.00
C										
ATOM	1198	C	LEU	A	79	32.201	7.128	-1.782	1.00	0.00
C										
ATOM	1199	O	LEU	A	79	31.149	6.856	-2.320	1.00	0.00
O										
ATOM	1200	CB	LEU	A	79	32.887	5.209	-0.348	1.00	0.00
C										
ATOM	1201	CG	LEU	A	79	33.354	3.740	-0.348	1.00	0.00
C										
ATOM	1202	CD1	LEU	A	79	32.522	2.969	-1.365	1.00	0.00
C										
ATOM	1203	CD2	LEU	A	79	34.850	3.561	-0.644	1.00	0.00
C										
ATOM	1204	H	LEU	A	79	35.138	6.366	-0.576	1.00	0.00
H										
ATOM	1205	HA	LEU	A	79	33.275	5.411	-2.445	1.00	0.00
H										
ATOM	1206	HB2	LEU	A	79	31.801	5.209	-0.268	1.00	0.00
H										
ATOM	1207	HB3	LEU	A	79	33.316	5.690	0.530	1.00	0.00
H										
ATOM	1208	HG	LEU	A	79	33.153	3.323	0.638	1.00	0.00
H										
ATOM	1209	HD11	LEU	A	79	32.663	3.404	-2.353	1.00	0.00
H										
ATOM	1210	HD12	LEU	A	79	32.839	1.927	-1.378	1.00	0.00
H										
ATOM	1211	HD13	LEU	A	79	31.470	3.025	-1.090	1.00	0.00
H										
ATOM	1212	HD21	LEU	A	79	35.435	4.084	0.111	1.00	0.00
H										
ATOM	1213	HD22	LEU	A	79	35.099	2.501	-0.626	1.00	0.00
H										
ATOM	1214	HD23	LEU	A	79	35.077	3.971	-1.627	1.00	0.00
H										
ATOM	1215	N	LYS	A	80	32.456	8.321	-1.272	1.00	0.00
N										
ATOM	1216	CA	LYS	A	80	31.649	9.508	-1.537	1.00	0.00
C										
ATOM	1217	C	LYS	A	80	31.592	9.934	-3.012	1.00	0.00
C										

ATOM	1218	O	LYS	A	80	30.642	10.636	-3.415	1.00	0.00
O										
ATOM	1219	CB	LYS	A	80	32.232	10.709	-0.768	1.00	0.00
C										
ATOM	1220	CG	LYS	A	80	31.851	10.756	0.693	1.00	0.00
C										
ATOM	1221	CD	LYS	A	80	31.831	12.203	1.245	1.00	0.00
C										
ATOM	1222	CE	LYS	A	80	33.133	12.599	1.931	1.00	0.00
C										
ATOM	1223	NZ	LYS	A	80	33.115	14.045	2.376	1.00	0.00
N1+										
ATOM	1224	H	LYS	A	80	33.260	8.417	-0.660	1.00	0.00
H										
ATOM	1225	HA	LYS	A	80	30.634	9.327	-1.186	1.00	0.00
H										
ATOM	1226	HB2	LYS	A	80	31.877	11.623	-1.243	1.00	0.00
H										
ATOM	1227	HB3	LYS	A	80	33.318	10.663	-0.836	1.00	0.00
H										
ATOM	1228	HG2	LYS	A	80	32.573	10.173	1.263	1.00	0.00
H										
ATOM	1229	HG3	LYS	A	80	30.860	10.322	0.811	1.00	0.00
H										
ATOM	1230	HD2	LYS	A	80	31.020	12.288	1.966	1.00	0.00
H										
ATOM	1231	HD3	LYS	A	80	31.654	12.888	0.417	1.00	0.00
H										
ATOM	1232	HE2	LYS	A	80	33.957	12.455	1.234	1.00	0.00
H										
ATOM	1233	HE3	LYS	A	80	33.280	11.964	2.803	1.00	0.00
H										
ATOM	1234	HZ1	LYS	A	80	32.353	14.188	3.031	1.00	0.00
H										
ATOM	1235	HZ2	LYS	A	80	33.996	14.272	2.827	1.00	0.00
H										
ATOM	1236	HZ3	LYS	A	80	32.984	14.646	1.569	1.00	0.00
H										
ATOM	1237	N	GLU	A	81	32.601	9.527	-3.799	1.00	0.00
N										
ATOM	1238	CA	GLU	A	81	32.876	10.152	-5.051	1.00	0.00
C										
ATOM	1239	C	GLU	A	81	32.478	9.328	-6.249	1.00	0.00
C										
ATOM	1240	O	GLU	A	81	32.861	8.174	-6.383	1.00	0.00
O										
ATOM	1241	CB	GLU	A	81	34.371	10.523	-5.139	1.00	0.00
C										
ATOM	1242	CG	GLU	A	81	34.675	11.666	-6.121	1.00	0.00
C										
ATOM	1243	CD	GLU	A	81	36.156	12.076	-6.122	1.00	0.00
C										
ATOM	1244	OE1	GLU	A	81	36.864	11.816	-5.107	1.00	0.00
O										
ATOM	1245	OE2	GLU	A	81	36.629	12.642	-7.134	1.00	0.00
O1-										

ATOM	1246	H	GLU	A	81	33.184	8.754	-3.495	1.00	0.00
H										
ATOM	1247	HA	GLU	A	81	32.306	11.079	-5.087	1.00	0.00
H										
ATOM	1248	HB2	GLU	A	81	34.925	9.641	-5.458	1.00	0.00
H										
ATOM	1249	HB3	GLU	A	81	34.708	10.824	-4.148	1.00	0.00
H										
ATOM	1250	HG2	GLU	A	81	34.075	12.532	-5.843	1.00	0.00
H										
ATOM	1251	HG3	GLU	A	81	34.404	11.343	-7.125	1.00	0.00
H										
ATOM	1252	N	SER	A	82	31.749	9.976	-7.164	1.00	0.00
N										
ATOM	1253	CA	SER	A	82	31.379	9.318	-8.400	1.00	0.00
C										
ATOM	1254	C	SER	A	82	32.524	9.304	-9.407	1.00	0.00
C										
ATOM	1255	O	SER	A	82	33.462	10.103	-9.321	1.00	0.00
O										
ATOM	1256	CB	SER	A	82	30.180	9.968	-9.030	1.00	0.00
C										
ATOM	1257	OG	SER	A	82	30.064	9.533	-10.351	1.00	0.00
O										
ATOM	1258	H	SER	A	82	31.454	10.932	-6.992	1.00	0.00
H										
ATOM	1259	HA	SER	A	82	31.121	8.286	-8.168	1.00	0.00
H										
ATOM	1260	HB2	SER	A	82	30.301	11.050	-9.012	1.00	0.00
H										
ATOM	1261	HB3	SER	A	82	29.284	9.694	-8.476	1.00	0.00
H										
ATOM	1262	HG	SER	A	82	29.955	8.546	-10.366	1.00	0.00
H										
ATOM	1263	N	SER	A	83	32.407	8.391	-10.374	1.00	0.00
N										
ATOM	1264	CA	SER	A	83	33.306	8.365	-11.523	1.00	0.00
C										
ATOM	1265	C	SER	A	83	33.153	9.628	-12.421	1.00	0.00
C										
ATOM	1266	O	SER	A	83	33.935	9.835	-13.342	1.00	0.00
O										
ATOM	1267	CB	SER	A	83	33.103	7.076	-12.334	1.00	0.00
C										
ATOM	1268	OG	SER	A	83	31.826	7.050	-12.926	1.00	0.00
O										
ATOM	1269	H	SER	A	83	31.672	7.695	-10.308	1.00	0.00
H										
ATOM	1270	HA	SER	A	83	34.325	8.356	-11.142	1.00	0.00
H										
ATOM	1271	HB2	SER	A	83	33.207	6.218	-11.672	1.00	0.00
H										
ATOM	1272	HB3	SER	A	83	33.860	7.024	-13.116	1.00	0.00
H										
ATOM	1273	HG	SER	A	83	31.727	7.829	-13.534	1.00	0.00
H										

ATOM	1274	N	SER	A	84	32.179	10.486	-12.152	1.00	0.00
N										
ATOM	1275	CA	SER	A	84	32.132	11.759	-12.855	1.00	0.00
C										
ATOM	1276	C	SER	A	84	33.158	12.757	-12.256	1.00	0.00
C										
ATOM	1277	O	SER	A	84	33.615	13.721	-12.925	1.00	0.00
O										
ATOM	1278	CB	SER	A	84	30.726	12.341	-12.778	1.00	0.00
C										
ATOM	1279	OG	SER	A	84	30.368	12.562	-11.429	1.00	0.00
O										
ATOM	1280	H	SER	A	84	31.473	10.257	-11.461	1.00	0.00
H										
ATOM	1281	HA	SER	A	84	32.381	11.589	-13.901	1.00	0.00
H										
ATOM	1282	HB2	SER	A	84	30.022	11.644	-13.229	1.00	0.00
H										
ATOM	1283	HB3	SER	A	84	30.697	13.286	-13.318	1.00	0.00
H										
ATOM	1284	HG	SER	A	84	31.009	13.199	-11.017	1.00	0.00
H										
ATOM	1285	N	GLY	A	85	33.526	12.508	-10.999	1.00	0.00
N										
ATOM	1286	CA	GLY	A	85	34.306	13.449	-10.239	1.00	0.00
C										
ATOM	1287	C	GLY	A	85	33.460	14.289	-9.322	1.00	0.00
C										
ATOM	1288	O	GLY	A	85	33.976	15.151	-8.643	1.00	0.00
O										
ATOM	1289	H	GLY	A	85	33.250	11.632	-10.567	1.00	0.00
H										
ATOM	1290	HA2	GLY	A	85	34.830	14.107	-10.930	1.00	0.00
H										
ATOM	1291	HA3	GLY	A	85	35.030	12.900	-9.640	1.00	0.00
H										
ATOM	1292	N	GLN	A	86	32.158	14.022	-9.280	1.00	0.00
N										
ATOM	1293	CA	GLN	A	86	31.270	14.686	-8.357	1.00	0.00
C										
ATOM	1294	C	GLN	A	86	31.046	13.739	-7.208	1.00	0.00
C										
ATOM	1295	O	GLN	A	86	31.162	12.520	-7.387	1.00	0.00
O										
ATOM	1296	CB	GLN	A	86	29.883	14.960	-9.011	1.00	0.00
C										
ATOM	1297	CG	GLN	A	86	29.782	16.253	-9.828	1.00	0.00
C										
ATOM	1298	CD	GLN	A	86	30.187	17.465	-8.989	1.00	0.00
C										
ATOM	1299	OE1	GLN	A	86	31.284	18.009	-9.152	1.00	0.00
O										
ATOM	1300	NE2	GLN	A	86	29.311	17.863	-8.049	1.00	0.00
N										
ATOM	1301	H	GLN	A	86	31.778	13.330	-9.917	1.00	0.00
H										

ATOM	1302	HA	GLN	A	86	31.715	15.616	-8.003	1.00	0.00
H										
ATOM	1303	HB2	GLN	A	86	29.141	15.007	-8.216	1.00	0.00
H										
ATOM	1304	HB3	GLN	A	86	29.654	14.127	-9.673	1.00	0.00
H										
ATOM	1305	HG2	GLN	A	86	28.755	16.381	-10.166	1.00	0.00
H										
ATOM	1306	HG3	GLN	A	86	30.442	16.181	-10.691	1.00	0.00
H										
ATOM	1307	HE21	GLN	A	86	29.526	18.663	-7.461	1.00	0.00
H										
ATOM	1308	HE22	GLN	A	86	28.436	17.365	-7.928	1.00	0.00
H										
ATOM	1309	N	PRO	A	87	30.600	14.282	-6.053	1.00	0.00
N										
ATOM	1310	CA	PRO	A	87	30.179	13.409	-5.001	1.00	0.00
C										
ATOM	1311	C	PRO	A	87	28.827	12.756	-5.352	1.00	0.00
C										
ATOM	1312	O	PRO	A	87	27.997	13.388	-5.991	1.00	0.00
O										
ATOM	1313	CB	PRO	A	87	30.038	14.341	-3.782	1.00	0.00
C										
ATOM	1314	CG	PRO	A	87	30.577	15.654	-4.193	1.00	0.00
C										
ATOM	1315	CD	PRO	A	87	30.418	15.702	-5.684	1.00	0.00
C										
ATOM	1316	HA	PRO	A	87	30.934	12.647	-4.813	1.00	0.00
H										
ATOM	1317	HB2	PRO	A	87	30.606	13.948	-2.940	1.00	0.00
H										
ATOM	1318	HB3	PRO	A	87	28.991	14.436	-3.500	1.00	0.00
H										
ATOM	1319	HG2	PRO	A	87	31.628	15.737	-3.919	1.00	0.00
H										
ATOM	1320	HG3	PRO	A	87	30.015	16.461	-3.724	1.00	0.00
H										
ATOM	1321	HD2	PRO	A	87	29.430	16.062	-5.966	1.00	0.00
H										
ATOM	1322	HD3	PRO	A	87	31.178	16.332	-6.144	1.00	0.00
H										
ATOM	1323	N	TYR	A	88	28.612	11.523	-4.914	1.00	0.00
N										
ATOM	1324	CA	TYR	A	88	27.290	10.904	-4.999	1.00	0.00
C										
ATOM	1325	C	TYR	A	88	26.235	11.768	-4.275	1.00	0.00
C										
ATOM	1326	O	TYR	A	88	26.491	12.351	-3.219	1.00	0.00
O										
ATOM	1327	CB	TYR	A	88	27.297	9.486	-4.438	1.00	0.00
C										
ATOM	1328	CG	TYR	A	88	28.147	8.507	-5.217	1.00	0.00
C										
ATOM	1329	CD1	TYR	A	88	29.203	7.849	-4.619	1.00	0.00
C										

ATOM	1330	CD2	TYR	A	88	27.909	8.261	-6.564	1.00	0.00
C										
ATOM	1331	CE1	TYR	A	88	30.006	6.960	-5.343	1.00	0.00
C										
ATOM	1332	CE2	TYR	A	88	28.687	7.393	-7.288	1.00	0.00
C										
ATOM	1333	CZ	TYR	A	88	29.726	6.733	-6.666	1.00	0.00
C										
ATOM	1334	OH	TYR	A	88	30.477	5.843	-7.345	1.00	0.00
O										
ATOM	1335	H	TYR	A	88	29.382	10.998	-4.511	1.00	0.00
H										
ATOM	1336	HA	TYR	A	88	27.013	10.848	-6.051	1.00	0.00
H										
ATOM	1337	HB2	TYR	A	88	26.272	9.118	-4.433	1.00	0.00
H										
ATOM	1338	HB3	TYR	A	88	27.674	9.526	-3.417	1.00	0.00
H										
ATOM	1339	HD1	TYR	A	88	29.415	8.025	-3.565	1.00	0.00
H										
ATOM	1340	HD2	TYR	A	88	27.083	8.771	-7.058	1.00	0.00
H										
ATOM	1341	HE1	TYR	A	88	30.843	6.455	-4.862	1.00	0.00
H										
ATOM	1342	HE2	TYR	A	88	28.486	7.227	-8.345	1.00	0.00
H										
ATOM	1343	HH	TYR	A	88	30.402	4.951	-6.916	1.00	0.00
H										
ATOM	1344	N	ASP	A	89	25.076	11.897	-4.906	1.00	0.00
N										
ATOM	1345	CA	ASP	A	89	23.913	12.487	-4.302	1.00	0.00
C										
ATOM	1346	C	ASP	A	89	23.205	11.444	-3.437	1.00	0.00
C										
ATOM	1347	O	ASP	A	89	22.587	11.801	-2.464	1.00	0.00
O										
ATOM	1348	CB	ASP	A	89	22.971	13.024	-5.400	1.00	0.00
C										
ATOM	1349	CG	ASP	A	89	23.602	14.192	-6.169	1.00	0.00
C										
ATOM	1350	OD1	ASP	A	89	23.807	15.236	-5.572	1.00	0.00
O										
ATOM	1351	OD2	ASP	A	89	23.963	14.068	-7.335	1.00	0.00
O1-										
ATOM	1352	H	ASP	A	89	25.007	11.563	-5.862	1.00	0.00
H										
ATOM	1353	HA	ASP	A	89	24.226	13.316	-3.669	1.00	0.00
H										
ATOM	1354	HB2	ASP	A	89	22.047	13.366	-4.936	1.00	0.00
H										
ATOM	1355	HB3	ASP	A	89	22.750	12.220	-6.100	1.00	0.00
H										
ATOM	1356	N	ALA	A	90	23.246	10.177	-3.844	1.00	0.00
N										
ATOM	1357	CA	ALA	A	90	22.550	9.116	-3.124	1.00	0.00
C										



ATOM	1358	C	ALA	A	90	23.140	7.780	-3.451	1.00	0.00
C										
ATOM	1359	O	ALA	A	90	23.508	7.524	-4.551	1.00	0.00
O										
ATOM	1360	CB	ALA	A	90	21.001	9.123	-3.391	1.00	0.00
C										
ATOM	1361	H	ALA	A	90	23.776	9.943	-4.678	1.00	0.00
H										
ATOM	1362	HA	ALA	A	90	22.700	9.289	-2.059	1.00	0.00
H										
ATOM	1363	HB1	ALA	A	90	20.815	8.984	-4.455	1.00	0.00
H										
ATOM	1364	HB2	ALA	A	90	20.532	8.315	-2.832	1.00	0.00
H										
ATOM	1365	HB3	ALA	A	90	20.582	10.076	-3.071	1.00	0.00
H										
ATOM	1366	N	VAL	A	91	23.282	6.935	-2.450	1.00	0.00
N										
ATOM	1367	CA	VAL	A	91	23.745	5.575	-2.625	1.00	0.00
C										
ATOM	1368	C	VAL	A	91	22.662	4.645	-2.103	1.00	0.00
C										
ATOM	1369	O	VAL	A	91	22.175	4.831	-0.960	1.00	0.00
O										
ATOM	1370	CB	VAL	A	91	25.058	5.392	-1.870	1.00	0.00
C										
ATOM	1371	CG1	VAL	A	91	25.627	3.990	-2.053	1.00	0.00
C										
ATOM	1372	CG2	VAL	A	91	26.050	6.507	-2.233	1.00	0.00
C										
ATOM	1373	H	VAL	A	91	23.056	7.253	-1.513	1.00	0.00
H										
ATOM	1374	HA	VAL	A	91	23.907	5.382	-3.684	1.00	0.00
H										
ATOM	1375	HB	VAL	A	91	24.831	5.505	-0.811	1.00	0.00
H										
ATOM	1376	HG11	VAL	A	91	25.813	3.809	-3.111	1.00	0.00
H										
ATOM	1377	HG12	VAL	A	91	26.561	3.902	-1.500	1.00	0.00
H										
ATOM	1378	HG13	VAL	A	91	24.913	3.257	-1.680	1.00	0.00
H										
ATOM	1379	HG21	VAL	A	91	25.623	7.473	-1.969	1.00	0.00
H										
ATOM	1380	HG22	VAL	A	91	26.979	6.359	-1.685	1.00	0.00
H										
ATOM	1381	HG23	VAL	A	91	26.251	6.480	-3.303	1.00	0.00
H										
ATOM	1382	N	PHE	A	92	22.269	3.681	-2.961	1.00	0.00
N										
ATOM	1383	CA	PHE	A	92	21.320	2.603	-2.640	1.00	0.00
C										
ATOM	1384	C	PHE	A	92	22.034	1.435	-2.052	1.00	0.00
C										
ATOM	1385	O	PHE	A	92	22.859	0.797	-2.744	1.00	0.00
O										

ATOM	1386	CB	PHE	A	92	20.555	2.114	-3.909	1.00	0.00
C										
ATOM	1387	CG	PHE	A	92	19.506	3.081	-4.403	1.00	0.00
C										
ATOM	1388	CD1	PHE	A	92	18.177	2.892	-4.110	1.00	0.00
C										
ATOM	1389	CD2	PHE	A	92	19.860	4.196	-5.141	1.00	0.00
C										
ATOM	1390	CE1	PHE	A	92	17.234	3.735	-4.550	1.00	0.00
C										
ATOM	1391	CE2	PHE	A	92	18.902	5.050	-5.626	1.00	0.00
C										
ATOM	1392	CZ	PHE	A	92	17.581	4.832	-5.306	1.00	0.00
C										
ATOM	1393	H	PHE	A	92	22.657	3.701	-3.899	1.00	0.00
H										
ATOM	1394	HA	PHE	A	92	20.597	2.975	-1.915	1.00	0.00
H										
ATOM	1395	HB2	PHE	A	92	20.066	1.170	-3.672	1.00	0.00
H										
ATOM	1396	HB3	PHE	A	92	21.279	1.958	-4.707	1.00	0.00
H										
ATOM	1397	HD1	PHE	A	92	17.883	2.036	-3.505	1.00	0.00
H										
ATOM	1398	HD2	PHE	A	92	20.911	4.398	-5.339	1.00	0.00
H										
ATOM	1399	HE1	PHE	A	92	16.188	3.552	-4.309	1.00	0.00
H										
ATOM	1400	HE2	PHE	A	92	19.183	5.891	-6.257	1.00	0.00
H										
ATOM	1401	HZ	PHE	A	92	16.814	5.524	-5.649	1.00	0.00
H										
ATOM	1402	N	PRO	A	93	21.745	1.108	-0.775	1.00	0.00
N										
ATOM	1403	CA	PRO	A	93	22.312	-0.143	-0.298	1.00	0.00
C										
ATOM	1404	C	PRO	A	93	21.335	-1.295	-0.507	1.00	0.00
C										
ATOM	1405	O	PRO	A	93	20.479	-1.596	0.337	1.00	0.00
O										
ATOM	1406	CB	PRO	A	93	22.592	0.152	1.176	1.00	0.00
C										
ATOM	1407	CG	PRO	A	93	21.485	1.159	1.559	1.00	0.00
C										
ATOM	1408	CD	PRO	A	93	21.069	1.857	0.300	1.00	0.00
C										
ATOM	1409	HA	PRO	A	93	23.246	-0.349	-0.819	1.00	0.00
H										
ATOM	1410	HB2	PRO	A	93	23.579	0.592	1.304	1.00	0.00
H										
ATOM	1411	HB3	PRO	A	93	22.518	-0.754	1.775	1.00	0.00
H										
ATOM	1412	HG2	PRO	A	93	21.869	1.882	2.277	1.00	0.00
H										
ATOM	1413	HG3	PRO	A	93	20.635	0.633	1.993	1.00	0.00
H										

ATOM	1414	HD2	PRO	A	93	19.988	1.817	0.176	1.00	0.00
H										
ATOM	1415	HD3	PRO	A	93	21.395	2.896	0.310	1.00	0.00
H										
ATOM	1416	N	LEU	A	94	21.474	-1.942	-1.652	1.00	0.00
N										
ATOM	1417	CA	LEU	A	94	20.548	-3.015	-2.003	1.00	0.00
C										
ATOM	1418	C	LEU	A	94	21.046	-4.336	-1.480	1.00	0.00
C										
ATOM	1419	O	LEU	A	94	21.288	-5.239	-2.233	1.00	0.00
O										
ATOM	1420	CB	LEU	A	94	20.326	-3.065	-3.494	1.00	0.00
C										
ATOM	1421	CG	LEU	A	94	19.626	-1.850	-4.128	1.00	0.00
C										
ATOM	1422	CD1	LEU	A	94	19.388	-2.232	-5.628	1.00	0.00
C										
ATOM	1423	CD2	LEU	A	94	18.313	-1.378	-3.395	1.00	0.00
C										
ATOM	1424	H	LEU	A	94	22.225	-1.692	-2.287	1.00	0.00
H										
ATOM	1425	HA	LEU	A	94	19.591	-2.804	-1.527	1.00	0.00
H										
ATOM	1426	HB2	LEU	A	94	19.720	-3.944	-3.708	1.00	0.00
H										
ATOM	1427	HB3	LEU	A	94	21.300	-3.170	-3.970	1.00	0.00
H										
ATOM	1428	HG	LEU	A	94	20.329	-1.019	-4.109	1.00	0.00
H										
ATOM	1429	HD11	LEU	A	94	18.762	-3.122	-5.681	1.00	0.00
H										
ATOM	1430	HD12	LEU	A	94	18.891	-1.408	-6.138	1.00	0.00
H										
ATOM	1431	HD13	LEU	A	94	20.345	-2.432	-6.108	1.00	0.00
H										
ATOM	1432	HD21	LEU	A	94	18.550	-1.100	-2.369	1.00	0.00
H										
ATOM	1433	HD22	LEU	A	94	17.895	-0.518	-3.917	1.00	0.00
H										
ATOM	1434	HD23	LEU	A	94	17.586	-2.189	-3.393	1.00	0.00
H										
ATOM	1435	N	LEU	A	95	21.211	-4.431	-0.171	1.00	0.00
N										
ATOM	1436	CA	LEU	A	95	21.710	-5.671	0.458	1.00	0.00
C										
ATOM	1437	C	LEU	A	95	21.585	-5.616	1.952	1.00	0.00
C										
ATOM	1438	O	LEU	A	95	21.480	-4.524	2.545	1.00	0.00
O										
ATOM	1439	CB	LEU	A	95	23.183	-5.952	0.112	1.00	0.00
C										
ATOM	1440	CG	LEU	A	95	24.266	-5.009	0.620	1.00	0.00
C										
ATOM	1441	CD1	LEU	A	95	25.640	-5.646	0.504	1.00	0.00
C										

ATOM	1442	CD2	LEU	A	95	24.250	-3.718	-0.137	1.00	0.00
C										
ATOM	1443	H	LEU	A	95	20.989	-3.633	0.415	1.00	0.00
H										
ATOM	1444	HA	LEU	A	95	21.109	-6.504	0.095	1.00	0.00
H										
ATOM	1445	HB2	LEU	A	95	23.256	-5.963	-0.975	1.00	0.00
H										
ATOM	1446	HB3	LEU	A	95	23.416	-6.942	0.502	1.00	0.00
H										
ATOM	1447	HG	LEU	A	95	24.072	-4.795	1.670	1.00	0.00
H										
ATOM	1448	HD11	LEU	A	95	25.843	-5.882	-0.539	1.00	0.00
H										
ATOM	1449	HD12	LEU	A	95	26.394	-4.952	0.873	1.00	0.00
H										
ATOM	1450	HD13	LEU	A	95	25.667	-6.560	1.095	1.00	0.00
H										
ATOM	1451	HD21	LEU	A	95	23.281	-3.237	-0.013	1.00	0.00
H										
ATOM	1452	HD22	LEU	A	95	25.032	-3.064	0.245	1.00	0.00
H										
ATOM	1453	HD23	LEU	A	95	24.425	-3.915	-1.194	1.00	0.00
H										
ATOM	1454	N	HIS	A	96	21.590	-6.786	2.575	1.00	0.00
N										
ATOM	1455	CA	HIS	A	96	21.664	-6.856	4.020	1.00	0.00
C										
ATOM	1456	C	HIS	A	96	23.132	-6.763	4.499	1.00	0.00
C										
ATOM	1457	O	HIS	A	96	24.066	-6.825	3.695	1.00	0.00
O										
ATOM	1458	CB	HIS	A	96	21.011	-8.140	4.513	1.00	0.00
C										
ATOM	1459	CG	HIS	A	96	19.512	-8.182	4.341	1.00	0.00
C										
ATOM	1460	ND1	HIS	A	96	18.650	-7.503	5.169	1.00	0.00
N										
ATOM	1461	CD2	HIS	A	96	18.730	-8.877	3.484	1.00	0.00
C										
ATOM	1462	CE1	HIS	A	96	17.404	-7.762	4.822	1.00	0.00
C										
ATOM	1463	NE2	HIS	A	96	17.422	-8.593	3.799	1.00	0.00
N										
ATOM	1464	H	HIS	A	96	21.541	-7.643	2.033	1.00	0.00
H										
ATOM	1465	HA	HIS	A	96	21.114	-6.011	4.433	1.00	0.00
H										
ATOM	1466	HB2	HIS	A	96	21.235	-8.252	5.573	1.00	0.00
H										
ATOM	1467	HB3	HIS	A	96	21.440	-8.975	3.961	1.00	0.00
H										
ATOM	1468	HD1	HIS	A	96	18.929	-6.895	5.932	1.00	0.00
H										
ATOM	1469	HD2	HIS	A	96	19.073	-9.540	2.691	1.00	0.00
H										

ATOM	1470	HE1	HIS	A	96	16.513	-7.358	5.300	1.00	0.00
H										
ATOM	1471	N	GLY	A	97	23.341	-6.587	5.803	1.00	0.00
N										
ATOM	1472	CA	GLY	A	97	24.688	-6.636	6.349	1.00	0.00
C										
ATOM	1473	C	GLY	A	97	25.510	-7.806	5.801	1.00	0.00
C										
ATOM	1474	O	GLY	A	97	25.201	-8.975	6.096	1.00	0.00
O										
ATOM	1475	H	GLY	A	97	22.553	-6.417	6.420	1.00	0.00
H										
ATOM	1476	HA2	GLY	A	97	24.621	-6.735	7.431	1.00	0.00
H										
ATOM	1477	HA3	GLY	A	97	25.198	-5.707	6.100	1.00	0.00
H										
ATOM	1478	N	PRO	A	98	26.539	-7.512	4.955	1.00	0.00
N										
ATOM	1479	CA	PRO	A	98	27.341	-8.659	4.395	1.00	0.00
C										
ATOM	1480	C	PRO	A	98	27.797	-9.670	5.477	1.00	0.00
C										
ATOM	1481	O	PRO	A	98	27.761	-10.894	5.253	1.00	0.00
O										
ATOM	1482	CB	PRO	A	98	28.513	-7.976	3.654	1.00	0.00
C										
ATOM	1483	CG	PRO	A	98	28.027	-6.537	3.385	1.00	0.00
C										
ATOM	1484	CD	PRO	A	98	26.988	-6.194	4.446	1.00	0.00
C										
ATOM	1485	HA	PRO	A	98	26.729	-9.186	3.664	1.00	0.00
H										
ATOM	1486	HB2	PRO	A	98	28.726	-8.490	2.718	1.00	0.00
H										
ATOM	1487	HB3	PRO	A	98	29.407	-7.969	4.276	1.00	0.00
H										
ATOM	1488	HG2	PRO	A	98	27.579	-6.476	2.394	1.00	0.00
H										
ATOM	1489	HG3	PRO	A	98	28.865	-5.845	3.449	1.00	0.00
H										
ATOM	1490	HD2	PRO	A	98	27.432	-5.603	5.245	1.00	0.00
H										
ATOM	1491	HD3	PRO	A	98	26.155	-5.645	4.008	1.00	0.00
H										
ATOM	1492	N	ASN	A	99	28.192	-9.170	6.642	1.00	0.00
N										
ATOM	1493	CA	ASN	A	99	28.237	-10.020	7.842	1.00	0.00
C										
ATOM	1494	C	ASN	A	99	27.910	-9.280	9.167	1.00	0.00
C										
ATOM	1495	O	ASN	A	99	28.597	-8.327	9.573	1.00	0.00
O										
ATOM	1496	CB	ASN	A	99	29.561	-10.803	7.935	1.00	0.00
C										
ATOM	1497	CG	ASN	A	99	30.782	-9.905	8.020	1.00	0.00
C										

ATOM	1498	OD1	ASN	A	99	31.062	-9.119	7.111	1.00	0.00
O										
ATOM	1499	ND2	ASN	A	99	31.530	-10.038	9.115	1.00	0.00
N										
ATOM	1500	H	ASN	A	99	28.465	-8.195	6.705	1.00	0.00
H										
ATOM	1501	HA	ASN	A	99	27.454	-10.766	7.712	1.00	0.00
H										
ATOM	1502	HB2	ASN	A	99	29.654	-11.432	7.051	1.00	0.00
H										
ATOM	1503	HB3	ASN	A	99	29.530	-11.431	8.825	1.00	0.00
H										
ATOM	1504	HD21	ASN	A	99	32.361	-9.467	9.234	1.00	0.00
H										
ATOM	1505	HD22	ASN	A	99	31.269	-10.710	9.829	1.00	0.00
H										
ATOM	1506	N	GLY	A	100	26.828	-9.724	9.811	1.00	0.00
N										
ATOM	1507	CA	GLY	A	100	26.354	-9.155	11.086	1.00	0.00
C										
ATOM	1508	C	GLY	A	100	24.851	-8.970	10.996	1.00	0.00
C										
ATOM	1509	O	GLY	A	100	24.140	-9.866	10.508	1.00	0.00
O										
ATOM	1510	H	GLY	A	100	26.305	-10.492	9.402	1.00	0.00
H										
ATOM	1511	HA2	GLY	A	100	26.833	-8.193	11.261	1.00	0.00
H										
ATOM	1512	HA3	GLY	A	100	26.593	-9.834	11.903	1.00	0.00
H										
ATOM	1513	N	GLU	A	101	24.368	-7.820	11.461	1.00	0.00
N										
ATOM	1514	CA	GLU	A	101	22.964	-7.492	11.335	1.00	0.00
C										
ATOM	1515	C	GLU	A	101	22.853	-6.601	10.146	1.00	0.00
C										
ATOM	1516	O	GLU	A	101	23.840	-6.466	9.405	1.00	0.00
O										
ATOM	1517	CB	GLU	A	101	22.448	-6.747	12.574	1.00	0.00
C										
ATOM	1518	CG	GLU	A	101	21.001	-7.094	12.938	1.00	0.00
C										
ATOM	1519	CD	GLU	A	101	20.588	-6.555	14.315	1.00	0.00
C										
ATOM	1520	OE1	GLU	A	101	21.177	-6.955	15.362	1.00	0.00
O										
ATOM	1521	OE2	GLU	A	101	19.666	-5.749	14.346	1.00	0.00
O1-										
ATOM	1522	H	GLU	A	101	24.996	-7.162	11.912	1.00	0.00
H										
ATOM	1523	HA	GLU	A	101	22.383	-8.399	11.177	1.00	0.00
H										
ATOM	1524	HB2	GLU	A	101	22.508	-5.677	12.382	1.00	0.00
H										
ATOM	1525	HB3	GLU	A	101	23.087	-7.001	13.419	1.00	0.00
H										

ATOM	1526	HG2	GLU	A	101	20.894	-8.178	12.942	1.00	0.00
H										
ATOM	1527	HG3	GLU	A	101	20.341	-6.667	12.185	1.00	0.00
H										
ATOM	1528	N	ASP	A	102	21.647	-6.030	9.943	1.00	0.00
N										
ATOM	1529	CA	ASP	A	102	21.508	-4.880	9.065	1.00	0.00
C										
ATOM	1530	C	ASP	A	102	21.918	-3.661	9.879	1.00	0.00
C										
ATOM	1531	O	ASP	A	102	22.147	-3.735	11.046	1.00	0.00
O										
ATOM	1532	CB	ASP	A	102	20.091	-4.716	8.521	1.00	0.00
C										
ATOM	1533	CG	ASP	A	102	19.730	-5.752	7.493	1.00	0.00
C										
ATOM	1534	OD1	ASP	A	102	18.507	-5.934	7.250	1.00	0.00
O										
ATOM	1535	OD2	ASP	A	102	20.657	-6.348	6.913	1.00	0.00
O1-										
ATOM	1536	H	ASP	A	102	20.828	-6.408	10.409	1.00	0.00
H										
ATOM	1537	HA	ASP	A	102	22.196	-4.992	8.228	1.00	0.00
H										
ATOM	1538	HB2	ASP	A	102	20.007	-3.731	8.065	1.00	0.00
H										
ATOM	1539	HB3	ASP	A	102	19.391	-4.793	9.351	1.00	0.00
H										
ATOM	1540	N	GLY	A	103	22.090	-2.546	9.226	1.00	0.00
N										
ATOM	1541	CA	GLY	A	103	22.506	-1.367	9.916	1.00	0.00
C										
ATOM	1542	C	GLY	A	103	23.996	-1.176	9.795	1.00	0.00
C										
ATOM	1543	O	GLY	A	103	24.480	-0.109	10.122	1.00	0.00
O										
ATOM	1544	H	GLY	A	103	21.928	-2.516	8.225	1.00	0.00
H										
ATOM	1545	HA2	GLY	A	103	22.242	-1.457	10.969	1.00	0.00
H										
ATOM	1546	HA3	GLY	A	103	21.999	-0.504	9.487	1.00	0.00
H										
ATOM	1547	N	THR	A	104	24.720	-2.183	9.300	1.00	0.00
N										
ATOM	1548	CA	THR	A	104	26.167	-2.135	9.287	1.00	0.00
C										
ATOM	1549	C	THR	A	104	26.704	-1.250	8.136	1.00	0.00
C										
ATOM	1550	O	THR	A	104	27.558	-0.453	8.361	1.00	0.00
O										
ATOM	1551	CB	THR	A	104	26.807	-3.533	9.295	1.00	0.00
C										
ATOM	1552	OG1	THR	A	104	26.409	-4.242	8.118	1.00	0.00
O										
ATOM	1553	CG2	THR	A	104	26.436	-4.348	10.603	1.00	0.00
C										

ATOM	1554	H	THR	A	104	24.246	-2.999	8.925	1.00	0.00
H										
ATOM	1555	HA	THR	A	104	26.468	-1.652	10.215	1.00	0.00
H										
ATOM	1556	HB	THR	A	104	27.888	-3.411	9.267	1.00	0.00
H										
ATOM	1557	HG21	THR	A	104	25.355	-4.468	10.661	1.00	0.00
H										
ATOM	1558	HG22	THR	A	104	26.909	-5.328	10.566	1.00	0.00
H										
ATOM	1559	HG23	THR	A	104	26.788	-3.807	11.480	1.00	0.00
H										
ATOM	1560	HG1	THR	A	104	26.709	-3.744	7.314	1.00	0.00
H										
ATOM	1561	N	ILE	A	105	26.178	-1.385	6.914	1.00	0.00
N										
ATOM	1562	CA	ILE	A	105	26.700	-0.607	5.800	1.00	0.00
C										
ATOM	1563	C	ILE	A	105	26.210	0.812	5.986	1.00	0.00
C										
ATOM	1564	O	ILE	A	105	26.854	1.753	5.576	1.00	0.00
O										
ATOM	1565	CB	ILE	A	105	26.315	-1.193	4.385	1.00	0.00
C										
ATOM	1566	CG1	ILE	A	105	27.312	-0.709	3.304	1.00	0.00
C										
ATOM	1567	CG2	ILE	A	105	24.964	-0.783	3.985	1.00	0.00
C										
ATOM	1568	CD1	ILE	A	105	26.910	-1.081	1.815	1.00	0.00
C										
ATOM	1569	H	ILE	A	105	25.411	-2.033	6.763	1.00	0.00
H										
ATOM	1570	HA	ILE	A	105	27.786	-0.600	5.876	1.00	0.00
H										
ATOM	1571	HB	ILE	A	105	26.351	-2.280	4.434	1.00	0.00
H										
ATOM	1572	HG12	ILE	A	105	28.283	-1.155	3.514	1.00	0.00
H										
ATOM	1573	HG13	ILE	A	105	27.387	0.375	3.374	1.00	0.00
H										
ATOM	1574	HG21	ILE	A	105	24.914	0.304	3.934	1.00	0.00
H										
ATOM	1575	HG22	ILE	A	105	24.731	-1.203	3.008	1.00	0.00
H										
ATOM	1576	HG23	ILE	A	105	24.243	-1.145	4.717	1.00	0.00
H										
ATOM	1577	HD11	ILE	A	105	25.946	-0.633	1.577	1.00	0.00
H										
ATOM	1578	HD12	ILE	A	105	27.666	-0.702	1.129	1.00	0.00
H										
ATOM	1579	HD13	ILE	A	105	26.841	-2.164	1.717	1.00	0.00
H										
ATOM	1580	N	GLN	A	106	25.050	0.960	6.630	1.00	0.00
N										
ATOM	1581	CA	GLN	A	106	24.590	2.290	6.996	1.00	0.00
C										



ATOM	1582	C	GLN	A	106	25.595	2.983	7.925	1.00	0.00
C										
ATOM	1583	O	GLN	A	106	25.931	4.147	7.718	1.00	0.00
O										
ATOM	1584	CB	GLN	A	106	23.203	2.250	7.622	1.00	0.00
C										
ATOM	1585	CG	GLN	A	106	22.119	1.920	6.646	1.00	0.00
C										
ATOM	1586	CD	GLN	A	106	22.035	0.418	6.332	1.00	0.00
C										
ATOM	1587	OE1	GLN	A	106	22.564	-0.409	7.056	1.00	0.00
O										
ATOM	1588	NE2	GLN	A	106	21.343	0.081	5.267	1.00	0.00
N										
ATOM	1589	H	GLN	A	106	24.490	0.146	6.864	1.00	0.00
H										
ATOM	1590	HA	GLN	A	106	24.523	2.880	6.083	1.00	0.00
H										
ATOM	1591	HB2	GLN	A	106	22.991	3.227	8.055	1.00	0.00
H										
ATOM	1592	HB3	GLN	A	106	23.200	1.496	8.408	1.00	0.00
H										
ATOM	1593	HG2	GLN	A	106	22.311	2.459	5.719	1.00	0.00
H										
ATOM	1594	HG3	GLN	A	106	21.166	2.242	7.063	1.00	0.00
H										
ATOM	1595	HE21	GLN	A	106	21.253	-0.896	5.009	1.00	0.00
H										
ATOM	1596	HE22	GLN	A	106	20.900	0.798	4.702	1.00	0.00
H										
ATOM	1597	N	GLY	A	107	26.094	2.273	8.921	1.00	0.00
N										
ATOM	1598	CA	GLY	A	107	27.112	2.842	9.787	1.00	0.00
C										
ATOM	1599	C	GLY	A	107	28.351	3.277	9.043	1.00	0.00
C										
ATOM	1600	O	GLY	A	107	28.911	4.324	9.307	1.00	0.00
O										
ATOM	1601	H	GLY	A	107	25.764	1.326	9.082	1.00	0.00
H										
ATOM	1602	HA2	GLY	A	107	27.396	2.093	10.525	1.00	0.00
H										
ATOM	1603	HA3	GLY	A	107	26.690	3.709	10.293	1.00	0.00
H										
ATOM	1604	N	LEU	A	108	28.791	2.414	8.138	1.00	0.00
N										
ATOM	1605	CA	LEU	A	108	29.916	2.698	7.269	1.00	0.00
C										
ATOM	1606	C	LEU	A	108	29.708	3.987	6.473	1.00	0.00
C										
ATOM	1607	O	LEU	A	108	30.587	4.861	6.428	1.00	0.00
O										
ATOM	1608	CB	LEU	A	108	30.177	1.509	6.339	1.00	0.00
C										
ATOM	1609	CG	LEU	A	108	31.389	1.588	5.395	1.00	0.00
C										

ATOM	1610	CD1	LEU	A	108	31.985	0.213	5.227	1.00	0.00
C										
ATOM	1611	CD2	LEU	A	108	30.964	2.142	4.040	1.00	0.00
C										
ATOM	1612	H	LEU	A	108	28.321	1.519	8.050	1.00	0.00
H										
ATOM	1613	HA	LEU	A	108	30.796	2.831	7.896	1.00	0.00
H										
ATOM	1614	HB2	LEU	A	108	29.291	1.381	5.719	1.00	0.00
H										
ATOM	1615	HB3	LEU	A	108	30.311	0.629	6.967	1.00	0.00
H										
ATOM	1616	HG	LEU	A	108	32.137	2.249	5.831	1.00	0.00
H										
ATOM	1617	HD11	LEU	A	108	31.238	-0.457	4.804	1.00	0.00
H										
ATOM	1618	HD12	LEU	A	108	32.843	0.269	4.559	1.00	0.00
H										
ATOM	1619	HD13	LEU	A	108	32.304	-0.165	6.197	1.00	0.00
H										
ATOM	1620	HD21	LEU	A	108	30.547	3.140	4.170	1.00	0.00
H										
ATOM	1621	HD22	LEU	A	108	31.829	2.193	3.381	1.00	0.00
H										
ATOM	1622	HD23	LEU	A	108	30.211	1.489	3.601	1.00	0.00
H										
ATOM	1623	N	PHE	A	109	28.545	4.110	5.870	1.00	0.00
N										
ATOM	1624	CA	PHE	A	109	28.169	5.331	5.143	1.00	0.00
C										
ATOM	1625	C	PHE	A	109	28.125	6.521	6.043	1.00	0.00
C										
ATOM	1626	O	PHE	A	109	28.567	7.606	5.662	1.00	0.00
O										
ATOM	1627	CB	PHE	A	109	26.808	5.169	4.495	1.00	0.00
C										
ATOM	1628	CG	PHE	A	109	26.769	4.148	3.362	1.00	0.00
C										
ATOM	1629	CD1	PHE	A	109	27.915	3.792	2.649	1.00	0.00
C										
ATOM	1630	CD2	PHE	A	109	25.559	3.589	2.972	1.00	0.00
C										
ATOM	1631	CE1	PHE	A	109	27.845	2.883	1.569	1.00	0.00
C										
ATOM	1632	CE2	PHE	A	109	25.510	2.720	1.910	1.00	0.00
C										
ATOM	1633	CZ	PHE	A	109	26.654	2.368	1.217	1.00	0.00
C										
ATOM	1634	H	PHE	A	109	27.887	3.338	5.908	1.00	0.00
H										
ATOM	1635	HA	PHE	A	109	28.906	5.512	4.362	1.00	0.00
H										
ATOM	1636	HB2	PHE	A	109	26.504	6.135	4.094	1.00	0.00
H										
ATOM	1637	HB3	PHE	A	109	26.101	4.855	5.261	1.00	0.00
H										

ATOM	1638	HD1	PHE	A	109	28.876	4.221	2.929	1.00	0.00
H										
ATOM	1639	HD2	PHE	A	109	24.646	3.841	3.510	1.00	0.00
H										
ATOM	1640	HE1	PHE	A	109	28.747	2.603	1.027	1.00	0.00
H										
ATOM	1641	HE2	PHE	A	109	24.552	2.300	1.607	1.00	0.00
H										
ATOM	1642	HZ	PHE	A	109	26.590	1.671	0.383	1.00	0.00
H										
ATOM	1643	N	GLU	A	110	27.559	6.344	7.231	1.00	0.00
N										
ATOM	1644	CA	GLU	A	110	27.571	7.406	8.235	1.00	0.00
C										
ATOM	1645	C	GLU	A	110	29.005	7.812	8.559	1.00	0.00
C										
ATOM	1646	O	GLU	A	110	29.303	9.011	8.664	1.00	0.00
O										
ATOM	1647	CB	GLU	A	110	26.934	6.959	9.524	1.00	0.00
C										
ATOM	1648	CG	GLU	A	110	25.366	6.793	9.508	1.00	0.00
C										
ATOM	1649	CD	GLU	A	110	24.622	8.119	9.459	1.00	0.00
C										
ATOM	1650	OE1	GLU	A	110	25.241	9.226	9.593	1.00	0.00
O										
ATOM	1651	OE2	GLU	A	110	23.416	8.040	9.205	1.00	0.00
O1-										
ATOM	1652	H	GLU	A	110	27.111	5.458	7.445	1.00	0.00
H										
ATOM	1653	HA	GLU	A	110	27.032	8.270	7.849	1.00	0.00
H										
ATOM	1654	HB2	GLU	A	110	27.182	7.694	10.289	1.00	0.00
H										
ATOM	1655	HB3	GLU	A	110	27.366	5.996	9.791	1.00	0.00
H										
ATOM	1656	HG2	GLU	A	110	25.066	6.261	10.409	1.00	0.00
H										
ATOM	1657	HG3	GLU	A	110	25.090	6.208	8.632	1.00	0.00
H										
ATOM	1658	N	VAL	A	111	29.900	6.842	8.751	1.00	0.00
N										
ATOM	1659	CA	VAL	A	111	31.251	7.208	9.110	1.00	0.00
C										
ATOM	1660	C	VAL	A	111	31.880	7.988	7.961	1.00	0.00
C										
ATOM	1661	O	VAL	A	111	32.604	8.924	8.176	1.00	0.00
O										
ATOM	1662	CB	VAL	A	111	32.141	6.029	9.423	1.00	0.00
C										
ATOM	1663	CG1	VAL	A	111	33.603	6.501	9.490	1.00	0.00
C										
ATOM	1664	CG2	VAL	A	111	31.735	5.363	10.758	1.00	0.00
C										
ATOM	1665	H	VAL	A	111	29.637	5.867	8.647	1.00	0.00
H										

ATOM	1666	HA	VAL	A	111	31.212	7.854	9.986	1.00	0.00
H										
ATOM	1667	HB	VAL	A	111	32.046	5.296	8.623	1.00	0.00
H										
ATOM	1668	HG11	VAL	A	111	33.706	7.254	10.270	1.00	0.00
H										
ATOM	1669	HG12	VAL	A	111	34.248	5.653	9.716	1.00	0.00
H										
ATOM	1670	HG13	VAL	A	111	33.890	6.931	8.531	1.00	0.00
H										
ATOM	1671	HG21	VAL	A	111	30.705	5.014	10.691	1.00	0.00
H										
ATOM	1672	HG22	VAL	A	111	32.392	4.518	10.957	1.00	0.00
H										
ATOM	1673	HG23	VAL	A	111	31.820	6.088	11.566	1.00	0.00
H										
ATOM	1674	N	LEU	A	112	31.587	7.591	6.743	1.00	0.00
N										
ATOM	1675	CA	LEU	A	112	32.241	8.182	5.595	1.00	0.00
C										
ATOM	1676	C	LEU	A	112	31.434	9.336	5.017	1.00	0.00
C										
ATOM	1677	O	LEU	A	112	31.758	9.830	3.941	1.00	0.00
O										
ATOM	1678	CB	LEU	A	112	32.484	7.110	4.531	1.00	0.00
C										
ATOM	1679	CG	LEU	A	112	33.434	5.960	4.939	1.00	0.00
C										
ATOM	1680	CD1	LEU	A	112	33.601	5.069	3.739	1.00	0.00
C										
ATOM	1681	CD2	LEU	A	112	34.757	6.477	5.429	1.00	0.00
C										
ATOM	1682	H	LEU	A	112	30.894	6.862	6.606	1.00	0.00
H										
ATOM	1683	HA	LEU	A	112	33.207	8.569	5.915	1.00	0.00
H										
ATOM	1684	HB2	LEU	A	112	32.908	7.599	3.655	1.00	0.00
H										
ATOM	1685	HB3	LEU	A	112	31.521	6.672	4.272	1.00	0.00
H										
ATOM	1686	HG	LEU	A	112	32.965	5.387	5.737	1.00	0.00
H										
ATOM	1687	HD11	LEU	A	112	34.027	5.643	2.917	1.00	0.00
H										
ATOM	1688	HD12	LEU	A	112	34.267	4.244	3.989	1.00	0.00
H										
ATOM	1689	HD13	LEU	A	112	32.630	4.675	3.442	1.00	0.00
H										
ATOM	1690	HD21	LEU	A	112	34.599	7.114	6.298	1.00	0.00
H										
ATOM	1691	HD22	LEU	A	112	35.395	5.639	5.705	1.00	0.00
H										
ATOM	1692	HD23	LEU	A	112	35.237	7.053	4.639	1.00	0.00
H										
ATOM	1693	N	ASP	A	113	30.367	9.738	5.697	1.00	0.00
N										

ATOM	1694	CA	ASP	A	113	29.500	10.829	5.212	1.00	0.00
C										
ATOM	1695	C	ASP	A	113	29.013	10.623	3.786	1.00	0.00
C										
ATOM	1696	O	ASP	A	113	28.946	11.559	3.004	1.00	0.00
O										
ATOM	1697	CB	ASP	A	113	30.231	12.195	5.359	1.00	0.00
C										
ATOM	1698	CG	ASP	A	113	29.296	13.403	5.160	1.00	0.00
C										
ATOM	1699	OD1	ASP	A	113	28.076	13.361	5.510	1.00	0.00
O										
ATOM	1700	OD2	ASP	A	113	29.819	14.422	4.651	1.00	0.00
O1-										
ATOM	1701	H	ASP	A	113	30.141	9.282	6.575	1.00	0.00
H										
ATOM	1702	HA	ASP	A	113	28.622	10.858	5.855	1.00	0.00
H										
ATOM	1703	HB2	ASP	A	113	31.025	12.245	4.616	1.00	0.00
H										
ATOM	1704	HB3	ASP	A	113	30.663	12.252	6.357	1.00	0.00
H										
ATOM	1705	N	VAL	A	114	28.659	9.385	3.473	1.00	0.00
N										
ATOM	1706	CA	VAL	A	114	28.028	9.012	2.202	1.00	0.00
C										
ATOM	1707	C	VAL	A	114	26.495	9.133	2.282	1.00	0.00
C										
ATOM	1708	O	VAL	A	114	25.898	8.660	3.202	1.00	0.00
O										
ATOM	1709	CB	VAL	A	114	28.447	7.566	1.847	1.00	0.00
C										
ATOM	1710	CG1	VAL	A	114	27.810	7.078	0.547	1.00	0.00
C										
ATOM	1711	CG2	VAL	A	114	29.956	7.488	1.796	1.00	0.00
C										
ATOM	1712	H	VAL	A	114	28.834	8.652	4.152	1.00	0.00
H										
ATOM	1713	HA	VAL	A	114	28.390	9.681	1.423	1.00	0.00
H										
ATOM	1714	HB	VAL	A	114	28.107	6.914	2.650	1.00	0.00
H										
ATOM	1715	HG11	VAL	A	114	28.115	7.727	-0.273	1.00	0.00
H										
ATOM	1716	HG12	VAL	A	114	28.136	6.059	0.343	1.00	0.00
H										
ATOM	1717	HG13	VAL	A	114	26.725	7.100	0.644	1.00	0.00
H										
ATOM	1718	HG21	VAL	A	114	30.367	7.761	2.767	1.00	0.00
H										
ATOM	1719	HG22	VAL	A	114	30.259	6.472	1.546	1.00	0.00
H										
ATOM	1720	HG23	VAL	A	114	30.329	8.175	1.038	1.00	0.00
H										
ATOM	1721	N	PRO	A	115	25.860	9.880	1.367	1.00	0.00
N										

ATOM	1722	CA	PRO	A	115	24.391	10.018	1.409	1.00	0.00
C										
ATOM	1723	C	PRO	A	115	23.748	8.747	0.904	1.00	0.00
C										
ATOM	1724	O	PRO	A	115	24.099	8.283	-0.162	1.00	0.00
O										
ATOM	1725	CB	PRO	A	115	24.087	11.142	0.443	1.00	0.00
C										
ATOM	1726	CG	PRO	A	115	25.288	11.347	-0.361	1.00	0.00
C										
ATOM	1727	CD	PRO	A	115	26.472	10.715	0.339	1.00	0.00
C										
ATOM	1728	HA	PRO	A	115	24.047	10.260	2.414	1.00	0.00
H										
ATOM	1729	HB2	PRO	A	115	23.843	12.051	0.991	1.00	0.00
H										
ATOM	1730	HB3	PRO	A	115	23.250	10.869	-0.198	1.00	0.00
H										
ATOM	1731	HG2	PRO	A	115	25.465	12.415	-0.484	1.00	0.00
H										
ATOM	1732	HG3	PRO	A	115	25.154	10.886	-1.339	1.00	0.00
H										
ATOM	1733	HD2	PRO	A	115	27.056	10.112	-0.354	1.00	0.00
H										
ATOM	1734	HD3	PRO	A	115	27.110	11.476	0.786	1.00	0.00
H										
ATOM	1735	N	TYR	A	116	22.891	8.156	1.701	1.00	0.00
N										
ATOM	1736	CA	TYR	A	116	22.342	6.862	1.388	1.00	0.00
C										
ATOM	1737	C	TYR	A	116	20.810	6.846	1.490	1.00	0.00
C										
ATOM	1738	O	TYR	A	116	20.180	7.642	2.202	1.00	0.00
O										
ATOM	1739	CB	TYR	A	116	22.956	5.781	2.270	1.00	0.00
C										
ATOM	1740	CG	TYR	A	116	22.697	5.916	3.748	1.00	0.00
C										
ATOM	1741	CD1	TYR	A	116	21.603	5.321	4.344	1.00	0.00
C										
ATOM	1742	CD2	TYR	A	116	23.562	6.627	4.553	1.00	0.00
C										
ATOM	1743	CE1	TYR	A	116	21.365	5.458	5.729	1.00	0.00
C										
ATOM	1744	CE2	TYR	A	116	23.322	6.793	5.896	1.00	0.00
C										
ATOM	1745	CZ	TYR	A	116	22.236	6.181	6.505	1.00	0.00
C										
ATOM	1746	OH	TYR	A	116	22.055	6.292	7.893	1.00	0.00
O										
ATOM	1747	H	TYR	A	116	22.608	8.621	2.558	1.00	0.00
H										
ATOM	1748	HA	TYR	A	116	22.605	6.634	0.356	1.00	0.00
H										
ATOM	1749	HB2	TYR	A	116	24.034	5.797	2.117	1.00	0.00
H										

ATOM	1750	HB3	TYR	A	116	22.557	4.820	1.947	1.00	0.00
H										
ATOM	1751	HD1	TYR	A	116	20.913	4.737	3.737	1.00	0.00
H										
ATOM	1752	HD2	TYR	A	116	24.456	7.067	4.114	1.00	0.00
H										
ATOM	1753	HE1	TYR	A	116	20.491	4.991	6.181	1.00	0.00
H										
ATOM	1754	HE2	TYR	A	116	23.992	7.413	6.489	1.00	0.00
H										
ATOM	1755	HH	TYR	A	116	22.080	5.388	8.303	1.00	0.00
H										
ATOM	1756	N	VAL	A	117	20.250	5.971	0.690	1.00	0.00
N										
ATOM	1757	CA	VAL	A	117	18.856	5.757	0.603	1.00	0.00
C										
ATOM	1758	C	VAL	A	117	18.397	4.842	1.740	1.00	0.00
C										
ATOM	1759	O	VAL	A	117	19.098	3.895	2.148	1.00	0.00
O										
ATOM	1760	CB	VAL	A	117	18.520	5.131	-0.728	1.00	0.00
C										
ATOM	1761	CG1	VAL	A	117	17.039	4.835	-0.828	1.00	0.00
C										
ATOM	1762	CG2	VAL	A	117	18.964	6.036	-1.880	1.00	0.00
C										
ATOM	1763	H	VAL	A	117	20.855	5.413	0.097	1.00	0.00
H										
ATOM	1764	HA	VAL	A	117	18.342	6.714	0.686	1.00	0.00
H										
ATOM	1765	HB	VAL	A	117	19.061	4.189	-0.807	1.00	0.00
H										
ATOM	1766	HG11	VAL	A	117	16.476	5.761	-0.725	1.00	0.00
H										
ATOM	1767	HG12	VAL	A	117	16.823	4.385	-1.796	1.00	0.00
H										
ATOM	1768	HG13	VAL	A	117	16.752	4.146	-0.035	1.00	0.00
H										
ATOM	1769	HG21	VAL	A	117	20.040	6.191	-1.826	1.00	0.00
H										
ATOM	1770	HG22	VAL	A	117	18.712	5.566	-2.829	1.00	0.00
H										
ATOM	1771	HG23	VAL	A	117	18.455	6.996	-1.804	1.00	0.00
H										
ATOM	1772	N	GLY	A	118	17.241	5.159	2.282	1.00	0.00
N										
ATOM	1773	CA	GLY	A	118	16.526	4.228	3.077	1.00	0.00
C										
ATOM	1774	C	GLY	A	118	16.800	4.456	4.538	1.00	0.00
C										
ATOM	1775	O	GLY	A	118	17.187	5.546	4.979	1.00	0.00
O										
ATOM	1776	H	GLY	A	118	16.856	6.085	2.129	1.00	0.00
H										
ATOM	1777	HA2	GLY	A	118	16.832	3.218	2.809	1.00	0.00
H										

ATOM	1778	HA3	GLY	A	118	15.459	4.345	2.891	1.00	0.00
H										
ATOM	1779	N	ASN	A	119	16.598	3.387	5.293	1.00	0.00
N										
ATOM	1780	CA	ASN	A	119	16.771	3.437	6.725	1.00	0.00
C										
ATOM	1781	C	ASN	A	119	18.195	3.626	7.234	1.00	0.00
C										
ATOM	1782	O	ASN	A	119	19.120	3.124	6.658	1.00	0.00
O										
ATOM	1783	CB	ASN	A	119	16.106	2.190	7.305	1.00	0.00
C										
ATOM	1784	CG	ASN	A	119	14.673	2.285	7.185	1.00	0.00
C										
ATOM	1785	OD1	ASN	A	119	14.072	3.003	7.972	1.00	0.00
O										
ATOM	1786	ND2	ASN	A	119	14.085	1.677	6.120	1.00	0.00
N										
ATOM	1787	H	ASN	A	119	16.316	2.515	4.856	1.00	0.00
H										
ATOM	1788	HA	ASN	A	119	16.197	4.291	7.080	1.00	0.00
H										
ATOM	1789	HB2	ASN	A	119	16.373	2.097	8.357	1.00	0.00
H										
ATOM	1790	HB3	ASN	A	119	16.455	1.312	6.763	1.00	0.00
H										
ATOM	1791	HD21	ASN	A	119	13.078	1.722	6.002	1.00	0.00
H										
ATOM	1792	HD22	ASN	A	119	14.654	1.178	5.443	1.00	0.00
H										
ATOM	1793	N	GLY	A	120	18.308	4.405	8.303	1.00	0.00
N										
ATOM	1794	CA	GLY	A	120	19.508	4.634	9.053	1.00	0.00
C										
ATOM	1795	C	GLY	A	120	19.854	3.442	9.943	1.00	0.00
C										
ATOM	1796	O	GLY	A	120	19.171	2.402	9.903	1.00	0.00
O										
ATOM	1797	H	GLY	A	120	17.469	4.882	8.618	1.00	0.00
H										
ATOM	1798	HA2	GLY	A	120	19.370	5.514	9.680	1.00	0.00
H										
ATOM	1799	HA3	GLY	A	120	20.330	4.807	8.360	1.00	0.00
H										
ATOM	1800	N	VAL	A	121	20.917	3.632	10.740	1.00	0.00
N										
ATOM	1801	CA	VAL	A	121	21.528	2.563	11.498	1.00	0.00
C										
ATOM	1802	C	VAL	A	121	20.551	1.934	12.432	1.00	0.00
C										
ATOM	1803	O	VAL	A	121	20.329	0.708	12.423	1.00	0.00
O										
ATOM	1804	CB	VAL	A	121	22.773	3.050	12.292	1.00	0.00
C										
ATOM	1805	CG1	VAL	A	121	23.272	1.918	13.339	1.00	0.00
C										



ATOM	1806	CG2	VAL	A	121	23.868	3.438	11.331	1.00	0.00
C										
ATOM	1807	H	VAL	A	121	21.309	4.566	10.814	1.00	0.00
H										
ATOM	1808	HA	VAL	A	121	21.858	1.800	10.794	1.00	0.00
H										
ATOM	1809	HB	VAL	A	121	22.490	3.936	12.859	1.00	0.00
H										
ATOM	1810	HG11	VAL	A	121	23.537	1.012	12.795	1.00	0.00
H										
ATOM	1811	HG12	VAL	A	121	24.143	2.284	13.881	1.00	0.00
H										
ATOM	1812	HG13	VAL	A	121	22.472	1.698	14.044	1.00	0.00
H										
ATOM	1813	HG21	VAL	A	121	23.516	4.240	10.684	1.00	0.00
H										
ATOM	1814	HG22	VAL	A	121	24.738	3.779	11.890	1.00	0.00
H										
ATOM	1815	HG23	VAL	A	121	24.142	2.576	10.724	1.00	0.00
H										
ATOM	1816	N	LEU	A	122	19.950	2.781	13.238	1.00	0.00
N										
ATOM	1817	CA	LEU	A	122	19.107	2.338	14.309	1.00	0.00
C										
ATOM	1818	C	LEU	A	122	17.842	1.705	13.748	1.00	0.00
C										
ATOM	1819	O	LEU	A	122	17.376	0.730	14.292	1.00	0.00
O										
ATOM	1820	CB	LEU	A	122	18.758	3.472	15.273	1.00	0.00
C										
ATOM	1821	CG	LEU	A	122	17.826	3.104	16.450	1.00	0.00
C										
ATOM	1822	CD1	LEU	A	122	18.197	1.815	17.172	1.00	0.00
C										
ATOM	1823	CD2	LEU	A	122	17.837	4.245	17.426	1.00	0.00
C										
ATOM	1824	H	LEU	A	122	20.087	3.777	13.098	1.00	0.00
H										
ATOM	1825	HA	LEU	A	122	19.646	1.575	14.868	1.00	0.00
H										
ATOM	1826	HB2	LEU	A	122	18.273	4.259	14.698	1.00	0.00
H										
ATOM	1827	HB3	LEU	A	122	19.689	3.850	15.692	1.00	0.00
H										
ATOM	1828	HG	LEU	A	122	16.814	2.998	16.062	1.00	0.00
H										
ATOM	1829	HD11	LEU	A	122	19.202	1.904	17.581	1.00	0.00
H										
ATOM	1830	HD12	LEU	A	122	17.491	1.636	17.981	1.00	0.00
H										
ATOM	1831	HD13	LEU	A	122	18.163	0.983	16.470	1.00	0.00
H										
ATOM	1832	HD21	LEU	A	122	17.481	5.148	16.933	1.00	0.00
H										
ATOM	1833	HD22	LEU	A	122	17.186	4.010	18.267	1.00	0.00
H										

ATOM	1834	HD23	LEU	A	122	18.852	4.405	17.786	1.00	0.00
H										
ATOM	1835	N	SER	A	123	17.282	2.232	12.676	1.00	0.00
N										
ATOM	1836	CA	SER	A	123	16.047	1.619	12.164	1.00	0.00
C										
ATOM	1837	C	SER	A	123	16.335	0.347	11.363	1.00	0.00
C										
ATOM	1838	O	SER	A	123	15.635	-0.653	11.540	1.00	0.00
O										
ATOM	1839	CB	SER	A	123	15.165	2.599	11.387	1.00	0.00
C										
ATOM	1840	OG	SER	A	123	15.786	2.912	10.164	1.00	0.00
O										
ATOM	1841	H	SER	A	123	17.693	3.039	12.217	1.00	0.00
H										
ATOM	1842	HA	SER	A	123	15.472	1.311	13.036	1.00	0.00
H										
ATOM	1843	HB2	SER	A	123	15.030	3.509	11.970	1.00	0.00
H										
ATOM	1844	HB3	SER	A	123	14.195	2.143	11.196	1.00	0.00
H										
ATOM	1845	HG	SER	A	123	15.909	2.082	9.633	1.00	0.00
H										
ATOM	1846	N	ALA	A	124	17.389	0.333	10.553	1.00	0.00
N										
ATOM	1847	CA	ALA	A	124	17.744	-0.932	9.865	1.00	0.00
C										
ATOM	1848	C	ALA	A	124	18.062	-2.028	10.927	1.00	0.00
C										
ATOM	1849	O	ALA	A	124	17.484	-3.104	10.926	1.00	0.00
O										
ATOM	1850	CB	ALA	A	124	18.907	-0.732	8.907	1.00	0.00
C										
ATOM	1851	H	ALA	A	124	17.941	1.173	10.408	1.00	0.00
H										
ATOM	1852	HA	ALA	A	124	16.881	-1.259	9.287	1.00	0.00
H										
ATOM	1853	HB1	ALA	A	124	19.778	-0.383	9.461	1.00	0.00
H										
ATOM	1854	HB2	ALA	A	124	19.143	-1.677	8.419	1.00	0.00
H										
ATOM	1855	HB3	ALA	A	124	18.635	0.007	8.155	1.00	0.00
H										
ATOM	1856	N	ALA	A	125	18.959	-1.744	11.863	1.00	0.00
N										
ATOM	1857	CA	ALA	A	125	19.249	-2.703	12.948	1.00	0.00
C										
ATOM	1858	C	ALA	A	125	17.992	-3.074	13.730	1.00	0.00
C										
ATOM	1859	O	ALA	A	125	17.786	-4.214	14.032	1.00	0.00
O										
ATOM	1860	CB	ALA	A	125	20.267	-2.148	13.861	1.00	0.00
C										
ATOM	1861	H	ALA	A	125	19.452	-0.857	11.833	1.00	0.00
H										

ATOM	1862	HA	ALA	A	125	19.652	-3.611	12.501	1.00	0.00
H										
ATOM	1863	HB1	ALA	A	125	19.898	-1.220	14.295	1.00	0.00
H										
ATOM	1864	HB2	ALA	A	125	20.471	-2.864	14.655	1.00	0.00
H										
ATOM	1865	HB3	ALA	A	125	21.183	-1.950	13.306	1.00	0.00
H										
ATOM	1866	N	SER	A	126	17.147	-2.135	14.125	1.00	0.00
N										
ATOM	1867	CA	SER	A	126	16.114	-2.550	15.076	1.00	0.00
C										
ATOM	1868	C	SER	A	126	15.030	-3.402	14.400	1.00	0.00
C										
ATOM	1869	O	SER	A	126	14.416	-4.298	15.042	1.00	0.00
O										
ATOM	1870	CB	SER	A	126	15.552	-1.385	15.890	1.00	0.00
C										
ATOM	1871	OG	SER	A	126	14.851	-0.545	15.079	1.00	0.00
O										
ATOM	1872	H	SER	A	126	17.212	-1.180	13.787	1.00	0.00
H										
ATOM	1873	HA	SER	A	126	16.609	-3.205	15.791	1.00	0.00
H										
ATOM	1874	HB2	SER	A	126	16.373	-0.839	16.352	1.00	0.00
H										
ATOM	1875	HB3	SER	A	126	14.892	-1.772	16.665	1.00	0.00
H										
ATOM	1876	HG	SER	A	126	14.101	-1.041	14.658	1.00	0.00
H										
ATOM	1877	N	SER	A	127	14.890	-3.250	13.084	1.00	0.00
N										
ATOM	1878	CA	SER	A	127	13.941	-4.078	12.345	1.00	0.00
C										
ATOM	1879	C	SER	A	127	14.489	-5.437	11.897	1.00	0.00
C										
ATOM	1880	O	SER	A	127	13.756	-6.239	11.332	1.00	0.00
O										
ATOM	1881	CB	SER	A	127	13.376	-3.335	11.157	1.00	0.00
C										
ATOM	1882	OG	SER	A	127	14.225	-3.578	10.035	1.00	0.00
O										
ATOM	1883	H	SER	A	127	15.445	-2.556	12.593	1.00	0.00
H										
ATOM	1884	HA	SER	A	127	13.108	-4.279	13.017	1.00	0.00
H										
ATOM	1885	HB2	SER	A	127	13.344	-2.268	11.371	1.00	0.00
H										
ATOM	1886	HB3	SER	A	127	12.370	-3.693	10.943	1.00	0.00
H										
ATOM	1887	HG	SER	A	127	14.254	-4.553	9.846	1.00	0.00
H										
ATOM	1888	N	MET	A	128	15.750	-5.716	12.177	1.00	0.00
N										
ATOM	1889	CA	MET	A	128	16.300	-7.040	11.995	1.00	0.00
C										

ATOM	1890	C	MET	A	128	16.319	-7.791	13.323	1.00	0.00
C										
ATOM	1891	O	MET	A	128	16.778	-8.969	13.388	1.00	0.00
O										
ATOM	1892	CB	MET	A	128	17.715	-6.955	11.439	1.00	0.00
C										
ATOM	1893	CG	MET	A	128	17.990	-7.819	10.187	1.00	0.00
C										
ATOM	1894	SD	MET	A	128	16.670	-7.788	8.866	1.00	0.00
S										
ATOM	1895	CE	MET	A	128	15.815	-9.282	9.420	1.00	0.00
C										
ATOM	1896	H	MET	A	128	16.351	-4.978	12.531	1.00	0.00
H										
ATOM	1897	HA	MET	A	128	15.676	-7.587	11.290	1.00	0.00
H										
ATOM	1898	HB2	MET	A	128	18.403	-7.270	12.222	1.00	0.00
H										
ATOM	1899	HB3	MET	A	128	17.912	-5.916	11.180	1.00	0.00
H										
ATOM	1900	HG2	MET	A	128	18.111	-8.851	10.514	1.00	0.00
H										
ATOM	1901	HG3	MET	A	128	18.919	-7.470	9.738	1.00	0.00
H										
ATOM	1902	HE1	MET	A	128	15.465	-9.142	10.442	1.00	0.00
H										
ATOM	1903	HE2	MET	A	128	14.965	-9.476	8.768	1.00	0.00
H										
ATOM	1904	HE3	MET	A	128	16.501	-10.127	9.384	1.00	0.00
H										
ATOM	1905	N	ASP	A	129	15.843	-7.120	14.374	1.00	0.00
N										
ATOM	1906	CA	ASP	A	129	15.737	-7.698	15.693	1.00	0.00
C										
ATOM	1907	C	ASP	A	129	14.277	-7.734	16.142	1.00	0.00
C										
ATOM	1908	O	ASP	A	129	13.696	-6.718	16.565	1.00	0.00
O										
ATOM	1909	CB	ASP	A	129	16.594	-6.960	16.689	1.00	0.00
C										
ATOM	1910	CG	ASP	A	129	16.657	-7.670	18.028	1.00	0.00
C										
ATOM	1911	OD1	ASP	A	129	15.608	-8.084	18.598	1.00	0.00
O										
ATOM	1912	OD2	ASP	A	129	17.770	-7.854	18.505	1.00	0.00
O1-										
ATOM	1913	H	ASP	A	129	15.542	-6.160	14.240	1.00	0.00
H										
ATOM	1914	HA	ASP	A	129	16.096	-8.725	15.638	1.00	0.00
H										
ATOM	1915	HB2	ASP	A	129	16.179	-5.965	16.839	1.00	0.00
H										
ATOM	1916	HB3	ASP	A	129	17.603	-6.876	16.289	1.00	0.00
H										
ATOM	1917	N	LYS	A	130	13.681	-8.920	16.069	1.00	0.00
N										

ATOM	1918	CA	LYS	A	130	12.219	-9.045	16.181	1.00	0.00
C										
ATOM	1919	C	LYS	A	130	11.809	-8.618	17.547	1.00	0.00
C										
ATOM	1920	O	LYS	A	130	10.813	-7.956	17.686	1.00	0.00
O										
ATOM	1921	CB	LYS	A	130	11.709	-10.483	15.975	1.00	0.00
C										
ATOM	1922	CG	LYS	A	130	12.209	-11.121	14.754	1.00	0.00
C										
ATOM	1923	CD	LYS	A	130	11.758	-12.583	14.645	1.00	0.00
C										
ATOM	1924	CE	LYS	A	130	11.976	-13.014	13.185	1.00	0.00
C										
ATOM	1925	NZ	LYS	A	130	13.426	-12.636	12.719	1.00	0.00
N1+										
ATOM	1926	H	LYS	A	130	14.244	-9.754	15.934	1.00	0.00
H										
ATOM	1927	HA	LYS	A	130	11.748	-8.392	15.448	1.00	0.00
H										
ATOM	1928	HB2	LYS	A	130	10.621	-10.458	15.928	1.00	0.00
H										
ATOM	1929	HB3	LYS	A	130	12.021	-11.083	16.828	1.00	0.00
H										
ATOM	1930	HG2	LYS	A	130	13.297	-11.088	14.760	1.00	0.00
H										
ATOM	1931	HG3	LYS	A	130	11.834	-10.572	13.891	1.00	0.00
H										
ATOM	1932	HD2	LYS	A	130	10.704	-12.670	14.907	1.00	0.00
H										
ATOM	1933	HD3	LYS	A	130	12.351	-13.208	15.312	1.00	0.00
H										
ATOM	1934	HE2	LYS	A	130	11.251	-12.509	12.549	1.00	0.00
H										
ATOM	1935	HE3	LYS	A	130	11.842	-14.092	13.104	1.00	0.00
H										
ATOM	1936	HZ1	LYS	A	130	14.105	-13.107	13.309	1.00	0.00
H										
ATOM	1937	HZ2	LYS	A	130	13.558	-12.925	11.755	1.00	0.00
H										
ATOM	1938	HZ3	LYS	A	130	13.554	-11.632	12.791	1.00	0.00
H										
ATOM	1939	N	LEU	A	131	12.623	-8.969	18.549	1.00	0.00
N										
ATOM	1940	CA	LEU	A	131	12.354	-8.548	19.898	1.00	0.00
C										
ATOM	1941	C	LEU	A	131	12.375	-7.055	20.047	1.00	0.00
C										
ATOM	1942	O	LEU	A	131	11.440	-6.478	20.533	1.00	0.00
O										
ATOM	1943	CB	LEU	A	131	13.278	-9.223	20.889	1.00	0.00
C										
ATOM	1944	CG	LEU	A	131	12.948	-8.870	22.343	1.00	0.00
C										
ATOM	1945	CD1	LEU	A	131	11.356	-9.070	22.676	1.00	0.00
C										

ATOM	1946	CD2	LEU	A	131	13.910	-9.624	23.338	1.00	0.00
C										
ATOM	1947	H	LEU	A	131	13.440	-9.539	18.355	1.00	0.00
H										
ATOM	1948	HA	LEU	A	131	11.342	-8.875	20.135	1.00	0.00
H										
ATOM	1949	HB2	LEU	A	131	14.300	-8.913	20.679	1.00	0.00
H										
ATOM	1950	HB3	LEU	A	131	13.193	-10.302	20.765	1.00	0.00
H										
ATOM	1951	HG	LEU	A	131	13.156	-7.808	22.458	1.00	0.00
H										
ATOM	1952	HD11	LEU	A	131	11.077	-10.109	22.506	1.00	0.00
H										
ATOM	1953	HD12	LEU	A	131	11.167	-8.809	23.716	1.00	0.00
H										
ATOM	1954	HD13	LEU	A	131	10.765	-8.425	22.027	1.00	0.00
H										
ATOM	1955	HD21	LEU	A	131	14.940	-9.338	23.134	1.00	0.00
H										
ATOM	1956	HD22	LEU	A	131	13.655	-9.357	24.362	1.00	0.00
H										
ATOM	1957	HD23	LEU	A	131	13.799	-10.699	23.205	1.00	0.00
H										
ATOM	1958	N	VAL	A	132	13.417	-6.389	19.580	1.00	0.00
N										
ATOM	1959	CA	VAL	A	132	13.424	-4.957	19.712	1.00	0.00
C										
ATOM	1960	C	VAL	A	132	12.294	-4.356	18.890	1.00	0.00
C										
ATOM	1961	O	VAL	A	132	11.626	-3.464	19.323	1.00	0.00
O										
ATOM	1962	CB	VAL	A	132	14.783	-4.368	19.294	1.00	0.00
C										
ATOM	1963	CG1	VAL	A	132	14.685	-2.865	19.073	1.00	0.00
C										
ATOM	1964	CG2	VAL	A	132	15.818	-4.766	20.318	1.00	0.00
C										
ATOM	1965	H	VAL	A	132	14.191	-6.875	19.140	1.00	0.00
H										
ATOM	1966	HA	VAL	A	132	13.253	-4.710	20.759	1.00	0.00
H										
ATOM	1967	HB	VAL	A	132	15.063	-4.824	18.346	1.00	0.00
H										
ATOM	1968	HG11	VAL	A	132	14.365	-2.383	19.996	1.00	0.00
H										
ATOM	1969	HG12	VAL	A	132	15.659	-2.477	18.779	1.00	0.00
H										
ATOM	1970	HG13	VAL	A	132	13.960	-2.660	18.286	1.00	0.00
H										
ATOM	1971	HG21	VAL	A	132	15.884	-5.852	20.364	1.00	0.00
H										
ATOM	1972	HG22	VAL	A	132	16.786	-4.356	20.034	1.00	0.00
H										
ATOM	1973	HG23	VAL	A	132	15.531	-4.378	21.294	1.00	0.00
H										

ATOM	1974	N	MET	A	133	12.060	-4.868	17.691	1.00	0.00
N										
ATOM	1975	CA	MET	A	133	10.972	-4.380	16.880	1.00	0.00
C										
ATOM	1976	C	MET	A	133	9.624	-4.532	17.597	1.00	0.00
C										
ATOM	1977	O	MET	A	133	8.849	-3.630	17.634	1.00	0.00
O										
ATOM	1978	CB	MET	A	133	10.992	-5.137	15.548	1.00	0.00
C										
ATOM	1979	CG	MET	A	133	9.956	-4.729	14.575	1.00	0.00
C										
ATOM	1980	SD	MET	A	133	9.723	-5.992	13.319	1.00	0.00
S										
ATOM	1981	CE	MET	A	133	8.798	-7.329	14.163	1.00	0.00
C										
ATOM	1982	H	MET	A	133	12.653	-5.612	17.339	1.00	0.00
H										
ATOM	1983	HA	MET	A	133	11.139	-3.323	16.679	1.00	0.00
H										
ATOM	1984	HB2	MET	A	133	10.855	-6.196	15.761	1.00	0.00
H										
ATOM	1985	HB3	MET	A	133	11.966	-4.982	15.087	1.00	0.00
H										
ATOM	1986	HG2	MET	A	133	10.263	-3.801	14.095	1.00	0.00
H										
ATOM	1987	HG3	MET	A	133	9.015	-4.571	15.101	1.00	0.00
H										
ATOM	1988	HE1	MET	A	133	7.847	-6.940	14.525	1.00	0.00
H										
ATOM	1989	HE2	MET	A	133	8.614	-8.142	13.462	1.00	0.00
H										
ATOM	1990	HE3	MET	A	133	9.382	-7.700	15.004	1.00	0.00
H										
ATOM	1991	N	LYS	A	134	9.356	-5.697	18.156	1.00	0.00
N										
ATOM	1992	CA	LYS	A	134	8.107	-5.892	18.929	1.00	0.00
C										
ATOM	1993	C	LYS	A	134	7.923	-4.997	20.133	1.00	0.00
C										
ATOM	1994	O	LYS	A	134	6.868	-4.497	20.349	1.00	0.00
O										
ATOM	1995	CB	LYS	A	134	8.007	-7.340	19.359	1.00	0.00
C										
ATOM	1996	CG	LYS	A	134	7.728	-8.225	18.140	1.00	0.00
C										
ATOM	1997	CD	LYS	A	134	7.442	-9.614	18.603	1.00	0.00
C										
ATOM	1998	CE	LYS	A	134	6.944	-10.440	17.473	1.00	0.00
C										
ATOM	1999	NZ	LYS	A	134	5.633	-9.971	16.855	1.00	0.00
N1+										
ATOM	2000	H	LYS	A	134	10.011	-6.466	18.056	1.00	0.00
H										
ATOM	2001	HA	LYS	A	134	7.275	-5.698	18.253	1.00	0.00
H										

ATOM	2002	HB2	LYS	A	134	7.196	-7.449	20.078	1.00	0.00
H										
ATOM	2003	HB3	LYS	A	134	8.944	-7.646	19.821	1.00	0.00
H										
ATOM	2004	HG2	LYS	A	134	8.598	-8.230	17.486	1.00	0.00
H										
ATOM	2005	HG3	LYS	A	134	6.867	-7.837	17.596	1.00	0.00
H										
ATOM	2006	HD2	LYS	A	134	6.686	-9.584	19.386	1.00	0.00
H										
ATOM	2007	HD3	LYS	A	134	8.355	-10.057	18.997	1.00	0.00
H										
ATOM	2008	HE2	LYS	A	134	6.800	-11.457	17.836	1.00	0.00
H										
ATOM	2009	HE3	LYS	A	134	7.704	-10.437	16.693	1.00	0.00
H										
ATOM	2010	HZ1	LYS	A	134	5.746	-9.029	16.496	1.00	0.00
H										
ATOM	2011	HZ2	LYS	A	134	5.375	-10.594	16.096	1.00	0.00
H										
ATOM	2012	HZ3	LYS	A	134	4.904	-9.979	17.561	1.00	0.00
H										
ATOM	2013	N	GLN	A	135	8.965	-4.768	20.901	1.00	0.00
N										
ATOM	2014	CA	GLN	A	135	8.882	-3.798	22.005	1.00	0.00
C										
ATOM	2015	C	GLN	A	135	8.578	-2.403	21.573	1.00	0.00
C										
ATOM	2016	O	GLN	A	135	7.864	-1.661	22.280	1.00	0.00
O										
ATOM	2017	CB	GLN	A	135	10.191	-3.762	22.771	1.00	0.00
C										
ATOM	2018	CG	GLN	A	135	10.574	-5.132	23.366	1.00	0.00
C										
ATOM	2019	CD	GLN	A	135	11.908	-5.018	24.004	1.00	0.00
C										
ATOM	2020	OE1	GLN	A	135	12.102	-4.224	24.933	1.00	0.00
O										
ATOM	2021	NE2	GLN	A	135	12.863	-5.734	23.477	1.00	0.00
N										
ATOM	2022	H	GLN	A	135	9.834	-5.264	20.731	1.00	0.00
H										
ATOM	2023	HA	GLN	A	135	8.097	-4.123	22.686	1.00	0.00
H										
ATOM	2024	HB2	GLN	A	135	10.098	-3.043	23.584	1.00	0.00
H										
ATOM	2025	HB3	GLN	A	135	10.982	-3.444	22.093	1.00	0.00
H										
ATOM	2026	HG2	GLN	A	135	10.609	-5.878	22.574	1.00	0.00
H										
ATOM	2027	HG3	GLN	A	135	9.836	-5.427	24.110	1.00	0.00
H										
ATOM	2028	HE21	GLN	A	135	13.798	-5.699	23.869	1.00	0.00
H										
ATOM	2029	HE22	GLN	A	135	12.670	-6.326	22.675	1.00	0.00
H										



ATOM	2030	N	LEU	A	136	9.103	-2.018	20.410	1.00	0.00
N										
ATOM	2031	CA	LEU	A	136	8.820	-0.694	19.885	1.00	0.00
C										
ATOM	2032	C	LEU	A	136	7.384	-0.644	19.396	1.00	0.00
C										
ATOM	2033	O	LEU	A	136	6.742	0.390	19.486	1.00	0.00
O										
ATOM	2034	CB	LEU	A	136	9.820	-0.361	18.775	1.00	0.00
C										
ATOM	2035	CG	LEU	A	136	11.299	-0.194	19.192	1.00	0.00
C										
ATOM	2036	CD1	LEU	A	136	12.174	0.018	17.972	1.00	0.00
C										
ATOM	2037	CD2	LEU	A	136	11.421	1.027	20.158	1.00	0.00
C										
ATOM	2038	H	LEU	A	136	9.701	-2.652	19.890	1.00	0.00
H										
ATOM	2039	HA	LEU	A	136	8.938	0.031	20.689	1.00	0.00
H										
ATOM	2040	HB2	LEU	A	136	9.501	0.573	18.314	1.00	0.00
H										
ATOM	2041	HB3	LEU	A	136	9.774	-1.163	18.040	1.00	0.00
H										
ATOM	2042	HG	LEU	A	136	11.625	-1.093	19.712	1.00	0.00
H										
ATOM	2043	HD11	LEU	A	136	11.851	0.915	17.445	1.00	0.00
H										
ATOM	2044	HD12	LEU	A	136	13.211	0.134	18.285	1.00	0.00
H										
ATOM	2045	HD13	LEU	A	136	12.088	-0.842	17.310	1.00	0.00
H										
ATOM	2046	HD21	LEU	A	136	10.808	0.854	21.041	1.00	0.00
H										
ATOM	2047	HD22	LEU	A	136	12.461	1.151	20.456	1.00	0.00
H										
ATOM	2048	HD23	LEU	A	136	11.079	1.928	19.650	1.00	0.00
H										
ATOM	2049	N	PHE	A	137	6.860	-1.743	18.864	1.00	0.00
N										
ATOM	2050	CA	PHE	A	137	5.500	-1.697	18.351	1.00	0.00
C										
ATOM	2051	C	PHE	A	137	4.516	-1.528	19.510	1.00	0.00
C										
ATOM	2052	O	PHE	A	137	3.603	-0.719	19.458	1.00	0.00
O										
ATOM	2053	CB	PHE	A	137	5.146	-2.917	17.534	1.00	0.00
C										
ATOM	2054	CG	PHE	A	137	5.810	-2.980	16.176	1.00	0.00
C										
ATOM	2055	CD1	PHE	A	137	5.948	-4.177	15.529	1.00	0.00
C										
ATOM	2056	CD2	PHE	A	137	6.348	-1.867	15.563	1.00	0.00
C										
ATOM	2057	CE1	PHE	A	137	6.588	-4.240	14.272	1.00	0.00
C										

ATOM	2058	CE2	PHE	A	137	6.947	-1.956	14.326	1.00	0.00
C										
ATOM	2059	CZ	PHE	A	137	7.045	-3.142	13.691	1.00	0.00
C										
ATOM	2060	H	PHE	A	137	7.400	-2.601	18.816	1.00	0.00
H										
ATOM	2061	HA	PHE	A	137	5.413	-0.824	17.706	1.00	0.00
H										
ATOM	2062	HB2	PHE	A	137	4.067	-2.925	17.385	1.00	0.00
H										
ATOM	2063	HB3	PHE	A	137	5.441	-3.801	18.098	1.00	0.00
H										
ATOM	2064	HD1	PHE	A	137	5.562	-5.087	15.986	1.00	0.00
H										
ATOM	2065	HD2	PHE	A	137	6.298	-0.902	16.066	1.00	0.00
H										
ATOM	2066	HE1	PHE	A	137	6.707	-5.202	13.775	1.00	0.00
H										
ATOM	2067	HE2	PHE	A	137	7.346	-1.059	13.855	1.00	0.00
H										
ATOM	2068	HZ	PHE	A	137	7.499	-3.196	12.703	1.00	0.00
H										
ATOM	2069	N	GLU	A	138	4.753	-2.308	20.545	1.00	0.00
N										
ATOM	2070	CA	GLU	A	138	3.968	-2.360	21.772	1.00	0.00
C										
ATOM	2071	C	GLU	A	138	3.867	-1.002	22.417	1.00	0.00
C										
ATOM	2072	O	GLU	A	138	2.776	-0.584	22.800	1.00	0.00
O										
ATOM	2073	CB	GLU	A	138	4.700	-3.325	22.703	1.00	0.00
C										
ATOM	2074	CG	GLU	A	138	4.043	-3.772	23.975	1.00	0.00
C										
ATOM	2075	CD	GLU	A	138	4.859	-4.953	24.567	1.00	0.00
C										
ATOM	2076	OE1	GLU	A	138	5.497	-4.760	25.636	1.00	0.00
O										
ATOM	2077	OE2	GLU	A	138	4.922	-6.053	23.913	1.00	0.00
O1-										
ATOM	2078	H	GLU	A	138	5.553	-2.929	20.482	1.00	0.00
H										
ATOM	2079	HA	GLU	A	138	2.971	-2.741	21.556	1.00	0.00
H										
ATOM	2080	HB2	GLU	A	138	5.637	-2.845	22.983	1.00	0.00
H										
ATOM	2081	HB3	GLU	A	138	4.912	-4.223	22.124	1.00	0.00
H										
ATOM	2082	HG2	GLU	A	138	3.025	-4.098	23.767	1.00	0.00
H										
ATOM	2083	HG3	GLU	A	138	4.023	-2.948	24.686	1.00	0.00
H										
ATOM	2084	N	HIS	A	139	4.989	-0.296	22.502	1.00	0.00
N										
ATOM	2085	CA	HIS	A	139	5.000	1.045	23.085	1.00	0.00
C										

ATOM	2086	C	HIS	A	139	4.162	2.036	22.277	1.00	0.00
C										
ATOM	2087	O	HIS	A	139	3.592	2.969	22.800	1.00	0.00
O										
ATOM	2088	CB	HIS	A	139	6.422	1.583	23.208	1.00	0.00
C										
ATOM	2089	CG	HIS	A	139	6.486	2.873	23.950	1.00	0.00
C										
ATOM	2090	ND1	HIS	A	139	6.705	2.939	25.314	1.00	0.00
N										
ATOM	2091	CD2	HIS	A	139	6.324	4.153	23.525	1.00	0.00
C										
ATOM	2092	CE1	HIS	A	139	6.658	4.208	25.692	1.00	0.00
C										
ATOM	2093	NE2	HIS	A	139	6.440	4.964	24.627	1.00	0.00
N										
ATOM	2094	H	HIS	A	139	5.856	-0.695	22.156	1.00	0.00
H										
ATOM	2095	HA	HIS	A	139	4.576	0.981	24.086	1.00	0.00
H										
ATOM	2096	HB2	HIS	A	139	6.824	1.736	22.208	1.00	0.00
H										
ATOM	2097	HB3	HIS	A	139	7.028	0.848	23.734	1.00	0.00
H										
ATOM	2098	HD1	HIS	A	139	6.874	2.146	25.925	1.00	0.00
H										
ATOM	2099	HD2	HIS	A	139	6.135	4.476	22.502	1.00	0.00
H										
ATOM	2100	HE1	HIS	A	139	6.779	4.570	26.712	1.00	0.00
H										
ATOM	2101	N	ARG	A	140	4.085	1.819	20.978	1.00	0.00
N										
ATOM	2102	CA	ARG	A	140	3.365	2.704	20.121	1.00	0.00
C										
ATOM	2103	C	ARG	A	140	1.839	2.378	20.185	1.00	0.00
C										
ATOM	2104	O	ARG	A	140	0.969	3.085	19.632	1.00	0.00
O										
ATOM	2105	CB	ARG	A	140	3.946	2.518	18.724	1.00	0.00
C										
ATOM	2106	CG	ARG	A	140	3.611	3.621	17.750	1.00	0.00
C										
ATOM	2107	CD	ARG	A	140	4.456	4.856	17.997	1.00	0.00
C										
ATOM	2108	NE	ARG	A	140	3.885	5.916	17.204	1.00	0.00
N1+										
ATOM	2109	CZ	ARG	A	140	4.408	7.118	17.035	1.00	0.00
C1+										
ATOM	2110	NH1	ARG	A	140	5.582	7.422	17.551	1.00	0.00
N1+										
ATOM	2111	NH2	ARG	A	140	3.750	8.001	16.296	1.00	0.00
N1+										
ATOM	2112	H	ARG	A	140	4.548	1.008	20.580	1.00	0.00
H										
ATOM	2113	HA	ARG	A	140	3.527	3.731	20.445	1.00	0.00
H										

ATOM	2114	HB2	ARG	A	140	3.564	1.581	18.320	1.00	0.00
H										
ATOM	2115	HB3	ARG	A	140	5.029	2.461	18.812	1.00	0.00
H										
ATOM	2116	HG2	ARG	A	140	2.559	3.884	17.860	1.00	0.00
H										
ATOM	2117	HG3	ARG	A	140	3.791	3.265	16.737	1.00	0.00
H										
ATOM	2118	HD2	ARG	A	140	5.485	4.673	17.693	1.00	0.00
H										
ATOM	2119	HD3	ARG	A	140	4.431	5.122	19.053	1.00	0.00
H										
ATOM	2120	HE2	ARG	A	140	3.005	5.723	16.735	1.00	0.00
H										
ATOM	2121	HE3	ARG	A	140	4.389	5.583	16.395	1.00	0.00
H										
ATOM	2122	HH11	ARG	A	140	5.972	8.349	17.413	1.00	0.00
H										
ATOM	2123	HH12	ARG	A	140	6.096	6.729	18.086	1.00	0.00
H										
ATOM	2124	HH13	ARG	A	140	5.128	7.738	18.396	1.00	0.00
H										
ATOM	2125	HH21	ARG	A	140	4.133	8.930	16.153	1.00	0.00
H										
ATOM	2126	HH22	ARG	A	140	2.862	7.748	15.873	1.00	0.00
H										
ATOM	2127	HH23	ARG	A	140	4.235	7.674	15.473	1.00	0.00
H										
ATOM	2128	N	GLY	A	141	1.516	1.294	20.864	1.00	0.00
N										
ATOM	2129	CA	GLY	A	141	0.144	0.883	20.965	1.00	0.00
C										
ATOM	2130	C	GLY	A	141	-0.321	0.117	19.755	1.00	0.00
C										
ATOM	2131	O	GLY	A	141	-1.498	0.056	19.532	1.00	0.00
O										
ATOM	2132	H	GLY	A	141	2.242	0.748	21.317	1.00	0.00
H										
ATOM	2133	HA2	GLY	A	141	-0.478	1.770	21.077	1.00	0.00
H										
ATOM	2134	HA3	GLY	A	141	0.034	0.249	21.843	1.00	0.00
H										
ATOM	2135	N	LEU	A	142	0.591	-0.478	18.978	1.00	0.00
N										
ATOM	2136	CA	LEU	A	142	0.194	-1.275	17.825	1.00	0.00
C										
ATOM	2137	C	LEU	A	142	-0.207	-2.642	18.307	1.00	0.00
C										
ATOM	2138	O	LEU	A	142	0.498	-3.219	19.122	1.00	0.00
O										
ATOM	2139	CB	LEU	A	142	1.347	-1.420	16.833	1.00	0.00
C										
ATOM	2140	CG	LEU	A	142	1.619	-0.194	15.954	1.00	0.00
C										
ATOM	2141	CD1	LEU	A	142	3.038	-0.197	15.389	1.00	0.00
C										

ATOM	2142	CD2	LEU	A	142	0.544	-0.057	14.841	1.00	0.00
C										
ATOM	2143	H	LEU	A	142	1.577	-0.372	19.196	1.00	0.00
H										
ATOM	2144	HA	LEU	A	142	-0.653	-0.801	17.331	1.00	0.00
H										
ATOM	2145	HB2	LEU	A	142	1.121	-2.259	16.177	1.00	0.00
H										
ATOM	2146	HB3	LEU	A	142	2.252	-1.635	17.399	1.00	0.00
H										
ATOM	2147	HG	LEU	A	142	1.532	0.684	16.593	1.00	0.00
H										
ATOM	2148	HD11	LEU	A	142	3.185	-1.089	14.782	1.00	0.00
H										
ATOM	2149	HD12	LEU	A	142	3.185	0.689	14.774	1.00	0.00
H										
ATOM	2150	HD13	LEU	A	142	3.755	-0.193	16.208	1.00	0.00
H										
ATOM	2151	HD21	LEU	A	142	-0.438	0.052	15.297	1.00	0.00
H										
ATOM	2152	HD22	LEU	A	142	0.762	0.820	14.233	1.00	0.00
H										
ATOM	2153	HD23	LEU	A	142	0.557	-0.947	14.213	1.00	0.00
H										
ATOM	2154	N	PRO	A	143	-1.288	-3.222	17.739	1.00	0.00
N										
ATOM	2155	CA	PRO	A	143	-1.686	-4.572	18.194	1.00	0.00
C										
ATOM	2156	C	PRO	A	143	-0.750	-5.655	17.654	1.00	0.00
C										
ATOM	2157	O	PRO	A	143	-0.411	-5.651	16.445	1.00	0.00
O										
ATOM	2158	CB	PRO	A	143	-3.089	-4.762	17.575	1.00	0.00
C										
ATOM	2159	CG	PRO	A	143	-3.042	-3.935	16.366	1.00	0.00
C										
ATOM	2160	CD	PRO	A	143	-2.105	-2.764	16.616	1.00	0.00
C										
ATOM	2161	HA	PRO	A	143	-1.736	-4.613	19.281	1.00	0.00
H										
ATOM	2162	HB2	PRO	A	143	-3.865	-4.414	18.255	1.00	0.00
H										
ATOM	2163	HB3	PRO	A	143	-3.266	-5.807	17.326	1.00	0.00
H										
ATOM	2164	HG2	PRO	A	143	-4.039	-3.564	16.136	1.00	0.00
H										
ATOM	2165	HG3	PRO	A	143	-2.673	-4.528	15.530	1.00	0.00
H										
ATOM	2166	HD2	PRO	A	143	-1.488	-2.564	15.741	1.00	0.00
H										
ATOM	2167	HD3	PRO	A	143	-2.663	-1.867	16.880	1.00	0.00
H										
ATOM	2168	N	GLN	A	144	-0.357	-6.562	18.525	1.00	0.00
N										
ATOM	2169	CA	GLN	A	144	0.426	-7.704	18.169	1.00	0.00
C										

ATOM	2170	C	GLN	A	144	-0.103	-8.982	18.842	1.00	0.00
C										
ATOM	2171	O	GLN	A	144	-0.653	-8.953	19.951	1.00	0.00
O										
ATOM	2172	CB	GLN	A	144	1.901	-7.508	18.609	1.00	0.00
C										
ATOM	2173	CG	GLN	A	144	2.558	-6.218	18.166	1.00	0.00
C										
ATOM	2174	CD	GLN	A	144	4.003	-6.098	18.600	1.00	0.00
C										
ATOM	2175	OE1	GLN	A	144	4.885	-6.295	17.810	1.00	0.00
O										
ATOM	2176	NE2	GLN	A	144	4.242	-5.773	19.842	1.00	0.00
N										
ATOM	2177	H	GLN	A	144	-0.623	-6.444	19.497	1.00	0.00
H										
ATOM	2178	HA	GLN	A	144	0.394	-7.833	17.088	1.00	0.00
H										
ATOM	2179	HB2	GLN	A	144	2.482	-8.335	18.204	1.00	0.00
H										
ATOM	2180	HB3	GLN	A	144	1.931	-7.542	19.697	1.00	0.00
H										
ATOM	2181	HG2	GLN	A	144	2.000	-5.384	18.589	1.00	0.00
H										
ATOM	2182	HG3	GLN	A	144	2.518	-6.167	17.079	1.00	0.00
H										
ATOM	2183	HE21	GLN	A	144	5.198	-5.683	20.169	1.00	0.00
H										
ATOM	2184	HE22	GLN	A	144	3.470	-5.610	20.481	1.00	0.00
H										
ATOM	2185	N	LEU	A	145	0.174	-10.107	18.200	1.00	0.00
N										
ATOM	2186	CA	LEU	A	145	-0.116	-11.409	18.750	1.00	0.00
C										
ATOM	2187	C	LEU	A	145	0.696	-11.562	20.015	1.00	0.00
C										
ATOM	2188	O	LEU	A	145	1.739	-10.949	20.132	1.00	0.00
O										
ATOM	2189	CB	LEU	A	145	0.232	-12.499	17.731	1.00	0.00
C										
ATOM	2190	CG	LEU	A	145	-0.751	-12.630	16.539	1.00	0.00
C										
ATOM	2191	CD1	LEU	A	145	-0.099	-13.359	15.348	1.00	0.00
C										
ATOM	2192	CD2	LEU	A	145	-2.047	-13.304	16.985	1.00	0.00
C										
ATOM	2193	H	LEU	A	145	0.608	-10.051	17.284	1.00	0.00
H										
ATOM	2194	HA	LEU	A	145	-1.175	-11.469	18.993	1.00	0.00
H										
ATOM	2195	HB2	LEU	A	145	0.256	-13.454	18.254	1.00	0.00
H										
ATOM	2196	HB3	LEU	A	145	1.221	-12.281	17.329	1.00	0.00
H										
ATOM	2197	HG	LEU	A	145	-1.002	-11.623	16.209	1.00	0.00
H										

ATOM	2198	HD11	LEU	A	145	0.205	-14.359	15.656	1.00	0.00
H										
ATOM	2199	HD12	LEU	A	145	-0.815	-13.433	14.531	1.00	0.00
H										
ATOM	2200	HD13	LEU	A	145	0.775	-12.801	15.015	1.00	0.00
H										
ATOM	2201	HD21	LEU	A	145	-2.516	-12.708	17.766	1.00	0.00
H										
ATOM	2202	HD22	LEU	A	145	-2.723	-13.387	16.136	1.00	0.00
H										
ATOM	2203	HD23	LEU	A	145	-1.825	-14.298	17.371	1.00	0.00
H										
ATOM	2204	N	PRO	A	146	0.185	-12.335	21.005	1.00	0.00
N										
ATOM	2205	CA	PRO	A	146	0.919	-12.582	22.238	1.00	0.00
C										
ATOM	2206	C	PRO	A	146	2.250	-13.266	21.950	1.00	0.00
C										
ATOM	2207	O	PRO	A	146	2.329	-14.127	21.045	1.00	0.00
O										
ATOM	2208	CB	PRO	A	146	0.019	-13.537	23.006	1.00	0.00
C										
ATOM	2209	CG	PRO	A	146	-1.351	-13.296	22.472	1.00	0.00
C										
ATOM	2210	CD	PRO	A	146	-1.114	-13.015	21.003	1.00	0.00
C										
ATOM	2211	HA	PRO	A	146	1.069	-11.658	22.793	1.00	0.00
H										
ATOM	2212	HB2	PRO	A	146	0.057	-13.323	24.073	1.00	0.00
H										
ATOM	2213	HB3	PRO	A	146	0.321	-14.569	22.833	1.00	0.00
H										
ATOM	2214	HG2	PRO	A	146	-1.815	-12.441	22.962	1.00	0.00
H										
ATOM	2215	HG3	PRO	A	146	-1.980	-14.175	22.603	1.00	0.00
H										
ATOM	2216	HD2	PRO	A	146	-1.071	-13.940	20.429	1.00	0.00
H										
ATOM	2217	HD3	PRO	A	146	-1.892	-12.371	20.597	1.00	0.00
H										
ATOM	2218	N	TYR	A	147	3.285	-12.864	22.681	1.00	0.00
N										
ATOM	2219	CA	TYR	A	147	4.597	-13.431	22.475	1.00	0.00
C										
ATOM	2220	C	TYR	A	147	5.390	-13.398	23.771	1.00	0.00
C										
ATOM	2221	O	TYR	A	147	5.037	-12.701	24.685	1.00	0.00
O										
ATOM	2222	CB	TYR	A	147	5.364	-12.707	21.342	1.00	0.00
C										
ATOM	2223	CG	TYR	A	147	5.854	-11.372	21.788	1.00	0.00
C										
ATOM	2224	CD1	TYR	A	147	5.048	-10.265	21.681	1.00	0.00
C										
ATOM	2225	CD2	TYR	A	147	7.125	-11.211	22.351	1.00	0.00
C										

ATOM	2226	CE1	TYR	A	147	5.486	-9.038	22.110	1.00	0.00
C										
ATOM	2227	CE2	TYR	A	147	7.572	-9.958	22.765	1.00	0.00
C										
ATOM	2228	CZ	TYR	A	147	6.742	-8.893	22.641	1.00	0.00
C										
ATOM	2229	OH	TYR	A	147	7.114	-7.629	23.056	1.00	0.00
O										
ATOM	2230	H	TYR	A	147	3.152	-12.152	23.391	1.00	0.00
H										
ATOM	2231	HA	TYR	A	147	4.472	-14.473	22.184	1.00	0.00
H										
ATOM	2232	HB2	TYR	A	147	4.698	-12.575	20.491	1.00	0.00
H										
ATOM	2233	HB3	TYR	A	147	6.216	-13.317	21.044	1.00	0.00
H										
ATOM	2234	HD1	TYR	A	147	4.053	-10.363	21.251	1.00	0.00
H										
ATOM	2235	HD2	TYR	A	147	7.775	-12.078	22.467	1.00	0.00
H										
ATOM	2236	HE1	TYR	A	147	4.830	-8.172	22.028	1.00	0.00
H										
ATOM	2237	HE2	TYR	A	147	8.572	-9.836	23.181	1.00	0.00
H										
ATOM	2238	HH	TYR	A	147	6.492	-7.316	23.763	1.00	0.00
H										
ATOM	2239	N	ILE	A	148	6.417	-14.225	23.837	1.00	0.00
N										
ATOM	2240	CA	ILE	A	148	7.335	-14.281	24.956	1.00	0.00
C										
ATOM	2241	C	ILE	A	148	8.745	-14.241	24.323	1.00	0.00
C										
ATOM	2242	O	ILE	A	148	8.919	-14.620	23.194	1.00	0.00
O										
ATOM	2243	CB	ILE	A	148	7.132	-15.595	25.749	1.00	0.00
C										
ATOM	2244	CG1	ILE	A	148	5.886	-15.547	26.660	1.00	0.00
C										
ATOM	2245	CG2	ILE	A	148	8.402	-16.067	26.509	1.00	0.00
C										
ATOM	2246	CD1	ILE	A	148	5.697	-14.270	27.513	1.00	0.00
C										
ATOM	2247	H	ILE	A	148	6.573	-14.858	23.059	1.00	0.00
H										
ATOM	2248	HA	ILE	A	148	7.190	-13.421	25.607	1.00	0.00
H										
ATOM	2249	HB	ILE	A	148	6.928	-16.364	25.005	1.00	0.00
H										
ATOM	2250	HG12	ILE	A	148	5.944	-16.394	27.342	1.00	0.00
H										
ATOM	2251	HG13	ILE	A	148	5.008	-15.652	26.024	1.00	0.00
H										
ATOM	2252	HG21	ILE	A	148	8.704	-15.301	27.222	1.00	0.00
H										
ATOM	2253	HG22	ILE	A	148	8.184	-16.992	27.041	1.00	0.00
H										



ATOM	2254	HG23	ILE	A	148	9.209	-16.239	25.797	1.00	0.00
H										
ATOM	2255	HD11	ILE	A	148	5.617	-13.404	26.857	1.00	0.00
H										
ATOM	2256	HD12	ILE	A	148	4.789	-14.361	28.106	1.00	0.00
H										
ATOM	2257	HD13	ILE	A	148	6.553	-14.146	28.176	1.00	0.00
H										
ATOM	2258	N	SER	A	149	9.745	-13.755	25.036	1.00	0.00
N										
ATOM	2259	CA	SER	A	149	11.094	-13.839	24.520	1.00	0.00
C										
ATOM	2260	C	SER	A	149	12.096	-14.020	25.652	1.00	0.00
C										
ATOM	2261	O	SER	A	149	11.797	-13.736	26.826	1.00	0.00
O										
ATOM	2262	CB	SER	A	149	11.436	-12.590	23.723	1.00	0.00
C										
ATOM	2263	OG	SER	A	149	11.706	-11.573	24.634	1.00	0.00
O										
ATOM	2264	H	SER	A	149	9.568	-13.326	25.939	1.00	0.00
H										
ATOM	2265	HA	SER	A	149	11.159	-14.702	23.858	1.00	0.00
H										
ATOM	2266	HB2	SER	A	149	10.594	-12.310	23.092	1.00	0.00
H										
ATOM	2267	HB3	SER	A	149	12.310	-12.774	23.101	1.00	0.00
H										
ATOM	2268	HG	SER	A	149	12.471	-11.838	25.209	1.00	0.00
H										
ATOM	2269	N	PHE	A	150	13.273	-14.523	25.291	1.00	0.00
N										
ATOM	2270	CA	PHE	A	150	14.331	-14.745	26.278	1.00	0.00
C										
ATOM	2271	C	PHE	A	150	15.668	-14.951	25.600	1.00	0.00
C										
ATOM	2272	O	PHE	A	150	15.756	-15.312	24.406	1.00	0.00
O										
ATOM	2273	CB	PHE	A	150	14.015	-15.960	27.182	1.00	0.00
C										
ATOM	2274	CG	PHE	A	150	13.533	-17.160	26.427	1.00	0.00
C										
ATOM	2275	CD1	PHE	A	150	14.401	-18.128	26.027	1.00	0.00
C										
ATOM	2276	CD2	PHE	A	150	12.201	-17.299	26.107	1.00	0.00
C										
ATOM	2277	CE1	PHE	A	150	13.958	-19.192	25.303	1.00	0.00
C										
ATOM	2278	CE2	PHE	A	150	11.762	-18.348	25.382	1.00	0.00
C										
ATOM	2279	CZ	PHE	A	150	12.630	-19.302	24.978	1.00	0.00
C										
ATOM	2280	H	PHE	A	150	13.440	-14.757	24.317	1.00	0.00
H										
ATOM	2281	HA	PHE	A	150	14.400	-13.860	26.908	1.00	0.00
H										

ATOM	2282	HB2	PHE	A	150	13.243	-15.669	27.893	1.00	0.00
H										
ATOM	2283	HB3	PHE	A	150	14.921	-16.234	27.721	1.00	0.00
H										
ATOM	2284	HD1	PHE	A	150	15.455	-18.052	26.287	1.00	0.00
H										
ATOM	2285	HD2	PHE	A	150	11.488	-16.548	26.446	1.00	0.00
H										
ATOM	2286	HE1	PHE	A	150	14.660	-19.959	24.980	1.00	0.00
H										
ATOM	2287	HE2	PHE	A	150	10.707	-18.427	25.122	1.00	0.00
H										
ATOM	2288	HZ	PHE	A	150	12.277	-20.154	24.398	1.00	0.00
H										
ATOM	2289	N	LEU	A	151	16.703	-14.712	26.396	1.00	0.00
N										
ATOM	2290	CA	LEU	A	151	18.057	-15.081	26.037	1.00	0.00
C										
ATOM	2291	C	LEU	A	151	18.337	-16.517	26.443	1.00	0.00
C										
ATOM	2292	O	LEU	A	151	17.729	-17.087	27.369	1.00	0.00
O										
ATOM	2293	CB	LEU	A	151	19.085	-14.149	26.683	1.00	0.00
C										
ATOM	2294	CG	LEU	A	151	18.969	-12.660	26.329	1.00	0.00
C										
ATOM	2295	CD1	LEU	A	151	19.657	-11.742	27.364	1.00	0.00
C										
ATOM	2296	CD2	LEU	A	151	19.534	-12.391	24.943	1.00	0.00
C										
ATOM	2297	H	LEU	A	151	16.540	-14.255	27.287	1.00	0.00
H										
ATOM	2298	HA	LEU	A	151	18.157	-15.005	24.955	1.00	0.00
H										
ATOM	2299	HB2	LEU	A	151	20.075	-14.486	26.380	1.00	0.00
H										
ATOM	2300	HB3	LEU	A	151	18.985	-14.242	27.763	1.00	0.00
H										
ATOM	2301	HG	LEU	A	151	17.910	-12.405	26.311	1.00	0.00
H										
ATOM	2302	HD11	LEU	A	151	20.716	-11.989	27.420	1.00	0.00
H										
ATOM	2303	HD12	LEU	A	151	19.542	-10.703	27.060	1.00	0.00
H										
ATOM	2304	HD13	LEU	A	151	19.198	-11.888	28.340	1.00	0.00
H										
ATOM	2305	HD21	LEU	A	151	18.981	-12.972	24.206	1.00	0.00
H										
ATOM	2306	HD22	LEU	A	151	19.442	-11.331	24.713	1.00	0.00
H										
ATOM	2307	HD23	LEU	A	151	20.584	-12.678	24.917	1.00	0.00
H										
ATOM	2308	N	ARG	A	152	19.247	-17.109	25.683	1.00	0.00
N										
ATOM	2309	CA	ARG	A	152	19.791	-18.421	25.965	1.00	0.00
C										

ATOM	2310	C	ARG	A	152	20.176	-18.558	27.419	1.00	0.00
C										
ATOM	2311	O	ARG	A	152	19.775	-19.518	28.083	1.00	0.00
O										
ATOM	2312	CB	ARG	A	152	21.006	-18.638	25.038	1.00	0.00
C										
ATOM	2313	CG	ARG	A	152	21.758	-19.936	25.186	1.00	0.00
C										
ATOM	2314	CD	ARG	A	152	21.024	-21.110	24.685	1.00	0.00
C										
ATOM	2315	NE	ARG	A	152	21.559	-22.263	25.409	1.00	0.00
N1+										
ATOM	2316	CZ	ARG	A	152	22.208	-23.314	24.909	1.00	0.00
C1+										
ATOM	2317	NH1	ARG	A	152	22.407	-23.498	23.582	1.00	0.00
N1+										
ATOM	2318	NH2	ARG	A	152	22.659	-24.208	25.781	1.00	0.00
N1+										
ATOM	2319	H	ARG	A	152	19.580	-16.617	24.860	1.00	0.00
H										
ATOM	2320	HA	ARG	A	152	19.035	-19.170	25.732	1.00	0.00
H										
ATOM	2321	HB2	ARG	A	152	21.709	-17.828	25.224	1.00	0.00
H										
ATOM	2322	HB3	ARG	A	152	20.649	-18.581	24.011	1.00	0.00
H										
ATOM	2323	HG2	ARG	A	152	21.972	-20.091	26.243	1.00	0.00
H										
ATOM	2324	HG3	ARG	A	152	22.694	-19.856	24.634	1.00	0.00
H										
ATOM	2325	HD2	ARG	A	152	21.185	-21.228	23.614	1.00	0.00
H										
ATOM	2326	HD3	ARG	A	152	19.958	-21.002	24.882	1.00	0.00
H										
ATOM	2327	HE2	ARG	A	152	21.419	-22.263	26.414	1.00	0.00
H										
ATOM	2328	HE3	ARG	A	152	22.437	-21.779	25.531	1.00	0.00
H										
ATOM	2329	HH11	ARG	A	152	22.908	-24.317	23.253	1.00	0.00
H										
ATOM	2330	HH12	ARG	A	152	22.055	-22.818	22.917	1.00	0.00
H										
ATOM	2331	HH13	ARG	A	152	21.537	-24.007	23.522	1.00	0.00
H										
ATOM	2332	HH21	ARG	A	152	23.160	-25.027	25.454	1.00	0.00
H										
ATOM	2333	HH22	ARG	A	152	22.503	-24.071	26.774	1.00	0.00
H										
ATOM	2334	HH23	ARG	A	152	23.530	-23.701	25.848	1.00	0.00
H										
ATOM	2335	N	SER	A	153	20.924	-17.588	27.936	1.00	0.00
N										
ATOM	2336	CA	SER	A	153	21.405	-17.641	29.320	1.00	0.00
C										
ATOM	2337	C	SER	A	153	20.243	-17.761	30.283	1.00	0.00
C										

ATOM	2338	O	SER	A	153	20.361	-18.431	31.289	1.00	0.00
O										
ATOM	2339	CB	SER	A	153	22.223	-16.413	29.674	1.00	0.00
C										
ATOM	2340	OG	SER	A	153	21.376	-15.282	29.665	1.00	0.00
O										
ATOM	2341	H	SER	A	153	21.168	-16.791	27.358	1.00	0.00
H										
ATOM	2342	HA	SER	A	153	22.037	-18.521	29.432	1.00	0.00
H										
ATOM	2343	HB2	SER	A	153	23.018	-16.280	28.942	1.00	0.00
H										
ATOM	2344	HB3	SER	A	153	22.658	-16.537	30.665	1.00	0.00
H										
ATOM	2345	HG	SER	A	153	20.651	-15.407	30.332	1.00	0.00
H										
ATOM	2346	N	GLU	A	154	19.128	-17.117	29.962	1.00	0.00
N										
ATOM	2347	CA	GLU	A	154	17.932	-17.152	30.786	1.00	0.00
C										
ATOM	2348	C	GLU	A	154	17.210	-18.488	30.691	1.00	0.00
C										
ATOM	2349	O	GLU	A	154	16.706	-18.958	31.685	1.00	0.00
O										
ATOM	2350	CB	GLU	A	154	16.962	-16.036	30.415	1.00	0.00
C										
ATOM	2351	CG	GLU	A	154	17.561	-14.647	30.587	1.00	0.00
C										
ATOM	2352	CD	GLU	A	154	16.702	-13.579	29.972	1.00	0.00
C										
ATOM	2353	OE1	GLU	A	154	16.096	-13.855	28.922	1.00	0.00
O										
ATOM	2354	OE2	GLU	A	154	16.599	-12.489	30.568	1.00	0.00
O1-										
ATOM	2355	H	GLU	A	154	19.110	-16.577	29.103	1.00	0.00
H										
ATOM	2356	HA	GLU	A	154	18.233	-17.006	31.822	1.00	0.00
H										
ATOM	2357	HB2	GLU	A	154	16.081	-16.116	31.051	1.00	0.00
H										
ATOM	2358	HB3	GLU	A	154	16.670	-16.162	29.373	1.00	0.00
H										
ATOM	2359	HG2	GLU	A	154	18.540	-14.626	30.112	1.00	0.00
H										
ATOM	2360	HG3	GLU	A	154	17.669	-14.441	31.651	1.00	0.00
H										
ATOM	2361	N	TYR	A	155	17.164	-19.091	29.515	1.00	0.00
N										
ATOM	2362	CA	TYR	A	155	16.509	-20.381	29.356	1.00	0.00
C										
ATOM	2363	C	TYR	A	155	17.294	-21.475	30.074	1.00	0.00
C										
ATOM	2364	O	TYR	A	155	16.728	-22.337	30.726	1.00	0.00
O										
ATOM	2365	CB	TYR	A	155	16.394	-20.715	27.892	1.00	0.00
C										

ATOM	2366	CG	TYR	A	155	15.562	-21.960	27.608	1.00	0.00
C										
ATOM	2367	CD1	TYR	A	155	14.175	-21.901	27.640	1.00	0.00
C										
ATOM	2368	CD2	TYR	A	155	16.171	-23.172	27.296	1.00	0.00
C										
ATOM	2369	CE1	TYR	A	155	13.403	-23.014	27.389	1.00	0.00
C										
ATOM	2370	CE2	TYR	A	155	15.405	-24.305	27.034	1.00	0.00
C										
ATOM	2371	CZ	TYR	A	155	14.008	-24.218	27.077	1.00	0.00
C										
ATOM	2372	OH	TYR	A	155	13.215	-25.333	26.810	1.00	0.00
O										
ATOM	2373	H	TYR	A	155	17.593	-18.647	28.709	1.00	0.00
H										
ATOM	2374	HA	TYR	A	155	15.509	-20.325	29.785	1.00	0.00
H										
ATOM	2375	HB2	TYR	A	155	17.396	-20.875	27.497	1.00	0.00
H										
ATOM	2376	HB3	TYR	A	155	15.932	-19.871	27.382	1.00	0.00
H										
ATOM	2377	HD1	TYR	A	155	13.687	-20.955	27.868	1.00	0.00
H										
ATOM	2378	HD2	TYR	A	155	17.257	-23.236	27.256	1.00	0.00
H										
ATOM	2379	HE1	TYR	A	155	12.317	-22.946	27.436	1.00	0.00
H										
ATOM	2380	HE2	TYR	A	155	15.889	-25.251	26.797	1.00	0.00
H										
ATOM	2381	HH	TYR	A	155	12.629	-25.143	26.031	1.00	0.00
H										
ATOM	2382	N	GLU	A	156	18.617	-21.371	29.969	1.00	0.00
N										
ATOM	2383	CA	GLU	A	156	19.532	-22.223	30.689	1.00	0.00
C										
ATOM	2384	C	GLU	A	156	19.235	-22.224	32.175	1.00	0.00
C										
ATOM	2385	O	GLU	A	156	19.265	-23.276	32.782	1.00	0.00
O										
ATOM	2386	CB	GLU	A	156	20.981	-21.782	30.444	1.00	0.00
C										
ATOM	2387	CG	GLU	A	156	21.500	-22.092	29.025	1.00	0.00
C										
ATOM	2388	CD	GLU	A	156	22.824	-21.362	28.715	1.00	0.00
C										
ATOM	2389	OE1	GLU	A	156	23.446	-21.648	27.660	1.00	0.00
O										
ATOM	2390	OE2	GLU	A	156	23.241	-20.498	29.538	1.00	0.00
O1-										
ATOM	2391	H	GLU	A	156	18.999	-20.660	29.354	1.00	0.00
H										
ATOM	2392	HA	GLU	A	156	19.416	-23.240	30.317	1.00	0.00
H										
ATOM	2393	HB2	GLU	A	156	21.620	-22.294	31.162	1.00	0.00
H										

ATOM	2394	HB3	GLU	A	156	21.043	-20.707	30.604	1.00	0.00
H										
ATOM	2395	HG2	GLU	A	156	20.749	-21.779	28.301	1.00	0.00
H										
ATOM	2396	HG3	GLU	A	156	21.663	-23.166	28.938	1.00	0.00
H										
ATOM	2397	N	LYS	A	157	18.962	-21.051	32.746	1.00	0.00
N										
ATOM	2398	CA	LYS	A	157	18.733	-20.917	34.189	1.00	0.00
C										
ATOM	2399	C	LYS	A	157	17.252	-21.195	34.588	1.00	0.00
C										
ATOM	2400	O	LYS	A	157	16.995	-21.788	35.623	1.00	0.00
O										
ATOM	2401	CB	LYS	A	157	19.174	-19.517	34.637	1.00	0.00
C										
ATOM	2402	CG	LYS	A	157	19.668	-19.379	36.060	1.00	0.00
C										
ATOM	2403	CD	LYS	A	157	19.680	-17.884	36.537	1.00	0.00
C										
ATOM	2404	CE	LYS	A	157	20.328	-16.885	35.524	1.00	0.00
C										
ATOM	2405	NZ	LYS	A	157	19.558	-16.442	34.247	1.00	0.00
N1+										
ATOM	2406	H	LYS	A	157	18.910	-20.223	32.162	1.00	0.00
H										
ATOM	2407	HA	LYS	A	157	19.362	-21.647	34.698	1.00	0.00
H										
ATOM	2408	HB2	LYS	A	157	18.321	-18.851	34.518	1.00	0.00
H										
ATOM	2409	HB3	LYS	A	157	19.979	-19.198	33.977	1.00	0.00
H										
ATOM	2410	HG2	LYS	A	157	20.680	-19.776	36.120	1.00	0.00
H										
ATOM	2411	HG3	LYS	A	157	19.013	-19.952	36.716	1.00	0.00
H										
ATOM	2412	HD2	LYS	A	157	20.238	-17.830	37.471	1.00	0.00
H										
ATOM	2413	HD3	LYS	A	157	18.651	-17.574	36.710	1.00	0.00
H										
ATOM	2414	HE2	LYS	A	157	21.256	-17.343	35.185	1.00	0.00
H										
ATOM	2415	HE3	LYS	A	157	20.553	-15.978	36.082	1.00	0.00
H										
ATOM	2416	HZ1	LYS	A	157	18.692	-15.985	34.515	1.00	0.00
H										
ATOM	2417	HZ2	LYS	A	157	20.131	-15.797	33.713	1.00	0.00
H										
ATOM	2418	HZ3	LYS	A	157	19.347	-17.257	33.679	1.00	0.00
H										
ATOM	2419	N	TYR	A	158	16.296	-20.820	33.728	1.00	0.00
N										
ATOM	2420	CA	TYR	A	158	14.874	-20.756	34.079	1.00	0.00
C										
ATOM	2421	C	TYR	A	158	13.956	-21.474	33.070	1.00	0.00
C										

ATOM	2422	O	TYR	A	158	12.865	-20.989	32.725	1.00	0.00
O										
ATOM	2423	CB	TYR	A	158	14.465	-19.277	34.185	1.00	0.00
C										
ATOM	2424	CG	TYR	A	158	15.096	-18.526	35.343	1.00	0.00
C										
ATOM	2425	CD1	TYR	A	158	15.887	-17.406	35.131	1.00	0.00
C										
ATOM	2426	CD2	TYR	A	158	14.876	-18.938	36.659	1.00	0.00
C										
ATOM	2427	CE1	TYR	A	158	16.442	-16.719	36.182	1.00	0.00
C										
ATOM	2428	CE2	TYR	A	158	15.442	-18.253	37.746	1.00	0.00
C										
ATOM	2429	CZ	TYR	A	158	16.210	-17.147	37.499	1.00	0.00
C										
ATOM	2430	OH	TYR	A	158	16.777	-16.477	38.570	1.00	0.00
O										
ATOM	2431	H	TYR	A	158	16.570	-20.567	32.784	1.00	0.00
H										
ATOM	2432	HA	TYR	A	158	14.741	-21.220	35.055	1.00	0.00
H										
ATOM	2433	HB2	TYR	A	158	13.384	-19.232	34.301	1.00	0.00
H										
ATOM	2434	HB3	TYR	A	158	14.753	-18.779	33.260	1.00	0.00
H										
ATOM	2435	HD1	TYR	A	158	16.071	-17.066	34.113	1.00	0.00
H										
ATOM	2436	HD2	TYR	A	158	14.252	-19.811	36.846	1.00	0.00
H										
ATOM	2437	HE1	TYR	A	158	17.062	-15.844	35.994	1.00	0.00
H										
ATOM	2438	HE2	TYR	A	158	15.274	-18.595	38.766	1.00	0.00
H										
ATOM	2439	HH	TYR	A	158	16.466	-15.534	38.572	1.00	0.00
H										
ATOM	2440	N	GLU	A	159	14.389	-22.630	32.594	1.00	0.00
N										
ATOM	2441	CA	GLU	A	159	13.644	-23.365	31.559	1.00	0.00
C										
ATOM	2442	C	GLU	A	159	12.197	-23.625	31.971	1.00	0.00
C										
ATOM	2443	O	GLU	A	159	11.283	-23.384	31.177	1.00	0.00
O										
ATOM	2444	CB	GLU	A	159	14.361	-24.677	31.207	1.00	0.00
C										
ATOM	2445	CG	GLU	A	159	13.547	-25.697	30.333	1.00	0.00
C										
ATOM	2446	CD	GLU	A	159	14.378	-26.915	29.883	1.00	0.00
C										
ATOM	2447	OE1	GLU	A	159	15.608	-26.785	29.760	1.00	0.00
O										
ATOM	2448	OE2	GLU	A	159	13.807	-28.009	29.655	1.00	0.00
O1-										
ATOM	2449	H	GLU	A	159	15.256	-23.020	32.951	1.00	0.00
H										

ATOM	2450	HA	GLU	A	159	13.627	-22.747	30.663	1.00	0.00
H										
ATOM	2451	HB2	GLU	A	159	14.623	-25.174	32.140	1.00	0.00
H										
ATOM	2452	HB3	GLU	A	159	15.270	-24.424	30.663	1.00	0.00
H										
ATOM	2453	HG2	GLU	A	159	13.185	-25.179	29.446	1.00	0.00
H										
ATOM	2454	HG3	GLU	A	159	12.700	-26.053	30.917	1.00	0.00
H										
ATOM	2455	N	HIS	A	160	11.991	-24.127	33.202	1.00	0.00
N										
ATOM	2456	CA	HIS	A	160	10.673	-24.616	33.617	1.00	0.00
C										
ATOM	2457	C	HIS	A	160	9.698	-23.460	33.653	1.00	0.00
C										
ATOM	2458	O	HIS	A	160	8.574	-23.582	33.193	1.00	0.00
O										
ATOM	2459	CB	HIS	A	160	10.730	-25.302	34.986	1.00	0.00
C										
ATOM	2460	CG	HIS	A	160	9.382	-25.714	35.516	1.00	0.00
C										
ATOM	2461	ND1	HIS	A	160	8.928	-27.017	35.470	1.00	0.00
N										
ATOM	2462	CD2	HIS	A	160	8.388	-24.994	36.094	1.00	0.00
C										
ATOM	2463	CE1	HIS	A	160	7.714	-27.084	35.995	1.00	0.00
C										
ATOM	2464	NE2	HIS	A	160	7.365	-25.871	36.388	1.00	0.00
N										
ATOM	2465	H	HIS	A	160	12.765	-24.166	33.858	1.00	0.00
H										
ATOM	2466	HA	HIS	A	160	10.325	-25.340	32.882	1.00	0.00
H										
ATOM	2467	HB2	HIS	A	160	11.182	-24.611	35.697	1.00	0.00
H										
ATOM	2468	HB3	HIS	A	160	11.352	-26.192	34.899	1.00	0.00
H										
ATOM	2469	HD1	HIS	A	160	9.446	-27.803	35.091	1.00	0.00
H										
ATOM	2470	HD2	HIS	A	160	8.396	-23.922	36.289	1.00	0.00
H										
ATOM	2471	HE1	HIS	A	160	7.108	-27.983	36.087	1.00	0.00
H										
ATOM	2472	N	ASN	A	161	10.164	-22.330	34.186	1.00	0.00
N										
ATOM	2473	CA	ASN	A	161	9.340	-21.120	34.340	1.00	0.00
C										
ATOM	2474	C	ASN	A	161	8.951	-20.501	33.014	1.00	0.00
C										
ATOM	2475	O	ASN	A	161	7.825	-20.052	32.833	1.00	0.00
O										
ATOM	2476	CB	ASN	A	161	10.059	-20.097	35.212	1.00	0.00
C										
ATOM	2477	CG	ASN	A	161	9.594	-20.147	36.627	1.00	0.00
C										



ATOM	2478	OD1	ASN	A	161	8.426	-20.481	36.893	1.00	0.00
O										
ATOM	2479	ND2	ASN	A	161	10.482	-19.825	37.561	1.00	0.00
N										
ATOM	2480	H	ASN	A	161	11.129	-22.303	34.499	1.00	0.00
H										
ATOM	2481	HA	ASN	A	161	8.424	-21.407	34.853	1.00	0.00
H										
ATOM	2482	HB2	ASN	A	161	9.870	-19.101	34.814	1.00	0.00
H										
ATOM	2483	HB3	ASN	A	161	11.129	-20.302	35.185	1.00	0.00
H										
ATOM	2484	HD21	ASN	A	161	10.217	-19.843	38.541	1.00	0.00
H										
ATOM	2485	HD22	ASN	A	161	11.426	-19.562	37.295	1.00	0.00
H										
ATOM	2486	N	ILE	A	162	9.904	-20.513	32.093	1.00	0.00
N										
ATOM	2487	CA	ILE	A	162	9.701	-20.075	30.735	1.00	0.00
C										
ATOM	2488	C	ILE	A	162	8.652	-20.912	30.020	1.00	0.00
C										
ATOM	2489	O	ILE	A	162	7.761	-20.367	29.330	1.00	0.00
O										
ATOM	2490	CB	ILE	A	162	11.020	-20.127	29.965	1.00	0.00
C										
ATOM	2491	CG1	ILE	A	162	11.905	-18.966	30.423	1.00	0.00
C										
ATOM	2492	CG2	ILE	A	162	10.754	-20.120	28.433	1.00	0.00
C										
ATOM	2493	CD1	ILE	A	162	13.336	-19.083	30.034	1.00	0.00
C										
ATOM	2494	H	ILE	A	162	10.825	-20.849	32.358	1.00	0.00
H										
ATOM	2495	HA	ILE	A	162	9.358	-19.042	30.756	1.00	0.00
H										
ATOM	2496	HB	ILE	A	162	11.525	-21.059	30.218	1.00	0.00
H										
ATOM	2497	HG12	ILE	A	162	11.853	-18.908	31.509	1.00	0.00
H										
ATOM	2498	HG13	ILE	A	162	11.511	-18.048	29.991	1.00	0.00
H										
ATOM	2499	HG21	ILE	A	162	10.221	-19.211	28.161	1.00	0.00
H										
ATOM	2500	HG22	ILE	A	162	11.703	-20.158	27.900	1.00	0.00
H										
ATOM	2501	HG23	ILE	A	162	10.153	-20.988	28.165	1.00	0.00
H										
ATOM	2502	HD11	ILE	A	162	13.415	-19.129	28.949	1.00	0.00
H										
ATOM	2503	HD12	ILE	A	162	13.884	-18.217	30.401	1.00	0.00
H										
ATOM	2504	HD13	ILE	A	162	13.758	-19.989	30.467	1.00	0.00
H										
ATOM	2505	N	LEU	A	163	8.771	-22.229	30.160	1.00	0.00
N										

ATOM	2506	CA	LEU	A	163	7.796	-23.156	29.551	1.00	0.00
C										
ATOM	2507	C	LEU	A	163	6.402	-22.944	30.119	1.00	0.00
C										
ATOM	2508	O	LEU	A	163	5.445	-22.833	29.364	1.00	0.00
O										
ATOM	2509	CB	LEU	A	163	8.193	-24.608	29.746	1.00	0.00
C										
ATOM	2510	CG	LEU	A	163	9.464	-25.102	29.074	1.00	0.00
C										
ATOM	2511	CD1	LEU	A	163	9.514	-26.628	29.287	1.00	0.00
C										
ATOM	2512	CD2	LEU	A	163	9.500	-24.720	27.596	1.00	0.00
C										
ATOM	2513	H	LEU	A	163	9.547	-22.605	30.696	1.00	0.00
H										
ATOM	2514	HA	LEU	A	163	7.761	-22.956	28.481	1.00	0.00
H										
ATOM	2515	HB2	LEU	A	163	7.373	-25.219	29.374	1.00	0.00
H										
ATOM	2516	HB3	LEU	A	163	8.310	-24.769	30.817	1.00	0.00
H										
ATOM	2517	HG	LEU	A	163	10.321	-24.652	29.573	1.00	0.00
H										
ATOM	2518	HD11	LEU	A	163	8.635	-27.087	28.837	1.00	0.00
H										
ATOM	2519	HD12	LEU	A	163	10.412	-27.031	28.820	1.00	0.00
H										
ATOM	2520	HD13	LEU	A	163	9.531	-26.846	30.354	1.00	0.00
H										
ATOM	2521	HD21	LEU	A	163	9.460	-23.635	27.501	1.00	0.00
H										
ATOM	2522	HD22	LEU	A	163	10.422	-25.089	27.148	1.00	0.00
H										
ATOM	2523	HD23	LEU	A	163	8.646	-25.161	27.086	1.00	0.00
H										
ATOM	2524	N	LYS	A	164	6.313	-22.841	31.438	1.00	0.00
N										
ATOM	2525	CA	LYS	A	164	5.079	-22.454	32.104	1.00	0.00
C										
ATOM	2526	C	LYS	A	164	4.537	-21.130	31.550	1.00	0.00
C										
ATOM	2527	O	LYS	A	164	3.350	-20.984	31.321	1.00	0.00
O										
ATOM	2528	CB	LYS	A	164	5.308	-22.316	33.609	1.00	0.00
C										
ATOM	2529	CG	LYS	A	164	4.032	-22.168	34.411	1.00	0.00
C										
ATOM	2530	CD	LYS	A	164	4.291	-22.118	35.911	1.00	0.00
C										
ATOM	2531	CE	LYS	A	164	3.807	-20.801	36.547	1.00	0.00
C										
ATOM	2532	NZ	LYS	A	164	2.534	-20.966	37.337	1.00	0.00
N1+										
ATOM	2533	H	LYS	A	164	7.134	-23.039	32.002	1.00	0.00
H										

ATOM	2534	HA	LYS	A	164	4.335	-23.232	31.936	1.00	0.00
H										
ATOM	2535	HB2	LYS	A	164	5.927	-21.437	33.783	1.00	0.00
H										
ATOM	2536	HB3	LYS	A	164	5.833	-23.204	33.959	1.00	0.00
H										
ATOM	2537	HG2	LYS	A	164	3.384	-23.017	34.196	1.00	0.00
H										
ATOM	2538	HG3	LYS	A	164	3.535	-21.247	34.111	1.00	0.00
H										
ATOM	2539	HD2	LYS	A	164	5.362	-22.218	36.084	1.00	0.00
H										
ATOM	2540	HD3	LYS	A	164	3.768	-22.948	36.384	1.00	0.00
H										
ATOM	2541	HE2	LYS	A	164	3.632	-20.076	35.754	1.00	0.00
H										
ATOM	2542	HE3	LYS	A	164	4.584	-20.431	37.214	1.00	0.00
H										
ATOM	2543	HZ1	LYS	A	164	2.685	-21.635	38.086	1.00	0.00
H										
ATOM	2544	HZ2	LYS	A	164	2.262	-20.072	37.732	1.00	0.00
H										
ATOM	2545	HZ3	LYS	A	164	1.798	-21.304	36.725	1.00	0.00
H										
ATOM	2546	N	LEU	A	165	5.400	-20.156	31.335	1.00	0.00
N										
ATOM	2547	CA	LEU	A	165	4.936	-18.866	30.826	1.00	0.00
C										
ATOM	2548	C	LEU	A	165	4.197	-19.037	29.496	1.00	0.00
C										
ATOM	2549	O	LEU	A	165	3.133	-18.474	29.303	1.00	0.00
O										
ATOM	2550	CB	LEU	A	165	6.097	-17.896	30.634	1.00	0.00
C										
ATOM	2551	CG	LEU	A	165	5.907	-16.447	31.118	1.00	0.00
C										
ATOM	2552	CD1	LEU	A	165	6.651	-15.522	30.171	1.00	0.00
C										
ATOM	2553	CD2	LEU	A	165	4.448	-16.042	31.245	1.00	0.00
C										
ATOM	2554	H	LEU	A	165	6.387	-20.302	31.523	1.00	0.00
H										
ATOM	2555	HA	LEU	A	165	4.246	-18.438	31.551	1.00	0.00
H										
ATOM	2556	HB2	LEU	A	165	6.315	-17.857	29.568	1.00	0.00
H										
ATOM	2557	HB3	LEU	A	165	6.955	-18.307	31.165	1.00	0.00
H										
ATOM	2558	HG	LEU	A	165	6.366	-16.360	32.102	1.00	0.00
H										
ATOM	2559	HD11	LEU	A	165	6.250	-15.634	29.165	1.00	0.00
H										
ATOM	2560	HD12	LEU	A	165	6.527	-14.491	30.499	1.00	0.00
H										
ATOM	2561	HD13	LEU	A	165	7.710	-15.778	30.170	1.00	0.00
H										

ATOM	2562	HD21	LEU	A	165	3.951	-16.695	31.961	1.00	0.00
H										
ATOM	2563	HD22	LEU	A	165	4.386	-15.011	31.590	1.00	0.00
H										
ATOM	2564	HD23	LEU	A	165	3.961	-16.131	30.275	1.00	0.00
H										
ATOM	2565	N	VAL	A	166	4.777	-19.806	28.574	1.00	0.00
N										
ATOM	2566	CA	VAL	A	166	4.131	-20.100	27.298	1.00	0.00
C										
ATOM	2567	C	VAL	A	166	2.779	-20.781	27.520	1.00	0.00
C										
ATOM	2568	O	VAL	A	166	1.766	-20.374	26.940	1.00	0.00
O										
ATOM	2569	CB	VAL	A	166	5.019	-21.014	26.435	1.00	0.00
C										
ATOM	2570	CG1	VAL	A	166	4.235	-21.594	25.256	1.00	0.00
C										
ATOM	2571	CG2	VAL	A	166	6.300	-20.278	25.979	1.00	0.00
C										
ATOM	2572	H	VAL	A	166	5.694	-20.198	28.765	1.00	0.00
H										
ATOM	2573	HA	VAL	A	166	3.969	-19.165	26.764	1.00	0.00
H										
ATOM	2574	HB	VAL	A	166	5.330	-21.850	27.061	1.00	0.00
H										
ATOM	2575	HG11	VAL	A	166	3.863	-20.782	24.633	1.00	0.00
H										
ATOM	2576	HG12	VAL	A	166	4.889	-22.235	24.666	1.00	0.00
H										
ATOM	2577	HG13	VAL	A	166	3.396	-22.179	25.630	1.00	0.00
H										
ATOM	2578	HG21	VAL	A	166	6.870	-19.965	26.853	1.00	0.00
H										
ATOM	2579	HG22	VAL	A	166	6.907	-20.948	25.372	1.00	0.00
H										
ATOM	2580	HG23	VAL	A	166	6.027	-19.404	25.391	1.00	0.00
H										
ATOM	2581	N	ASN	A	167	2.781	-21.826	28.350	1.00	0.00
N										
ATOM	2582	CA	ASN	A	167	1.557	-22.516	28.783	1.00	0.00
C										
ATOM	2583	C	ASN	A	167	0.546	-21.514	29.312	1.00	0.00
C										
ATOM	2584	O	ASN	A	167	-0.593	-21.496	28.869	1.00	0.00
O										
ATOM	2585	CB	ASN	A	167	1.897	-23.610	29.824	1.00	0.00
C										
ATOM	2586	CG	ASN	A	167	0.796	-23.831	30.891	1.00	0.00
C										
ATOM	2587	OD1	ASN	A	167	-0.405	-23.639	30.637	1.00	0.00
O										
ATOM	2588	ND2	ASN	A	167	1.213	-24.308	32.088	1.00	0.00
N										
ATOM	2589	H	ASN	A	167	3.673	-22.162	28.700	1.00	0.00
H										

ATOM	2590	HA	ASN	A	167	1.122	-23.005	27.913	1.00	0.00
H										
ATOM	2591	HB2	ASN	A	167	2.815	-23.323	30.334	1.00	0.00
H										
ATOM	2592	HB3	ASN	A	167	2.054	-24.549	29.295	1.00	0.00
H										
ATOM	2593	HD21	ASN	A	167	0.541	-24.475	32.830	1.00	0.00
H										
ATOM	2594	HD22	ASN	A	167	2.198	-24.499	32.243	1.00	0.00
H										
ATOM	2595	N	ASP	A	168	0.969	-20.648	30.226	1.00	0.00
N										
ATOM	2596	CA	ASP	A	168	0.051	-19.673	30.822	1.00	0.00
C										
ATOM	2597	C	ASP	A	168	-0.439	-18.601	29.864	1.00	0.00
C										
ATOM	2598	O	ASP	A	168	-1.621	-18.265	29.857	1.00	0.00
O										
ATOM	2599	CB	ASP	A	168	0.704	-19.005	32.028	1.00	0.00
C										
ATOM	2600	CG	ASP	A	168	0.971	-19.976	33.154	1.00	0.00
C										
ATOM	2601	OD1	ASP	A	168	0.524	-21.147	33.079	1.00	0.00
O										
ATOM	2602	OD2	ASP	A	168	1.644	-19.570	34.111	1.00	0.00
O1-										
ATOM	2603	H	ASP	A	168	1.942	-20.662	30.516	1.00	0.00
H										
ATOM	2604	HA	ASP	A	168	-0.821	-20.218	31.180	1.00	0.00
H										
ATOM	2605	HB2	ASP	A	168	0.043	-18.221	32.393	1.00	0.00
H										
ATOM	2606	HB3	ASP	A	168	1.650	-18.566	31.714	1.00	0.00
H										
ATOM	2607	N	LYS	A	169	0.453	-18.069	29.041	1.00	0.00
N										
ATOM	2608	CA	LYS	A	169	0.176	-16.800	28.358	1.00	0.00
C										
ATOM	2609	C	LYS	A	169	-0.240	-16.905	26.886	1.00	0.00
C										
ATOM	2610	O	LYS	A	169	-0.975	-16.045	26.386	1.00	0.00
O										
ATOM	2611	CB	LYS	A	169	1.386	-15.877	28.511	1.00	0.00
C										
ATOM	2612	CG	LYS	A	169	1.563	-15.362	29.968	1.00	0.00
C										
ATOM	2613	CD	LYS	A	169	0.502	-14.277	30.358	1.00	0.00
C										
ATOM	2614	CE	LYS	A	169	1.126	-13.085	31.146	1.00	0.00
C										
ATOM	2615	NZ	LYS	A	169	0.334	-11.810	30.967	1.00	0.00
N1+										
ATOM	2616	H	LYS	A	169	1.336	-18.544	28.881	1.00	0.00
H										
ATOM	2617	HA	LYS	A	169	-0.650	-16.329	28.888	1.00	0.00
H										

ATOM	2618	HB2	LYS	A	169	1.257	-15.021	27.851	1.00	0.00
H										
ATOM	2619	HB3	LYS	A	169	2.282	-16.426	28.223	1.00	0.00
H										
ATOM	2620	HG2	LYS	A	169	2.557	-14.929	30.066	1.00	0.00
H										
ATOM	2621	HG3	LYS	A	169	1.466	-16.206	30.650	1.00	0.00
H										
ATOM	2622	HD2	LYS	A	169	-0.262	-14.744	30.978	1.00	0.00
H										
ATOM	2623	HD3	LYS	A	169	0.045	-13.893	29.447	1.00	0.00
H										
ATOM	2624	HE2	LYS	A	169	2.142	-12.921	30.789	1.00	0.00
H										
ATOM	2625	HE3	LYS	A	169	1.150	-13.338	32.205	1.00	0.00
H										
ATOM	2626	HZ1	LYS	A	169	-0.613	-11.951	31.303	1.00	0.00
H										
ATOM	2627	HZ2	LYS	A	169	0.773	-11.062	31.494	1.00	0.00
H										
ATOM	2628	HZ3	LYS	A	169	0.311	-11.562	29.983	1.00	0.00
H										
ATOM	2629	N	LEU	A	170	0.230	-17.961	26.227	1.00	0.00
N										
ATOM	2630	CA	LEU	A	170	0.095	-18.207	24.795	1.00	0.00
C										
ATOM	2631	C	LEU	A	170	-0.773	-19.464	24.542	1.00	0.00
C										
ATOM	2632	O	LEU	A	170	-0.706	-20.451	25.295	1.00	0.00
O										
ATOM	2633	CB	LEU	A	170	1.490	-18.469	24.211	1.00	0.00
C										
ATOM	2634	CG	LEU	A	170	2.511	-17.342	23.967	1.00	0.00
C										
ATOM	2635	CD1	LEU	A	170	2.540	-16.334	25.082	1.00	0.00
C										
ATOM	2636	CD2	LEU	A	170	3.879	-17.907	23.749	1.00	0.00
C										
ATOM	2637	H	LEU	A	170	0.728	-18.660	26.770	1.00	0.00
H										
ATOM	2638	HA	LEU	A	170	-0.354	-17.342	24.310	1.00	0.00
H										
ATOM	2639	HB2	LEU	A	170	1.329	-18.945	23.245	1.00	0.00
H										
ATOM	2640	HB3	LEU	A	170	1.973	-19.174	24.887	1.00	0.00
H										
ATOM	2641	HG	LEU	A	170	2.219	-16.821	23.057	1.00	0.00
H										
ATOM	2642	HD11	LEU	A	170	2.808	-16.831	26.013	1.00	0.00
H										
ATOM	2643	HD12	LEU	A	170	3.277	-15.565	24.856	1.00	0.00
H										
ATOM	2644	HD13	LEU	A	170	1.557	-15.877	25.184	1.00	0.00
H										
ATOM	2645	HD21	LEU	A	170	3.866	-18.565	22.881	1.00	0.00
H										

ATOM	2646	HD22	LEU	A	170	4.585	-17.095	23.579	1.00	0.00
H										
ATOM	2647	HD23	LEU	A	170	4.183	-18.473	24.628	1.00	0.00
H										
ATOM	2648	N	ASN	A	171	-1.586	-19.424	23.492	1.00	0.00
N										
ATOM	2649	CA	ASN	A	171	-2.284	-20.623	22.986	1.00	0.00
C										
ATOM	2650	C	ASN	A	171	-1.356	-21.311	22.021	1.00	0.00
C										
ATOM	2651	O	ASN	A	171	-0.709	-20.633	21.215	1.00	0.00
O										
ATOM	2652	CB	ASN	A	171	-3.523	-20.251	22.147	1.00	0.00
C										
ATOM	2653	CG	ASN	A	171	-4.568	-19.488	22.926	1.00	0.00
C										
ATOM	2654	OD1	ASN	A	171	-4.735	-19.674	24.144	1.00	0.00
O										
ATOM	2655	ND2	ASN	A	171	-5.297	-18.625	22.220	1.00	0.00
N										
ATOM	2656	H	ASN	A	171	-1.732	-18.538	23.020	1.00	0.00
H										
ATOM	2657	HA	ASN	A	171	-2.555	-21.289	23.804	1.00	0.00
H										
ATOM	2658	HB2	ASN	A	171	-3.974	-21.169	21.772	1.00	0.00
H										
ATOM	2659	HB3	ASN	A	171	-3.200	-19.636	21.308	1.00	0.00
H										
ATOM	2660	HD21	ASN	A	171	-6.018	-18.077	22.677	1.00	0.00
H										
ATOM	2661	HD22	ASN	A	171	-5.131	-18.516	21.225	1.00	0.00
H										
ATOM	2662	N	TYR	A	172	-1.310	-22.639	22.056	1.00	0.00
N										
ATOM	2663	CA	TYR	A	172	-0.663	-23.391	20.978	1.00	0.00
C										
ATOM	2664	C	TYR	A	172	-1.636	-23.525	19.776	1.00	0.00
C										
ATOM	2665	O	TYR	A	172	-2.858	-23.507	19.956	1.00	0.00
O										
ATOM	2666	CB	TYR	A	172	-0.259	-24.794	21.446	1.00	0.00
C										
ATOM	2667	CG	TYR	A	172	0.906	-24.872	22.403	1.00	0.00
C										
ATOM	2668	CD1	TYR	A	172	0.714	-24.720	23.765	1.00	0.00
C										
ATOM	2669	CD2	TYR	A	172	2.189	-25.159	21.956	1.00	0.00
C										
ATOM	2670	CE1	TYR	A	172	1.778	-24.828	24.667	1.00	0.00
C										
ATOM	2671	CE2	TYR	A	172	3.266	-25.270	22.849	1.00	0.00
C										
ATOM	2672	CZ	TYR	A	172	3.052	-25.111	24.210	1.00	0.00
C										
ATOM	2673	OH	TYR	A	172	4.097	-25.217	25.136	1.00	0.00
O										

ATOM	2674	H	TYR	A	172	-1.727	-23.137	22.836	1.00	0.00
H										
ATOM	2675	HA	TYR	A	172	0.228	-22.855	20.656	1.00	0.00
H										
ATOM	2676	HB2	TYR	A	172	-0.002	-25.377	20.563	1.00	0.00
H										
ATOM	2677	HB3	TYR	A	172	-1.122	-25.241	21.937	1.00	0.00
H										
ATOM	2678	HD1	TYR	A	172	-0.285	-24.510	24.142	1.00	0.00
H										
ATOM	2679	HD2	TYR	A	172	2.364	-25.300	20.890	1.00	0.00
H										
ATOM	2680	HE1	TYR	A	172	1.602	-24.690	25.733	1.00	0.00
H										
ATOM	2681	HE2	TYR	A	172	4.267	-25.479	22.474	1.00	0.00
H										
ATOM	2682	HH	TYR	A	172	3.896	-25.945	25.781	1.00	0.00
H										
ATOM	2683	N	PRO	A	173	-1.107	-23.678	18.548	1.00	0.00
N										
ATOM	2684	CA	PRO	A	173	0.303	-23.641	18.133	1.00	0.00
C										
ATOM	2685	C	PRO	A	173	1.017	-22.326	18.407	1.00	0.00
C										
ATOM	2686	O	PRO	A	173	0.392	-21.259	18.443	1.00	0.00
O										
ATOM	2687	CB	PRO	A	173	0.242	-23.837	16.615	1.00	0.00
C										
ATOM	2688	CG	PRO	A	173	-1.186	-23.544	16.230	1.00	0.00
C										
ATOM	2689	CD	PRO	A	173	-2.002	-23.945	17.407	1.00	0.00
C										
ATOM	2690	HA	PRO	A	173	0.849	-24.464	18.593	1.00	0.00
H										
ATOM	2691	HB2	PRO	A	173	0.506	-24.860	16.352	1.00	0.00
H										
ATOM	2692	HB3	PRO	A	173	0.920	-23.147	16.115	1.00	0.00
H										
ATOM	2693	HG2	PRO	A	173	-1.470	-24.125	15.354	1.00	0.00
H										
ATOM	2694	HG3	PRO	A	173	-1.314	-22.484	16.020	1.00	0.00
H										
ATOM	2695	HD2	PRO	A	173	-2.909	-23.347	17.475	1.00	0.00
H										
ATOM	2696	HD3	PRO	A	173	-2.266	-25.001	17.357	1.00	0.00
H										
ATOM	2697	N	VAL	A	174	2.332	-22.435	18.558	1.00	0.00
N										
ATOM	2698	CA	VAL	A	174	3.215	-21.291	18.754	1.00	0.00
C										
ATOM	2699	C	VAL	A	174	4.370	-21.455	17.788	1.00	0.00
C										
ATOM	2700	O	VAL	A	174	4.656	-22.579	17.351	1.00	0.00
O										
ATOM	2701	CB	VAL	A	174	3.733	-21.196	20.245	1.00	0.00
C										



ATOM	2702	CG1	VAL	A	174	2.561	-21.017	21.238	1.00	0.00
C										
ATOM	2703	CG2	VAL	A	174	4.593	-22.392	20.633	1.00	0.00
C										
ATOM	2704	H	VAL	A	174	2.743	-23.363	18.536	1.00	0.00
H										
ATOM	2705	HA	VAL	A	174	2.673	-20.379	18.508	1.00	0.00
H										
ATOM	2706	HB	VAL	A	174	4.359	-20.308	20.316	1.00	0.00
H										
ATOM	2707	HG11	VAL	A	174	1.886	-21.868	21.160	1.00	0.00
H										
ATOM	2708	HG12	VAL	A	174	2.952	-20.956	22.253	1.00	0.00
H										
ATOM	2709	HG13	VAL	A	174	2.021	-20.102	21.000	1.00	0.00
H										
ATOM	2710	HG21	VAL	A	174	5.460	-22.445	19.976	1.00	0.00
H										
ATOM	2711	HG22	VAL	A	174	4.926	-22.282	21.664	1.00	0.00
H										
ATOM	2712	HG23	VAL	A	174	4.009	-23.306	20.536	1.00	0.00
H										
ATOM	2713	N	PHE	A	175	5.038	-20.351	17.451	1.00	0.00
N										
ATOM	2714	CA	PHE	A	175	6.244	-20.416	16.621	1.00	0.00
C										
ATOM	2715	C	PHE	A	175	7.456	-20.044	17.419	1.00	0.00
C										
ATOM	2716	O	PHE	A	175	7.415	-19.132	18.215	1.00	0.00
O										
ATOM	2717	CB	PHE	A	175	6.136	-19.475	15.432	1.00	0.00
C										
ATOM	2718	CG	PHE	A	175	5.143	-19.922	14.408	1.00	0.00
C										
ATOM	2719	CD1	PHE	A	175	3.782	-19.800	14.647	1.00	0.00
C										
ATOM	2720	CD2	PHE	A	175	5.573	-20.461	13.195	1.00	0.00
C										
ATOM	2721	CE1	PHE	A	175	2.863	-20.240	13.706	1.00	0.00
C										
ATOM	2722	CE2	PHE	A	175	4.670	-20.873	12.254	1.00	0.00
C										
ATOM	2723	CZ	PHE	A	175	3.307	-20.765	12.510	1.00	0.00
C										
ATOM	2724	H	PHE	A	175	4.704	-19.449	17.775	1.00	0.00
H										
ATOM	2725	HA	PHE	A	175	6.363	-21.435	16.254	1.00	0.00
H										
ATOM	2726	HB2	PHE	A	175	7.113	-19.406	14.957	1.00	0.00
H										
ATOM	2727	HB3	PHE	A	175	5.838	-18.493	15.796	1.00	0.00
H										
ATOM	2728	HD1	PHE	A	175	3.433	-19.357	15.578	1.00	0.00
H										
ATOM	2729	HD2	PHE	A	175	6.639	-20.555	12.995	1.00	0.00
H										

ATOM H	2730	HE1	PHE	A	175	1.795	-20.172	13.910	1.00	0.00
ATOM H	2731	HE2	PHE	A	175	5.017	-21.285	11.307	1.00	0.00
ATOM H	2732	HZ	PHE	A	175	2.587	-21.097	11.763	1.00	0.00
ATOM N	2733	N	VAL	A	176	8.554	-20.741	17.175	1.00	0.00
ATOM C	2734	CA	VAL	A	176	9.817	-20.431	17.809	1.00	0.00
ATOM C	2735	C	VAL	A	176	10.660	-19.748	16.724	1.00	0.00
ATOM O	2736	O	VAL	A	176	10.872	-20.311	15.650	1.00	0.00
ATOM C	2737	CB	VAL	A	176	10.546	-21.674	18.366	1.00	0.00
ATOM C	2738	CG1	VAL	A	176	11.674	-21.246	19.289	1.00	0.00
ATOM C	2739	CG2	VAL	A	176	9.568	-22.617	19.125	1.00	0.00
ATOM H	2740	H	VAL	A	176	8.508	-21.518	16.523	1.00	0.00
ATOM H	2741	HA	VAL	A	176	9.644	-19.727	18.621	1.00	0.00
ATOM H	2742	HB	VAL	A	176	10.975	-22.225	17.530	1.00	0.00
ATOM H	2743	HG11	VAL	A	176	11.266	-20.670	20.118	1.00	0.00
ATOM H	2744	HG12	VAL	A	176	12.181	-22.129	19.676	1.00	0.00
ATOM H	2745	HG13	VAL	A	176	12.383	-20.634	18.735	1.00	0.00
ATOM H	2746	HG21	VAL	A	176	8.786	-22.953	18.445	1.00	0.00
ATOM H	2747	HG22	VAL	A	176	10.115	-23.480	19.503	1.00	0.00
ATOM H	2748	HG23	VAL	A	176	9.118	-22.079	19.958	1.00	0.00
ATOM N	2749	N	LYS	A	177	11.084	-18.517	17.005	1.00	0.00
ATOM C	2750	CA	LYS	A	177	11.787	-17.675	16.034	1.00	0.00
ATOM C	2751	C	LYS	A	177	13.104	-17.216	16.649	1.00	0.00
ATOM O	2752	O	LYS	A	177	13.093	-16.590	17.719	1.00	0.00
ATOM C	2753	CB	LYS	A	177	10.988	-16.379	15.759	1.00	0.00
ATOM C	2754	CG	LYS	A	177	9.503	-16.497	15.480	1.00	0.00
ATOM C	2755	CD	LYS	A	177	9.229	-17.018	14.081	1.00	0.00
ATOM C	2756	CE	LYS	A	177	7.821	-16.637	13.621	1.00	0.00
ATOM N1+	2757	NZ	LYS	A	177	7.798	-15.515	12.612	1.00	0.00

ATOM	2758	H	LYS	A	177	10.912	-18.146	17.934	1.00	0.00
H										
ATOM	2759	HA	LYS	A	177	11.964	-18.221	15.109	1.00	0.00
H										
ATOM	2760	HB2	LYS	A	177	11.441	-15.898	14.894	1.00	0.00
H										
ATOM	2761	HB3	LYS	A	177	11.102	-15.739	16.632	1.00	0.00
H										
ATOM	2762	HG2	LYS	A	177	9.046	-15.515	15.585	1.00	0.00
H										
ATOM	2763	HG3	LYS	A	177	9.062	-17.182	16.203	1.00	0.00
H										
ATOM	2764	HD2	LYS	A	177	9.322	-18.103	14.080	1.00	0.00
H										
ATOM	2765	HD3	LYS	A	177	9.956	-16.591	13.393	1.00	0.00
H										
ATOM	2766	HE2	LYS	A	177	7.246	-16.328	14.493	1.00	0.00
H										
ATOM	2767	HE3	LYS	A	177	7.356	-17.514	13.172	1.00	0.00
H										
ATOM	2768	HZ1	LYS	A	177	8.322	-15.791	11.788	1.00	0.00
H										
ATOM	2769	HZ2	LYS	A	177	6.838	-15.314	12.351	1.00	0.00
H										
ATOM	2770	HZ3	LYS	A	177	8.219	-14.686	13.019	1.00	0.00
H										
ATOM	2771	N	PRO	A	178	14.240	-17.478	15.990	1.00	0.00
N										
ATOM	2772	CA	PRO	A	178	15.408	-16.673	16.335	1.00	0.00
C										
ATOM	2773	C	PRO	A	178	15.067	-15.178	16.274	1.00	0.00
C										
ATOM	2774	O	PRO	A	178	14.288	-14.787	15.411	1.00	0.00
O										
ATOM	2775	CB	PRO	A	178	16.393	-17.023	15.214	1.00	0.00
C										
ATOM	2776	CG	PRO	A	178	16.044	-18.313	14.801	1.00	0.00
C										
ATOM	2777	CD	PRO	A	178	14.584	-18.499	14.996	1.00	0.00
C										
ATOM	2778	HA	PRO	A	178	15.805	-16.949	17.311	1.00	0.00
H										
ATOM	2779	HB2	PRO	A	178	17.416	-17.006	15.587	1.00	0.00
H										
ATOM	2780	HB3	PRO	A	178	16.296	-16.320	14.388	1.00	0.00
H										
ATOM	2781	HG2	PRO	A	178	16.589	-19.047	15.393	1.00	0.00
H										
ATOM	2782	HG3	PRO	A	178	16.292	-18.440	13.748	1.00	0.00
H										
ATOM	2783	HD2	PRO	A	178	14.043	-18.335	14.065	1.00	0.00
H										
ATOM	2784	HD3	PRO	A	178	14.365	-19.498	15.372	1.00	0.00
H										
ATOM	2785	N	ALA	A	179	15.629	-14.356	17.156	1.00	0.00
N										

ATOM	2786	CA	ALA	A	179	15.277	-12.932	17.160	1.00	0.00
C										
ATOM	2787	C	ALA	A	179	15.919	-12.213	15.992	1.00	0.00
C										
ATOM	2788	O	ALA	A	179	15.384	-11.220	15.499	1.00	0.00
O										
ATOM	2789	CB	ALA	A	179	15.695	-12.285	18.438	1.00	0.00
C										
ATOM	2790	H	ALA	A	179	16.302	-14.714	17.826	1.00	0.00
H										
ATOM	2791	HA	ALA	A	179	14.195	-12.844	17.067	1.00	0.00
H										
ATOM	2792	HB1	ALA	A	179	16.773	-12.380	18.557	1.00	0.00
H										
ATOM	2793	HB2	ALA	A	179	15.423	-11.231	18.417	1.00	0.00
H										
ATOM	2794	HB3	ALA	A	179	15.193	-12.773	19.273	1.00	0.00
H										
ATOM	2795	N	ASN	A	180	17.054	-12.756	15.552	1.00	0.00
N										
ATOM	2796	CA	ASN	A	180	18.016	-12.083	14.698	1.00	0.00
C										
ATOM	2797	C	ASN	A	180	18.100	-12.737	13.283	1.00	0.00
C										
ATOM	2798	O	ASN	A	180	17.652	-13.875	13.075	1.00	0.00
O										
ATOM	2799	CB	ASN	A	180	19.349	-12.030	15.440	1.00	0.00
C										
ATOM	2800	CG	ASN	A	180	19.239	-11.270	16.821	1.00	0.00
C										
ATOM	2801	OD1	ASN	A	180	18.842	-10.106	16.864	1.00	0.00
O										
ATOM	2802	ND2	ASN	A	180	19.604	-11.943	17.936	1.00	0.00
N										
ATOM	2803	H	ASN	A	180	17.261	-13.709	15.834	1.00	0.00
H										
ATOM	2804	HA	ASN	A	180	17.675	-11.058	14.565	1.00	0.00
H										
ATOM	2805	HB2	ASN	A	180	20.077	-11.516	14.815	1.00	0.00
H										
ATOM	2806	HB3	ASN	A	180	19.686	-13.049	15.627	1.00	0.00
H										
ATOM	2807	HD21	ASN	A	180	19.548	-11.491	18.843	1.00	0.00
H										
ATOM	2808	HD22	ASN	A	180	19.934	-12.901	17.866	1.00	0.00
H										
ATOM	2809	N	LEU	A	181	18.582	-12.008	12.282	1.00	0.00
N										
ATOM	2810	CA	LEU	A	181	18.403	-12.451	10.863	1.00	0.00
C										
ATOM	2811	C	LEU	A	181	16.919	-12.678	10.506	1.00	0.00
C										
ATOM	2812	O	LEU	A	181	16.066	-12.892	11.405	1.00	0.00
O										
ATOM	2813	CB	LEU	A	181	19.189	-13.756	10.597	1.00	0.00
C										

ATOM	2814	CG	LEU	A	181	19.910	-13.911	9.247	1.00	0.00
C										
ATOM	2815	CD1	LEU	A	181	21.127	-12.985	9.193	1.00	0.00
C										
ATOM	2816	CD2	LEU	A	181	20.323	-15.392	9.028	1.00	0.00
C										
ATOM	2817	H	LEU	A	181	19.076	-11.144	12.481	1.00	0.00
H										
ATOM	2818	HA	LEU	A	181	18.798	-11.675	10.209	1.00	0.00
H										
ATOM	2819	HB2	LEU	A	181	18.483	-14.581	10.682	1.00	0.00
H										
ATOM	2820	HB3	LEU	A	181	19.944	-13.843	11.377	1.00	0.00
H										
ATOM	2821	HG	LEU	A	181	19.222	-13.624	8.453	1.00	0.00
H										
ATOM	2822	HD11	LEU	A	181	21.815	-13.242	9.998	1.00	0.00
H										
ATOM	2823	HD12	LEU	A	181	21.630	-13.102	8.234	1.00	0.00
H										
ATOM	2824	HD13	LEU	A	181	20.803	-11.952	9.309	1.00	0.00
H										
ATOM	2825	HD21	LEU	A	181	19.435	-16.021	9.032	1.00	0.00
H										
ATOM	2826	HD22	LEU	A	181	20.832	-15.489	8.070	1.00	0.00
H										
ATOM	2827	HD23	LEU	A	181	20.993	-15.705	9.828	1.00	0.00
H										
ATOM	2828	N	GLY	A	182	16.618	-12.677	9.205	1.00	0.00
N										
ATOM	2829	CA	GLY	A	182	15.226	-12.750	8.727	1.00	0.00
C										
ATOM	2830	C	GLY	A	182	14.813	-14.051	8.026	1.00	0.00
C										
ATOM	2831	O	GLY	A	182	15.623	-14.660	7.307	1.00	0.00
O										
ATOM	2832	H	GLY	A	182	17.370	-12.625	8.525	1.00	0.00
H										
ATOM	2833	HA2	GLY	A	182	15.074	-11.932	8.024	1.00	0.00
H										
ATOM	2834	HA3	GLY	A	182	14.573	-12.616	9.588	1.00	0.00
H										
ATOM	2835	N	SER	A	183	13.559	-14.492	8.255	1.00	0.00
N										
ATOM	2836	CA	SER	A	183	12.914	-15.565	7.446	1.00	0.00
C										
ATOM	2837	C	SER	A	183	13.705	-16.898	7.344	1.00	0.00
C										
ATOM	2838	O	SER	A	183	13.288	-17.846	6.655	1.00	0.00
O										
ATOM	2839	CB	SER	A	183	12.635	-15.021	6.033	1.00	0.00
C										
ATOM	2840	OG	SER	A	183	11.879	-13.811	6.093	1.00	0.00
O										
ATOM	2841	H	SER	A	183	13.030	-14.074	9.014	1.00	0.00
H										

ATOM	2842	HA	SER	A	183	11.953	-15.789	7.906	1.00	0.00
H										
ATOM	2843	HB2	SER	A	183	12.074	-15.765	5.469	1.00	0.00
H										
ATOM	2844	HB3	SER	A	183	13.583	-14.825	5.533	1.00	0.00
H										
ATOM	2845	HG	SER	A	183	12.388	-13.128	6.603	1.00	0.00
H										
ATOM	2846	N	SER	A	184	14.814	-16.988	8.070	1.00	0.00
N										
ATOM	2847	CA	SER	A	184	15.869	-17.944	7.755	1.00	0.00
C										
ATOM	2848	C	SER	A	184	15.798	-19.273	8.589	1.00	0.00
C										
ATOM	2849	O	SER	A	184	14.726	-19.890	8.741	1.00	0.00
O										
ATOM	2850	CB	SER	A	184	17.239	-17.209	7.896	1.00	0.00
C										
ATOM	2851	OG	SER	A	184	17.410	-16.649	9.203	1.00	0.00
O										
ATOM	2852	H	SER	A	184	14.931	-16.373	8.868	1.00	0.00
H										
ATOM	2853	HA	SER	A	184	15.756	-18.216	6.706	1.00	0.00
H										
ATOM	2854	HB2	SER	A	184	17.287	-16.408	7.160	1.00	0.00
H										
ATOM	2855	HB3	SER	A	184	18.042	-17.921	7.710	1.00	0.00
H										
ATOM	2856	HG	SER	A	184	17.374	-17.374	9.881	1.00	0.00
H										
ATOM	2857	N	VAL	A	185	16.957	-19.689	9.116	1.00	0.00
N										
ATOM	2858	CA	VAL	A	185	17.123	-20.947	9.837	1.00	0.00
C										
ATOM	2859	C	VAL	A	185	16.508	-20.889	11.225	1.00	0.00
C										
ATOM	2860	O	VAL	A	185	16.350	-19.810	11.795	1.00	0.00
O										
ATOM	2861	CB	VAL	A	185	18.633	-21.309	9.956	1.00	0.00
C										
ATOM	2862	CG1	VAL	A	185	19.261	-21.447	8.574	1.00	0.00
C										
ATOM	2863	CG2	VAL	A	185	19.374	-20.261	10.762	1.00	0.00
C										
ATOM	2864	H	VAL	A	185	17.771	-19.092	9.007	1.00	0.00
H										
ATOM	2865	HA	VAL	A	185	16.625	-21.735	9.273	1.00	0.00
H										
ATOM	2866	HB	VAL	A	185	18.719	-22.265	10.471	1.00	0.00
H										
ATOM	2867	HG11	VAL	A	185	19.165	-20.506	8.036	1.00	0.00
H										
ATOM	2868	HG12	VAL	A	185	20.316	-21.700	8.678	1.00	0.00
H										
ATOM	2869	HG13	VAL	A	185	18.752	-22.235	8.021	1.00	0.00
H										

ATOM	2870	HG21	VAL	A	185	18.947	-20.203	11.762	1.00	0.00
H										
ATOM	2871	HG22	VAL	A	185	20.426	-20.534	10.832	1.00	0.00
H										
ATOM	2872	HG23	VAL	A	185	19.282	-19.294	10.271	1.00	0.00
H										
ATOM	2873	N	GLY	A	186	16.158	-22.056	11.755	1.00	0.00
N										
ATOM	2874	CA	GLY	A	186	15.725	-22.211	13.143	1.00	0.00
C										
ATOM	2875	C	GLY	A	186	14.303	-21.798	13.517	1.00	0.00
C										
ATOM	2876	O	GLY	A	186	14.016	-21.636	14.707	1.00	0.00
O										
ATOM	2877	H	GLY	A	186	16.193	-22.883	11.166	1.00	0.00
H										
ATOM	2878	HA2	GLY	A	186	16.403	-21.621	13.758	1.00	0.00
H										
ATOM	2879	HA3	GLY	A	186	15.830	-23.265	13.396	1.00	0.00
H										
ATOM	2880	N	ILE	A	187	13.416	-21.626	12.526	1.00	0.00
N										
ATOM	2881	CA	ILE	A	187	11.979	-21.436	12.786	1.00	0.00
C										
ATOM	2882	C	ILE	A	187	11.169	-22.741	12.859	1.00	0.00
C										
ATOM	2883	O	ILE	A	187	11.100	-23.484	11.861	1.00	0.00
O										
ATOM	2884	CB	ILE	A	187	11.304	-20.532	11.707	1.00	0.00
C										
ATOM	2885	CG1	ILE	A	187	11.993	-19.148	11.642	1.00	0.00
C										
ATOM	2886	CG2	ILE	A	187	9.824	-20.399	12.025	1.00	0.00
C										
ATOM	2887	CD1	ILE	A	187	11.365	-18.150	10.704	1.00	0.00
C										
ATOM	2888	H	ILE	A	187	13.746	-21.627	11.566	1.00	0.00
H										
ATOM	2889	HA	ILE	A	187	11.881	-20.933	13.747	1.00	0.00
H										
ATOM	2890	HB	ILE	A	187	11.407	-21.016	10.737	1.00	0.00
H										
ATOM	2891	HG12	ILE	A	187	13.024	-19.302	11.326	1.00	0.00
H										
ATOM	2892	HG13	ILE	A	187	11.980	-18.721	12.643	1.00	0.00
H										
ATOM	2893	HG21	ILE	A	187	9.703	-19.948	13.009	1.00	0.00
H										
ATOM	2894	HG22	ILE	A	187	9.347	-19.770	11.276	1.00	0.00
H										
ATOM	2895	HG23	ILE	A	187	9.361	-21.385	12.019	1.00	0.00
H										
ATOM	2896	HD11	ILE	A	187	10.336	-17.965	11.007	1.00	0.00
H										
ATOM	2897	HD12	ILE	A	187	11.927	-17.218	10.737	1.00	0.00
H										

ATOM	2898	HD13	ILE	A	187	11.379	-18.547	9.690	1.00	0.00
H										
ATOM	2899	N	SER	A	188	10.520	-22.997	14.001	1.00	0.00
N										
ATOM	2900	CA	SER	A	188	9.573	-24.134	14.133	1.00	0.00
C										
ATOM	2901	C	SER	A	188	8.118	-23.739	14.510	1.00	0.00
C										
ATOM	2902	O	SER	A	188	7.882	-22.806	15.305	1.00	0.00
O										
ATOM	2903	CB	SER	A	188	10.073	-25.128	15.193	1.00	0.00
C										
ATOM	2904	OG	SER	A	188	11.433	-25.474	15.014	1.00	0.00
O										
ATOM	2905	H	SER	A	188	10.680	-22.396	14.803	1.00	0.00
H										
ATOM	2906	HA	SER	A	188	9.540	-24.653	13.177	1.00	0.00
H										
ATOM	2907	HB2	SER	A	188	9.471	-26.034	15.133	1.00	0.00
H										
ATOM	2908	HB3	SER	A	188	9.954	-24.679	16.178	1.00	0.00
H										
ATOM	2909	HG	SER	A	188	11.993	-24.657	15.074	1.00	0.00
H										
ATOM	2910	N	LYS	A	189	7.175	-24.465	13.923	1.00	0.00
N										
ATOM	2911	CA	LYS	A	189	5.783	-24.551	14.355	1.00	0.00
C										
ATOM	2912	C	LYS	A	189	5.681	-25.671	15.409	1.00	0.00
C										
ATOM	2913	O	LYS	A	189	6.098	-26.797	15.178	1.00	0.00
O										
ATOM	2914	CB	LYS	A	189	4.843	-24.884	13.172	1.00	0.00
C										
ATOM	2915	CG	LYS	A	189	5.232	-26.220	12.396	1.00	0.00
C										
ATOM	2916	CD	LYS	A	189	4.024	-27.052	11.795	1.00	0.00
C										
ATOM	2917	CE	LYS	A	189	3.912	-26.894	10.243	1.00	0.00
C										
ATOM	2918	NZ	LYS	A	189	4.532	-25.607	9.750	1.00	0.00
N1+										
ATOM	2919	H	LYS	A	189	7.443	-25.006	13.107	1.00	0.00
H										
ATOM	2920	HA	LYS	A	189	5.483	-23.604	14.801	1.00	0.00
H										
ATOM	2921	HB2	LYS	A	189	4.873	-24.055	12.466	1.00	0.00
H										
ATOM	2922	HB3	LYS	A	189	3.831	-24.994	13.559	1.00	0.00
H										
ATOM	2923	HG2	LYS	A	189	5.768	-26.864	13.091	1.00	0.00
H										
ATOM	2924	HG3	LYS	A	189	5.890	-25.947	11.573	1.00	0.00
H										
ATOM	2925	HD2	LYS	A	189	3.098	-26.706	12.251	1.00	0.00
H										



ATOM	2926	HD3	LYS	A	189	4.172	-28.105	12.030	1.00	0.00
H										
ATOM	2927	HE2	LYS	A	189	2.859	-26.903	9.965	1.00	0.00
H										
ATOM	2928	HE3	LYS	A	189	4.420	-27.731	9.768	1.00	0.00
H										
ATOM	2929	HZ1	LYS	A	189	5.516	-25.589	9.997	1.00	0.00
H										
ATOM	2930	HZ2	LYS	A	189	4.435	-25.549	8.741	1.00	0.00
H										
ATOM	2931	HZ3	LYS	A	189	4.061	-24.817	10.181	1.00	0.00
H										
ATOM	2932	N	CYS	A	190	5.112	-25.340	16.565	1.00	0.00
N										
ATOM	2933	CA	CYS	A	190	5.070	-26.233	17.716	1.00	0.00
C										
ATOM	2934	C	CYS	A	190	3.647	-26.329	18.265	1.00	0.00
C										
ATOM	2935	O	CYS	A	190	3.068	-25.320	18.661	1.00	0.00
O										
ATOM	2936	CB	CYS	A	190	6.014	-25.682	18.791	1.00	0.00
C										
ATOM	2937	SG	CYS	A	190	7.703	-25.485	18.216	1.00	0.00
S										
ATOM	2938	H	CYS	A	190	4.686	-24.423	16.649	1.00	0.00
H										
ATOM	2939	HA	CYS	A	190	5.407	-27.223	17.415	1.00	0.00
H										
ATOM	2940	HB2	CYS	A	190	6.014	-26.368	19.636	1.00	0.00
H										
ATOM	2941	HB3	CYS	A	190	5.642	-24.710	19.113	1.00	0.00
H										
ATOM	2942	HG	CYS	A	190	7.727	-24.594	17.136	1.00	0.00
H										
ATOM	2943	N	ASN	A	191	3.100	-27.544	18.320	1.00	0.00
N										
ATOM	2944	CA	ASN	A	191	1.702	-27.741	18.703	1.00	0.00
C										
ATOM	2945	C	ASN	A	191	1.549	-28.134	20.162	1.00	0.00
C										
ATOM	2946	O	ASN	A	191	0.439	-28.151	20.711	1.00	0.00
O										
ATOM	2947	CB	ASN	A	191	1.044	-28.787	17.787	1.00	0.00
C										
ATOM	2948	CG	ASN	A	191	0.699	-28.223	16.406	1.00	0.00
C										
ATOM	2949	OD1	ASN	A	191	0.126	-27.137	16.291	1.00	0.00
O										
ATOM	2950	ND2	ASN	A	191	1.057	-28.954	15.357	1.00	0.00
N										
ATOM	2951	H	ASN	A	191	3.669	-28.352	18.090	1.00	0.00
H										
ATOM	2952	HA	ASN	A	191	1.180	-26.796	18.557	1.00	0.00
H										
ATOM	2953	HB2	ASN	A	191	0.127	-29.138	18.260	1.00	0.00
H										

ATOM	2954	HB3	ASN	A	191	1.730	-29.622	17.661	1.00	0.00
H										
ATOM	2955	HD21	ASN	A	191	0.853	-28.629	14.418	1.00	0.00
H										
ATOM	2956	HD22	ASN	A	191	1.534	-29.840	15.495	1.00	0.00
H										
ATOM	2957	N	ASN	A	192	2.675	-28.456	20.788	1.00	0.00
N										
ATOM	2958	CA	ASN	A	192	2.675	-28.913	22.155	1.00	0.00
C										
ATOM	2959	C	ASN	A	192	4.011	-28.579	22.783	1.00	0.00
C										
ATOM	2960	O	ASN	A	192	4.878	-27.990	22.115	1.00	0.00
O										
ATOM	2961	CB	ASN	A	192	2.391	-30.415	22.196	1.00	0.00
C										
ATOM	2962	CG	ASN	A	192	3.642	-31.242	22.217	1.00	0.00
C										
ATOM	2963	OD1	ASN	A	192	4.402	-31.240	21.261	1.00	0.00
O										
ATOM	2964	ND2	ASN	A	192	3.868	-31.965	23.328	1.00	0.00
N										
ATOM	2965	H	ASN	A	192	3.558	-28.377	20.292	1.00	0.00
H										
ATOM	2966	HA	ASN	A	192	1.890	-28.392	22.701	1.00	0.00
H										
ATOM	2967	HB2	ASN	A	192	1.811	-30.683	21.314	1.00	0.00
H										
ATOM	2968	HB3	ASN	A	192	1.813	-30.635	23.092	1.00	0.00
H										
ATOM	2969	HD21	ASN	A	192	4.700	-32.543	23.397	1.00	0.00
H										
ATOM	2970	HD22	ASN	A	192	3.208	-31.932	24.098	1.00	0.00
H										
ATOM	2971	N	GLU	A	193	4.188	-28.961	24.054	1.00	0.00
N										
ATOM	2972	CA	GLU	A	193	5.383	-28.541	24.804	1.00	0.00
C										
ATOM	2973	C	GLU	A	193	6.607	-29.343	24.403	1.00	0.00
C										
ATOM	2974	O	GLU	A	193	7.697	-28.820	24.331	1.00	0.00
O										
ATOM	2975	CB	GLU	A	193	5.163	-28.674	26.302	1.00	0.00
C										
ATOM	2976	CG	GLU	A	193	6.318	-28.148	27.138	1.00	0.00
C										
ATOM	2977	CD	GLU	A	193	5.952	-28.003	28.591	1.00	0.00
C										
ATOM	2978	OE1	GLU	A	193	6.730	-28.445	29.437	1.00	0.00
O										
ATOM	2979	OE2	GLU	A	193	4.875	-27.461	28.903	1.00	0.00
O1-										
ATOM	2980	H	GLU	A	193	3.492	-29.545	24.505	1.00	0.00
H										
ATOM	2981	HA	GLU	A	193	5.575	-27.492	24.580	1.00	0.00
H										

ATOM	2982	HB2	GLU	A	193	5.021	-29.727	26.536	1.00	0.00
H										
ATOM	2983	HB3	GLU	A	193	4.265	-28.118	26.568	1.00	0.00
H										
ATOM	2984	HG2	GLU	A	193	6.614	-27.173	26.752	1.00	0.00
H										
ATOM	2985	HG3	GLU	A	193	7.155	-28.840	27.055	1.00	0.00
H										
ATOM	2986	N	ALA	A	194	6.420	-30.619	24.157	1.00	0.00
N										
ATOM	2987	CA	ALA	A	194	7.471	-31.471	23.618	1.00	0.00
C										
ATOM	2988	C	ALA	A	194	8.121	-30.851	22.402	1.00	0.00
C										
ATOM	2989	O	ALA	A	194	9.335	-30.790	22.290	1.00	0.00
O										
ATOM	2990	CB	ALA	A	194	6.880	-32.884	23.261	1.00	0.00
C										
ATOM	2991	H	ALA	A	194	5.511	-31.026	24.349	1.00	0.00
H										
ATOM	2992	HA	ALA	A	194	8.234	-31.602	24.384	1.00	0.00
H										
ATOM	2993	HB1	ALA	A	194	6.091	-32.770	22.518	1.00	0.00
H										
ATOM	2994	HB2	ALA	A	194	7.669	-33.517	22.858	1.00	0.00
H										
ATOM	2995	HB3	ALA	A	194	6.468	-33.343	24.159	1.00	0.00
H										
ATOM	2996	N	GLU	A	195	7.280	-30.389	21.493	1.00	0.00
N										
ATOM	2997	CA	GLU	A	195	7.729	-29.756	20.260	1.00	0.00
C										
ATOM	2998	C	GLU	A	195	8.423	-28.424	20.529	1.00	0.00
C										
ATOM	2999	O	GLU	A	195	9.530	-28.208	20.054	1.00	0.00
O										
ATOM	3000	CB	GLU	A	195	6.560	-29.628	19.279	1.00	0.00
C										
ATOM	3001	CG	GLU	A	195	6.217	-30.971	18.645	1.00	0.00
C										
ATOM	3002	CD	GLU	A	195	5.044	-30.943	17.698	1.00	0.00
C										
ATOM	3003	OE1	GLU	A	195	4.501	-29.867	17.366	1.00	0.00
O										
ATOM	3004	OE2	GLU	A	195	4.650	-32.032	17.265	1.00	0.00
O1-										
ATOM	3005	H	GLU	A	195	6.282	-30.478	21.660	1.00	0.00
H										
ATOM	3006	HA	GLU	A	195	8.463	-30.418	19.804	1.00	0.00
H										
ATOM	3007	HB2	GLU	A	195	6.832	-28.924	18.494	1.00	0.00
H										
ATOM	3008	HB3	GLU	A	195	5.687	-29.255	19.814	1.00	0.00
H										
ATOM	3009	HG2	GLU	A	195	5.990	-31.674	19.444	1.00	0.00
H										

ATOM	3010	HG3	GLU	A	195	7.089	-31.317	18.093	1.00	0.00
H										
ATOM	3011	N	LEU	A	196	7.824	-27.578	21.359	1.00	0.00
N										
ATOM	3012	CA	LEU	A	196	8.421	-26.281	21.682	1.00	0.00
C										
ATOM	3013	C	LEU	A	196	9.862	-26.439	22.153	1.00	0.00
C										
ATOM	3014	O	LEU	A	196	10.796	-25.730	21.699	1.00	0.00
O										
ATOM	3015	CB	LEU	A	196	7.611	-25.573	22.773	1.00	0.00
C										
ATOM	3016	CG	LEU	A	196	8.091	-24.148	23.173	1.00	0.00
C										
ATOM	3017	CD1	LEU	A	196	8.409	-23.280	21.970	1.00	0.00
C										
ATOM	3018	CD2	LEU	A	196	7.064	-23.440	24.048	1.00	0.00
C										
ATOM	3019	H	LEU	A	196	6.935	-27.836	21.777	1.00	0.00
H										
ATOM	3020	HA	LEU	A	196	8.413	-25.662	20.786	1.00	0.00
H										
ATOM	3021	HB2	LEU	A	196	7.641	-26.195	23.666	1.00	0.00
H										
ATOM	3022	HB3	LEU	A	196	6.583	-25.490	22.422	1.00	0.00
H										
ATOM	3023	HG	LEU	A	196	9.004	-24.256	23.755	1.00	0.00
H										
ATOM	3024	HD11	LEU	A	196	7.517	-23.172	21.354	1.00	0.00
H										
ATOM	3025	HD12	LEU	A	196	8.738	-22.299	22.307	1.00	0.00
H										
ATOM	3026	HD13	LEU	A	196	9.199	-23.748	21.385	1.00	0.00
H										
ATOM	3027	HD21	LEU	A	196	6.902	-24.018	24.957	1.00	0.00
H										
ATOM	3028	HD22	LEU	A	196	7.430	-22.449	24.309	1.00	0.00
H										
ATOM	3029	HD23	LEU	A	196	6.125	-23.349	23.504	1.00	0.00
H										
ATOM	3030	N	LYS	A	197	10.039	-27.380	23.076	1.00	0.00
N										
ATOM	3031	CA	LYS	A	197	11.341	-27.587	23.682	1.00	0.00
C										
ATOM	3032	C	LYS	A	197	12.334	-28.031	22.596	1.00	0.00
C										
ATOM	3033	O	LYS	A	197	13.461	-27.525	22.571	1.00	0.00
O										
ATOM	3034	CB	LYS	A	197	11.247	-28.584	24.825	1.00	0.00
C										
ATOM	3035	CG	LYS	A	197	12.302	-28.365	25.852	1.00	0.00
C										
ATOM	3036	CD	LYS	A	197	12.474	-29.560	26.782	1.00	0.00
C										
ATOM	3037	CE	LYS	A	197	11.546	-29.506	27.974	1.00	0.00
C										

ATOM	3038	NZ	LYS	A	197	12.089	-30.416	29.060	1.00	0.00
N1+										
ATOM	3039	H	LYS	A	197	9.255	-27.958	23.360	1.00	0.00
H										
ATOM	3040	HA	LYS	A	197	11.682	-26.637	24.088	1.00	0.00
H										
ATOM	3041	HB2	LYS	A	197	11.354	-29.591	24.422	1.00	0.00
H										
ATOM	3042	HB3	LYS	A	197	10.271	-28.485	25.298	1.00	0.00
H										
ATOM	3043	HG2	LYS	A	197	12.031	-27.494	26.449	1.00	0.00
H										
ATOM	3044	HG3	LYS	A	197	13.248	-28.178	25.346	1.00	0.00
H										
ATOM	3045	HD2	LYS	A	197	13.502	-29.578	27.141	1.00	0.00
H										
ATOM	3046	HD3	LYS	A	197	12.269	-30.470	26.221	1.00	0.00
H										
ATOM	3047	HE2	LYS	A	197	10.552	-29.840	27.679	1.00	0.00
H										
ATOM	3048	HE3	LYS	A	197	11.489	-28.484	28.347	1.00	0.00
H										
ATOM	3049	HZ1	LYS	A	197	13.015	-30.103	29.332	1.00	0.00
H										
ATOM	3050	HZ2	LYS	A	197	11.472	-30.386	29.866	1.00	0.00
H										
ATOM	3051	HZ3	LYS	A	197	12.142	-31.366	28.709	1.00	0.00
H										
ATOM	3052	N	GLU	A	198	11.903	-28.897	21.666	1.00	0.00
N										
ATOM	3053	CA	GLU	A	198	12.722	-29.207	20.475	1.00	0.00
C										
ATOM	3054	C	GLU	A	198	13.112	-27.968	19.633	1.00	0.00
C										
ATOM	3055	O	GLU	A	198	14.278	-27.810	19.224	1.00	0.00
O										
ATOM	3056	CB	GLU	A	198	12.021	-30.221	19.558	1.00	0.00
C										
ATOM	3057	CG	GLU	A	198	12.321	-31.665	19.899	1.00	0.00
C										
ATOM	3058	CD	GLU	A	198	11.567	-32.675	19.010	1.00	0.00
C										
ATOM	3059	OE1	GLU	A	198	11.406	-33.846	19.474	1.00	0.00
O										
ATOM	3060	OE2	GLU	A	198	11.151	-32.309	17.868	1.00	0.00
O1-										
ATOM	3061	H	GLU	A	198	11.000	-29.346	21.782	1.00	0.00
H										
ATOM	3062	HA	GLU	A	198	13.645	-29.667	20.825	1.00	0.00
H										
ATOM	3063	HB2	GLU	A	198	12.342	-30.036	18.534	1.00	0.00
H										
ATOM	3064	HB3	GLU	A	198	10.945	-30.066	19.635	1.00	0.00
H										
ATOM	3065	HG2	GLU	A	198	12.039	-31.840	20.936	1.00	0.00
H										

ATOM	3066	HG3	GLU	A	198	13.390	-31.832	19.781	1.00	0.00
H										
ATOM	3067	N	GLY	A	199	12.122	-27.125	19.355	1.00	0.00
N										
ATOM	3068	CA	GLY	A	199	12.295	-25.930	18.532	1.00	0.00
C										
ATOM	3069	C	GLY	A	199	13.209	-24.924	19.173	1.00	0.00
C										
ATOM	3070	O	GLY	A	199	14.106	-24.409	18.517	1.00	0.00
O										
ATOM	3071	H	GLY	A	199	11.201	-27.322	19.733	1.00	0.00
H										
ATOM	3072	HA2	GLY	A	199	11.321	-25.469	18.375	1.00	0.00
H										
ATOM	3073	HA3	GLY	A	199	12.716	-26.224	17.572	1.00	0.00
H										
ATOM	3074	N	ILE	A	200	12.999	-24.669	20.467	1.00	0.00
N										
ATOM	3075	CA	ILE	A	200	13.922	-23.837	21.286	1.00	0.00
C										
ATOM	3076	C	ILE	A	200	15.356	-24.346	21.168	1.00	0.00
C										
ATOM	3077	O	ILE	A	200	16.266	-23.609	20.790	1.00	0.00
O										
ATOM	3078	CB	ILE	A	200	13.520	-23.871	22.802	1.00	0.00
C										
ATOM	3079	CG1	ILE	A	200	12.235	-23.065	23.026	1.00	0.00
C										
ATOM	3080	CG2	ILE	A	200	14.627	-23.282	23.686	1.00	0.00
C										
ATOM	3081	CD1	ILE	A	200	11.697	-23.119	24.414	1.00	0.00
C										
ATOM	3082	H	ILE	A	200	12.173	-25.058	20.911	1.00	0.00
H										
ATOM	3083	HA	ILE	A	200	13.881	-22.809	20.931	1.00	0.00
H										
ATOM	3084	HB	ILE	A	200	13.344	-24.904	23.098	1.00	0.00
H										
ATOM	3085	HG12	ILE	A	200	11.472	-23.451	22.352	1.00	0.00
H										
ATOM	3086	HG13	ILE	A	200	12.441	-22.024	22.783	1.00	0.00
H										
ATOM	3087	HG21	ILE	A	200	14.810	-22.248	23.399	1.00	0.00
H										
ATOM	3088	HG22	ILE	A	200	14.317	-23.320	24.729	1.00	0.00
H										
ATOM	3089	HG23	ILE	A	200	15.540	-23.862	23.557	1.00	0.00
H										
ATOM	3090	HD11	ILE	A	200	12.438	-22.725	25.107	1.00	0.00
H										
ATOM	3091	HD12	ILE	A	200	10.789	-22.521	24.475	1.00	0.00
H										
ATOM	3092	HD13	ILE	A	200	11.469	-24.152	24.675	1.00	0.00
H										
ATOM	3093	N	LYS	A	201	15.539	-25.639	21.495	1.00	0.00
N										

ATOM	3094	CA	LYS	A	201	16.862	-26.287	21.408	1.00	0.00
C										
ATOM	3095	C	LYS	A	201	17.485	-26.052	20.017	1.00	0.00
C										
ATOM	3096	O	LYS	A	201	18.634	-25.596	19.891	1.00	0.00
O										
ATOM	3097	CB	LYS	A	201	16.774	-27.788	21.746	1.00	0.00
C										
ATOM	3098	CG	LYS	A	201	17.879	-28.265	22.700	1.00	0.00
C										
ATOM	3099	CD	LYS	A	201	17.839	-29.786	22.974	1.00	0.00
C										
ATOM	3100	CE	LYS	A	201	16.982	-30.198	24.225	1.00	0.00
C										
ATOM	3101	NZ	LYS	A	201	16.836	-31.750	24.301	1.00	0.00
N1+										
ATOM	3102	H	LYS	A	201	14.743	-26.184	21.811	1.00	0.00
H										
ATOM	3103	HA	LYS	A	201	17.511	-25.817	22.146	1.00	0.00
H										
ATOM	3104	HB2	LYS	A	201	16.849	-28.355	20.820	1.00	0.00
H										
ATOM	3105	HB3	LYS	A	201	15.809	-27.980	22.212	1.00	0.00
H										
ATOM	3106	HG2	LYS	A	201	17.767	-27.740	23.648	1.00	0.00
H										
ATOM	3107	HG3	LYS	A	201	18.844	-28.018	22.261	1.00	0.00
H										
ATOM	3108	HD2	LYS	A	201	18.860	-30.130	23.132	1.00	0.00
H										
ATOM	3109	HD3	LYS	A	201	17.421	-30.279	22.098	1.00	0.00
H										
ATOM	3110	HE2	LYS	A	201	15.993	-29.748	24.146	1.00	0.00
H										
ATOM	3111	HE3	LYS	A	201	17.472	-29.839	25.129	1.00	0.00
H										
ATOM	3112	HZ1	LYS	A	201	17.755	-32.173	24.378	1.00	0.00
H										
ATOM	3113	HZ2	LYS	A	201	16.280	-31.998	25.113	1.00	0.00
H										
ATOM	3114	HZ3	LYS	A	201	16.377	-32.088	23.461	1.00	0.00
H										
ATOM	3115	N	GLU	A	202	16.695	-26.302	18.978	1.00	0.00
N										
ATOM	3116	CA	GLU	A	202	17.154	-26.140	17.608	1.00	0.00
C										
ATOM	3117	C	GLU	A	202	17.483	-24.674	17.226	1.00	0.00
C										
ATOM	3118	O	GLU	A	202	18.506	-24.410	16.607	1.00	0.00
O										
ATOM	3119	CB	GLU	A	202	16.138	-26.797	16.677	1.00	0.00
C										
ATOM	3120	CG	GLU	A	202	16.196	-28.392	16.780	1.00	0.00
C										
ATOM	3121	CD	GLU	A	202	15.123	-29.144	15.948	1.00	0.00
C										

ATOM	3122	OE1	GLU	A	202	15.232	-30.386	15.823	1.00	0.00
O										
ATOM	3123	OE2	GLU	A	202	14.166	-28.506	15.436	1.00	0.00
O1-										
ATOM	3124	H	GLU	A	202	15.745	-26.617	19.146	1.00	0.00
H										
ATOM	3125	HA	GLU	A	202	18.080	-26.706	17.516	1.00	0.00
H										
ATOM	3126	HB2	GLU	A	202	16.354	-26.501	15.652	1.00	0.00
H										
ATOM	3127	HB3	GLU	A	202	15.139	-26.461	16.950	1.00	0.00
H										
ATOM	3128	HG2	GLU	A	202	16.067	-28.668	17.826	1.00	0.00
H										
ATOM	3129	HG3	GLU	A	202	17.177	-28.718	16.438	1.00	0.00
H										
ATOM	3130	N	ALA	A	203	16.648	-23.728	17.656	1.00	0.00
N										
ATOM	3131	CA	ALA	A	203	16.844	-22.290	17.386	1.00	0.00
C										
ATOM	3132	C	ALA	A	203	18.115	-21.729	18.014	1.00	0.00
C										
ATOM	3133	O	ALA	A	203	18.807	-20.908	17.414	1.00	0.00
O										
ATOM	3134	CB	ALA	A	203	15.608	-21.474	17.881	1.00	0.00
C										
ATOM	3135	H	ALA	A	203	15.836	-24.011	18.196	1.00	0.00
H										
ATOM	3136	HA	ALA	A	203	16.919	-22.161	16.307	1.00	0.00
H										
ATOM	3137	HB1	ALA	A	203	15.481	-21.622	18.953	1.00	0.00
H										
ATOM	3138	HB2	ALA	A	203	15.766	-20.417	17.676	1.00	0.00
H										
ATOM	3139	HB3	ALA	A	203	14.715	-21.816	17.360	1.00	0.00
H										
ATOM	3140	N	PHE	A	204	18.421	-22.183	19.215	1.00	0.00
N										
ATOM	3141	CA	PHE	A	204	19.647	-21.785	19.924	1.00	0.00
C										
ATOM	3142	C	PHE	A	204	20.974	-22.252	19.284	1.00	0.00
C										
ATOM	3143	O	PHE	A	204	22.032	-21.753	19.680	1.00	0.00
O										
ATOM	3144	CB	PHE	A	204	19.612	-22.287	21.370	1.00	0.00
C										
ATOM	3145	CG	PHE	A	204	18.790	-21.444	22.311	1.00	0.00
C										
ATOM	3146	CD1	PHE	A	204	18.039	-22.054	23.327	1.00	0.00
C										
ATOM	3147	CD2	PHE	A	204	18.793	-20.039	22.227	1.00	0.00
C										
ATOM	3148	CE1	PHE	A	204	17.296	-21.260	24.245	1.00	0.00
C										
ATOM	3149	CE2	PHE	A	204	18.061	-19.269	23.125	1.00	0.00
C										



ATOM	3150	CZ	PHE	A	204	17.332	-19.879	24.146	1.00	0.00
C										
ATOM	3151	H	PHE	A	204	17.785	-22.833	19.667	1.00	0.00
H										
ATOM	3152	HA	PHE	A	204	19.666	-20.697	19.957	1.00	0.00
H										
ATOM	3153	HB2	PHE	A	204	20.634	-22.314	21.744	1.00	0.00
H										
ATOM	3154	HB3	PHE	A	204	19.199	-23.295	21.369	1.00	0.00
H										
ATOM	3155	HD1	PHE	A	204	18.024	-23.140	23.413	1.00	0.00
H										
ATOM	3156	HD2	PHE	A	204	19.376	-19.549	21.449	1.00	0.00
H										
ATOM	3157	HE1	PHE	A	204	16.701	-21.737	25.023	1.00	0.00
H										
ATOM	3158	HE2	PHE	A	204	18.057	-18.185	23.030	1.00	0.00
H										
ATOM	3159	HZ	PHE	A	204	16.790	-19.269	24.866	1.00	0.00
H										
ATOM	3160	N	GLN	A	205	20.925	-23.193	18.324	1.00	0.00
N										
ATOM	3161	CA	GLN	A	205	22.070	-23.490	17.469	1.00	0.00
C										
ATOM	3162	C	GLN	A	205	22.501	-22.276	16.648	1.00	0.00
C										
ATOM	3163	O	GLN	A	205	23.659	-22.201	16.194	1.00	0.00
O										
ATOM	3164	CB	GLN	A	205	21.755	-24.608	16.456	1.00	0.00
C										
ATOM	3165	CG	GLN	A	205	21.712	-26.031	17.016	1.00	0.00
C										
ATOM	3166	CD	GLN	A	205	20.958	-26.997	16.095	1.00	0.00
C										
ATOM	3167	OE1	GLN	A	205	20.347	-26.576	15.106	1.00	0.00
O										
ATOM	3168	NE2	GLN	A	205	21.007	-28.317	16.419	1.00	0.00
N										
ATOM	3169	H	GLN	A	205	20.064	-23.714	18.190	1.00	0.00
H										
ATOM	3170	HA	GLN	A	205	22.904	-23.807	18.094	1.00	0.00
H										
ATOM	3171	HB2	GLN	A	205	22.519	-24.579	15.680	1.00	0.00
H										
ATOM	3172	HB3	GLN	A	205	20.782	-24.395	16.016	1.00	0.00
H										
ATOM	3173	HG2	GLN	A	205	21.215	-26.010	17.985	1.00	0.00
H										
ATOM	3174	HG3	GLN	A	205	22.733	-26.389	17.139	1.00	0.00
H										
ATOM	3175	HE21	GLN	A	205	20.525	-28.999	15.842	1.00	0.00
H										
ATOM	3176	HE22	GLN	A	205	21.526	-28.619	17.237	1.00	0.00
H										
ATOM	3177	N	PHE	A	206	21.567	-21.366	16.395	1.00	0.00
N										

ATOM	3178	CA	PHE	A	206	21.831	-20.232	15.502	1.00	0.00
C										
ATOM	3179	C	PHE	A	206	21.626	-18.870	16.185	1.00	0.00
C										
ATOM	3180	O	PHE	A	206	22.038	-17.858	15.649	1.00	0.00
O										
ATOM	3181	CB	PHE	A	206	20.924	-20.294	14.264	1.00	0.00
C										
ATOM	3182	CG	PHE	A	206	20.780	-21.675	13.667	1.00	0.00
C										
ATOM	3183	CD1	PHE	A	206	19.575	-22.353	13.757	1.00	0.00
C										
ATOM	3184	CD2	PHE	A	206	21.845	-22.288	13.033	1.00	0.00
C										
ATOM	3185	CE1	PHE	A	206	19.439	-23.636	13.224	1.00	0.00
C										
ATOM	3186	CE2	PHE	A	206	21.726	-23.571	12.492	1.00	0.00
C										
ATOM	3187	CZ	PHE	A	206	20.519	-24.247	12.576	1.00	0.00
C										
ATOM	3188	H	PHE	A	206	20.654	-21.457	16.828	1.00	0.00
H										
ATOM	3189	HA	PHE	A	206	22.866	-20.294	15.169	1.00	0.00
H										
ATOM	3190	HB2	PHE	A	206	21.340	-19.636	13.503	1.00	0.00
H										
ATOM	3191	HB3	PHE	A	206	19.934	-19.941	14.548	1.00	0.00
H										
ATOM	3192	HD1	PHE	A	206	18.726	-21.881	14.248	1.00	0.00
H										
ATOM	3193	HD2	PHE	A	206	22.795	-21.761	12.954	1.00	0.00
H										
ATOM	3194	HE1	PHE	A	206	18.490	-24.163	13.313	1.00	0.00
H										
ATOM	3195	HE2	PHE	A	206	22.581	-24.039	12.005	1.00	0.00
H										
ATOM	3196	HZ	PHE	A	206	20.412	-25.241	12.143	1.00	0.00
H										
ATOM	3197	N	ASP	A	207	20.975	-18.822	17.340	1.00	0.00
N										
ATOM	3198	CA	ASP	A	207	20.737	-17.499	17.962	1.00	0.00
C										
ATOM	3199	C	ASP	A	207	20.767	-17.539	19.447	1.00	0.00
C										
ATOM	3200	O	ASP	A	207	20.523	-18.573	20.056	1.00	0.00
O										
ATOM	3201	CB	ASP	A	207	19.388	-16.952	17.521	1.00	0.00
C										
ATOM	3202	CG	ASP	A	207	19.371	-15.440	17.426	1.00	0.00
C										
ATOM	3203	OD1	ASP	A	207	20.033	-14.754	18.239	1.00	0.00
O										
ATOM	3204	OD2	ASP	A	207	18.658	-14.958	16.536	1.00	0.00
O1-										
ATOM	3205	H	ASP	A	207	20.648	-19.673	17.787	1.00	0.00
H										

ATOM	3206	HA	ASP	A	207	21.513	-16.815	17.621	1.00	0.00
H										
ATOM	3207	HB2	ASP	A	207	18.634	-17.264	18.242	1.00	0.00
H										
ATOM	3208	HB3	ASP	A	207	19.148	-17.365	16.542	1.00	0.00
H										
ATOM	3209	N	ARG	A	208	21.067	-16.413	20.045	1.00	0.00
N										
ATOM	3210	CA	ARG	A	208	21.272	-16.373	21.486	1.00	0.00
C										
ATOM	3211	C	ARG	A	208	20.044	-15.815	22.180	1.00	0.00
C										
ATOM	3212	O	ARG	A	208	20.003	-15.726	23.381	1.00	0.00
O										
ATOM	3213	CB	ARG	A	208	22.518	-15.549	21.806	1.00	0.00
C										
ATOM	3214	CG	ARG	A	208	22.500	-14.078	21.233	1.00	0.00
C										
ATOM	3215	CD	ARG	A	208	23.856	-13.368	21.534	1.00	0.00
C										
ATOM	3216	NE	ARG	A	208	23.961	-13.223	22.968	1.00	0.00
N1+										
ATOM	3217	CZ	ARG	A	208	23.403	-12.233	23.662	1.00	0.00
C1+										
ATOM	3218	NH1	ARG	A	208	22.707	-11.270	23.059	1.00	0.00
N1+										
ATOM	3219	NH2	ARG	A	208	23.533	-12.216	24.980	1.00	0.00
N1+										
ATOM	3220	H	ARG	A	208	21.157	-15.562	19.500	1.00	0.00
H										
ATOM	3221	HA	ARG	A	208	21.433	-17.391	21.839	1.00	0.00
H										
ATOM	3222	HB2	ARG	A	208	23.382	-16.065	21.390	1.00	0.00
H										
ATOM	3223	HB3	ARG	A	208	22.617	-15.491	22.889	1.00	0.00
H										
ATOM	3224	HG2	ARG	A	208	21.690	-13.520	21.700	1.00	0.00
H										
ATOM	3225	HG3	ARG	A	208	22.343	-14.113	20.156	1.00	0.00
H										
ATOM	3226	HD2	ARG	A	208	23.877	-12.389	21.059	1.00	0.00
H										
ATOM	3227	HD3	ARG	A	208	24.683	-13.971	21.160	1.00	0.00
H										
ATOM	3228	HE2	ARG	A	208	24.494	-13.920	23.479	1.00	0.00
H										
ATOM	3229	HE3	ARG	A	208	23.125	-13.777	23.085	1.00	0.00
H										
ATOM	3230	HH11	ARG	A	208	22.290	-10.525	23.608	1.00	0.00
H										
ATOM	3231	HH12	ARG	A	208	22.593	-11.282	22.050	1.00	0.00
H										
ATOM	3232	HH13	ARG	A	208	23.550	-10.724	22.958	1.00	0.00
H										
ATOM	3233	HH21	ARG	A	208	23.113	-11.468	25.522	1.00	0.00
H										

ATOM	3234	HH22	ARG	A	208	24.053	-12.952	25.448	1.00	0.00
H										
ATOM	3235	HH23	ARG	A	208	22.685	-12.758	25.070	1.00	0.00
H										
ATOM	3236	N	LYS	A	209	19.053	-15.441	21.384	1.00	0.00
N										
ATOM	3237	CA	LYS	A	209	17.867	-14.716	21.810	1.00	0.00
C										
ATOM	3238	C	LYS	A	209	16.731	-15.179	20.898	1.00	0.00
C										
ATOM	3239	O	LYS	A	209	16.869	-15.186	19.651	1.00	0.00
O										
ATOM	3240	CB	LYS	A	209	18.108	-13.203	21.692	1.00	0.00
C										
ATOM	3241	CG	LYS	A	209	17.003	-12.378	22.236	1.00	0.00
C										
ATOM	3242	CD	LYS	A	209	17.416	-10.845	22.291	1.00	0.00
C										
ATOM	3243	CE	LYS	A	209	17.524	-10.200	20.847	1.00	0.00
C										
ATOM	3244	NZ	LYS	A	209	17.891	-8.738	20.869	1.00	0.00
N1+										
ATOM	3245	H	LYS	A	209	19.128	-15.680	20.400	1.00	0.00
H										
ATOM	3246	HA	LYS	A	209	17.634	-14.970	22.843	1.00	0.00
H										
ATOM	3247	HB2	LYS	A	209	18.235	-12.957	20.639	1.00	0.00
H										
ATOM	3248	HB3	LYS	A	209	19.020	-12.957	22.235	1.00	0.00
H										
ATOM	3249	HG2	LYS	A	209	16.765	-12.720	23.242	1.00	0.00
H										
ATOM	3250	HG3	LYS	A	209	16.127	-12.489	21.598	1.00	0.00
H										
ATOM	3251	HD2	LYS	A	209	18.382	-10.760	22.786	1.00	0.00
H										
ATOM	3252	HD3	LYS	A	209	16.666	-10.301	22.863	1.00	0.00
H										
ATOM	3253	HE2	LYS	A	209	16.561	-10.307	20.349	1.00	0.00
H										
ATOM	3254	HE3	LYS	A	209	18.285	-10.739	20.285	1.00	0.00
H										
ATOM	3255	HZ1	LYS	A	209	18.792	-8.622	21.322	1.00	0.00
H										
ATOM	3256	HZ2	LYS	A	209	17.943	-8.388	19.918	1.00	0.00
H										
ATOM	3257	HZ3	LYS	A	209	17.185	-8.220	21.382	1.00	0.00
H										
ATOM	3258	N	LEU	A	210	15.642	-15.616	21.534	1.00	0.00
N										
ATOM	3259	CA	LEU	A	210	14.450	-16.170	20.864	1.00	0.00
C										
ATOM	3260	C	LEU	A	210	13.170	-15.411	21.152	1.00	0.00
C										
ATOM	3261	O	LEU	A	210	12.976	-14.919	22.244	1.00	0.00
O										

ATOM	3262	CB	LEU	A	210	14.176	-17.607	21.366	1.00	0.00
C										
ATOM	3263	CG	LEU	A	210	15.301	-18.599	21.144	1.00	0.00
C										
ATOM	3264	CD1	LEU	A	210	14.897	-19.911	21.681	1.00	0.00
C										
ATOM	3265	CD2	LEU	A	210	15.735	-18.704	19.633	1.00	0.00
C										
ATOM	3266	H	LEU	A	210	15.633	-15.564	22.548	1.00	0.00
H										
ATOM	3267	HA	LEU	A	210	14.620	-16.192	19.789	1.00	0.00
H										
ATOM	3268	HB2	LEU	A	210	13.292	-17.980	20.850	1.00	0.00
H										
ATOM	3269	HB3	LEU	A	210	13.978	-17.558	22.436	1.00	0.00
H										
ATOM	3270	HG	LEU	A	210	16.163	-18.258	21.715	1.00	0.00
H										
ATOM	3271	HD11	LEU	A	210	13.999	-20.253	21.167	1.00	0.00
H										
ATOM	3272	HD12	LEU	A	210	15.700	-20.630	21.525	1.00	0.00
H										
ATOM	3273	HD13	LEU	A	210	14.693	-19.820	22.747	1.00	0.00
H										
ATOM	3274	HD21	LEU	A	210	16.077	-17.731	19.285	1.00	0.00
H										
ATOM	3275	HD22	LEU	A	210	16.542	-19.429	19.537	1.00	0.00
H										
ATOM	3276	HD23	LEU	A	210	14.885	-19.026	19.033	1.00	0.00
H										
ATOM	3277	N	VAL	A	211	12.270	-15.429	20.178	1.00	0.00
N										
ATOM	3278	CA	VAL	A	211	10.862	-15.044	20.345	1.00	0.00
C										
ATOM	3279	C	VAL	A	211	9.961	-16.272	20.188	1.00	0.00
C										
ATOM	3280	O	VAL	A	211	10.237	-17.112	19.342	1.00	0.00
O										
ATOM	3281	CB	VAL	A	211	10.466	-13.993	19.255	1.00	0.00
C										
ATOM	3282	CG1	VAL	A	211	9.014	-13.805	19.220	1.00	0.00
C										
ATOM	3283	CG2	VAL	A	211	11.150	-12.630	19.533	1.00	0.00
C										
ATOM	3284	H	VAL	A	211	12.574	-15.729	19.257	1.00	0.00
H										
ATOM	3285	HA	VAL	A	211	10.718	-14.613	21.334	1.00	0.00
H										
ATOM	3286	HB	VAL	A	211	10.794	-14.357	18.283	1.00	0.00
H										
ATOM	3287	HG11	VAL	A	211	8.670	-13.452	20.191	1.00	0.00
H										
ATOM	3288	HG12	VAL	A	211	8.761	-13.071	18.456	1.00	0.00
H										
ATOM	3289	HG13	VAL	A	211	8.531	-14.753	18.987	1.00	0.00
H										

ATOM	3290	HG21	VAL	A	211	12.231	-12.758	19.522	1.00	0.00
H										
ATOM	3291	HG22	VAL	A	211	10.861	-11.916	18.764	1.00	0.00
H										
ATOM	3292	HG23	VAL	A	211	10.838	-12.260	20.508	1.00	0.00
H										
ATOM	3293	N	ILE	A	212	8.944	-16.399	21.043	1.00	0.00
N										
ATOM	3294	CA	ILE	A	212	7.887	-17.432	20.925	1.00	0.00
C										
ATOM	3295	C	ILE	A	212	6.603	-16.664	20.711	1.00	0.00
C										
ATOM	3296	O	ILE	A	212	6.229	-15.829	21.559	1.00	0.00
O										
ATOM	3297	CB	ILE	A	212	7.641	-18.301	22.211	1.00	0.00
C										
ATOM	3298	CG1	ILE	A	212	8.949	-18.757	22.864	1.00	0.00
C										
ATOM	3299	CG2	ILE	A	212	6.697	-19.510	21.913	1.00	0.00
C										
ATOM	3300	CD1	ILE	A	212	9.887	-19.489	21.952	1.00	0.00
C										
ATOM	3301	H	ILE	A	212	8.891	-15.749	21.821	1.00	0.00
H										
ATOM	3302	HA	ILE	A	212	8.085	-18.076	20.070	1.00	0.00
H										
ATOM	3303	HB	ILE	A	212	7.129	-17.666	22.932	1.00	0.00
H										
ATOM	3304	HG12	ILE	A	212	8.700	-19.417	23.694	1.00	0.00
H										
ATOM	3305	HG13	ILE	A	212	9.464	-17.876	23.242	1.00	0.00
H										
ATOM	3306	HG21	ILE	A	212	7.147	-20.143	21.150	1.00	0.00
H										
ATOM	3307	HG22	ILE	A	212	6.549	-20.089	22.824	1.00	0.00
H										
ATOM	3308	HG23	ILE	A	212	5.736	-19.141	21.558	1.00	0.00
H										
ATOM	3309	HD11	ILE	A	212	10.161	-18.843	21.119	1.00	0.00
H										
ATOM	3310	HD12	ILE	A	212	10.782	-19.772	22.503	1.00	0.00
H										
ATOM	3311	HD13	ILE	A	212	9.398	-20.385	21.571	1.00	0.00
H										
ATOM	3312	N	GLU	A	213	5.949	-16.927	19.584	1.00	0.00
N										
ATOM	3313	CA	GLU	A	213	4.716	-16.253	19.257	1.00	0.00
C										
ATOM	3314	C	GLU	A	213	3.591	-17.222	19.134	1.00	0.00
C										
ATOM	3315	O	GLU	A	213	3.744	-18.305	18.603	1.00	0.00
O										
ATOM	3316	CB	GLU	A	213	4.818	-15.523	17.930	1.00	0.00
C										
ATOM	3317	CG	GLU	A	213	6.065	-14.800	17.784	1.00	0.00
C										

ATOM	3318	CD	GLU	A	213	6.063	-13.808	16.629	1.00	0.00
C										
ATOM	3319	OE1	GLU	A	213	7.174	-13.262	16.369	1.00	0.00
O										
ATOM	3320	OE2	GLU	A	213	4.973	-13.603	16.022	1.00	0.00
O1-										
ATOM	3321	H	GLU	A	213	6.324	-17.617	18.941	1.00	0.00
H										
ATOM	3322	HA	GLU	A	213	4.484	-15.535	20.042	1.00	0.00
H										
ATOM	3323	HB2	GLU	A	213	3.994	-14.815	17.858	1.00	0.00
H										
ATOM	3324	HB3	GLU	A	213	4.741	-16.252	17.125	1.00	0.00
H										
ATOM	3325	HG2	GLU	A	213	6.863	-15.522	17.617	1.00	0.00
H										
ATOM	3326	HG3	GLU	A	213	6.256	-14.254	18.706	1.00	0.00
H										
ATOM	3327	N	GLN	A	214	2.447	-16.796	19.622	1.00	0.00
N										
ATOM	3328	CA	GLN	A	214	1.208	-17.441	19.318	1.00	0.00
C										
ATOM	3329	C	GLN	A	214	0.956	-17.255	17.825	1.00	0.00
C										
ATOM	3330	O	GLN	A	214	0.902	-16.136	17.335	1.00	0.00
O										
ATOM	3331	CB	GLN	A	214	0.103	-16.789	20.133	1.00	0.00
C										
ATOM	3332	CG	GLN	A	214	-1.280	-17.302	19.883	1.00	0.00
C										
ATOM	3333	CD	GLN	A	214	-2.288	-16.645	20.790	1.00	0.00
C										
ATOM	3334	OE1	GLN	A	214	-2.146	-16.659	22.023	1.00	0.00
O										
ATOM	3335	NE2	GLN	A	214	-3.326	-16.065	20.191	1.00	0.00
N										
ATOM	3336	H	GLN	A	214	2.444	-15.986	20.233	1.00	0.00
H										
ATOM	3337	HA	GLN	A	214	1.272	-18.502	19.556	1.00	0.00
H										
ATOM	3338	HB2	GLN	A	214	0.109	-15.723	19.911	1.00	0.00
H										
ATOM	3339	HB3	GLN	A	214	0.331	-16.942	21.187	1.00	0.00
H										
ATOM	3340	HG2	GLN	A	214	-1.295	-18.377	20.058	1.00	0.00
H										
ATOM	3341	HG3	GLN	A	214	-1.550	-17.099	18.848	1.00	0.00
H										
ATOM	3342	HE21	GLN	A	214	-4.040	-15.605	20.746	1.00	0.00
H										
ATOM	3343	HE22	GLN	A	214	-3.403	-16.083	19.179	1.00	0.00
H										
ATOM	3344	N	GLY	A	215	0.841	-18.372	17.115	1.00	0.00
N										
ATOM	3345	CA	GLY	A	215	0.421	-18.382	15.734	1.00	0.00
C										

ATOM	3346	C	GLY	A	215	-1.069	-18.115	15.562	1.00	0.00
C										
ATOM	3347	O	GLY	A	215	-1.857	-18.221	16.516	1.00	0.00
O										
ATOM	3348	H	GLY	A	215	1.057	-19.257	17.563	1.00	0.00
H										
ATOM	3349	HA2	GLY	A	215	0.650	-19.358	15.309	1.00	0.00
H										
ATOM	3350	HA3	GLY	A	215	0.976	-17.614	15.198	1.00	0.00
H										
ATOM	3351	N	VAL	A	216	-1.438	-17.730	14.340	1.00	0.00
N										
ATOM	3352	CA	VAL	A	216	-2.818	-17.458	13.993	1.00	0.00
C										
ATOM	3353	C	VAL	A	216	-3.026	-17.850	12.565	1.00	0.00
C										
ATOM	3354	O	VAL	A	216	-2.064	-18.094	11.821	1.00	0.00
O										
ATOM	3355	CB	VAL	A	216	-3.226	-15.946	14.132	1.00	0.00
C										
ATOM	3356	CG1	VAL	A	216	-3.138	-15.493	15.571	1.00	0.00
C										
ATOM	3357	CG2	VAL	A	216	-2.410	-15.075	13.255	1.00	0.00
C										
ATOM	3358	H	VAL	A	216	-0.724	-17.624	13.626	1.00	0.00
H										
ATOM	3359	HA	VAL	A	216	-3.469	-18.061	14.625	1.00	0.00
H										
ATOM	3360	HB	VAL	A	216	-4.264	-15.853	13.818	1.00	0.00
H										
ATOM	3361	HG11	VAL	A	216	-2.116	-15.615	15.928	1.00	0.00
H										
ATOM	3362	HG12	VAL	A	216	-3.424	-14.445	15.640	1.00	0.00
H										
ATOM	3363	HG13	VAL	A	216	-3.809	-16.094	16.182	1.00	0.00
H										
ATOM	3364	HG21	VAL	A	216	-2.550	-15.373	12.217	1.00	0.00
H										
ATOM	3365	HG22	VAL	A	216	-2.723	-14.040	13.381	1.00	0.00
H										
ATOM	3366	HG23	VAL	A	216	-1.359	-15.173	13.522	1.00	0.00
H										
ATOM	3367	N	ASN	A	217	-4.301	-17.922	12.201	1.00	0.00
N										
ATOM	3368	CA	ASN	A	217	-4.705	-18.139	10.821	1.00	0.00
C										
ATOM	3369	C	ASN	A	217	-5.056	-16.741	10.372	1.00	0.00
C										
ATOM	3370	O	ASN	A	217	-5.986	-16.126	10.919	1.00	0.00
O										
ATOM	3371	CB	ASN	A	217	-5.926	-19.100	10.688	1.00	0.00
C										
ATOM	3372	CG	ASN	A	217	-5.947	-20.256	11.746	1.00	0.00
C										
ATOM	3373	OD1	ASN	A	217	-4.928	-20.853	12.079	1.00	0.00
O										



ATOM	3374	ND2	ASN	A	217	-7.147	-20.581	12.234	1.00	0.00
N										
ATOM	3375	H	ASN	A	217	-5.019	-17.822	12.911	1.00	0.00
H										
ATOM	3376	HA	ASN	A	217	-3.865	-18.519	10.240	1.00	0.00
H										
ATOM	3377	HB2	ASN	A	217	-5.904	-19.546	9.695	1.00	0.00
H										
ATOM	3378	HB3	ASN	A	217	-6.836	-18.515	10.803	1.00	0.00
H										
ATOM	3379	HD21	ASN	A	217	-7.231	-21.322	12.923	1.00	0.00
H										
ATOM	3380	HD22	ASN	A	217	-7.974	-20.088	11.916	1.00	0.00
H										
ATOM	3381	N	ALA	A	218	-4.291	-16.198	9.429	1.00	0.00
N										
ATOM	3382	CA	ALA	A	218	-4.533	-14.837	8.981	1.00	0.00
C										
ATOM	3383	C	ALA	A	218	-4.054	-14.626	7.559	1.00	0.00
C										
ATOM	3384	O	ALA	A	218	-3.086	-15.227	7.121	1.00	0.00
O										
ATOM	3385	CB	ALA	A	218	-3.866	-13.851	9.917	1.00	0.00
C										
ATOM	3386	H	ALA	A	218	-3.535	-16.737	9.020	1.00	0.00
H										
ATOM	3387	HA	ALA	A	218	-5.607	-14.657	9.008	1.00	0.00
H										
ATOM	3388	HB1	ALA	A	218	-2.793	-14.035	9.933	1.00	0.00
H										
ATOM	3389	HB2	ALA	A	218	-4.056	-12.836	9.570	1.00	0.00
H										
ATOM	3390	HB3	ALA	A	218	-4.271	-13.973	10.921	1.00	0.00
H										
ATOM	3391	N	ARG	A	219	-4.748	-13.767	6.839	1.00	0.00
N										
ATOM	3392	CA	ARG	A	219	-4.217	-13.236	5.623	1.00	0.00
C										
ATOM	3393	C	ARG	A	219	-3.001	-12.327	5.926	1.00	0.00
C										
ATOM	3394	O	ARG	A	219	-2.950	-11.664	6.953	1.00	0.00
O										
ATOM	3395	CB	ARG	A	219	-5.280	-12.442	4.923	1.00	0.00
C										
ATOM	3396	CG	ARG	A	219	-6.466	-13.291	4.426	1.00	0.00
C										
ATOM	3397	CD	ARG	A	219	-7.134	-12.536	3.271	1.00	0.00
C										
ATOM	3398	NE	ARG	A	219	-8.121	-11.597	3.779	1.00	0.00
N1+										
ATOM	3399	CZ	ARG	A	219	-8.694	-10.602	3.112	1.00	0.00
C1+										
ATOM	3400	NH1	ARG	A	219	-8.401	-10.305	1.842	1.00	0.00
N1+										
ATOM	3401	NH2	ARG	A	219	-9.598	-9.901	3.764	1.00	0.00
N1+										

ATOM	3402	H	ARG	A	219	-5.670	-13.480	7.152	1.00	0.00
H										
ATOM	3403	HA	ARG	A	219	-3.901	-14.057	4.981	1.00	0.00
H										
ATOM	3404	HB2	ARG	A	219	-4.829	-11.947	4.064	1.00	0.00
H										
ATOM	3405	HB3	ARG	A	219	-5.661	-11.693	5.616	1.00	0.00
H										
ATOM	3406	HG2	ARG	A	219	-7.181	-13.438	5.234	1.00	0.00
H										
ATOM	3407	HG3	ARG	A	219	-6.109	-14.259	4.078	1.00	0.00
H										
ATOM	3408	HD2	ARG	A	219	-7.625	-13.251	2.612	1.00	0.00
H										
ATOM	3409	HD3	ARG	A	219	-6.375	-11.991	2.713	1.00	0.00
H										
ATOM	3410	HE2	ARG	A	219	-8.403	-11.715	4.747	1.00	0.00
H										
ATOM	3411	HE3	ARG	A	219	-8.862	-12.219	3.488	1.00	0.00
H										
ATOM	3412	HH11	ARG	A	219	-8.870	-9.533	1.380	1.00	0.00
H										
ATOM	3413	HH12	ARG	A	219	-7.710	-10.852	1.339	1.00	0.00
H										
ATOM	3414	HH13	ARG	A	219	-7.676	-9.677	2.156	1.00	0.00
H										
ATOM	3415	HH21	ARG	A	219	-10.070	-9.128	3.305	1.00	0.00
H										
ATOM	3416	HH22	ARG	A	219	-9.824	-10.134	4.726	1.00	0.00
H										
ATOM	3417	HH23	ARG	A	219	-10.319	-10.532	3.443	1.00	0.00
H										
ATOM	3418	N	GLU	A	220	-2.030	-12.332	5.033	1.00	0.00
N										
ATOM	3419	CA	GLU	A	220	-0.826	-11.515	5.172	1.00	0.00
C										
ATOM	3420	C	GLU	A	220	-1.072	-10.336	4.301	1.00	0.00
C										
ATOM	3421	O	GLU	A	220	-1.393	-10.463	3.123	1.00	0.00
O										
ATOM	3422	CB	GLU	A	220	0.435	-12.301	4.780	1.00	0.00
C										
ATOM	3423	CG	GLU	A	220	1.686	-11.448	4.368	1.00	0.00
C										
ATOM	3424	CD	GLU	A	220	2.398	-10.674	5.526	1.00	0.00
C										
ATOM	3425	OE1	GLU	A	220	1.807	-10.431	6.613	1.00	0.00
O										
ATOM	3426	OE2	GLU	A	220	3.578	-10.279	5.302	1.00	0.00
O1-										
ATOM	3427	H	GLU	A	220	-2.123	-12.928	4.216	1.00	0.00
H										
ATOM	3428	HA	GLU	A	220	-0.735	-11.184	6.205	1.00	0.00
H										
ATOM	3429	HB2	GLU	A	220	0.178	-12.942	3.938	1.00	0.00
H										

ATOM	3430	HB3	GLU	A	220	0.720	-12.918	5.631	1.00	0.00
H										
ATOM	3431	HG2	GLU	A	220	1.362	-10.718	3.628	1.00	0.00
H										
ATOM	3432	HG3	GLU	A	220	2.415	-12.121	3.919	1.00	0.00
H										
ATOM	3433	N	ILE	A	221	-1.019	-9.170	4.887	1.00	0.00
N										
ATOM	3434	CA	ILE	A	221	-1.394	-7.952	4.166	1.00	0.00
C										
ATOM	3435	C	ILE	A	221	-0.280	-6.936	4.363	1.00	0.00
C										
ATOM	3436	O	ILE	A	221	0.210	-6.715	5.483	1.00	0.00
O										
ATOM	3437	CB	ILE	A	221	-2.707	-7.343	4.745	1.00	0.00
C										
ATOM	3438	CG1	ILE	A	221	-3.844	-8.338	4.669	1.00	0.00
C										
ATOM	3439	CG2	ILE	A	221	-3.045	-5.965	4.124	1.00	0.00
C										
ATOM	3440	CD1	ILE	A	221	-4.294	-8.674	3.330	1.00	0.00
C										
ATOM	3441	H	ILE	A	221	-0.715	-9.108	5.853	1.00	0.00
H										
ATOM	3442	HA	ILE	A	221	-1.519	-8.169	3.106	1.00	0.00
H										
ATOM	3443	HB	ILE	A	221	-2.523	-7.167	5.804	1.00	0.00
H										
ATOM	3444	HG12	ILE	A	221	-4.691	-7.922	5.213	1.00	0.00
H										
ATOM	3445	HG13	ILE	A	221	-3.518	-9.257	5.154	1.00	0.00
H										
ATOM	3446	HG21	ILE	A	221	-3.172	-6.073	3.048	1.00	0.00
H										
ATOM	3447	HG22	ILE	A	221	-3.968	-5.586	4.562	1.00	0.00
H										
ATOM	3448	HG23	ILE	A	221	-2.234	-5.267	4.326	1.00	0.00
H										
ATOM	3449	HD11	ILE	A	221	-3.469	-9.108	2.768	1.00	0.00
H										
ATOM	3450	HD12	ILE	A	221	-5.110	-9.393	3.391	1.00	0.00
H										
ATOM	3451	HD13	ILE	A	221	-4.641	-7.773	2.827	1.00	0.00
H										
ATOM	3452	N	GLU	A	222	0.056	-6.249	3.290	1.00	0.00
N										
ATOM	3453	CA	GLU	A	222	1.161	-5.341	3.329	1.00	0.00
C										
ATOM	3454	C	GLU	A	222	0.868	-3.929	2.899	1.00	0.00
C										
ATOM	3455	O	GLU	A	222	0.063	-3.674	2.044	1.00	0.00
O										
ATOM	3456	CB	GLU	A	222	2.247	-5.928	2.462	1.00	0.00
C										
ATOM	3457	CG	GLU	A	222	3.031	-6.946	3.166	1.00	0.00
C										

ATOM	3458	CD	GLU	A	222	3.185	-8.141	2.376	1.00	0.00
C										
ATOM	3459	OE1	GLU	A	222	2.133	-8.760	2.164	1.00	0.00
O										
ATOM	3460	OE2	GLU	A	222	4.328	-8.430	1.932	1.00	0.00
O1-										
ATOM	3461	H	GLU	A	222	-0.472	-6.365	2.431	1.00	0.00
H										
ATOM	3462	HA	GLU	A	222	1.531	-5.309	4.353	1.00	0.00
H										
ATOM	3463	HB2	GLU	A	222	2.915	-5.128	2.147	1.00	0.00
H										
ATOM	3464	HB3	GLU	A	222	1.788	-6.384	1.586	1.00	0.00
H										
ATOM	3465	HG2	GLU	A	222	2.525	-7.201	4.096	1.00	0.00
H										
ATOM	3466	HG3	GLU	A	222	4.017	-6.541	3.389	1.00	0.00
H										
ATOM	3467	N	VAL	A	223	1.598	-3.015	3.513	1.00	0.00
N										
ATOM	3468	CA	VAL	A	223	1.506	-1.592	3.253	1.00	0.00
C										
ATOM	3469	C	VAL	A	223	2.930	-1.045	3.065	1.00	0.00
C										
ATOM	3470	O	VAL	A	223	3.813	-1.361	3.828	1.00	0.00
O										
ATOM	3471	CB	VAL	A	223	0.749	-0.843	4.393	1.00	0.00
C										
ATOM	3472	CG1	VAL	A	223	0.670	0.683	4.104	1.00	0.00
C										
ATOM	3473	CG2	VAL	A	223	-0.622	-1.443	4.588	1.00	0.00
C										
ATOM	3474	H	VAL	A	223	2.265	-3.329	4.211	1.00	0.00
H										
ATOM	3475	HA	VAL	A	223	0.957	-1.448	2.324	1.00	0.00
H										
ATOM	3476	HB	VAL	A	223	1.310	-0.981	5.316	1.00	0.00
H										
ATOM	3477	HG11	VAL	A	223	0.140	0.848	3.167	1.00	0.00
H										
ATOM	3478	HG12	VAL	A	223	0.138	1.179	4.914	1.00	0.00
H										
ATOM	3479	HG13	VAL	A	223	1.677	1.091	4.028	1.00	0.00
H										
ATOM	3480	HG21	VAL	A	223	-0.524	-2.494	4.856	1.00	0.00
H										
ATOM	3481	HG22	VAL	A	223	-1.141	-0.912	5.385	1.00	0.00
H										
ATOM	3482	HG23	VAL	A	223	-1.192	-1.355	3.664	1.00	0.00
H										
ATOM	3483	N	ALA	A	224	3.117	-0.288	1.983	1.00	0.00
N										
ATOM	3484	CA	ALA	A	224	4.337	0.388	1.652	1.00	0.00
C										
ATOM	3485	C	ALA	A	224	4.288	1.803	2.235	1.00	0.00
C										

ATOM	3486	O	ALA	A	224	3.344	2.511	2.052	1.00	0.00
O										
ATOM	3487	CB	ALA	A	224	4.530	0.447	0.139	1.00	0.00
C										
ATOM	3488	H	ALA	A	224	2.335	-0.182	1.345	1.00	0.00
H										
ATOM	3489	HA	ALA	A	224	5.173	-0.150	2.096	1.00	0.00
H										
ATOM	3490	HB1	ALA	A	224	3.697	0.984	-0.313	1.00	0.00
H										
ATOM	3491	HB2	ALA	A	224	5.461	0.964	-0.088	1.00	0.00
H										
ATOM	3492	HB3	ALA	A	224	4.569	-0.565	-0.262	1.00	0.00
H										
ATOM	3493	N	VAL	A	225	5.324	2.223	2.933	1.00	0.00
N										
ATOM	3494	CA	VAL	A	225	5.436	3.630	3.295	1.00	0.00
C										
ATOM	3495	C	VAL	A	225	6.716	4.298	2.751	1.00	0.00
C										
ATOM	3496	O	VAL	A	225	7.724	3.670	2.581	1.00	0.00
O										
ATOM	3497	CB	VAL	A	225	5.027	3.867	4.848	1.00	0.00
C										
ATOM	3498	CG1	VAL	A	225	4.819	2.613	5.580	1.00	0.00
C										
ATOM	3499	CG2	VAL	A	225	5.760	4.947	5.584	1.00	0.00
C										
ATOM	3500	H	VAL	A	225	6.044	1.567	3.218	1.00	0.00
H										
ATOM	3501	HA	VAL	A	225	4.633	4.109	2.737	1.00	0.00
H										
ATOM	3502	HB	VAL	A	225	4.018	4.271	4.772	1.00	0.00
H										
ATOM	3503	HG11	VAL	A	225	5.737	2.027	5.564	1.00	0.00
H										
ATOM	3504	HG12	VAL	A	225	4.548	2.835	6.611	1.00	0.00
H										
ATOM	3505	HG13	VAL	A	225	4.018	2.046	5.108	1.00	0.00
H										
ATOM	3506	HG21	VAL	A	225	5.594	5.902	5.087	1.00	0.00
H										
ATOM	3507	HG22	VAL	A	225	5.393	5.002	6.608	1.00	0.00
H										
ATOM	3508	HG23	VAL	A	225	6.825	4.722	5.592	1.00	0.00
H										
ATOM	3509	N	LEU	A	226	6.592	5.561	2.395	1.00	0.00
N										
ATOM	3510	CA	LEU	A	226	7.622	6.287	1.730	1.00	0.00
C										
ATOM	3511	C	LEU	A	226	7.680	7.678	2.332	1.00	0.00
C										
ATOM	3512	O	LEU	A	226	6.636	8.348	2.457	1.00	0.00
O										
ATOM	3513	CB	LEU	A	226	7.291	6.382	0.259	1.00	0.00
C										

ATOM	3514	CG	LEU	A	226	8.274	7.012	-0.749	1.00	0.00
C										
ATOM	3515	CD1	LEU	A	226	9.671	6.370	-0.841	1.00	0.00
C										
ATOM	3516	CD2	LEU	A	226	7.587	6.995	-2.087	1.00	0.00
C										
ATOM	3517	H	LEU	A	226	5.722	6.039	2.604	1.00	0.00
H										
ATOM	3518	HA	LEU	A	226	8.578	5.784	1.864	1.00	0.00
H										
ATOM	3519	HB2	LEU	A	226	6.369	6.956	0.188	1.00	0.00
H										
ATOM	3520	HB3	LEU	A	226	7.112	5.364	-0.082	1.00	0.00
H										
ATOM	3521	HG	LEU	A	226	8.411	8.054	-0.465	1.00	0.00
H										
ATOM	3522	HD11	LEU	A	226	9.572	5.326	-1.135	1.00	0.00
H										
ATOM	3523	HD12	LEU	A	226	10.267	6.901	-1.582	1.00	0.00
H										
ATOM	3524	HD13	LEU	A	226	10.162	6.429	0.129	1.00	0.00
H										
ATOM	3525	HD21	LEU	A	226	6.666	7.573	-2.030	1.00	0.00
H										
ATOM	3526	HD22	LEU	A	226	8.244	7.432	-2.838	1.00	0.00
H										
ATOM	3527	HD23	LEU	A	226	7.354	5.968	-2.362	1.00	0.00
H										
ATOM	3528	N	GLY	A	227	8.892	8.110	2.717	1.00	0.00
N										
ATOM	3529	CA	GLY	A	227	9.086	9.465	3.208	1.00	0.00
C										
ATOM	3530	C	GLY	A	227	10.097	9.519	4.324	1.00	0.00
C										
ATOM	3531	O	GLY	A	227	10.702	8.514	4.703	1.00	0.00
O										
ATOM	3532	H	GLY	A	227	9.686	7.480	2.664	1.00	0.00
H										
ATOM	3533	HA2	GLY	A	227	8.135	9.846	3.576	1.00	0.00
H										
ATOM	3534	HA3	GLY	A	227	9.434	10.091	2.387	1.00	0.00
H										
ATOM	3535	N	ASN	A	228	10.267	10.704	4.886	1.00	0.00
N										
ATOM	3536	CA	ASN	A	228	11.167	10.882	6.001	1.00	0.00
C										
ATOM	3537	C	ASN	A	228	10.348	11.397	7.161	1.00	0.00
C										
ATOM	3538	O	ASN	A	228	9.939	10.616	7.985	1.00	0.00
O										
ATOM	3539	CB	ASN	A	228	12.366	11.824	5.654	1.00	0.00
C										
ATOM	3540	CG	ASN	A	228	13.424	11.162	4.702	1.00	0.00
C										
ATOM	3541	OD1	ASN	A	228	13.646	9.944	4.718	1.00	0.00
O										

ATOM	3542	ND2	ASN	A	228	14.056	11.988	3.864	1.00	0.00
N										
ATOM	3543	H	ASN	A	228	9.755	11.504	4.527	1.00	0.00
H										
ATOM	3544	HA	ASN	A	228	11.568	9.907	6.274	1.00	0.00
H										
ATOM	3545	HB2	ASN	A	228	12.864	12.105	6.581	1.00	0.00
H										
ATOM	3546	HB3	ASN	A	228	11.975	12.716	5.168	1.00	0.00
H										
ATOM	3547	HD21	ASN	A	228	14.753	11.624	3.222	1.00	0.00
H										
ATOM	3548	HD22	ASN	A	228	13.840	12.980	3.870	1.00	0.00
H										
ATOM	3549	N	ASP	A	229	10.081	12.698	7.210	1.00	0.00
N										
ATOM	3550	CA	ASP	A	229	9.338	13.287	8.330	1.00	0.00
C										
ATOM	3551	C	ASP	A	229	7.828	13.341	8.112	1.00	0.00
C										
ATOM	3552	O	ASP	A	229	7.103	13.450	9.055	1.00	0.00
O										
ATOM	3553	CB	ASP	A	229	9.822	14.699	8.581	1.00	0.00
C										
ATOM	3554	CG	ASP	A	229	11.250	14.745	9.001	1.00	0.00
C										
ATOM	3555	OD1	ASP	A	229	11.727	13.760	9.615	1.00	0.00
O										
ATOM	3556	OD2	ASP	A	229	11.872	15.775	8.741	1.00	0.00
O1-										
ATOM	3557	H	ASP	A	229	10.399	13.298	6.455	1.00	0.00
H										
ATOM	3558	HA	ASP	A	229	9.535	12.694	9.222	1.00	0.00
H										
ATOM	3559	HB2	ASP	A	229	9.212	15.143	9.367	1.00	0.00
H										
ATOM	3560	HB3	ASP	A	229	9.709	15.276	7.664	1.00	0.00
H										
ATOM	3561	N	TYR	A	230	7.383	13.281	6.871	1.00	0.00
N										
ATOM	3562	CA	TYR	A	230	5.957	13.351	6.521	1.00	0.00
C										
ATOM	3563	C	TYR	A	230	5.635	12.211	5.562	1.00	0.00
C										
ATOM	3564	O	TYR	A	230	5.272	12.432	4.414	1.00	0.00
O										
ATOM	3565	CB	TYR	A	230	5.640	14.744	5.921	1.00	0.00
C										
ATOM	3566	CG	TYR	A	230	6.152	15.874	6.859	1.00	0.00
C										
ATOM	3567	CD1	TYR	A	230	7.374	16.490	6.627	1.00	0.00
C										
ATOM	3568	CD2	TYR	A	230	5.455	16.225	8.023	1.00	0.00
C										
ATOM	3569	CE1	TYR	A	230	7.869	17.505	7.473	1.00	0.00
C										

ATOM	3570	CE2	TYR	A	230	5.936	17.249	8.884	1.00	0.00
C										
ATOM	3571	CZ	TYR	A	230	7.156	17.866	8.605	1.00	0.00
C										
ATOM	3572	OH	TYR	A	230	7.697	18.850	9.430	1.00	0.00
O										
ATOM	3573	H	TYR	A	230	8.059	13.182	6.121	1.00	0.00
H										
ATOM	3574	HA	TYR	A	230	5.369	13.220	7.428	1.00	0.00
H										
ATOM	3575	HB2	TYR	A	230	4.563	14.843	5.796	1.00	0.00
H										
ATOM	3576	HB3	TYR	A	230	6.128	14.836	4.952	1.00	0.00
H										
ATOM	3577	HD1	TYR	A	230	7.968	16.182	5.768	1.00	0.00
H										
ATOM	3578	HD2	TYR	A	230	4.531	15.706	8.272	1.00	0.00
H										
ATOM	3579	HE1	TYR	A	230	8.808	18.003	7.237	1.00	0.00
H										
ATOM	3580	HE2	TYR	A	230	5.356	17.550	9.755	1.00	0.00
H										
ATOM	3581	HH	TYR	A	230	7.806	19.692	8.914	1.00	0.00
H										
ATOM	3582	N	PRO	A	231	5.767	10.974	6.047	1.00	0.00
N										
ATOM	3583	CA	PRO	A	231	5.608	9.792	5.212	1.00	0.00
C										
ATOM	3584	C	PRO	A	231	4.161	9.508	4.787	1.00	0.00
C										
ATOM	3585	O	PRO	A	231	3.199	9.964	5.422	1.00	0.00
O										
ATOM	3586	CB	PRO	A	231	6.156	8.677	6.123	1.00	0.00
C										
ATOM	3587	CG	PRO	A	231	5.738	9.105	7.457	1.00	0.00
C										
ATOM	3588	CD	PRO	A	231	6.086	10.585	7.440	1.00	0.00
C										
ATOM	3589	HA	PRO	A	231	6.237	9.883	4.328	1.00	0.00
H										
ATOM	3590	HB2	PRO	A	231	7.241	8.614	6.055	1.00	0.00
H										
ATOM	3591	HB3	PRO	A	231	5.720	7.713	5.867	1.00	0.00
H										
ATOM	3592	HG2	PRO	A	231	6.291	8.578	8.233	1.00	0.00
H										
ATOM	3593	HG3	PRO	A	231	4.670	8.952	7.605	1.00	0.00
H										
ATOM	3594	HD2	PRO	A	231	5.478	11.140	8.153	1.00	0.00
H										
ATOM	3595	HD3	PRO	A	231	7.140	10.744	7.661	1.00	0.00
H										
ATOM	3596	N	GLU	A	232	4.010	8.741	3.713	1.00	0.00
N										
ATOM	3597	CA	GLU	A	232	2.698	8.446	3.151	1.00	0.00
C										



ATOM	3598	C	GLU	A	232	2.648	6.954	2.982	1.00	0.00
C										
ATOM	3599	O	GLU	A	232	3.671	6.335	2.723	1.00	0.00
O										
ATOM	3600	CB	GLU	A	232	2.481	9.119	1.786	1.00	0.00
C										
ATOM	3601	CG	GLU	A	232	2.548	10.649	1.780	1.00	0.00
C										
ATOM	3602	CD	GLU	A	232	1.343	11.340	2.453	1.00	0.00
C										
ATOM	3603	OE1	GLU	A	232	0.245	10.727	2.461	1.00	0.00
O										
ATOM	3604	OE2	GLU	A	232	1.505	12.481	2.981	1.00	0.00
O1-										
ATOM	3605	H	GLU	A	232	4.834	8.348	3.270	1.00	0.00
H										
ATOM	3606	HA	GLU	A	232	1.921	8.764	3.845	1.00	0.00
H										
ATOM	3607	HB2	GLU	A	232	1.498	8.826	1.421	1.00	0.00
H										
ATOM	3608	HB3	GLU	A	232	3.246	8.748	1.105	1.00	0.00
H										
ATOM	3609	HG2	GLU	A	232	2.599	10.984	0.745	1.00	0.00
H										
ATOM	3610	HG3	GLU	A	232	3.452	10.953	2.305	1.00	0.00
H										
ATOM	3611	N	ALA	A	233	1.456	6.393	3.158	1.00	0.00
N										
ATOM	3612	CA	ALA	A	233	1.244	4.964	3.173	1.00	0.00
C										
ATOM	3613	C	ALA	A	233	0.364	4.659	2.008	1.00	0.00
C										
ATOM	3614	O	ALA	A	233	-0.533	5.435	1.705	1.00	0.00
O										
ATOM	3615	CB	ALA	A	233	0.593	4.511	4.427	1.00	0.00
C										
ATOM	3616	H	ALA	A	233	0.653	7.000	3.289	1.00	0.00
H										
ATOM	3617	HA	ALA	A	233	2.198	4.453	3.053	1.00	0.00
H										
ATOM	3618	HB1	ALA	A	233	-0.375	4.999	4.530	1.00	0.00
H										
ATOM	3619	HB2	ALA	A	233	0.453	3.432	4.394	1.00	0.00
H										
ATOM	3620	HB3	ALA	A	233	1.222	4.770	5.277	1.00	0.00
H										
ATOM	3621	N	THR	A	234	0.656	3.553	1.333	1.00	0.00
N										
ATOM	3622	CA	THR	A	234	-0.155	3.094	0.216	1.00	0.00
C										
ATOM	3623	C	THR	A	234	-1.413	2.366	0.711	1.00	0.00
C										
ATOM	3624	O	THR	A	234	-1.520	2.015	1.884	1.00	0.00
O										
ATOM	3625	CB	THR	A	234	0.627	2.108	-0.631	1.00	0.00
C										

ATOM	3626	OG1	THR	A	234	0.791	0.895	0.119	1.00	0.00
O										
ATOM	3627	CG2	THR	A	234	1.982	2.692	-1.008	1.00	0.00
C										
ATOM	3628	H	THR	A	234	1.470	3.011	1.605	1.00	0.00
H										
ATOM	3629	HA	THR	A	234	-0.446	3.947	-0.396	1.00	0.00
H										
ATOM	3630	HB	THR	A	234	0.066	1.893	-1.539	1.00	0.00
H										
ATOM	3631	HG21	THR	A	234	2.548	2.910	-0.103	1.00	0.00
H										
ATOM	3632	HG22	THR	A	234	2.531	1.974	-1.615	1.00	0.00
H										
ATOM	3633	HG23	THR	A	234	1.837	3.610	-1.575	1.00	0.00
H										
ATOM	3634	HG1	THR	A	234	-0.101	0.519	0.340	1.00	0.00
H										
ATOM	3635	N	TRP	A	235	-2.373	2.132	-0.181	1.00	0.00
N										
ATOM	3636	CA	TRP	A	235	-3.439	1.218	0.150	1.00	0.00
C										
ATOM	3637	C	TRP	A	235	-2.774	-0.135	0.310	1.00	0.00
C										
ATOM	3638	O	TRP	A	235	-1.710	-0.397	-0.321	1.00	0.00
O										
ATOM	3639	CB	TRP	A	235	-4.472	1.145	-0.970	1.00	0.00
C										
ATOM	3640	CG	TRP	A	235	-5.244	2.381	-1.148	1.00	0.00
C										
ATOM	3641	CD1	TRP	A	235	-5.174	3.262	-2.198	1.00	0.00
C										
ATOM	3642	CD2	TRP	A	235	-6.193	2.900	-0.246	1.00	0.00
C										
ATOM	3643	NE1	TRP	A	235	-6.050	4.286	-2.003	1.00	0.00
N										
ATOM	3644	CE2	TRP	A	235	-6.691	4.097	-0.809	1.00	0.00
C										
ATOM	3645	CE3	TRP	A	235	-6.726	2.445	0.965	1.00	0.00
C										
ATOM	3646	CZ2	TRP	A	235	-7.666	4.863	-0.192	1.00	0.00
C										
ATOM	3647	CZ3	TRP	A	235	-7.693	3.221	1.589	1.00	0.00
C										
ATOM	3648	CH2	TRP	A	235	-8.156	4.416	0.998	1.00	0.00
C										
ATOM	3649	H	TRP	A	235	-2.355	2.592	-1.085	1.00	0.00
H										
ATOM	3650	HA	TRP	A	235	-3.915	1.517	1.083	1.00	0.00
H										
ATOM	3651	HB2	TRP	A	235	-5.166	0.337	-0.744	1.00	0.00
H										
ATOM	3652	HB3	TRP	A	235	-3.953	0.928	-1.902	1.00	0.00
H										
ATOM	3653	HD1	TRP	A	235	-4.516	3.158	-3.059	1.00	0.00
H										

ATOM	3654	HE1	TRP	A	235	-6.203	5.062	-2.639	1.00	0.00
H										
ATOM	3655	HE3	TRP	A	235	-6.391	1.507	1.406	1.00	0.00
H										
ATOM	3656	HZ2	TRP	A	235	-8.027	5.787	-0.641	1.00	0.00
H										
ATOM	3657	HZ3	TRP	A	235	-8.100	2.903	2.548	1.00	0.00
H										
ATOM	3658	HH2	TRP	A	235	-8.925	4.996	1.506	1.00	0.00
H										
ATOM	3659	N	PRO	A	236	-3.385	-1.018	1.118	1.00	0.00
N										
ATOM	3660	CA	PRO	A	236	-2.715	-2.294	1.308	1.00	0.00
C										
ATOM	3661	C	PRO	A	236	-2.870	-3.225	0.109	1.00	0.00
C										
ATOM	3662	O	PRO	A	236	-3.735	-3.014	-0.728	1.00	0.00
O										
ATOM	3663	CB	PRO	A	236	-3.340	-2.836	2.583	1.00	0.00
C										
ATOM	3664	CG	PRO	A	236	-4.672	-2.299	2.569	1.00	0.00
C										
ATOM	3665	CD	PRO	A	236	-4.624	-0.952	1.898	1.00	0.00
C										
ATOM	3666	HA	PRO	A	236	-1.655	-2.115	1.482	1.00	0.00
H										
ATOM	3667	HB2	PRO	A	236	-2.793	-2.492	3.459	1.00	0.00
H										
ATOM	3668	HB3	PRO	A	236	-3.361	-3.925	2.572	1.00	0.00
H										
ATOM	3669	HG2	PRO	A	236	-5.038	-2.191	3.589	1.00	0.00
H										
ATOM	3670	HG3	PRO	A	236	-5.333	-2.964	2.015	1.00	0.00
H										
ATOM	3671	HD2	PRO	A	236	-5.487	-0.806	1.250	1.00	0.00
H										
ATOM	3672	HD3	PRO	A	236	-4.582	-0.150	2.633	1.00	0.00
H										
ATOM	3673	N	GLY	A	237	-1.973	-4.218	0.064	1.00	0.00
N										
ATOM	3674	CA	GLY	A	237	-1.907	-5.256	-0.923	1.00	0.00
C										
ATOM	3675	C	GLY	A	237	-1.749	-6.615	-0.276	1.00	0.00
C										
ATOM	3676	O	GLY	A	237	-1.407	-6.774	0.926	1.00	0.00
O										
ATOM	3677	H	GLY	A	237	-1.273	-4.238	0.799	1.00	0.00
H										
ATOM	3678	HA2	GLY	A	237	-1.055	-5.072	-1.576	1.00	0.00
H										
ATOM	3679	HA3	GLY	A	237	-2.824	-5.247	-1.511	1.00	0.00
H										
ATOM	3680	N	GLU	A	238	-2.001	-7.631	-1.088	1.00	0.00
N										
ATOM	3681	CA	GLU	A	238	-1.963	-8.997	-0.631	1.00	0.00
C										

ATOM	3682	C	GLU	A	238	-1.432	-9.948	-1.741	1.00	0.00
C										
ATOM	3683	O	GLU	A	238	-1.647	-9.707	-2.940	1.00	0.00
O										
ATOM	3684	CB	GLU	A	238	-3.372	-9.349	-0.246	1.00	0.00
C										
ATOM	3685	CG	GLU	A	238	-3.496	-10.618	0.458	1.00	0.00
C										
ATOM	3686	CD	GLU	A	238	-4.950	-10.948	0.812	1.00	0.00
C										
ATOM	3687	OE1	GLU	A	238	-5.098	-11.972	1.494	1.00	0.00
O										
ATOM	3688	OE2	GLU	A	238	-5.902	-10.227	0.397	1.00	0.00
O1-										
ATOM	3689	H	GLU	A	238	-2.227	-7.442	-2.059	1.00	0.00
H										
ATOM	3690	HA	GLU	A	238	-1.320	-9.068	0.245	1.00	0.00
H										
ATOM	3691	HB2	GLU	A	238	-3.972	-9.401	-1.154	1.00	0.00
H										
ATOM	3692	HB3	GLU	A	238	-3.758	-8.561	0.399	1.00	0.00
H										
ATOM	3693	HG2	GLU	A	238	-2.915	-10.567	1.378	1.00	0.00
H										
ATOM	3694	HG3	GLU	A	238	-3.102	-11.411	-0.177	1.00	0.00
H										
ATOM	3695	N	VAL	A	239	-0.752	-11.021	-1.335	1.00	0.00
N										
ATOM	3696	CA	VAL	A	239	-0.361	-12.087	-2.281	1.00	0.00
C										
ATOM	3697	C	VAL	A	239	-1.614	-12.938	-2.466	1.00	0.00
C										
ATOM	3698	O	VAL	A	239	-2.273	-13.308	-1.482	1.00	0.00
O										
ATOM	3699	CB	VAL	A	239	0.890	-12.924	-1.831	1.00	0.00
C										
ATOM	3700	CG1	VAL	A	239	1.000	-14.271	-2.632	1.00	0.00
C										
ATOM	3701	CG2	VAL	A	239	2.176	-12.107	-2.045	1.00	0.00
C										
ATOM	3702	H	VAL	A	239	-0.498	-11.108	-0.356	1.00	0.00
H										
ATOM	3703	HA	VAL	A	239	-0.127	-11.620	-3.237	1.00	0.00
H										
ATOM	3704	HB	VAL	A	239	0.794	-13.154	-0.771	1.00	0.00
H										
ATOM	3705	HG11	VAL	A	239	1.095	-14.055	-3.695	1.00	0.00
H										
ATOM	3706	HG12	VAL	A	239	1.876	-14.824	-2.295	1.00	0.00
H										
ATOM	3707	HG13	VAL	A	239	0.106	-14.869	-2.461	1.00	0.00
H										
ATOM	3708	HG21	VAL	A	239	2.127	-11.192	-1.456	1.00	0.00
H										
ATOM	3709	HG22	VAL	A	239	3.037	-12.696	-1.730	1.00	0.00
H										

ATOM	3710	HG23	VAL	A	239	2.275	-11.855	-3.100	1.00	0.00
H										
ATOM	3711	N	VAL	A	240	-2.020	-13.145	-3.718	1.00	0.00
N										
ATOM	3712	CA	VAL	A	240	-3.232	-13.922	-3.962	1.00	0.00
C										
ATOM	3713	C	VAL	A	240	-2.922	-15.399	-3.627	1.00	0.00
C										
ATOM	3714	O	VAL	A	240	-1.930	-15.959	-4.127	1.00	0.00
O										
ATOM	3715	CB	VAL	A	240	-3.783	-13.694	-5.408	1.00	0.00
C										
ATOM	3716	CG1	VAL	A	240	-4.853	-14.668	-5.729	1.00	0.00
C										
ATOM	3717	CG2	VAL	A	240	-4.292	-12.225	-5.533	1.00	0.00
C										
ATOM	3718	H	VAL	A	240	-1.491	-12.766	-4.496	1.00	0.00
H										
ATOM	3719	HA	VAL	A	240	-3.991	-13.578	-3.262	1.00	0.00
H										
ATOM	3720	HB	VAL	A	240	-2.966	-13.836	-6.114	1.00	0.00
H										
ATOM	3721	HG11	VAL	A	240	-5.673	-14.554	-5.021	1.00	0.00
H										
ATOM	3722	HG12	VAL	A	240	-5.218	-14.487	-6.739	1.00	0.00
H										
ATOM	3723	HG13	VAL	A	240	-4.455	-15.680	-5.663	1.00	0.00
H										
ATOM	3724	HG21	VAL	A	240	-3.469	-11.538	-5.341	1.00	0.00
H										
ATOM	3725	HG22	VAL	A	240	-4.677	-12.059	-6.538	1.00	0.00
H										
ATOM	3726	HG23	VAL	A	240	-5.085	-12.053	-4.807	1.00	0.00
H										
ATOM	3727	N	LYS	A	241	-3.738	-15.969	-2.734	1.00	0.00
N										
ATOM	3728	CA	LYS	A	241	-3.593	-17.328	-2.192	1.00	0.00
C										
ATOM	3729	C	LYS	A	241	-4.950	-17.715	-1.577	1.00	0.00
C										
ATOM	3730	O	LYS	A	241	-5.443	-16.987	-0.696	1.00	0.00
O										
ATOM	3731	CB	LYS	A	241	-2.578	-17.368	-1.052	1.00	0.00
C										
ATOM	3732	CG	LYS	A	241	-1.144	-17.816	-1.377	1.00	0.00
C										
ATOM	3733	CD	LYS	A	241	-0.229	-17.602	-0.121	1.00	0.00
C										
ATOM	3734	CE	LYS	A	241	1.144	-18.345	-0.205	1.00	0.00
C										
ATOM	3735	NZ	LYS	A	241	2.415	-17.488	-0.291	1.00	0.00
N1+										
ATOM	3736	H	LYS	A	241	-4.523	-15.418	-2.403	1.00	0.00
H										
ATOM	3737	HA	LYS	A	241	-3.315	-18.028	-2.979	1.00	0.00
H										

ATOM	3738	HB2	LYS	A	241	-2.967	-18.050	-0.296	1.00	0.00
H										
ATOM	3739	HB3	LYS	A	241	-2.517	-16.363	-0.637	1.00	0.00
H										
ATOM	3740	HG2	LYS	A	241	-0.760	-17.228	-2.209	1.00	0.00
H										
ATOM	3741	HG3	LYS	A	241	-1.146	-18.871	-1.648	1.00	0.00
H										
ATOM	3742	HD2	LYS	A	241	-0.762	-17.964	0.757	1.00	0.00
H										
ATOM	3743	HD3	LYS	A	241	-0.036	-16.536	-0.015	1.00	0.00
H										
ATOM	3744	HE2	LYS	A	241	1.118	-18.978	-1.091	1.00	0.00
H										
ATOM	3745	HE3	LYS	A	241	1.232	-18.969	0.684	1.00	0.00
H										
ATOM	3746	HZ1	LYS	A	241	2.482	-16.898	0.532	1.00	0.00
H										
ATOM	3747	HZ2	LYS	A	241	3.228	-18.093	-0.340	1.00	0.00
H										
ATOM	3748	HZ3	LYS	A	241	2.376	-16.907	-1.122	1.00	0.00
H										
ATOM	3749	N	ASP	A	242	-5.530	-18.857	-1.965	1.00	0.00
N										
ATOM	3750	CA	ASP	A	242	-6.790	-19.293	-1.321	1.00	0.00
C										
ATOM	3751	C	ASP	A	242	-6.542	-19.821	0.117	1.00	0.00
C										
ATOM	3752	O	ASP	A	242	-7.463	-19.814	0.932	1.00	0.00
O										
ATOM	3753	CB	ASP	A	242	-7.560	-20.342	-2.152	1.00	0.00
C										
ATOM	3754	CG	ASP	A	242	-8.216	-19.768	-3.413	1.00	0.00
C										
ATOM	3755	OD1	ASP	A	242	-8.417	-18.565	-3.507	1.00	0.00
O										
ATOM	3756	OD2	ASP	A	242	-8.543	-20.520	-4.347	1.00	0.00
O1-										
ATOM	3757	H	ASP	A	242	-5.109	-19.421	-2.696	1.00	0.00
H										
ATOM	3758	HA	ASP	A	242	-7.430	-18.416	-1.237	1.00	0.00
H										
ATOM	3759	HB2	ASP	A	242	-8.339	-20.773	-1.525	1.00	0.00
H										
ATOM	3760	HB3	ASP	A	242	-6.862	-21.123	-2.452	1.00	0.00
H										
ATOM	3761	N	VAL	A	243	-5.323	-20.280	0.424	1.00	0.00
N										
ATOM	3762	CA	VAL	A	243	-5.009	-20.845	1.752	1.00	0.00
C										
ATOM	3763	C	VAL	A	243	-3.776	-20.159	2.387	1.00	0.00
C										
ATOM	3764	O	VAL	A	243	-2.788	-19.904	1.680	1.00	0.00
O										
ATOM	3765	CB	VAL	A	243	-4.702	-22.381	1.674	1.00	0.00
C										

ATOM	3766	CG1	VAL	A	243	-4.856	-23.027	3.063	1.00	0.00
C										
ATOM	3767	CG2	VAL	A	243	-5.560	-23.075	0.616	1.00	0.00
C										
ATOM	3768	H	VAL	A	243	-4.591	-20.239	-0.278	1.00	0.00
H										
ATOM	3769	HA	VAL	A	243	-5.867	-20.695	2.406	1.00	0.00
H										
ATOM	3770	HB	VAL	A	243	-3.661	-22.492	1.375	1.00	0.00
H										
ATOM	3771	HG11	VAL	A	243	-5.876	-22.886	3.418	1.00	0.00
H										
ATOM	3772	HG12	VAL	A	243	-4.640	-24.093	2.994	1.00	0.00
H										
ATOM	3773	HG13	VAL	A	243	-4.161	-22.561	3.760	1.00	0.00
H										
ATOM	3774	HG21	VAL	A	243	-5.360	-22.636	-0.360	1.00	0.00
H										
ATOM	3775	HG22	VAL	A	243	-5.319	-24.137	0.592	1.00	0.00
H										
ATOM	3776	HG23	VAL	A	243	-6.613	-22.948	0.862	1.00	0.00
H										
ATOM	3777	N	ALA	A	244	-3.816	-19.944	3.717	1.00	0.00
N										
ATOM	3778	CA	ALA	A	244	-2.829	-19.092	4.436	1.00	0.00
C										
ATOM	3779	C	ALA	A	244	-1.615	-19.794	5.053	1.00	0.00
C										
ATOM	3780	O	ALA	A	244	-0.650	-19.109	5.409	1.00	0.00
O										
ATOM	3781	CB	ALA	A	244	-3.546	-18.240	5.557	1.00	0.00
C										
ATOM	3782	H	ALA	A	244	-4.556	-20.385	4.255	1.00	0.00
H										
ATOM	3783	HA	ALA	A	244	-2.441	-18.383	3.707	1.00	0.00
H										
ATOM	3784	HB1	ALA	A	244	-4.023	-18.909	6.272	1.00	0.00
H										
ATOM	3785	HB2	ALA	A	244	-2.810	-17.624	6.071	1.00	0.00
H										
ATOM	3786	HB3	ALA	A	244	-4.300	-17.600	5.100	1.00	0.00
H										
ATOM	3787	N	PHE	A	245	-1.661	-21.123	5.220	1.00	0.00
N										
ATOM	3788	CA	PHE	A	245	-0.562	-21.859	5.908	1.00	0.00
C										
ATOM	3789	C	PHE	A	245	0.802	-21.132	5.942	1.00	0.00
C										
ATOM	3790	O	PHE	A	245	1.765	-21.466	5.242	1.00	0.00
O										
ATOM	3791	CB	PHE	A	245	-0.422	-23.308	5.412	1.00	0.00
C										
ATOM	3792	CG	PHE	A	245	0.014	-23.465	3.949	1.00	0.00
C										
ATOM	3793	CD1	PHE	A	245	1.345	-23.760	3.626	1.00	0.00
C										

ATOM	3794	CD2	PHE	A	245	-0.917	-23.398	2.904	1.00	0.00
C										
ATOM	3795	CE1	PHE	A	245	1.741	-23.944	2.287	1.00	0.00
C										
ATOM	3796	CE2	PHE	A	245	-0.526	-23.581	1.552	1.00	0.00
C										
ATOM	3797	CZ	PHE	A	245	0.786	-23.866	1.247	1.00	0.00
C										
ATOM	3798	H	PHE	A	245	-2.462	-21.640	4.870	1.00	0.00
H										
ATOM	3799	HA	PHE	A	245	-0.874	-21.939	6.948	1.00	0.00
H										
ATOM	3800	HC	PHE	A	245	0.920	-20.285	6.615	1.00	0.00
H										
ATOM	3801	HB2	PHE	A	245	-1.388	-23.798	5.529	1.00	0.00
H										
ATOM	3802	HB3	PHE	A	245	0.316	-23.808	6.038	1.00	0.00
H										
ATOM	3803	HD1	PHE	A	245	2.083	-23.849	4.421	1.00	0.00
H										
ATOM	3804	HD2	PHE	A	245	-1.963	-23.202	3.134	1.00	0.00
H										
ATOM	3805	HE1	PHE	A	245	2.785	-24.145	2.052	1.00	0.00
H										
ATOM	3806	HE2	PHE	A	245	-1.264	-23.496	0.756	1.00	0.00
H										
ATOM	3807	HZ	PHE	A	245	1.086	-24.031	0.213	1.00	0.00
H										
ATOM	3808	N	VAL	A	257	4.585	-14.566	-9.176	1.00	0.00
N										
ATOM	3809	CA	VAL	A	257	3.726	-14.465	-7.972	1.00	0.00
C										
ATOM	3810	C	VAL	A	257	2.725	-13.320	-8.034	1.00	0.00
C										
ATOM	3811	O	VAL	A	257	3.105	-12.131	-7.968	1.00	0.00
O										
ATOM	3812	CB	VAL	A	257	4.545	-14.292	-6.665	1.00	0.00
C										
ATOM	3813	CG1	VAL	A	257	3.607	-14.496	-5.457	1.00	0.00
C										
ATOM	3814	CG2	VAL	A	257	5.707	-15.292	-6.611	1.00	0.00
C										
ATOM	3815	H1	VAL	A	257	5.114	-13.707	-9.288	1.00	0.00
H										
ATOM	3816	H2	VAL	A	257	5.226	-15.346	-9.070	1.00	0.00
H										
ATOM	3817	HA	VAL	A	257	3.163	-15.393	-7.889	1.00	0.00
H										
ATOM	3818	HB	VAL	A	257	4.948	-13.281	-6.632	1.00	0.00
H										
ATOM	3819	HG11	VAL	A	257	3.180	-15.497	-5.494	1.00	0.00
H										
ATOM	3820	HG12	VAL	A	257	4.173	-14.377	-4.534	1.00	0.00
H										
ATOM	3821	HG13	VAL	A	257	2.807	-13.759	-5.490	1.00	0.00
H										



ATOM	3822	HG21	VAL	A	257	6.367	-15.129	-7.462	1.00	0.00
H										
ATOM	3823	HG22	VAL	A	257	6.265	-15.151	-5.686	1.00	0.00
H										
ATOM	3824	HG23	VAL	A	257	5.315	-16.307	-6.646	1.00	0.00
H										
ATOM	3825	N	GLN	A	258	1.446	-13.691	-8.064	1.00	0.00
N										
ATOM	3826	CA	GLN	A	258	0.336	-12.757	-8.203	1.00	0.00
C										
ATOM	3827	C	GLN	A	258	-0.050	-12.031	-6.908	1.00	0.00
C										
ATOM	3828	O	GLN	A	258	-0.055	-12.573	-5.820	1.00	0.00
O										
ATOM	3829	CB	GLN	A	258	-0.876	-13.494	-8.802	1.00	0.00
C										
ATOM	3830	CG	GLN	A	258	-1.970	-12.598	-9.390	1.00	0.00
C										
ATOM	3831	CD	GLN	A	258	-3.201	-13.406	-9.821	1.00	0.00
C										
ATOM	3832	OE1	GLN	A	258	-3.070	-14.507	-10.366	1.00	0.00
O										
ATOM	3833	NE2	GLN	A	258	-4.401	-12.858	-9.585	1.00	0.00
N										
ATOM	3834	H	GLN	A	258	1.233	-14.680	-7.986	1.00	0.00
H										
ATOM	3835	HA	GLN	A	258	0.641	-11.998	-8.922	1.00	0.00
H										
ATOM	3836	HB2	GLN	A	258	-1.324	-14.098	-8.014	1.00	0.00
H										
ATOM	3837	HB3	GLN	A	258	-0.513	-14.146	-9.596	1.00	0.00
H										
ATOM	3838	HG2	GLN	A	258	-1.569	-12.077	-10.258	1.00	0.00
H										
ATOM	3839	HG3	GLN	A	258	-2.272	-11.871	-8.637	1.00	0.00
H										
ATOM	3840	HE21	GLN	A	258	-5.246	-13.353	-9.851	1.00	0.00
H										
ATOM	3841	HE22	GLN	A	258	-4.465	-11.948	-9.140	1.00	0.00
H										
ATOM	3842	N	LEU	A	259	-0.386	-10.766	-7.086	1.00	0.00
N										
ATOM	3843	CA	LEU	A	259	-0.658	-9.818	-6.028	1.00	0.00
C										
ATOM	3844	C	LEU	A	259	-2.026	-9.241	-6.306	1.00	0.00
C										
ATOM	3845	O	LEU	A	259	-2.382	-9.069	-7.495	1.00	0.00
O										
ATOM	3846	CB	LEU	A	259	0.351	-8.677	-6.105	1.00	0.00
C										
ATOM	3847	CG	LEU	A	259	1.774	-8.779	-5.516	1.00	0.00
C										
ATOM	3848	CD1	LEU	A	259	2.141	-10.176	-5.042	1.00	0.00
C										
ATOM	3849	CD2	LEU	A	259	2.817	-8.215	-6.489	1.00	0.00
C										

ATOM	3850	H	LEU	A	259	-0.459	-10.433	-8.042	1.00	0.00
H										
ATOM	3851	HA	LEU	A	259	-0.628	-10.302	-5.053	1.00	0.00
H										
ATOM	3852	HB2	LEU	A	259	-0.118	-7.827	-5.613	1.00	0.00
H										
ATOM	3853	HB3	LEU	A	259	0.479	-8.459	-7.164	1.00	0.00
H										
ATOM	3854	HG	LEU	A	259	1.792	-8.138	-4.636	1.00	0.00
H										
ATOM	3855	HD11	LEU	A	259	2.087	-10.870	-5.880	1.00	0.00
H										
ATOM	3856	HD12	LEU	A	259	3.154	-10.169	-4.641	1.00	0.00
H										
ATOM	3857	HD13	LEU	A	259	1.446	-10.490	-4.265	1.00	0.00
H										
ATOM	3858	HD21	LEU	A	259	2.598	-7.167	-6.689	1.00	0.00
H										
ATOM	3859	HD22	LEU	A	259	3.809	-8.300	-6.047	1.00	0.00
H										
ATOM	3860	HD23	LEU	A	259	2.785	-8.777	-7.421	1.00	0.00
H										
ATOM	3861	N	GLN	A	260	-2.753	-8.920	-5.227	1.00	0.00
N										
ATOM	3862	CA	GLN	A	260	-3.998	-8.181	-5.285	1.00	0.00
C										
ATOM	3863	C	GLN	A	260	-3.815	-6.887	-4.538	1.00	0.00
C										
ATOM	3864	O	GLN	A	260	-3.611	-6.868	-3.326	1.00	0.00
O										
ATOM	3865	CB	GLN	A	260	-5.159	-8.993	-4.713	1.00	0.00
C										
ATOM	3866	CG	GLN	A	260	-6.540	-8.273	-4.633	1.00	0.00
C										
ATOM	3867	CD	GLN	A	260	-7.054	-7.646	-5.931	1.00	0.00
C										
ATOM	3868	OE1	GLN	A	260	-6.946	-8.238	-7.019	1.00	0.00
O										
ATOM	3869	NE2	GLN	A	260	-7.681	-6.451	-5.808	1.00	0.00
N										
ATOM	3870	H	GLN	A	260	-2.412	-9.211	-4.316	1.00	0.00
H										
ATOM	3871	HA	GLN	A	260	-4.216	-7.952	-6.327	1.00	0.00
H										
ATOM	3872	HB2	GLN	A	260	-4.885	-9.296	-3.704	1.00	0.00
H										
ATOM	3873	HB3	GLN	A	260	-5.283	-9.877	-5.336	1.00	0.00
H										
ATOM	3874	HG2	GLN	A	260	-6.458	-7.480	-3.891	1.00	0.00
H										
ATOM	3875	HG3	GLN	A	260	-7.277	-9.004	-4.303	1.00	0.00
H										
ATOM	3876	HE21	GLN	A	260	-8.046	-5.982	-6.631	1.00	0.00
H										
ATOM	3877	HE22	GLN	A	260	-7.786	-6.025	-4.893	1.00	0.00
H										

ATOM	3878	N	ILE	A	261	-3.803	-5.822	-5.323	1.00	0.00
N										
ATOM	3879	CA	ILE	A	261	-3.540	-4.487	-4.913	1.00	0.00
C										
ATOM	3880	C	ILE	A	261	-4.581	-3.616	-5.611	1.00	0.00
C										
ATOM	3881	O	ILE	A	261	-4.601	-3.546	-6.844	1.00	0.00
O										
ATOM	3882	CB	ILE	A	261	-2.174	-4.008	-5.379	1.00	0.00
C										
ATOM	3883	CG1	ILE	A	261	-1.051	-4.805	-4.714	1.00	0.00
C										
ATOM	3884	CG2	ILE	A	261	-2.044	-2.565	-5.032	1.00	0.00
C										
ATOM	3885	CD1	ILE	A	261	0.420	-4.511	-5.275	1.00	0.00
C										
ATOM	3886	H	ILE	A	261	-3.999	-5.972	-6.307	1.00	0.00
H										
ATOM	3887	HA	ILE	A	261	-3.628	-4.395	-3.832	1.00	0.00
H										
ATOM	3888	HB	ILE	A	261	-2.103	-4.124	-6.460	1.00	0.00
H										
ATOM	3889	HG12	ILE	A	261	-1.260	-5.864	-4.856	1.00	0.00
H										
ATOM	3890	HG13	ILE	A	261	-1.058	-4.573	-3.650	1.00	0.00
H										
ATOM	3891	HG21	ILE	A	261	-2.136	-2.441	-3.954	1.00	0.00
H										
ATOM	3892	HG22	ILE	A	261	-1.071	-2.200	-5.357	1.00	0.00
H										
ATOM	3893	HG23	ILE	A	261	-2.829	-2.000	-5.531	1.00	0.00
H										
ATOM	3894	HD11	ILE	A	261	0.660	-3.459	-5.131	1.00	0.00
H										
ATOM	3895	HD12	ILE	A	261	1.143	-5.125	-4.739	1.00	0.00
H										
ATOM	3896	HD13	ILE	A	261	0.458	-4.750	-6.337	1.00	0.00
H										
ATOM	3897	N	PRO	A	262	-5.448	-2.940	-4.847	1.00	0.00
N										
ATOM	3898	CA	PRO	A	262	-5.551	-2.919	-3.382	1.00	0.00
C										
ATOM	3899	C	PRO	A	262	-6.027	-4.262	-2.804	1.00	0.00
C										
ATOM	3900	O	PRO	A	262	-6.643	-5.009	-3.504	1.00	0.00
O										
ATOM	3901	CB	PRO	A	262	-6.557	-1.799	-3.120	1.00	0.00
C										
ATOM	3902	CG	PRO	A	262	-7.369	-1.713	-4.365	1.00	0.00
C										
ATOM	3903	CD	PRO	A	262	-6.428	-2.039	-5.495	1.00	0.00
C										
ATOM	3904	HA	PRO	A	262	-4.587	-2.655	-2.950	1.00	0.00
H										
ATOM	3905	HB2	PRO	A	262	-6.042	-0.858	-2.933	1.00	0.00
H										

ATOM	3906	HB3	PRO	A	262	-7.189	-2.043	-2.267	1.00	0.00
H										
ATOM	3907	HG2	PRO	A	262	-7.772	-0.709	-4.486	1.00	0.00
H										
ATOM	3908	HG3	PRO	A	262	-8.187	-2.431	-4.334	1.00	0.00
H										
ATOM	3909	HD2	PRO	A	262	-6.949	-2.543	-6.308	1.00	0.00
H										
ATOM	3910	HD3	PRO	A	262	-5.945	-1.141	-5.876	1.00	0.00
H										
ATOM	3911	N	ALA	A	263	-5.729	-4.579	-1.551	1.00	0.00
N										
ATOM	3912	CA	ALA	A	263	-6.191	-5.858	-1.009	1.00	0.00
C										
ATOM	3913	C	ALA	A	263	-7.721	-5.881	-0.895	1.00	0.00
C										
ATOM	3914	O	ALA	A	263	-8.326	-4.843	-0.790	1.00	0.00
O										
ATOM	3915	CB	ALA	A	263	-5.584	-6.149	0.329	1.00	0.00
C										
ATOM	3916	H	ALA	A	263	-5.187	-3.943	-0.975	1.00	0.00
H										
ATOM	3917	HA	ALA	A	263	-5.890	-6.647	-1.697	1.00	0.00
H										
ATOM	3918	HB1	ALA	A	263	-5.858	-5.362	1.031	1.00	0.00
H										
ATOM	3919	HB2	ALA	A	263	-5.953	-7.106	0.695	1.00	0.00
H										
ATOM	3920	HB3	ALA	A	263	-4.500	-6.190	0.235	1.00	0.00
H										
ATOM	3921	N	ASP	A	264	-8.294	-7.086	-0.836	1.00	0.00
N										
ATOM	3922	CA	ASP	A	264	-9.733	-7.295	-0.795	1.00	0.00
C										
ATOM	3923	C	ASP	A	264	-10.175	-7.238	0.645	1.00	0.00
C										
ATOM	3924	O	ASP	A	264	-10.354	-8.246	1.337	1.00	0.00
O										
ATOM	3925	CB	ASP	A	264	-10.034	-8.652	-1.404	1.00	0.00
C										
ATOM	3926	CG	ASP	A	264	-11.517	-8.950	-1.515	1.00	0.00
C										
ATOM	3927	OD1	ASP	A	264	-12.372	-8.002	-1.410	1.00	0.00
O										
ATOM	3928	OD2	ASP	A	264	-11.794	-10.175	-1.734	1.00	0.00
O1-										
ATOM	3929	H	ASP	A	264	-7.691	-7.902	-0.819	1.00	0.00
H										
ATOM	3930	HA	ASP	A	264	-10.235	-6.515	-1.366	1.00	0.00
H										
ATOM	3931	HB2	ASP	A	264	-9.574	-9.419	-0.782	1.00	0.00
H										
ATOM	3932	HB3	ASP	A	264	-9.600	-8.686	-2.402	1.00	0.00
H										
ATOM	3933	N	LEU	A	265	-10.324	-6.017	1.105	1.00	0.00
N										

ATOM	3934	CA	LEU	A	265	-10.607	-5.748	2.482	1.00	0.00
C										
ATOM	3935	C	LEU	A	265	-11.517	-4.598	2.445	1.00	0.00
C										
ATOM	3936	O	LEU	A	265	-11.446	-3.804	1.525	1.00	0.00
O										
ATOM	3937	CB	LEU	A	265	-9.356	-5.283	3.229	1.00	0.00
C										
ATOM	3938	CG	LEU	A	265	-8.229	-6.283	3.469	1.00	0.00
C										
ATOM	3939	CD1	LEU	A	265	-7.018	-5.510	3.939	1.00	0.00
C										
ATOM	3940	CD2	LEU	A	265	-8.633	-7.402	4.479	1.00	0.00
C										
ATOM	3941	H	LEU	A	265	-10.236	-5.237	0.462	1.00	0.00
H										
ATOM	3942	HA	LEU	A	265	-11.068	-6.606	2.970	1.00	0.00
H										
ATOM	3943	HB2	LEU	A	265	-9.681	-4.926	4.205	1.00	0.00
H										
ATOM	3944	HB3	LEU	A	265	-8.934	-4.455	2.662	1.00	0.00
H										
ATOM	3945	HG	LEU	A	265	-7.984	-6.755	2.518	1.00	0.00
H										
ATOM	3946	HD11	LEU	A	265	-7.259	-4.984	4.861	1.00	0.00
H										
ATOM	3947	HD12	LEU	A	265	-6.195	-6.200	4.119	1.00	0.00
H										
ATOM	3948	HD13	LEU	A	265	-6.728	-4.790	3.175	1.00	0.00
H										
ATOM	3949	HD21	LEU	A	265	-9.492	-7.949	4.091	1.00	0.00
H										
ATOM	3950	HD22	LEU	A	265	-7.798	-8.087	4.615	1.00	0.00
H										
ATOM	3951	HD23	LEU	A	265	-8.893	-6.951	5.436	1.00	0.00
H										
ATOM	3952	N	ASP	A	266	-12.319	-4.516	3.504	1.00	0.00
N										
ATOM	3953	CA	ASP	A	266	-13.125	-3.374	3.896	1.00	0.00
C										
ATOM	3954	C	ASP	A	266	-12.277	-2.119	3.847	1.00	0.00
C										
ATOM	3955	O	ASP	A	266	-11.118	-2.119	4.292	1.00	0.00
O										
ATOM	3956	CB	ASP	A	266	-13.553	-3.543	5.359	1.00	0.00
C										
ATOM	3957	CG	ASP	A	266	-13.634	-5.040	5.816	1.00	0.00
C										
ATOM	3958	OD1	ASP	A	266	-12.675	-5.882	5.497	1.00	0.00
O										
ATOM	3959	OD2	ASP	A	266	-14.666	-5.349	6.503	1.00	0.00
O1-										
ATOM	3960	H	ASP	A	266	-12.372	-5.337	4.099	1.00	0.00
H										
ATOM	3961	HA	ASP	A	266	-13.995	-3.276	3.249	1.00	0.00
H										

ATOM	3962	HB2	ASP	A	266	-14.535	-3.090	5.486	1.00	0.00
H										
ATOM	3963	HB3	ASP	A	266	-12.831	-3.028	5.991	1.00	0.00
H										
ATOM	3964	N	GLU	A	267	-12.883	-1.063	3.349	1.00	0.00
N										
ATOM	3965	CA	GLU	A	267	-12.273	0.253	3.257	1.00	0.00
C										
ATOM	3966	C	GLU	A	267	-11.711	0.698	4.575	1.00	0.00
C										
ATOM	3967	O	GLU	A	267	-10.621	1.261	4.642	1.00	0.00
O										
ATOM	3968	CB	GLU	A	267	-13.360	1.256	2.808	1.00	0.00
C										
ATOM	3969	CG	GLU	A	267	-13.047	2.742	3.005	1.00	0.00
C										
ATOM	3970	CD	GLU	A	267	-12.227	3.281	1.864	1.00	0.00
C										
ATOM	3971	OE1	GLU	A	267	-11.197	2.644	1.558	1.00	0.00
O										
ATOM	3972	OE2	GLU	A	267	-12.637	4.312	1.268	1.00	0.00
O1-										
ATOM	3973	H	GLU	A	267	-13.832	-1.174	3.009	1.00	0.00
H										
ATOM	3974	HA	GLU	A	267	-11.476	0.230	2.515	1.00	0.00
H										
ATOM	3975	HB2	GLU	A	267	-14.266	1.033	3.368	1.00	0.00
H										
ATOM	3976	HB3	GLU	A	267	-13.540	1.095	1.746	1.00	0.00
H										
ATOM	3977	HG2	GLU	A	267	-12.490	2.868	3.933	1.00	0.00
H										
ATOM	3978	HG3	GLU	A	267	-13.982	3.297	3.064	1.00	0.00
H										
ATOM	3979	N	ASP	A	268	-12.482	0.494	5.625	1.00	0.00
N										
ATOM	3980	CA	ASP	A	268	-12.122	0.962	6.940	1.00	0.00
C										
ATOM	3981	C	ASP	A	268	-10.905	0.173	7.478	1.00	0.00
C										
ATOM	3982	O	ASP	A	268	-10.041	0.729	8.173	1.00	0.00
O										
ATOM	3983	CB	ASP	A	268	-13.325	0.836	7.851	1.00	0.00
C										
ATOM	3984	CG	ASP	A	268	-13.111	1.491	9.204	1.00	0.00
C										
ATOM	3985	OD1	ASP	A	268	-12.988	2.746	9.235	1.00	0.00
O										
ATOM	3986	OD2	ASP	A	268	-13.083	0.756	10.225	1.00	0.00
O1-										
ATOM	3987	H	ASP	A	268	-13.355	-0.008	5.504	1.00	0.00
H										
ATOM	3988	HA	ASP	A	268	-11.849	2.014	6.870	1.00	0.00
H										
ATOM	3989	HB2	ASP	A	268	-13.534	-0.221	8.006	1.00	0.00
H										

ATOM	3990	HB3	ASP	A	268	-14.178	1.308	7.367	1.00	0.00
H										
ATOM	3991	N	VAL	A	269	-10.826	-1.108	7.128	1.00	0.00
N										
ATOM	3992	CA	VAL	A	269	-9.707	-1.947	7.522	1.00	0.00
C										
ATOM	3993	C	VAL	A	269	-8.518	-1.463	6.769	1.00	0.00
C										
ATOM	3994	O	VAL	A	269	-7.431	-1.357	7.340	1.00	0.00
O										
ATOM	3995	CB	VAL	A	269	-9.965	-3.451	7.296	1.00	0.00
C										
ATOM	3996	CG1	VAL	A	269	-8.681	-4.301	7.483	1.00	0.00
C										
ATOM	3997	CG2	VAL	A	269	-11.016	-3.928	8.225	1.00	0.00
C										
ATOM	3998	H	VAL	A	269	-11.570	-1.512	6.568	1.00	0.00
H										
ATOM	3999	HA	VAL	A	269	-9.522	-1.790	8.584	1.00	0.00
H										
ATOM	4000	HB	VAL	A	269	-10.321	-3.588	6.276	1.00	0.00
H										
ATOM	4001	HG11	VAL	A	269	-8.304	-4.171	8.496	1.00	0.00
H										
ATOM	4002	HG12	VAL	A	269	-8.913	-5.351	7.314	1.00	0.00
H										
ATOM	4003	HG13	VAL	A	269	-7.924	-3.977	6.770	1.00	0.00
H										
ATOM	4004	HG21	VAL	A	269	-11.937	-3.375	8.046	1.00	0.00
H										
ATOM	4005	HG22	VAL	A	269	-11.192	-4.990	8.059	1.00	0.00
H										
ATOM	4006	HG23	VAL	A	269	-10.691	-3.770	9.252	1.00	0.00
H										
ATOM	4007	N	GLN	A	270	-8.726	-1.089	5.508	1.00	0.00
N										
ATOM	4008	CA	GLN	A	270	-7.627	-0.514	4.737	1.00	0.00
C										
ATOM	4009	C	GLN	A	270	-7.104	0.772	5.323	1.00	0.00
C										
ATOM	4010	O	GLN	A	270	-5.902	0.934	5.448	1.00	0.00
O										
ATOM	4011	CB	GLN	A	270	-8.028	-0.281	3.273	1.00	0.00
C										
ATOM	4012	CG	GLN	A	270	-8.286	-1.598	2.545	1.00	0.00
C										
ATOM	4013	CD	GLN	A	270	-8.419	-1.415	1.072	1.00	0.00
C										
ATOM	4014	OE1	GLN	A	270	-7.611	-0.752	0.473	1.00	0.00
O										
ATOM	4015	NE2	GLN	A	270	-9.450	-2.018	0.473	1.00	0.00
N										
ATOM	4016	H	GLN	A	270	-9.641	-1.203	5.085	1.00	0.00
H										
ATOM	4017	HA	GLN	A	270	-6.810	-1.234	4.743	1.00	0.00
H										

ATOM	4018	HB2	GLN	A	270	-7.224	0.251	2.767	1.00	0.00
H										
ATOM	4019	HB3	GLN	A	270	-8.935	0.321	3.246	1.00	0.00
H										
ATOM	4020	HG2	GLN	A	270	-9.207	-2.035	2.928	1.00	0.00
H										
ATOM	4021	HG3	GLN	A	270	-7.455	-2.274	2.740	1.00	0.00
H										
ATOM	4022	HE21	GLN	A	270	-9.582	-1.922	-0.529	1.00	0.00
H										
ATOM	4023	HE22	GLN	A	270	-10.102	-2.572	1.020	1.00	0.00
H										
ATOM	4024	N	LEU	A	271	-7.981	1.702	5.628	1.00	0.00
N										
ATOM	4025	CA	LEU	A	271	-7.569	2.968	6.236	1.00	0.00
C										
ATOM	4026	C	LEU	A	271	-6.821	2.726	7.556	1.00	0.00
C										
ATOM	4027	O	LEU	A	271	-5.792	3.357	7.833	1.00	0.00
O										
ATOM	4028	CB	LEU	A	271	-8.771	3.867	6.492	1.00	0.00
C										
ATOM	4029	CG	LEU	A	271	-9.409	4.543	5.264	1.00	0.00
C										
ATOM	4030	CD1	LEU	A	271	-10.727	5.211	5.639	1.00	0.00
C										
ATOM	4031	CD2	LEU	A	271	-8.451	5.533	4.548	1.00	0.00
C										
ATOM	4032	H	LEU	A	271	-8.965	1.539	5.438	1.00	0.00
H										
ATOM	4033	HA	LEU	A	271	-6.898	3.479	5.547	1.00	0.00
H										
ATOM	4034	HB2	LEU	A	271	-8.454	4.655	7.174	1.00	0.00
H										
ATOM	4035	HB3	LEU	A	271	-9.540	3.261	6.970	1.00	0.00
H										
ATOM	4036	HG	LEU	A	271	-9.643	3.754	4.551	1.00	0.00
H										
ATOM	4037	HD11	LEU	A	271	-10.546	5.967	6.402	1.00	0.00
H										
ATOM	4038	HD12	LEU	A	271	-11.159	5.682	4.757	1.00	0.00
H										
ATOM	4039	HD13	LEU	A	271	-11.416	4.462	6.025	1.00	0.00
H										
ATOM	4040	HD21	LEU	A	271	-7.565	4.999	4.208	1.00	0.00
H										
ATOM	4041	HD22	LEU	A	271	-8.960	5.975	3.692	1.00	0.00
H										
ATOM	4042	HD23	LEU	A	271	-8.158	6.320	5.242	1.00	0.00
H										
ATOM	4043	N	THR	A	272	-7.346	1.821	8.374	1.00	0.00
N										
ATOM	4044	CA	THR	A	272	-6.729	1.496	9.672	1.00	0.00
C										
ATOM	4045	C	THR	A	272	-5.327	0.984	9.471	1.00	0.00
C										



ATOM	4046	O	THR	A	272	-4.420	1.384	10.203	1.00	0.00
O										
ATOM	4047	CB	THR	A	272	-7.532	0.427	10.386	1.00	0.00
C										
ATOM	4048	OG1	THR	A	272	-8.853	0.924	10.561	1.00	0.00
O										
ATOM	4049	CG2	THR	A	272	-6.928	-0.001	11.743	1.00	0.00
C										
ATOM	4050	H	THR	A	272	-8.197	1.341	8.098	1.00	0.00
H										
ATOM	4051	HA	THR	A	272	-6.697	2.393	10.289	1.00	0.00
H										
ATOM	4052	HB	THR	A	272	-7.580	-0.450	9.742	1.00	0.00
H										
ATOM	4053	HG21	THR	A	272	-6.875	0.862	12.405	1.00	0.00
H										
ATOM	4054	HG22	THR	A	272	-7.556	-0.767	12.194	1.00	0.00
H										
ATOM	4055	HG23	THR	A	272	-5.926	-0.399	11.585	1.00	0.00
H										
ATOM	4056	HG1	THR	A	272	-9.252	1.121	9.674	1.00	0.00
H										
ATOM	4057	N	LEU	A	273	-5.142	0.121	8.463	1.00	0.00
N										
ATOM	4058	CA	LEU	A	273	-3.807	-0.407	8.142	1.00	0.00
C										
ATOM	4059	C	LEU	A	273	-2.838	0.669	7.648	1.00	0.00
C										
ATOM	4060	O	LEU	A	273	-1.652	0.720	8.045	1.00	0.00
O										
ATOM	4061	CB	LEU	A	273	-3.938	-1.563	7.134	1.00	0.00
C										
ATOM	4062	CG	LEU	A	273	-4.488	-2.909	7.648	1.00	0.00
C										
ATOM	4063	CD1	LEU	A	273	-4.735	-3.792	6.423	1.00	0.00
C										
ATOM	4064	CD2	LEU	A	273	-3.547	-3.676	8.590	1.00	0.00
C										
ATOM	4065	H	LEU	A	273	-5.940	-0.175	7.909	1.00	0.00
H										
ATOM	4066	HA	LEU	A	273	-3.393	-0.821	9.060	1.00	0.00
H										
ATOM	4067	HB2	LEU	A	273	-2.946	-1.752	6.727	1.00	0.00
H										
ATOM	4068	HB3	LEU	A	273	-4.599	-1.225	6.337	1.00	0.00
H										
ATOM	4069	HG	LEU	A	273	-5.435	-2.735	8.157	1.00	0.00
H										
ATOM	4070	HD11	LEU	A	273	-3.799	-3.940	5.887	1.00	0.00
H										
ATOM	4071	HD12	LEU	A	273	-5.126	-4.757	6.744	1.00	0.00
H										
ATOM	4072	HD13	LEU	A	273	-5.457	-3.308	5.766	1.00	0.00
H										
ATOM	4073	HD21	LEU	A	273	-3.339	-3.068	9.469	1.00	0.00
H										

ATOM	4074	HD22	LEU	A	273	-4.021	-4.607	8.897	1.00	0.00
H										
ATOM	4075	HD23	LEU	A	273	-2.615	-3.897	8.072	1.00	0.00
H										
ATOM	4076	N	ARG	A	274	-3.342	1.567	6.817	1.00	0.00
N										
ATOM	4077	CA	ARG	A	274	-2.548	2.693	6.384	1.00	0.00
C										
ATOM	4078	C	ARG	A	274	-2.062	3.482	7.571	1.00	0.00
C										
ATOM	4079	O	ARG	A	274	-0.914	3.764	7.671	1.00	0.00
O										
ATOM	4080	CB	ARG	A	274	-3.313	3.617	5.444	1.00	0.00
C										
ATOM	4081	CG	ARG	A	274	-3.530	3.007	4.106	1.00	0.00
C										
ATOM	4082	CD	ARG	A	274	-4.296	3.974	3.190	1.00	0.00
C										
ATOM	4083	NE	ARG	A	274	-3.450	5.016	2.584	1.00	0.00
N1+										
ATOM	4084	CZ	ARG	A	274	-3.931	5.970	1.792	1.00	0.00
C1+										
ATOM	4085	NH1	ARG	A	274	-5.229	6.046	1.565	1.00	0.00
N1+										
ATOM	4086	NH2	ARG	A	274	-3.126	6.863	1.237	1.00	0.00
N1+										
ATOM	4087	H	ARG	A	274	-4.295	1.464	6.481	1.00	0.00
H										
ATOM	4088	HA	ARG	A	274	-1.679	2.311	5.851	1.00	0.00
H										
ATOM	4089	HB2	ARG	A	274	-2.746	4.539	5.321	1.00	0.00
H										
ATOM	4090	HB3	ARG	A	274	-4.282	3.843	5.887	1.00	0.00
H										
ATOM	4091	HG2	ARG	A	274	-4.106	2.090	4.220	1.00	0.00
H										
ATOM	4092	HG3	ARG	A	274	-2.565	2.777	3.657	1.00	0.00
H										
ATOM	4093	HD2	ARG	A	274	-5.073	4.461	3.778	1.00	0.00
H										
ATOM	4094	HD3	ARG	A	274	-4.756	3.397	2.389	1.00	0.00
H										
ATOM	4095	HE2	ARG	A	274	-2.454	5.006	2.780	1.00	0.00
H										
ATOM	4096	HE3	ARG	A	274	-3.602	5.607	3.389	1.00	0.00
H										
ATOM	4097	HH11	ARG	A	274	-5.597	6.774	0.961	1.00	0.00
H										
ATOM	4098	HH12	ARG	A	274	-5.860	5.377	1.995	1.00	0.00
H										
ATOM	4099	HH13	ARG	A	274	-5.125	5.436	0.767	1.00	0.00
H										
ATOM	4100	HH21	ARG	A	274	-3.508	7.585	0.635	1.00	0.00
H										
ATOM	4101	HH22	ARG	A	274	-2.127	6.825	1.414	1.00	0.00
H										

ATOM	4102	HH23	ARG	A	274	-3.245	7.468	2.037	1.00	0.00
H										
ATOM	4103	N	ASN	A	275	-2.940	3.831	8.487	1.00	0.00
N										
ATOM	4104	CA	ASN	A	275	-2.522	4.590	9.627	1.00	0.00
C										
ATOM	4105	C	ASN	A	275	-1.550	3.814	10.523	1.00	0.00
C										
ATOM	4106	O	ASN	A	275	-0.509	4.315	10.876	1.00	0.00
O										
ATOM	4107	CB	ASN	A	275	-3.739	5.152	10.334	1.00	0.00
C										
ATOM	4108	CG	ASN	A	275	-4.239	6.429	9.640	1.00	0.00
C										
ATOM	4109	OD1	ASN	A	275	-3.486	7.418	9.455	1.00	0.00
O										
ATOM	4110	ND2	ASN	A	275	-5.479	6.407	9.227	1.00	0.00
N										
ATOM	4111	H	ASN	A	275	-3.914	3.562	8.385	1.00	0.00
H										
ATOM	4112	HA	ASN	A	275	-1.969	5.445	9.241	1.00	0.00
H										
ATOM	4113	HB2	ASN	A	275	-3.474	5.387	11.364	1.00	0.00
H										
ATOM	4114	HB3	ASN	A	275	-4.532	4.407	10.324	1.00	0.00
H										
ATOM	4115	HD21	ASN	A	275	-5.872	7.218	8.761	1.00	0.00
H										
ATOM	4116	HD22	ASN	A	275	-6.047	5.579	9.373	1.00	0.00
H										
ATOM	4117	N	MET	A	276	-1.839	2.547	10.768	1.00	0.00
N										
ATOM	4118	CA	MET	A	276	-0.985	1.727	11.534	1.00	0.00
C										
ATOM	4119	C	MET	A	276	0.391	1.587	10.927	1.00	0.00
C										
ATOM	4120	O	MET	A	276	1.378	1.427	11.630	1.00	0.00
O										
ATOM	4121	CB	MET	A	276	-1.581	0.322	11.695	1.00	0.00
C										
ATOM	4122	CG	MET	A	276	-2.648	0.198	12.725	1.00	0.00
C										
ATOM	4123	SD	MET	A	276	-3.184	-1.526	12.793	1.00	0.00
S										
ATOM	4124	CE	MET	A	276	-4.358	-1.364	14.134	1.00	0.00
C										
ATOM	4125	H	MET	A	276	-2.698	2.155	10.395	1.00	0.00
H										
ATOM	4126	HA	MET	A	276	-0.880	2.171	12.523	1.00	0.00
H										
ATOM	4127	HB2	MET	A	276	-0.774	-0.357	11.964	1.00	0.00
H										
ATOM	4128	HB3	MET	A	276	-2.003	0.024	10.736	1.00	0.00
H										
ATOM	4129	HG2	MET	A	276	-3.491	0.834	12.459	1.00	0.00
H										

ATOM	4130	HG3	MET	A	276	-2.259	0.500	13.696	1.00	0.00
H										
ATOM	4131	HE1	MET	A	276	-5.133	-0.653	13.853	1.00	0.00
H										
ATOM	4132	HE2	MET	A	276	-4.810	-2.333	14.339	1.00	0.00
H										
ATOM	4133	HE3	MET	A	276	-3.844	-1.007	15.025	1.00	0.00
H										
ATOM	4134	N	ALA	A	277	0.449	1.552	9.608	1.00	0.00
N										
ATOM	4135	CA	ALA	A	277	1.760	1.503	8.915	1.00	0.00
C										
ATOM	4136	C	ALA	A	277	2.630	2.760	9.179	1.00	0.00
C										
ATOM	4137	O	ALA	A	277	3.822	2.686	9.414	1.00	0.00
O										
ATOM	4138	CB	ALA	A	277	1.553	1.255	7.412	1.00	0.00
C										
ATOM	4139	H	ALA	A	277	-0.409	1.559	9.065	1.00	0.00
H										
ATOM	4140	HA	ALA	A	277	2.302	0.646	9.312	1.00	0.00
H										
ATOM	4141	HB1	ALA	A	277	0.955	2.062	6.990	1.00	0.00
H										
ATOM	4142	HB2	ALA	A	277	2.520	1.221	6.913	1.00	0.00
H										
ATOM	4143	HB3	ALA	A	277	1.037	0.307	7.268	1.00	0.00
H										
ATOM	4144	N	LEU	A	278	2.005	3.912	9.149	1.00	0.00
N										
ATOM	4145	CA	LEU	A	278	2.681	5.185	9.445	1.00	0.00
C										
ATOM	4146	C	LEU	A	278	3.187	5.123	10.845	1.00	0.00
C										
ATOM	4147	O	LEU	A	278	4.311	5.495	11.071	1.00	0.00
O										
ATOM	4148	CB	LEU	A	278	1.707	6.349	9.341	1.00	0.00
C										
ATOM	4149	CG	LEU	A	278	1.215	6.534	7.910	1.00	0.00
C										
ATOM	4150	CD1	LEU	A	278	0.216	7.742	7.858	1.00	0.00
C										
ATOM	4151	CD2	LEU	A	278	2.425	6.834	7.063	1.00	0.00
C										
ATOM	4152	H	LEU	A	278	1.018	3.926	8.913	1.00	0.00
H										
ATOM	4153	HA	LEU	A	278	3.511	5.333	8.756	1.00	0.00
H										
ATOM	4154	HB2	LEU	A	278	2.207	7.261	9.665	1.00	0.00
H										
ATOM	4155	HB3	LEU	A	278	0.852	6.155	9.988	1.00	0.00
H										
ATOM	4156	HG	LEU	A	278	0.726	5.626	7.560	1.00	0.00
H										
ATOM	4157	HD11	LEU	A	278	0.723	8.647	8.189	1.00	0.00
H										

ATOM	4158	HD12	LEU	A	278	-0.138	7.877	6.837	1.00	0.00
H										
ATOM	4159	HD13	LEU	A	278	-0.631	7.541	8.512	1.00	0.00
H										
ATOM	4160	HD21	LEU	A	278	3.126	6.003	7.124	1.00	0.00
H										
ATOM	4161	HD22	LEU	A	278	2.118	6.974	6.028	1.00	0.00
H										
ATOM	4162	HD23	LEU	A	278	2.905	7.742	7.425	1.00	0.00
H										
ATOM	4163	N	GLU	A	279	2.365	4.594	11.766	1.00	0.00
N										
ATOM	4164	CA	GLU	A	279	2.755	4.417	13.143	1.00	0.00
C										
ATOM	4165	C	GLU	A	279	3.921	3.470	13.334	1.00	0.00
C										
ATOM	4166	O	GLU	A	279	4.859	3.728	14.113	1.00	0.00
O										
ATOM	4167	CB	GLU	A	279	1.533	4.043	13.965	1.00	0.00
C										
ATOM	4168	CG	GLU	A	279	0.595	5.231	14.114	1.00	0.00
C										
ATOM	4169	CD	GLU	A	279	1.162	6.287	15.043	1.00	0.00
C										
ATOM	4170	OE1	GLU	A	279	1.254	6.004	16.238	1.00	0.00
O										
ATOM	4171	OE2	GLU	A	279	1.548	7.397	14.601	1.00	0.00
O1-										
ATOM	4172	H	GLU	A	279	1.433	4.308	11.482	1.00	0.00
H										
ATOM	4173	HA	GLU	A	279	3.084	5.392	13.501	1.00	0.00
H										
ATOM	4174	HB2	GLU	A	279	1.854	3.716	14.953	1.00	0.00
H										
ATOM	4175	HB3	GLU	A	279	1.004	3.231	13.468	1.00	0.00
H										
ATOM	4176	HG2	GLU	A	279	-0.355	4.882	14.517	1.00	0.00
H										
ATOM	4177	HG3	GLU	A	279	0.431	5.676	13.133	1.00	0.00
H										
ATOM	4178	N	ALA	A	280	3.892	2.356	12.620	1.00	0.00
N										
ATOM	4179	CA	ALA	A	280	5.004	1.397	12.669	1.00	0.00
C										
ATOM	4180	C	ALA	A	280	6.317	2.030	12.102	1.00	0.00
C										
ATOM	4181	O	ALA	A	280	7.381	1.836	12.636	1.00	0.00
O										
ATOM	4182	CB	ALA	A	280	4.621	0.113	11.909	1.00	0.00
C										
ATOM	4183	H	ALA	A	280	3.089	2.161	12.030	1.00	0.00
H										
ATOM	4184	HA	ALA	A	280	5.178	1.134	13.711	1.00	0.00
H										
ATOM	4185	HB1	ALA	A	280	4.402	0.357	10.871	1.00	0.00
H										

ATOM	4186	HB2	ALA	A	280	5.449	-0.593	11.949	1.00	0.00
H										
ATOM	4187	HB3	ALA	A	280	3.741	-0.333	12.370	1.00	0.00
H										
ATOM	4188	N	PHE	A	281	6.206	2.783	11.014	1.00	0.00
N										
ATOM	4189	CA	PHE	A	281	7.338	3.541	10.440	1.00	0.00
C										
ATOM	4190	C	PHE	A	281	7.999	4.450	11.502	1.00	0.00
C										
ATOM	4191	O	PHE	A	281	9.245	4.492	11.640	1.00	0.00
O										
ATOM	4192	CB	PHE	A	281	6.797	4.352	9.291	1.00	0.00
C										
ATOM	4193	CG	PHE	A	281	7.826	5.126	8.510	1.00	0.00
C										
ATOM	4194	CD1	PHE	A	281	8.295	4.639	7.333	1.00	0.00
C										
ATOM	4195	CD2	PHE	A	281	8.204	6.402	8.910	1.00	0.00
C										
ATOM	4196	CE1	PHE	A	281	9.244	5.349	6.608	1.00	0.00
C										
ATOM	4197	CE2	PHE	A	281	9.140	7.126	8.168	1.00	0.00
C										
ATOM	4198	CZ	PHE	A	281	9.645	6.590	7.016	1.00	0.00
C										
ATOM	4199	H	PHE	A	281	5.302	2.841	10.555	1.00	0.00
H										
ATOM	4200	HA	PHE	A	281	8.080	2.840	10.061	1.00	0.00
H										
ATOM	4201	HB2	PHE	A	281	6.074	5.062	9.691	1.00	0.00
H										
ATOM	4202	HB3	PHE	A	281	6.296	3.671	8.605	1.00	0.00
H										
ATOM	4203	HD1	PHE	A	281	7.926	3.687	6.955	1.00	0.00
H										
ATOM	4204	HD2	PHE	A	281	7.768	6.840	9.807	1.00	0.00
H										
ATOM	4205	HE1	PHE	A	281	9.672	4.913	5.707	1.00	0.00
H										
ATOM	4206	HE2	PHE	A	281	9.465	8.110	8.504	1.00	0.00
H										
ATOM	4207	HZ	PHE	A	281	10.366	7.152	6.424	1.00	0.00
H										
ATOM	4208	N	LYS	A	282	7.157	5.108	12.275	1.00	0.00
N										
ATOM	4209	CA	LYS	A	282	7.632	6.052	13.270	1.00	0.00
C										
ATOM	4210	C	LYS	A	282	8.189	5.334	14.480	1.00	0.00
C										
ATOM	4211	O	LYS	A	282	9.168	5.781	15.059	1.00	0.00
O										
ATOM	4212	CB	LYS	A	282	6.503	7.022	13.708	1.00	0.00
C										
ATOM	4213	CG	LYS	A	282	6.031	7.952	12.639	1.00	0.00
C										

ATOM	4214	CD	LYS	A	282	4.578	8.524	12.990	1.00	0.00
C										
ATOM	4215	CE	LYS	A	282	4.216	9.780	12.150	1.00	0.00
C										
ATOM	4216	NZ	LYS	A	282	2.772	9.973	11.706	1.00	0.00
N1+										
ATOM	4217	H	LYS	A	282	6.159	4.952	12.172	1.00	0.00
H										
ATOM	4218	HA	LYS	A	282	8.433	6.641	12.825	1.00	0.00
H										
ATOM	4219	HB2	LYS	A	282	6.873	7.620	14.539	1.00	0.00
H										
ATOM	4220	HB3	LYS	A	282	5.653	6.427	14.039	1.00	0.00
H										
ATOM	4221	HG2	LYS	A	282	5.985	7.415	11.693	1.00	0.00
H										
ATOM	4222	HG3	LYS	A	282	6.731	8.782	12.552	1.00	0.00
H										
ATOM	4223	HD2	LYS	A	282	4.553	8.790	14.046	1.00	0.00
H										
ATOM	4224	HD3	LYS	A	282	3.840	7.748	12.794	1.00	0.00
H										
ATOM	4225	HE2	LYS	A	282	4.827	9.750	11.249	1.00	0.00
H										
ATOM	4226	HE3	LYS	A	282	4.487	10.652	12.744	1.00	0.00
H										
ATOM	4227	HZ1	LYS	A	282	2.171	10.028	12.522	1.00	0.00
H										
ATOM	4228	HZ2	LYS	A	282	2.694	10.832	11.170	1.00	0.00
H										
ATOM	4229	HZ3	LYS	A	282	2.487	9.188	11.129	1.00	0.00
H										
ATOM	4230	N	ALA	A	283	7.546	4.225	14.858	1.00	0.00
N										
ATOM	4231	CA	ALA	A	283	7.935	3.454	16.041	1.00	0.00
C										
ATOM	4232	C	ALA	A	283	9.338	2.961	15.932	1.00	0.00
C										
ATOM	4233	O	ALA	A	283	10.025	2.790	16.933	1.00	0.00
O										
ATOM	4234	CB	ALA	A	283	6.984	2.254	16.243	1.00	0.00
C										
ATOM	4235	H	ALA	A	283	6.758	3.905	14.304	1.00	0.00
H										
ATOM	4236	HA	ALA	A	283	7.863	4.102	16.914	1.00	0.00
H										
ATOM	4237	HB1	ALA	A	283	7.027	1.606	15.369	1.00	0.00
H										
ATOM	4238	HB2	ALA	A	283	7.289	1.694	17.126	1.00	0.00
H										
ATOM	4239	HB3	ALA	A	283	5.965	2.616	16.377	1.00	0.00
H										
ATOM	4240	N	THR	A	284	9.767	2.659	14.708	1.00	0.00
N										
ATOM	4241	CA	THR	A	284	11.126	2.157	14.506	1.00	0.00
C										

ATOM	4242	C	THR	A	284	11.998	3.256	13.897	1.00	0.00
C										
ATOM	4243	O	THR	A	284	13.096	3.010	13.455	1.00	0.00
O										
ATOM	4244	CB	THR	A	284	11.103	0.894	13.682	1.00	0.00
C										
ATOM	4245	OG1	THR	A	284	10.370	1.118	12.476	1.00	0.00
O										
ATOM	4246	CG2	THR	A	284	10.318	-0.227	14.502	1.00	0.00
C										
ATOM	4247	H	THR	A	284	9.148	2.778	13.912	1.00	0.00
H										
ATOM	4248	HA	THR	A	284	11.538	1.909	15.483	1.00	0.00
H										
ATOM	4249	HB	THR	A	284	12.117	0.565	13.458	1.00	0.00
H										
ATOM	4250	HG21	THR	A	284	9.301	0.110	14.696	1.00	0.00
H										
ATOM	4251	HG22	THR	A	284	10.291	-1.149	13.922	1.00	0.00
H										
ATOM	4252	HG23	THR	A	284	10.826	-0.408	15.448	1.00	0.00
H										
ATOM	4253	HG1	THR	A	284	10.804	1.843	11.954	1.00	0.00
H										
ATOM	4254	N	ASP	A	285	11.479	4.462	13.915	1.00	0.00
N										
ATOM	4255	CA	ASP	A	285	12.143	5.636	13.410	1.00	0.00
C										
ATOM	4256	C	ASP	A	285	12.781	5.438	12.040	1.00	0.00
C										
ATOM	4257	O	ASP	A	285	13.935	5.672	11.825	1.00	0.00
O										
ATOM	4258	CB	ASP	A	285	13.195	6.064	14.428	1.00	0.00
C										
ATOM	4259	CG	ASP	A	285	13.381	7.627	14.467	1.00	0.00
C										
ATOM	4260	OD1	ASP	A	285	14.497	8.053	14.744	1.00	0.00
O										
ATOM	4261	OD2	ASP	A	285	12.389	8.392	14.207	1.00	0.00
O1-										
ATOM	4262	H	ASP	A	285	10.551	4.574	14.310	1.00	0.00
H										
ATOM	4263	HA	ASP	A	285	11.406	6.434	13.329	1.00	0.00
H										
ATOM	4264	HB2	ASP	A	285	14.146	5.604	14.165	1.00	0.00
H										
ATOM	4265	HB3	ASP	A	285	12.888	5.723	15.415	1.00	0.00
H										
ATOM	4266	N	CYS	A	286	12.001	4.988	11.094	1.00	0.00
N										
ATOM	4267	CA	CYS	A	286	12.475	4.773	9.744	1.00	0.00
C										
ATOM	4268	C	CYS	A	286	12.783	6.075	9.021	1.00	0.00
C										
ATOM	4269	O	CYS	A	286	12.331	7.105	9.382	1.00	0.00
O										



ATOM	4270	CB	CYS	A	286	11.402	4.005	8.967	1.00	0.00
C										
ATOM	4271	SG	CYS	A	286	11.033	2.422	9.654	1.00	0.00
S										
ATOM	4272	H	CYS	A	286	11.031	4.783	11.313	1.00	0.00
H										
ATOM	4273	HA	CYS	A	286	13.381	4.170	9.782	1.00	0.00
H										
ATOM	4274	HB2	CYS	A	286	11.751	3.865	7.945	1.00	0.00
H										
ATOM	4275	HB3	CYS	A	286	10.490	4.599	8.961	1.00	0.00
H										
ATOM	4276	HG	CYS	A	286	10.569	2.579	10.965	1.00	0.00
H										
ATOM	4277	N	SER	A	287	13.521	5.945	7.935	1.00	0.00
N										
ATOM	4278	CA	SER	A	287	13.827	6.969	6.992	1.00	0.00
C										
ATOM	4279	C	SER	A	287	13.643	6.323	5.683	1.00	0.00
C										
ATOM	4280	O	SER	A	287	14.002	5.144	5.538	1.00	0.00
O										
ATOM	4281	CB	SER	A	287	15.305	7.303	7.085	1.00	0.00
C										
ATOM	4282	OG	SER	A	287	15.504	7.912	8.325	1.00	0.00
O										
ATOM	4283	H	SER	A	287	13.909	5.025	7.753	1.00	0.00
H										
ATOM	4284	HA	SER	A	287	13.195	7.847	7.114	1.00	0.00
H										
ATOM	4285	HB2	SER	A	287	15.587	7.984	6.283	1.00	0.00
H										
ATOM	4286	HB3	SER	A	287	15.900	6.394	7.014	1.00	0.00
H										
ATOM	4287	HG	SER	A	287	15.238	7.285	9.048	1.00	0.00
H										
ATOM	4288	N	GLY	A	288	13.120	7.083	4.730	1.00	0.00
N										
ATOM	4289	CA	GLY	A	288	13.032	6.678	3.357	1.00	0.00
C										
ATOM	4290	C	GLY	A	288	11.848	5.788	3.099	1.00	0.00
C										
ATOM	4291	O	GLY	A	288	10.965	6.127	2.350	1.00	0.00
O										
ATOM	4292	H	GLY	A	288	12.764	7.998	4.986	1.00	0.00
H										
ATOM	4293	HA2	GLY	A	288	13.940	6.138	3.092	1.00	0.00
H										
ATOM	4294	HA3	GLY	A	288	12.944	7.567	2.735	1.00	0.00
H										
ATOM	4295	N	LEU	A	289	11.809	4.620	3.713	1.00	0.00
N										
ATOM	4296	CA	LEU	A	289	10.680	3.690	3.442	1.00	0.00
C										
ATOM	4297	C	LEU	A	289	10.585	2.631	4.537	1.00	0.00
C										

ATOM	4298	O	LEU	A	289	11.536	2.408	5.283	1.00	0.00
O										
ATOM	4299	CB	LEU	A	289	10.928	2.982	2.105	1.00	0.00
C										
ATOM	4300	CG	LEU	A	289	11.975	1.834	2.041	1.00	0.00
C										
ATOM	4301	CD1	LEU	A	289	11.940	1.117	0.621	1.00	0.00
C										
ATOM	4302	CD2	LEU	A	289	13.466	2.246	2.467	1.00	0.00
C										
ATOM	4303	H	LEU	A	289	12.543	4.359	4.364	1.00	0.00
H										
ATOM	4304	HA	LEU	A	289	9.748	4.250	3.392	1.00	0.00
H										
ATOM	4305	HB2	LEU	A	289	11.247	3.744	1.395	1.00	0.00
H										
ATOM	4306	HB3	LEU	A	289	9.976	2.563	1.785	1.00	0.00
H										
ATOM	4307	HG	LEU	A	289	11.650	1.088	2.764	1.00	0.00
H										
ATOM	4308	HD11	LEU	A	289	12.167	1.843	-0.158	1.00	0.00
H										
ATOM	4309	HD12	LEU	A	289	12.680	0.318	0.599	1.00	0.00
H										
ATOM	4310	HD13	LEU	A	289	10.950	0.699	0.450	1.00	0.00
H										
ATOM	4311	HD21	LEU	A	289	13.464	2.607	3.494	1.00	0.00
H										
ATOM	4312	HD22	LEU	A	289	14.119	1.378	2.389	1.00	0.00
H										
ATOM	4313	HD23	LEU	A	289	13.828	3.033	1.807	1.00	0.00
H										
ATOM	4314	N	VAL	A	290	9.436	1.955	4.585	1.00	0.00
N										
ATOM	4315	CA	VAL	A	290	9.299	0.662	5.211	1.00	0.00
C										
ATOM	4316	C	VAL	A	290	8.127	-0.024	4.540	1.00	0.00
C										
ATOM	4317	O	VAL	A	290	7.242	0.613	3.961	1.00	0.00
O										
ATOM	4318	CB	VAL	A	290	9.103	0.747	6.766	1.00	0.00
C										
ATOM	4319	CG1	VAL	A	290	7.595	0.879	7.218	1.00	0.00
C										
ATOM	4320	CG2	VAL	A	290	9.786	-0.404	7.460	1.00	0.00
C										
ATOM	4321	H	VAL	A	290	8.615	2.372	4.159	1.00	0.00
H										
ATOM	4322	HA	VAL	A	290	10.199	0.084	5.008	1.00	0.00
H										
ATOM	4323	HB	VAL	A	290	9.608	1.654	7.095	1.00	0.00
H										
ATOM	4324	HG11	VAL	A	290	7.035	0.012	6.871	1.00	0.00
H										
ATOM	4325	HG12	VAL	A	290	7.545	0.932	8.305	1.00	0.00
H										

ATOM	4326	HG13	VAL	A	290	7.166	1.784	6.790	1.00	0.00
H										
ATOM	4327	HG21	VAL	A	290	10.852	-0.379	7.240	1.00	0.00
H										
ATOM	4328	HG22	VAL	A	290	9.635	-0.321	8.535	1.00	0.00
H										
ATOM	4329	HG23	VAL	A	290	9.364	-1.343	7.106	1.00	0.00
H										
ATOM	4330	N	ARG	A	291	8.138	-1.337	4.600	1.00	0.00
N										
ATOM	4331	CA	ARG	A	291	6.952	-2.116	4.275	1.00	0.00
C										
ATOM	4332	C	ARG	A	291	6.491	-2.655	5.584	1.00	0.00
C										
ATOM	4333	O	ARG	A	291	7.284	-3.263	6.284	1.00	0.00
O										
ATOM	4334	CB	ARG	A	291	7.278	-3.268	3.331	1.00	0.00
C										
ATOM	4335	CG	ARG	A	291	6.046	-3.826	2.656	1.00	0.00
C										
ATOM	4336	CD	ARG	A	291	6.392	-5.078	1.911	1.00	0.00
C										
ATOM	4337	NE	ARG	A	291	6.784	-6.192	2.778	1.00	0.00
N1+										
ATOM	4338	CZ	ARG	A	291	7.637	-7.148	2.418	1.00	0.00
C1+										
ATOM	4339	NH1	ARG	A	291	8.349	-7.082	1.316	1.00	0.00
N1+										
ATOM	4340	NH2	ARG	A	291	7.895	-8.112	3.247	1.00	0.00
N1+										
ATOM	4341	H	ARG	A	291	8.989	-1.816	4.878	1.00	0.00
H										
ATOM	4342	HA	ARG	A	291	6.187	-1.475	3.839	1.00	0.00
H										
ATOM	4343	HB2	ARG	A	291	7.755	-4.064	3.902	1.00	0.00
H										
ATOM	4344	HB3	ARG	A	291	7.964	-2.909	2.565	1.00	0.00
H										
ATOM	4345	HG2	ARG	A	291	5.652	-3.089	1.958	1.00	0.00
H										
ATOM	4346	HG3	ARG	A	291	5.293	-4.051	3.410	1.00	0.00
H										
ATOM	4347	HD2	ARG	A	291	7.220	-4.859	1.238	1.00	0.00
H										
ATOM	4348	HD3	ARG	A	291	5.523	-5.384	1.331	1.00	0.00
H										
ATOM	4349	HE2	ARG	A	291	6.381	-6.237	3.708	1.00	0.00
H										
ATOM	4350	HE3	ARG	A	291	7.552	-5.643	3.137	1.00	0.00
H										
ATOM	4351	HH11	ARG	A	291	8.989	-7.834	1.079	1.00	0.00
H										
ATOM	4352	HH12	ARG	A	291	8.260	-6.279	0.702	1.00	0.00
H										
ATOM	4353	HH13	ARG	A	291	7.611	-7.551	0.811	1.00	0.00
H										

ATOM	4354	HH21	ARG	A	291	8.544	-8.847	2.985	1.00	0.00
H										
ATOM	4355	HH22	ARG	A	291	7.448	-8.131	4.158	1.00	0.00
H										
ATOM	4356	HH23	ARG	A	291	8.659	-7.576	3.633	1.00	0.00
H										
ATOM	4357	N	ALA	A	292	5.230	-2.398	5.930	1.00	0.00
N										
ATOM	4358	CA	ALA	A	292	4.640	-2.896	7.167	1.00	0.00
C										
ATOM	4359	C	ALA	A	292	3.774	-4.102	6.808	1.00	0.00
C										
ATOM	4360	O	ALA	A	292	2.934	-4.002	5.921	1.00	0.00
O										
ATOM	4361	CB	ALA	A	292	3.803	-1.822	7.806	1.00	0.00
C										
ATOM	4362	H	ALA	A	292	4.659	-1.834	5.309	1.00	0.00
H										
ATOM	4363	HA	ALA	A	292	5.429	-3.202	7.852	1.00	0.00
H										
ATOM	4364	HB1	ALA	A	292	3.008	-1.527	7.123	1.00	0.00
H										
ATOM	4365	HB2	ALA	A	292	3.366	-2.203	8.728	1.00	0.00
H										
ATOM	4366	HB3	ALA	A	292	4.428	-0.959	8.029	1.00	0.00
H										
ATOM	4367	N	ASP	A	293	3.987	-5.229	7.494	1.00	0.00
N										
ATOM	4368	CA	ASP	A	293	3.381	-6.480	7.135	1.00	0.00
C										
ATOM	4369	C	ASP	A	293	2.468	-6.856	8.273	1.00	0.00
C										
ATOM	4370	O	ASP	A	293	2.933	-6.946	9.413	1.00	0.00
O										
ATOM	4371	CB	ASP	A	293	4.436	-7.574	6.965	1.00	0.00
C										
ATOM	4372	CG	ASP	A	293	5.396	-7.319	5.766	1.00	0.00
C										
ATOM	4373	OD1	ASP	A	293	5.204	-6.377	4.957	1.00	0.00
O										
ATOM	4374	OD2	ASP	A	293	6.359	-8.091	5.642	1.00	0.00
O1-										
ATOM	4375	H	ASP	A	293	4.602	-5.199	8.301	1.00	0.00
H										
ATOM	4376	HA	ASP	A	293	2.807	-6.368	6.216	1.00	0.00
H										
ATOM	4377	HB2	ASP	A	293	3.927	-8.524	6.805	1.00	0.00
H										
ATOM	4378	HB3	ASP	A	293	5.028	-7.629	7.877	1.00	0.00
H										
ATOM	4379	N	PHE	A	294	1.172	-6.996	7.981	1.00	0.00
N										
ATOM	4380	CA	PHE	A	294	0.170	-7.302	9.011	1.00	0.00
C										
ATOM	4381	C	PHE	A	294	-0.417	-8.667	8.808	1.00	0.00
C										

ATOM	4382	O	PHE	A	294	-0.397	-9.218	7.698	1.00	0.00
O										
ATOM	4383	CB	PHE	A	294	-0.980	-6.304	8.983	1.00	0.00
C										
ATOM	4384	CG	PHE	A	294	-0.538	-4.875	9.100	1.00	0.00
C										
ATOM	4385	CD1	PHE	A	294	-0.091	-4.182	7.967	1.00	0.00
C										
ATOM	4386	CD2	PHE	A	294	-0.567	-4.211	10.323	1.00	0.00
C										
ATOM	4387	CE1	PHE	A	294	0.284	-2.854	8.047	1.00	0.00
C										
ATOM	4388	CE2	PHE	A	294	-0.146	-2.919	10.428	1.00	0.00
C										
ATOM	4389	CZ	PHE	A	294	0.276	-2.217	9.273	1.00	0.00
C										
ATOM	4390	H	PHE	A	294	0.870	-6.888	7.018	1.00	0.00
H										
ATOM	4391	HA	PHE	A	294	0.646	-7.265	9.989	1.00	0.00
H										
ATOM	4392	HB2	PHE	A	294	-1.650	-6.527	9.813	1.00	0.00
H										
ATOM	4393	HB3	PHE	A	294	-1.516	-6.423	8.043	1.00	0.00
H										
ATOM	4394	HD1	PHE	A	294	-0.039	-4.697	7.009	1.00	0.00
H										
ATOM	4395	HD2	PHE	A	294	-0.931	-4.731	11.208	1.00	0.00
H										
ATOM	4396	HE1	PHE	A	294	0.583	-2.314	7.150	1.00	0.00
H										
ATOM	4397	HE2	PHE	A	294	-0.135	-2.427	11.399	1.00	0.00
H										
ATOM	4398	HZ	PHE	A	294	0.593	-1.178	9.351	1.00	0.00
H										
ATOM	4399	N	PHE	A	295	-0.968	-9.215	9.882	1.00	0.00
N										
ATOM	4400	CA	PHE	A	295	-1.834	-10.384	9.772	1.00	0.00
C										
ATOM	4401	C	PHE	A	295	-3.241	-9.821	9.899	1.00	0.00
C										
ATOM	4402	O	PHE	A	295	-3.482	-9.014	10.781	1.00	0.00
O										
ATOM	4403	CB	PHE	A	295	-1.592	-11.382	10.907	1.00	0.00
C										
ATOM	4404	CG	PHE	A	295	-0.271	-12.105	10.847	1.00	0.00
C										
ATOM	4405	CD1	PHE	A	295	0.512	-12.213	11.977	1.00	0.00
C										
ATOM	4406	CD2	PHE	A	295	0.136	-12.751	9.691	1.00	0.00
C										
ATOM	4407	CE1	PHE	A	295	1.708	-12.926	11.958	1.00	0.00
C										
ATOM	4408	CE2	PHE	A	295	1.342	-13.469	9.648	1.00	0.00
C										
ATOM	4409	CZ	PHE	A	295	2.124	-13.558	10.788	1.00	0.00
C										

ATOM	4410	H	PHE	A	295	-0.785	-8.815	10.796	1.00	0.00
H										
ATOM	4411	HA	PHE	A	295	-1.702	-10.867	8.805	1.00	0.00
H										
ATOM	4412	HB2	PHE	A	295	-2.387	-12.127	10.878	1.00	0.00
H										
ATOM	4413	HB3	PHE	A	295	-1.638	-10.839	11.850	1.00	0.00
H										
ATOM	4414	HD1	PHE	A	295	0.189	-11.733	12.900	1.00	0.00
H										
ATOM	4415	HD2	PHE	A	295	-0.490	-12.701	8.801	1.00	0.00
H										
ATOM	4416	HE1	PHE	A	295	2.318	-12.990	12.858	1.00	0.00
H										
ATOM	4417	HE2	PHE	A	295	1.660	-13.953	8.725	1.00	0.00
H										
ATOM	4418	HZ	PHE	A	295	3.057	-14.118	10.770	1.00	0.00
H										
ATOM	4419	N	VAL	A	296	-4.153	-10.213	9.022	1.00	0.00
N										
ATOM	4420	CA	VAL	A	296	-5.556	-9.841	9.202	1.00	0.00
C										
ATOM	4421	C	VAL	A	296	-6.354	-11.120	9.285	1.00	0.00
C										
ATOM	4422	O	VAL	A	296	-6.402	-11.845	8.323	1.00	0.00
O										
ATOM	4423	CB	VAL	A	296	-6.114	-8.895	8.096	1.00	0.00
C										
ATOM	4424	CG1	VAL	A	296	-7.625	-8.543	8.333	1.00	0.00
C										
ATOM	4425	CG2	VAL	A	296	-5.263	-7.618	8.009	1.00	0.00
C										
ATOM	4426	H	VAL	A	296	-3.878	-10.774	8.222	1.00	0.00
H										
ATOM	4427	HA	VAL	A	296	-5.645	-9.328	10.158	1.00	0.00
H										
ATOM	4428	HB	VAL	A	296	-6.038	-9.414	7.142	1.00	0.00
H										
ATOM	4429	HG11	VAL	A	296	-7.734	-8.044	9.295	1.00	0.00
H										
ATOM	4430	HG12	VAL	A	296	-7.972	-7.883	7.540	1.00	0.00
H										
ATOM	4431	HG13	VAL	A	296	-8.216	-9.458	8.329	1.00	0.00
H										
ATOM	4432	HG21	VAL	A	296	-4.236	-7.883	7.765	1.00	0.00
H										
ATOM	4433	HG22	VAL	A	296	-5.664	-6.967	7.234	1.00	0.00
H										
ATOM	4434	HG23	VAL	A	296	-5.287	-7.100	8.966	1.00	0.00
H										
ATOM	4435	N	THR	A	297	-6.988	-11.366	10.429	1.00	0.00
N										
ATOM	4436	CA	THR	A	297	-7.839	-12.558	10.603	1.00	0.00
C										
ATOM	4437	C	THR	A	297	-9.176	-12.460	9.851	1.00	0.00
C										

ATOM	4438	O	THR	A	297	-9.536	-11.410	9.344	1.00	0.00
O										
ATOM	4439	CB	THR	A	297	-8.170	-12.827	12.052	1.00	0.00
C										
ATOM	4440	OG1	THR	A	297	-9.161	-11.889	12.473	1.00	0.00
O										
ATOM	4441	CG2	THR	A	297	-6.903	-12.735	12.944	1.00	0.00
C										
ATOM	4442	H	THR	A	297	-6.882	-10.717	11.202	1.00	0.00
H										
ATOM	4443	HA	THR	A	297	-7.296	-13.419	10.216	1.00	0.00
H										
ATOM	4444	HB	THR	A	297	-8.582	-13.832	12.135	1.00	0.00
H										
ATOM	4445	HG21	THR	A	297	-6.475	-11.737	12.865	1.00	0.00
H										
ATOM	4446	HG22	THR	A	297	-7.173	-12.934	13.980	1.00	0.00
H										
ATOM	4447	HG23	THR	A	297	-6.171	-13.471	12.613	1.00	0.00
H										
ATOM	4448	HG1	THR	A	297	-9.975	-11.995	11.914	1.00	0.00
H										
ATOM	4449	N	GLU	A	298	-9.871	-13.587	9.773	1.00	0.00
N										
ATOM	4450	CA	GLU	A	298	-11.189	-13.681	9.138	1.00	0.00
C										
ATOM	4451	C	GLU	A	298	-12.173	-12.676	9.717	1.00	0.00
C										
ATOM	4452	O	GLU	A	298	-13.046	-12.220	9.001	1.00	0.00
O										
ATOM	4453	CB	GLU	A	298	-11.856	-15.102	9.279	1.00	0.00
C										
ATOM	4454	CG	GLU	A	298	-10.913	-16.308	9.461	1.00	0.00
C										
ATOM	4455	CD	GLU	A	298	-10.123	-16.223	10.775	1.00	0.00
C										
ATOM	4456	OE1	GLU	A	298	-10.751	-16.396	11.862	1.00	0.00
O										
ATOM	4457	OE2	GLU	A	298	-8.890	-15.954	10.696	1.00	0.00
O1-										
ATOM	4458	H	GLU	A	298	-9.469	-14.429	10.174	1.00	0.00
H										
ATOM	4459	HA	GLU	A	298	-11.070	-13.467	8.077	1.00	0.00
H										
ATOM	4460	HB2	GLU	A	298	-12.444	-15.279	8.380	1.00	0.00
H										
ATOM	4461	HB3	GLU	A	298	-12.517	-15.070	10.144	1.00	0.00
H										
ATOM	4462	HG2	GLU	A	298	-10.211	-16.335	8.629	1.00	0.00
H										
ATOM	4463	HG3	GLU	A	298	-11.506	-17.222	9.465	1.00	0.00
H										
ATOM	4464	N	ASP	A	299	-12.070	-12.397	11.018	1.00	0.00
N										
ATOM	4465	CA	ASP	A	299	-12.944	-11.426	11.676	1.00	0.00
C										

ATOM	4466	C	ASP	A	299	-12.299	-10.055	11.819	1.00	0.00
C										
ATOM	4467	O	ASP	A	299	-12.541	-9.340	12.779	1.00	0.00
O										
ATOM	4468	CB	ASP	A	299	-13.438	-11.950	13.019	1.00	0.00
C										
ATOM	4469	CG	ASP	A	299	-12.336	-12.472	13.887	1.00	0.00
C										
ATOM	4470	OD1	ASP	A	299	-12.588	-12.641	15.102	1.00	0.00
O										
ATOM	4471	OD2	ASP	A	299	-11.227	-12.745	13.366	1.00	0.00
O1-										
ATOM	4472	H	ASP	A	299	-11.363	-12.874	11.568	1.00	0.00
H										
ATOM	4473	HA	ASP	A	299	-13.819	-11.302	11.040	1.00	0.00
H										
ATOM	4474	HB2	ASP	A	299	-14.147	-12.756	12.837	1.00	0.00
H										
ATOM	4475	HB3	ASP	A	299	-13.938	-11.139	13.545	1.00	0.00
H										
ATOM	4476	N	ASN	A	300	-11.520	-9.683	10.809	1.00	0.00
N										
ATOM	4477	CA	ASN	A	300	-10.817	-8.408	10.775	1.00	0.00
C										
ATOM	4478	C	ASN	A	300	-10.007	-8.025	11.998	1.00	0.00
C										
ATOM	4479	O	ASN	A	300	-9.784	-6.847	12.219	1.00	0.00
O										
ATOM	4480	CB	ASN	A	300	-11.769	-7.258	10.454	1.00	0.00
C										
ATOM	4481	CG	ASN	A	300	-12.433	-7.415	9.125	1.00	0.00
C										
ATOM	4482	OD1	ASN	A	300	-11.951	-8.163	8.259	1.00	0.00
O										
ATOM	4483	ND2	ASN	A	300	-13.555	-6.715	8.941	1.00	0.00
N										
ATOM	4484	H	ASN	A	300	-11.409	-10.317	10.024	1.00	0.00
H										
ATOM	4485	HA	ASN	A	300	-10.113	-8.466	9.946	1.00	0.00
H										
ATOM	4486	HB2	ASN	A	300	-11.204	-6.327	10.454	1.00	0.00
H										
ATOM	4487	HB3	ASN	A	300	-12.537	-7.216	11.225	1.00	0.00
H										
ATOM	4488	HD21	ASN	A	300	-14.054	-6.778	8.059	1.00	0.00
H										
ATOM	4489	HD22	ASN	A	300	-13.909	-6.120	9.683	1.00	0.00
H										
ATOM	4490	N	GLN	A	301	-9.515	-8.975	12.780	1.00	0.00
N										
ATOM	4491	CA	GLN	A	301	-8.534	-8.555	13.783	1.00	0.00
C										
ATOM	4492	C	GLN	A	301	-7.167	-8.393	13.114	1.00	0.00
C										
ATOM	4493	O	GLN	A	301	-6.670	-9.292	12.418	1.00	0.00
O										



ATOM	4494	CB	GLN	A	301	-8.493	-9.484	14.969	1.00	0.00
C										
ATOM	4495	CG	GLN	A	301	-9.850	-9.604	15.668	1.00	0.00
C										
ATOM	4496	CD	GLN	A	301	-9.938	-10.813	16.575	1.00	0.00
C										
ATOM	4497	OE1	GLN	A	301	-8.994	-11.620	16.670	1.00	0.00
O										
ATOM	4498	NE2	GLN	A	301	-11.087	-10.969	17.242	1.00	0.00
N										
ATOM	4499	H	GLN	A	301	-9.803	-9.944	12.688	1.00	0.00
H										
ATOM	4500	HA	GLN	A	301	-8.838	-7.575	14.147	1.00	0.00
H										
ATOM	4501	HB2	GLN	A	301	-7.764	-9.105	15.684	1.00	0.00
H										
ATOM	4502	HB3	GLN	A	301	-8.187	-10.472	14.628	1.00	0.00
H										
ATOM	4503	HG2	GLN	A	301	-10.627	-9.682	14.909	1.00	0.00
H										
ATOM	4504	HG3	GLN	A	301	-10.014	-8.709	16.265	1.00	0.00
H										
ATOM	4505	HE21	GLN	A	301	-11.208	-11.760	17.866	1.00	0.00
H										
ATOM	4506	HE22	GLN	A	301	-11.838	-10.296	17.124	1.00	0.00
H										
ATOM	4507	N	ILE	A	302	-6.600	-7.206	13.336	1.00	0.00
N										
ATOM	4508	CA	ILE	A	302	-5.324	-6.774	12.764	1.00	0.00
C										
ATOM	4509	C	ILE	A	302	-4.205	-6.932	13.785	1.00	0.00
C										
ATOM	4510	O	ILE	A	302	-4.370	-6.551	14.935	1.00	0.00
O										
ATOM	4511	CB	ILE	A	302	-5.366	-5.306	12.372	1.00	0.00
C										
ATOM	4512	CG1	ILE	A	302	-6.505	-5.044	11.367	1.00	0.00
C										
ATOM	4513	CG2	ILE	A	302	-3.962	-4.841	11.805	1.00	0.00
C										
ATOM	4514	CD1	ILE	A	302	-6.763	-3.555	11.137	1.00	0.00
C										
ATOM	4515	H	ILE	A	302	-7.088	-6.557	13.945	1.00	0.00
H										
ATOM	4516	HA	ILE	A	302	-5.099	-7.377	11.885	1.00	0.00
H										
ATOM	4517	HB	ILE	A	302	-5.572	-4.726	13.270	1.00	0.00
H										
ATOM	4518	HG12	ILE	A	302	-7.417	-5.500	11.749	1.00	0.00
H										
ATOM	4519	HG13	ILE	A	302	-6.241	-5.502	10.415	1.00	0.00
H										
ATOM	4520	HG21	ILE	A	302	-3.710	-5.434	10.927	1.00	0.00
H										
ATOM	4521	HG22	ILE	A	302	-4.012	-3.789	11.530	1.00	0.00
H										

ATOM	4522	HG23	ILE	A	302	-3.197	-4.981	12.568	1.00	0.00
H										
ATOM	4523	HD11	ILE	A	302	-5.861	-3.087	10.746	1.00	0.00
H										
ATOM	4524	HD12	ILE	A	302	-7.574	-3.434	10.421	1.00	0.00
H										
ATOM	4525	HD13	ILE	A	302	-7.037	-3.084	12.080	1.00	0.00
H										
ATOM	4526	N	TYR	A	303	-3.070	-7.464	13.337	1.00	0.00
N										
ATOM	4527	CA	TYR	A	303	-1.867	-7.602	14.158	1.00	0.00
C										
ATOM	4528	C	TYR	A	303	-0.749	-7.200	13.265	1.00	0.00
C										
ATOM	4529	O	TYR	A	303	-0.661	-7.713	12.179	1.00	0.00
O										
ATOM	4530	CB	TYR	A	303	-1.634	-9.069	14.630	1.00	0.00
C										
ATOM	4531	CG	TYR	A	303	-2.763	-9.546	15.469	1.00	0.00
C										
ATOM	4532	CD1	TYR	A	303	-3.635	-10.507	15.017	1.00	0.00
C										
ATOM	4533	CD2	TYR	A	303	-2.985	-8.985	16.699	1.00	0.00
C										
ATOM	4534	CE1	TYR	A	303	-4.688	-10.921	15.805	1.00	0.00
C										
ATOM	4535	CE2	TYR	A	303	-4.021	-9.372	17.487	1.00	0.00
C										
ATOM	4536	CZ	TYR	A	303	-4.875	-10.338	17.037	1.00	0.00
C										
ATOM	4537	OH	TYR	A	303	-5.943	-10.675	17.846	1.00	0.00
O										
ATOM	4538	H	TYR	A	303	-3.037	-7.791	12.377	1.00	0.00
H										
ATOM	4539	HA	TYR	A	303	-1.921	-6.935	15.017	1.00	0.00
H										
ATOM	4540	HB2	TYR	A	303	-0.714	-9.113	15.212	1.00	0.00
H										
ATOM	4541	HB3	TYR	A	303	-1.542	-9.714	13.757	1.00	0.00
H										
ATOM	4542	HD1	TYR	A	303	-3.493	-10.945	14.030	1.00	0.00
H										
ATOM	4543	HD2	TYR	A	303	-2.311	-8.207	17.055	1.00	0.00
H										
ATOM	4544	HE1	TYR	A	303	-5.364	-11.701	15.456	1.00	0.00
H										
ATOM	4545	HE2	TYR	A	303	-4.169	-8.918	18.465	1.00	0.00
H										
ATOM	4546	HH	TYR	A	303	-5.903	-11.644	18.060	1.00	0.00
H										
ATOM	4547	N	ILE	A	304	0.086	-6.258	13.700	1.00	0.00
N										
ATOM	4548	CA	ILE	A	304	1.320	-6.003	12.970	1.00	0.00
C										
ATOM	4549	C	ILE	A	304	2.242	-7.216	13.167	1.00	0.00
C										

ATOM	4550	O	ILE	A	304	2.443	-7.654	14.292	1.00	0.00
O										
ATOM	4551	CB	ILE	A	304	1.971	-4.654	13.361	1.00	0.00
C										
ATOM	4552	CG1	ILE	A	304	2.911	-4.193	12.223	1.00	0.00
C										
ATOM	4553	CG2	ILE	A	304	2.614	-4.694	14.754	1.00	0.00
C										
ATOM	4554	CD1	ILE	A	304	3.755	-3.021	12.564	1.00	0.00
C										
ATOM	4555	H	ILE	A	304	-0.137	-5.722	14.533	1.00	0.00
H										
ATOM	4556	HA	ILE	A	304	1.069	-5.951	11.912	1.00	0.00
H										
ATOM	4557	HB	ILE	A	304	1.164	-3.924	13.412	1.00	0.00
H										
ATOM	4558	HG12	ILE	A	304	2.299	-3.933	11.360	1.00	0.00
H										
ATOM	4559	HG13	ILE	A	304	3.567	-5.023	11.966	1.00	0.00
H										
ATOM	4560	HG21	ILE	A	304	3.389	-5.459	14.774	1.00	0.00
H										
ATOM	4561	HG22	ILE	A	304	3.055	-3.724	14.978	1.00	0.00
H										
ATOM	4562	HG23	ILE	A	304	1.854	-4.928	15.498	1.00	0.00
H										
ATOM	4563	HD11	ILE	A	304	4.385	-3.264	13.418	1.00	0.00
H										
ATOM	4564	HD12	ILE	A	304	4.382	-2.765	11.711	1.00	0.00
H										
ATOM	4565	HD13	ILE	A	304	3.117	-2.174	12.812	1.00	0.00
H										
ATOM	4566	N	ASN	A	305	2.735	-7.773	12.075	1.00	0.00
N										
ATOM	4567	CA	ASN	A	305	3.671	-8.904	12.142	1.00	0.00
C										
ATOM	4568	C	ASN	A	305	5.090	-8.394	12.197	1.00	0.00
C										
ATOM	4569	O	ASN	A	305	5.828	-8.611	13.164	1.00	0.00
O										
ATOM	4570	CB	ASN	A	305	3.503	-9.841	10.946	1.00	0.00
C										
ATOM	4571	CG	ASN	A	305	4.536	-10.960	10.963	1.00	0.00
C										
ATOM	4572	OD1	ASN	A	305	4.866	-11.456	12.028	1.00	0.00
O										
ATOM	4573	ND2	ASN	A	305	5.090	-11.306	9.799	1.00	0.00
N										
ATOM	4574	H	ASN	A	305	2.460	-7.411	11.167	1.00	0.00
H										
ATOM	4575	HA	ASN	A	305	3.470	-9.466	13.053	1.00	0.00
H										
ATOM	4576	HB2	ASN	A	305	3.618	-9.267	10.028	1.00	0.00
H										
ATOM	4577	HB3	ASN	A	305	2.506	-10.279	10.977	1.00	0.00
H										

ATOM	4578	HD21	ASN	A	305	5.783	-12.047	9.767	1.00	0.00
H										
ATOM	4579	HD22	ASN	A	305	4.818	-10.828	8.946	1.00	0.00
H										
ATOM	4580	N	GLU	A	306	5.471	-7.644	11.196	1.00	0.00
N										
ATOM	4581	CA	GLU	A	306	6.704	-6.929	11.293	1.00	0.00
C										
ATOM	4582	C	GLU	A	306	6.783	-5.813	10.303	1.00	0.00
C										
ATOM	4583	O	GLU	A	306	6.006	-5.755	9.374	1.00	0.00
O										
ATOM	4584	CB	GLU	A	306	7.855	-7.903	11.024	1.00	0.00
C										
ATOM	4585	CG	GLU	A	306	7.837	-8.532	9.680	1.00	0.00
C										
ATOM	4586	CD	GLU	A	306	8.821	-9.702	9.623	1.00	0.00
C										
ATOM	4587	OE1	GLU	A	306	9.330	-10.105	10.679	1.00	0.00
O										
ATOM	4588	OE2	GLU	A	306	9.096	-10.210	8.527	1.00	0.00
O1-										
ATOM	4589	H	GLU	A	306	4.898	-7.571	10.361	1.00	0.00
H										
ATOM	4590	HA	GLU	A	306	6.805	-6.524	12.299	1.00	0.00
H										
ATOM	4591	HB2	GLU	A	306	7.809	-8.696	11.770	1.00	0.00
H										
ATOM	4592	HB3	GLU	A	306	8.792	-7.358	11.130	1.00	0.00
H										
ATOM	4593	HG2	GLU	A	306	8.118	-7.791	8.934	1.00	0.00
H										
ATOM	4594	HG3	GLU	A	306	6.833	-8.898	9.469	1.00	0.00
H										
ATOM	4595	N	THR	A	307	7.812	-4.979	10.467	1.00	0.00
N										
ATOM	4596	CA	THR	A	307	8.209	-4.074	9.432	1.00	0.00
C										
ATOM	4597	C	THR	A	307	9.399	-4.640	8.736	1.00	0.00
C										
ATOM	4598	O	THR	A	307	10.161	-5.383	9.363	1.00	0.00
O										
ATOM	4599	CB	THR	A	307	8.597	-2.676	9.960	1.00	0.00
C										
ATOM	4600	OG1	THR	A	307	9.427	-2.831	11.103	1.00	0.00
O										
ATOM	4601	CG2	THR	A	307	7.319	-1.901	10.331	1.00	0.00
C										
ATOM	4602	H	THR	A	307	8.323	-4.987	11.344	1.00	0.00
H										
ATOM	4603	HA	THR	A	307	7.394	-3.971	8.717	1.00	0.00
H										
ATOM	4604	HB	THR	A	307	9.140	-2.133	9.187	1.00	0.00
H										
ATOM	4605	HG21	THR	A	307	6.776	-2.445	11.102	1.00	0.00
H										

ATOM	4606	HG22	THR	A	307	7.588	-0.914	10.704	1.00	0.00
H										
ATOM	4607	HG23	THR	A	307	6.689	-1.796	9.449	1.00	0.00
H										
ATOM	4608	HG1	THR	A	307	10.245	-3.334	10.852	1.00	0.00
H										
ATOM	4609	N	ASN	A	308	9.543	-4.277	7.441	1.00	0.00
N										
ATOM	4610	CA	ASN	A	308	10.700	-4.671	6.594	1.00	0.00
C										
ATOM	4611	C	ASN	A	308	11.390	-3.423	6.034	1.00	0.00
C										
ATOM	4612	O	ASN	A	308	10.829	-2.664	5.246	1.00	0.00
O										
ATOM	4613	CB	ASN	A	308	10.252	-5.585	5.422	1.00	0.00
C										
ATOM	4614	CG	ASN	A	308	11.434	-6.256	4.711	1.00	0.00
C										
ATOM	4615	OD1	ASN	A	308	12.454	-5.637	4.515	1.00	0.00
O										
ATOM	4616	ND2	ASN	A	308	11.269	-7.513	4.265	1.00	0.00
N										
ATOM	4617	H	ASN	A	308	8.819	-3.702	7.023	1.00	0.00
H										
ATOM	4618	HA	ASN	A	308	11.413	-5.217	7.210	1.00	0.00
H										
ATOM	4619	HB2	ASN	A	308	9.707	-4.981	4.698	1.00	0.00
H										
ATOM	4620	HB3	ASN	A	308	9.596	-6.360	5.816	1.00	0.00
H										
ATOM	4621	HD21	ASN	A	308	12.031	-7.987	3.790	1.00	0.00
H										
ATOM	4622	HD22	ASN	A	308	10.383	-7.988	4.403	1.00	0.00
H										
ATOM	4623	N	ALA	A	309	12.607	-3.208	6.473	1.00	0.00
N										
ATOM	4624	CA	ALA	A	309	13.351	-1.994	6.157	1.00	0.00
C										
ATOM	4625	C	ALA	A	309	13.997	-2.117	4.744	1.00	0.00
C										
ATOM	4626	O	ALA	A	309	14.468	-1.148	4.188	1.00	0.00
O										
ATOM	4627	CB	ALA	A	309	14.461	-1.772	7.264	1.00	0.00
C										
ATOM	4628	H	ALA	A	309	13.048	-3.913	7.055	1.00	0.00
H										
ATOM	4629	HA	ALA	A	309	12.668	-1.146	6.163	1.00	0.00
H										
ATOM	4630	HB1	ALA	A	309	15.137	-2.626	7.277	1.00	0.00
H										
ATOM	4631	HB2	ALA	A	309	15.024	-0.867	7.038	1.00	0.00
H										
ATOM	4632	HB3	ALA	A	309	13.986	-1.670	8.239	1.00	0.00
H										
ATOM	4633	N	MET	A	310	14.057	-3.334	4.219	1.00	0.00
N										

ATOM	4634	CA	MET	A	310	14.739	-3.640	2.963	1.00	0.00
C										
ATOM	4635	C	MET	A	310	13.871	-4.585	2.157	1.00	0.00
C										
ATOM	4636	O	MET	A	310	14.203	-5.749	1.956	1.00	0.00
O										
ATOM	4637	CB	MET	A	310	16.027	-4.334	3.237	1.00	0.00
C										
ATOM	4638	CG	MET	A	310	16.651	-3.938	4.540	1.00	0.00
C										
ATOM	4639	SD	MET	A	310	18.128	-3.142	4.177	1.00	0.00
S										
ATOM	4640	CE	MET	A	310	17.804	-1.383	4.146	1.00	0.00
C										
ATOM	4641	H	MET	A	310	13.605	-4.094	4.717	1.00	0.00
H										
ATOM	4642	HA	MET	A	310	14.919	-2.725	2.401	1.00	0.00
H										
ATOM	4643	HB2	MET	A	310	16.724	-4.098	2.434	1.00	0.00
H										
ATOM	4644	HB3	MET	A	310	15.844	-5.407	3.254	1.00	0.00
H										
ATOM	4645	HG2	MET	A	310	16.844	-4.823	5.145	1.00	0.00
H										
ATOM	4646	HG3	MET	A	310	15.988	-3.265	5.082	1.00	0.00
H										
ATOM	4647	HE1	MET	A	310	17.431	-1.065	5.119	1.00	0.00
H										
ATOM	4648	HE2	MET	A	310	18.724	-0.848	3.917	1.00	0.00
H										
ATOM	4649	HE3	MET	A	310	17.058	-1.165	3.383	1.00	0.00
H										
ATOM	4650	N	PRO	A	311	12.698	-4.100	1.781	1.00	0.00
N										
ATOM	4651	CA	PRO	A	311	11.719	-4.958	1.198	1.00	0.00
C										
ATOM	4652	C	PRO	A	311	12.139	-5.318	-0.239	1.00	0.00
C										
ATOM	4653	O	PRO	A	311	12.948	-4.609	-0.876	1.00	0.00
O										
ATOM	4654	CB	PRO	A	311	10.446	-4.091	1.241	1.00	0.00
C										
ATOM	4655	CG	PRO	A	311	10.983	-2.723	1.062	1.00	0.00
C										
ATOM	4656	CD	PRO	A	311	12.216	-2.720	1.906	1.00	0.00
C										
ATOM	4657	HA	PRO	A	311	11.592	-5.858	1.798	1.00	0.00
H										
ATOM	4658	HB2	PRO	A	311	9.934	-4.191	2.197	1.00	0.00
H										
ATOM	4659	HB3	PRO	A	311	9.764	-4.354	0.435	1.00	0.00
H										
ATOM	4660	HG2	PRO	A	311	10.271	-1.976	1.410	1.00	0.00
H										
ATOM	4661	HG3	PRO	A	311	11.226	-2.534	0.017	1.00	0.00
H										

ATOM	4662	HD2	PRO	A	311	12.951	-2.012	1.525	1.00	0.00
H										
ATOM	4663	HD3	PRO	A	311	11.982	-2.478	2.942	1.00	0.00
H										
ATOM	4664	N	GLY	A	312	11.597	-6.428	-0.718	1.00	0.00
N										
ATOM	4665	CA	GLY	A	312	11.707	-6.798	-2.122	1.00	0.00
C										
ATOM	4666	C	GLY	A	312	11.454	-5.546	-2.928	1.00	0.00
C										
ATOM	4667	O	GLY	A	312	10.560	-4.759	-2.610	1.00	0.00
O										
ATOM	4668	H	GLY	A	312	11.090	-7.040	-0.086	1.00	0.00
H										
ATOM	4669	HA2	GLY	A	312	10.965	-7.557	-2.368	1.00	0.00
H										
ATOM	4670	HA3	GLY	A	312	12.704	-7.183	-2.331	1.00	0.00
H										
ATOM	4671	N	PHE	A	313	12.281	-5.350	-3.935	1.00	0.00
N										
ATOM	4672	CA	PHE	A	313	12.302	-4.121	-4.658	1.00	0.00
C										
ATOM	4673	C	PHE	A	313	12.506	-4.264	-6.147	1.00	0.00
C										
ATOM	4674	O	PHE	A	313	12.905	-3.314	-6.770	1.00	0.00
O										
ATOM	4675	CB	PHE	A	313	13.423	-3.245	-4.089	1.00	0.00
C										
ATOM	4676	CG	PHE	A	313	13.115	-1.806	-4.156	1.00	0.00
C										
ATOM	4677	CD1	PHE	A	313	12.188	-1.271	-3.329	1.00	0.00
C										
ATOM	4678	CD2	PHE	A	313	13.742	-0.979	-5.051	1.00	0.00
C										
ATOM	4679	CE1	PHE	A	313	11.876	0.032	-3.403	1.00	0.00
C										
ATOM	4680	CE2	PHE	A	313	13.395	0.370	-5.123	1.00	0.00
C										
ATOM	4681	CZ	PHE	A	313	12.469	0.844	-4.300	1.00	0.00
C										
ATOM	4682	H	PHE	A	313	12.920	-6.092	-4.202	1.00	0.00
H										
ATOM	4683	HA	PHE	A	313	11.353	-3.612	-4.491	1.00	0.00
H										
ATOM	4684	HB2	PHE	A	313	14.333	-3.433	-4.657	1.00	0.00
H										
ATOM	4685	HB3	PHE	A	313	13.582	-3.518	-3.047	1.00	0.00
H										
ATOM	4686	HD1	PHE	A	313	11.691	-1.904	-2.595	1.00	0.00
H										
ATOM	4687	HD2	PHE	A	313	14.514	-1.377	-5.708	1.00	0.00
H										
ATOM	4688	HE1	PHE	A	313	11.128	0.441	-2.725	1.00	0.00
H										
ATOM	4689	HE2	PHE	A	313	13.878	1.026	-5.846	1.00	0.00
H										

ATOM	4690	HZ	PHE	A	313	12.186	1.895	-4.349	1.00	0.00
H										
ATOM	4691	N	THR	A	314	12.237	-5.431	-6.729	1.00	0.00
N										
ATOM	4692	CA	THR	A	314	12.139	-5.540	-8.184	1.00	0.00
C										
ATOM	4693	C	THR	A	314	10.930	-4.754	-8.701	1.00	0.00
C										
ATOM	4694	O	THR	A	314	10.067	-4.292	-7.942	1.00	0.00
O										
ATOM	4695	CB	THR	A	314	11.995	-7.042	-8.684	1.00	0.00
C										
ATOM	4696	OG1	THR	A	314	10.726	-7.589	-8.256	1.00	0.00
O										
ATOM	4697	CG2	THR	A	314	13.162	-7.912	-8.187	1.00	0.00
C										
ATOM	4698	H	THR	A	314	12.098	-6.257	-6.155	1.00	0.00
H										
ATOM	4699	HA	THR	A	314	13.040	-5.115	-8.623	1.00	0.00
H										
ATOM	4700	HB	THR	A	314	12.013	-7.040	-9.773	1.00	0.00
H										
ATOM	4701	HG21	THR	A	314	13.178	-7.910	-7.098	1.00	0.00
H										
ATOM	4702	HG22	THR	A	314	13.033	-8.932	-8.546	1.00	0.00
H										
ATOM	4703	HG23	THR	A	314	14.101	-7.510	-8.565	1.00	0.00
H										
ATOM	4704	HG1	THR	A	314	9.986	-7.047	-8.637	1.00	0.00
H										
ATOM	4705	N	ALA	A	315	10.838	-4.663	-10.020	1.00	0.00
N										
ATOM	4706	CA	ALA	A	315	9.708	-4.022	-10.679	1.00	0.00
C										
ATOM	4707	C	ALA	A	315	8.404	-4.681	-10.282	1.00	0.00
C										
ATOM	4708	O	ALA	A	315	7.383	-3.988	-10.131	1.00	0.00
O										
ATOM	4709	CB	ALA	A	315	9.883	-4.095	-12.154	1.00	0.00
C										
ATOM	4710	H	ALA	A	315	11.581	-5.054	-10.591	1.00	0.00
H										
ATOM	4711	HA	ALA	A	315	9.676	-2.975	-10.381	1.00	0.00
H										
ATOM	4712	HB1	ALA	A	315	9.937	-5.138	-12.462	1.00	0.00
H										
ATOM	4713	HB2	ALA	A	315	9.037	-3.615	-12.644	1.00	0.00
H										
ATOM	4714	HB3	ALA	A	315	10.803	-3.585	-12.436	1.00	0.00
H										
ATOM	4715	N	PHE	A	316	8.423	-6.005	-10.090	1.00	0.00
N										
ATOM	4716	CA	PHE	A	316	7.215	-6.705	-9.722	1.00	0.00
C										
ATOM	4717	C	PHE	A	316	7.077	-6.981	-8.215	1.00	0.00
C										



ATOM	4718	O	PHE	A	316	6.184	-7.700	-7.807	1.00	0.00
O										
ATOM	4719	CB	PHE	A	316	7.089	-8.036	-10.520	1.00	0.00
C										
ATOM	4720	CG	PHE	A	316	7.385	-7.910	-11.994	1.00	0.00
C										
ATOM	4721	CD1	PHE	A	316	7.984	-8.965	-12.674	1.00	0.00
C										
ATOM	4722	CD2	PHE	A	316	7.125	-6.725	-12.692	1.00	0.00
C										
ATOM	4723	CE1	PHE	A	316	8.307	-8.856	-14.027	1.00	0.00
C										
ATOM	4724	CE2	PHE	A	316	7.436	-6.592	-14.034	1.00	0.00
C										
ATOM	4725	CZ	PHE	A	316	8.025	-7.652	-14.709	1.00	0.00
C										
ATOM	4726	H	PHE	A	316	9.290	-6.520	-10.204	1.00	0.00
H										
ATOM	4727	HA	PHE	A	316	6.375	-6.075	-10.012	1.00	0.00
H										
ATOM	4728	HB2	PHE	A	316	6.070	-8.406	-10.408	1.00	0.00
H										
ATOM	4729	HB3	PHE	A	316	7.785	-8.756	-10.093	1.00	0.00
H										
ATOM	4730	HD1	PHE	A	316	8.204	-9.890	-12.143	1.00	0.00
H										
ATOM	4731	HD2	PHE	A	316	6.667	-5.888	-12.167	1.00	0.00
H										
ATOM	4732	HE1	PHE	A	316	8.771	-9.690	-14.551	1.00	0.00
H										
ATOM	4733	HE2	PHE	A	316	7.220	-5.662	-14.557	1.00	0.00
H										
ATOM	4734	HZ	PHE	A	316	8.270	-7.555	-15.766	1.00	0.00
H										
ATOM	4735	N	SER	A	317	7.952	-6.443	-7.370	1.00	0.00
N										
ATOM	4736	CA	SER	A	317	7.859	-6.772	-5.945	1.00	0.00
C										
ATOM	4737	C	SER	A	317	6.675	-6.036	-5.326	1.00	0.00
C										
ATOM	4738	O	SER	A	317	6.147	-5.090	-5.904	1.00	0.00
O										
ATOM	4739	CB	SER	A	317	9.140	-6.411	-5.214	1.00	0.00
C										
ATOM	4740	OG	SER	A	317	10.217	-7.131	-5.739	1.00	0.00
O										
ATOM	4741	H	SER	A	317	8.673	-5.814	-7.707	1.00	0.00
H										
ATOM	4742	HA	SER	A	317	7.692	-7.844	-5.846	1.00	0.00
H										
ATOM	4743	HB2	SER	A	317	9.031	-6.649	-4.157	1.00	0.00
H										
ATOM	4744	HB3	SER	A	317	9.331	-5.345	-5.328	1.00	0.00
H										
ATOM	4745	HG	SER	A	317	10.322	-6.915	-6.702	1.00	0.00
H										

ATOM	4746	N	MET	A	318	6.274	-6.457	-4.134	1.00	0.00
N										
ATOM	4747	CA	MET	A	318	5.108	-5.903	-3.508	1.00	0.00
C										
ATOM	4748	C	MET	A	318	5.288	-4.413	-3.270	1.00	0.00
C										
ATOM	4749	O	MET	A	318	4.375	-3.612	-3.577	1.00	0.00
O										
ATOM	4750	CB	MET	A	318	4.860	-6.634	-2.205	1.00	0.00
C										
ATOM	4751	CG	MET	A	318	3.705	-6.072	-1.391	1.00	0.00
C										
ATOM	4752	SD	MET	A	318	2.062	-6.260	-2.107	1.00	0.00
S										
ATOM	4753	CE	MET	A	318	1.597	-7.791	-1.280	1.00	0.00
C										
ATOM	4754	H	MET	A	318	6.801	-7.183	-3.657	1.00	0.00
H										
ATOM	4755	HA	MET	A	318	4.252	-6.053	-4.164	1.00	0.00
H										
ATOM	4756	HB2	MET	A	318	5.765	-6.575	-1.602	1.00	0.00
H										
ATOM	4757	HB3	MET	A	318	4.643	-7.677	-2.433	1.00	0.00
H										
ATOM	4758	HG2	MET	A	318	3.886	-5.008	-1.249	1.00	0.00
H										
ATOM	4759	HG3	MET	A	318	3.705	-6.573	-0.424	1.00	0.00
H										
ATOM	4760	HE1	MET	A	318	1.611	-7.640	-0.202	1.00	0.00
H										
ATOM	4761	HE2	MET	A	318	0.596	-8.083	-1.593	1.00	0.00
H										
ATOM	4762	HE3	MET	A	318	2.304	-8.576	-1.546	1.00	0.00
H										
ATOM	4763	N	TYR	A	319	6.470	-4.029	-2.771	1.00	0.00
N										
ATOM	4764	CA	TYR	A	319	6.643	-2.678	-2.303	1.00	0.00
C										
ATOM	4765	C	TYR	A	319	6.448	-1.717	-3.501	1.00	0.00
C										
ATOM	4766	O	TYR	A	319	5.669	-0.773	-3.398	1.00	0.00
O										
ATOM	4767	CB	TYR	A	319	7.988	-2.450	-1.545	1.00	0.00
C										
ATOM	4768	CG	TYR	A	319	8.117	-1.029	-1.088	1.00	0.00
C										
ATOM	4769	CD1	TYR	A	319	7.836	-0.673	0.235	1.00	0.00
C										
ATOM	4770	CD2	TYR	A	319	8.444	-0.009	-1.981	1.00	0.00
C										
ATOM	4771	CE1	TYR	A	319	7.888	0.641	0.639	1.00	0.00
C										
ATOM	4772	CE2	TYR	A	319	8.485	1.341	-1.563	1.00	0.00
C										
ATOM	4773	CZ	TYR	A	319	8.232	1.666	-0.266	1.00	0.00
C										

ATOM	4774	OH	TYR	A	319	8.250	3.011	0.168	1.00	0.00
O										
ATOM	4775	H	TYR	A	319	7.241	-4.688	-2.723	1.00	0.00
H										
ATOM	4776	HA	TYR	A	319	5.839	-2.478	-1.597	1.00	0.00
H										
ATOM	4777	HB2	TYR	A	319	8.816	-2.686	-2.212	1.00	0.00
H										
ATOM	4778	HB3	TYR	A	319	8.023	-3.107	-0.677	1.00	0.00
H										
ATOM	4779	HD1	TYR	A	319	7.573	-1.446	0.955	1.00	0.00
H										
ATOM	4780	HD2	TYR	A	319	8.672	-0.256	-3.017	1.00	0.00
H										
ATOM	4781	HE1	TYR	A	319	7.660	0.893	1.674	1.00	0.00
H										
ATOM	4782	HE2	TYR	A	319	8.720	2.124	-2.282	1.00	0.00
H										
ATOM	4783	HH	TYR	A	319	8.906	3.112	0.907	1.00	0.00
H										
ATOM	4784	N	PRO	A	320	7.205	-1.907	-4.602	1.00	0.00
N										
ATOM	4785	CA	PRO	A	320	6.994	-1.075	-5.796	1.00	0.00
C										
ATOM	4786	C	PRO	A	320	5.593	-1.190	-6.435	1.00	0.00
C										
ATOM	4787	O	PRO	A	320	5.024	-0.183	-6.891	1.00	0.00
O										
ATOM	4788	CB	PRO	A	320	8.088	-1.585	-6.756	1.00	0.00
C										
ATOM	4789	CG	PRO	A	320	9.162	-2.099	-5.879	1.00	0.00
C										
ATOM	4790	CD	PRO	A	320	8.371	-2.799	-4.786	1.00	0.00
C										
ATOM	4791	HA	PRO	A	320	7.192	-0.033	-5.547	1.00	0.00
H										
ATOM	4792	HB2	PRO	A	320	8.460	-0.772	-7.379	1.00	0.00
H										
ATOM	4793	HB3	PRO	A	320	7.700	-2.380	-7.391	1.00	0.00
H										
ATOM	4794	HG2	PRO	A	320	9.764	-1.287	-5.473	1.00	0.00
H										
ATOM	4795	HG3	PRO	A	320	9.807	-2.798	-6.410	1.00	0.00
H										
ATOM	4796	HD2	PRO	A	320	8.059	-3.793	-5.103	1.00	0.00
H										
ATOM	4797	HD3	PRO	A	320	8.954	-2.877	-3.869	1.00	0.00
H										
ATOM	4798	N	LYS	A	321	5.016	-2.379	-6.458	1.00	0.00
N										
ATOM	4799	CA	LYS	A	321	3.665	-2.512	-6.983	1.00	0.00
C										
ATOM	4800	C	LYS	A	321	2.617	-1.752	-6.133	1.00	0.00
C										
ATOM	4801	O	LYS	A	321	1.689	-1.229	-6.654	1.00	0.00
O										

ATOM	4802	CB	LYS	A	321	3.308	-3.988	-7.106	1.00	0.00
C										
ATOM	4803	CG	LYS	A	321	4.028	-4.675	-8.288	1.00	0.00
C										
ATOM	4804	CD	LYS	A	321	3.233	-4.493	-9.542	1.00	0.00
C										
ATOM	4805	CE	LYS	A	321	4.051	-4.537	-10.806	1.00	0.00
C										
ATOM	4806	NZ	LYS	A	321	3.175	-4.028	-11.922	1.00	0.00
N1+										
ATOM	4807	H	LYS	A	321	5.512	-3.194	-6.112	1.00	0.00
H										
ATOM	4808	HA	LYS	A	321	3.655	-2.083	-7.984	1.00	0.00
H										
ATOM	4809	HB2	LYS	A	321	2.233	-4.076	-7.253	1.00	0.00
H										
ATOM	4810	HB3	LYS	A	321	3.591	-4.494	-6.184	1.00	0.00
H										
ATOM	4811	HG2	LYS	A	321	4.134	-5.739	-8.078	1.00	0.00
H										
ATOM	4812	HG3	LYS	A	321	5.014	-4.231	-8.418	1.00	0.00
H										
ATOM	4813	HD2	LYS	A	321	2.734	-3.527	-9.492	1.00	0.00
H										
ATOM	4814	HD3	LYS	A	321	2.487	-5.285	-9.591	1.00	0.00
H										
ATOM	4815	HE2	LYS	A	321	4.362	-5.560	-11.013	1.00	0.00
H										
ATOM	4816	HE3	LYS	A	321	4.930	-3.903	-10.704	1.00	0.00
H										
ATOM	4817	HZ1	LYS	A	321	2.885	-3.077	-11.718	1.00	0.00
H										
ATOM	4818	HZ2	LYS	A	321	3.694	-4.043	-12.794	1.00	0.00
H										
ATOM	4819	HZ3	LYS	A	321	2.355	-4.621	-12.006	1.00	0.00
H										
ATOM	4820	N	LEU	A	322	2.801	-1.693	-4.815	1.00	0.00
N										
ATOM	4821	CA	LEU	A	322	1.884	-0.978	-3.950	1.00	0.00
C										
ATOM	4822	C	LEU	A	322	1.903	0.479	-4.294	1.00	0.00
C										
ATOM	4823	O	LEU	A	322	0.843	1.108	-4.251	1.00	0.00
O										
ATOM	4824	CB	LEU	A	322	2.203	-1.182	-2.463	1.00	0.00
C										
ATOM	4825	CG	LEU	A	322	1.906	-2.574	-1.896	1.00	0.00
C										
ATOM	4826	CD1	LEU	A	322	2.586	-2.766	-0.542	1.00	0.00
C										
ATOM	4827	CD2	LEU	A	322	0.366	-2.804	-1.805	1.00	0.00
C										
ATOM	4828	H	LEU	A	322	3.604	-2.161	-4.406	1.00	0.00
H										
ATOM	4829	HA	LEU	A	322	0.880	-1.356	-4.135	1.00	0.00
H										

ATOM	4830	HB2	LEU	A	322	1.619	-0.460	-1.895	1.00	0.00
H										
ATOM	4831	HB3	LEU	A	322	3.264	-0.984	-2.320	1.00	0.00
H										
ATOM	4832	HG	LEU	A	322	2.316	-3.312	-2.585	1.00	0.00
H										
ATOM	4833	HD11	LEU	A	322	2.219	-2.017	0.158	1.00	0.00
H										
ATOM	4834	HD12	LEU	A	322	2.361	-3.761	-0.160	1.00	0.00
H										
ATOM	4835	HD13	LEU	A	322	3.663	-2.658	-0.658	1.00	0.00
H										
ATOM	4836	HD21	LEU	A	322	-0.072	-2.724	-2.799	1.00	0.00
H										
ATOM	4837	HD22	LEU	A	322	0.171	-3.796	-1.401	1.00	0.00
H										
ATOM	4838	HD23	LEU	A	322	-0.075	-2.053	-1.152	1.00	0.00
H										
ATOM	4839	N	TRP	A	323	3.089	1.021	-4.650	1.00	0.00
N										
ATOM	4840	CA	TRP	A	323	3.176	2.454	-5.033	1.00	0.00
C										
ATOM	4841	C	TRP	A	323	2.652	2.688	-6.444	1.00	0.00
C										
ATOM	4842	O	TRP	A	323	2.040	3.733	-6.741	1.00	0.00
O										
ATOM	4843	CB	TRP	A	323	4.623	3.025	-4.854	1.00	0.00
C										
ATOM	4844	CG	TRP	A	323	4.813	3.426	-3.479	1.00	0.00
C										
ATOM	4845	CD1	TRP	A	323	5.593	2.829	-2.562	1.00	0.00
C										
ATOM	4846	CD2	TRP	A	323	4.099	4.472	-2.778	1.00	0.00
C										
ATOM	4847	NE1	TRP	A	323	5.485	3.468	-1.355	1.00	0.00
N										
ATOM	4848	CE2	TRP	A	323	4.564	4.467	-1.454	1.00	0.00
C										
ATOM	4849	CE3	TRP	A	323	3.145	5.445	-3.170	1.00	0.00
C										
ATOM	4850	CZ2	TRP	A	323	4.074	5.334	-0.482	1.00	0.00
C										
ATOM	4851	CZ3	TRP	A	323	2.656	6.295	-2.222	1.00	0.00
C										
ATOM	4852	CH2	TRP	A	323	3.129	6.241	-0.867	1.00	0.00
C										
ATOM	4853	H	TRP	A	323	3.925	0.446	-4.656	1.00	0.00
H										
ATOM	4854	HA	TRP	A	323	2.528	3.007	-4.355	1.00	0.00
H										
ATOM	4855	HB2	TRP	A	323	4.757	3.887	-5.506	1.00	0.00
H										
ATOM	4856	HB3	TRP	A	323	5.351	2.258	-5.113	1.00	0.00
H										
ATOM	4857	HD1	TRP	A	323	6.222	1.960	-2.751	1.00	0.00
H										

ATOM	4858	HE1	TRP	A	323	6.009	3.234	-0.518	1.00	0.00
H										
ATOM	4859	HE3	TRP	A	323	2.811	5.512	-4.204	1.00	0.00
H										
ATOM	4860	HZ2	TRP	A	323	4.431	5.291	0.546	1.00	0.00
H										
ATOM	4861	HZ3	TRP	A	323	1.896	7.025	-2.497	1.00	0.00
H										
ATOM	4862	HH2	TRP	A	323	2.726	6.937	-0.133	1.00	0.00
H										
ATOM	4863	N	GLU	A	324	2.868	1.713	-7.307	1.00	0.00
N										
ATOM	4864	CA	GLU	A	324	2.342	1.799	-8.646	1.00	0.00
C										
ATOM	4865	C	GLU	A	324	0.817	2.011	-8.585	1.00	0.00
C										
ATOM	4866	O	GLU	A	324	0.303	2.820	-9.317	1.00	0.00
O										
ATOM	4867	CB	GLU	A	324	2.660	0.512	-9.405	1.00	0.00
C										
ATOM	4868	CG	GLU	A	324	2.373	0.559	-10.876	1.00	0.00
C										
ATOM	4869	CD	GLU	A	324	2.439	-0.838	-11.480	1.00	0.00
C										
ATOM	4870	OE1	GLU	A	324	1.450	-1.261	-12.104	1.00	0.00
O										
ATOM	4871	OE2	GLU	A	324	3.465	-1.513	-11.248	1.00	0.00
O1-										
ATOM	4872	H	GLU	A	324	3.407	0.900	-7.027	1.00	0.00
H										
ATOM	4873	HA	GLU	A	324	2.802	2.642	-9.159	1.00	0.00
H										
ATOM	4874	HB2	GLU	A	324	2.068	-0.292	-8.970	1.00	0.00
H										
ATOM	4875	HB3	GLU	A	324	3.719	0.295	-9.274	1.00	0.00
H										
ATOM	4876	HG2	GLU	A	324	3.110	1.195	-11.364	1.00	0.00
H										
ATOM	4877	HG3	GLU	A	324	1.377	0.970	-11.033	1.00	0.00
H										
ATOM	4878	N	ASN	A	325	0.123	1.310	-7.681	1.00	0.00
N										
ATOM	4879	CA	ASN	A	325	-1.327	1.478	-7.497	1.00	0.00
C										
ATOM	4880	C	ASN	A	325	-1.733	2.883	-7.054	1.00	0.00
C										
ATOM	4881	O	ASN	A	325	-2.885	3.279	-7.243	1.00	0.00
O										
ATOM	4882	CB	ASN	A	325	-1.823	0.503	-6.451	1.00	0.00
C										
ATOM	4883	CG	ASN	A	325	-3.323	0.613	-6.185	1.00	0.00
C										
ATOM	4884	OD1	ASN	A	325	-4.104	0.378	-7.073	1.00	0.00
O										
ATOM	4885	ND2	ASN	A	325	-3.713	0.924	-4.939	1.00	0.00
N										

ATOM	4886	H	ASN	A	325	0.615	0.638	-7.101	1.00	0.00
H										
ATOM	4887	HA	ASN	A	325	-1.823	1.256	-8.440	1.00	0.00
H										
ATOM	4888	HB2	ASN	A	325	-1.292	0.695	-5.520	1.00	0.00
H										
ATOM	4889	HB3	ASN	A	325	-1.605	-0.508	-6.791	1.00	0.00
H										
ATOM	4890	HD21	ASN	A	325	-4.701	1.006	-4.722	1.00	0.00
H										
ATOM	4891	HD22	ASN	A	325	-3.020	1.077	-4.213	1.00	0.00
H										
ATOM	4892	N	MET	A	326	-0.811	3.613	-6.424	1.00	0.00
N										
ATOM	4893	CA	MET	A	326	-1.101	4.982	-5.997	1.00	0.00
C										
ATOM	4894	C	MET	A	326	-0.812	5.970	-7.105	1.00	0.00
C										
ATOM	4895	O	MET	A	326	-1.000	7.178	-6.902	1.00	0.00
O										
ATOM	4896	CB	MET	A	326	-0.223	5.383	-4.805	1.00	0.00
C										
ATOM	4897	CG	MET	A	326	-0.285	4.464	-3.604	1.00	0.00
C										
ATOM	4898	SD	MET	A	326	-1.964	4.115	-3.108	1.00	0.00
S										
ATOM	4899	CE	MET	A	326	-2.530	5.586	-2.249	1.00	0.00
C										
ATOM	4900	H	MET	A	326	0.104	3.214	-6.239	1.00	0.00
H										
ATOM	4901	HA	MET	A	326	-2.150	5.056	-5.713	1.00	0.00
H										
ATOM	4902	HB2	MET	A	326	-0.531	6.377	-4.482	1.00	0.00
H										
ATOM	4903	HB3	MET	A	326	0.810	5.417	-5.147	1.00	0.00
H										
ATOM	4904	HG2	MET	A	326	0.235	4.938	-2.773	1.00	0.00
H										
ATOM	4905	HG3	MET	A	326	0.209	3.526	-3.854	1.00	0.00
H										
ATOM	4906	HE1	MET	A	326	-2.485	6.440	-2.923	1.00	0.00
H										
ATOM	4907	HE2	MET	A	326	-3.557	5.440	-1.917	1.00	0.00
H										
ATOM	4908	HE3	MET	A	326	-1.892	5.771	-1.386	1.00	0.00
H										
ATOM	4909	N	GLY	A	327	-0.275	5.475	-8.227	1.00	0.00
N										
ATOM	4910	CA	GLY	A	327	0.076	6.309	-9.367	1.00	0.00
C										
ATOM	4911	C	GLY	A	327	1.527	6.746	-9.370	1.00	0.00
C										
ATOM	4912	O	GLY	A	327	1.913	7.639	-10.136	1.00	0.00
O										
ATOM	4913	H	GLY	A	327	-0.105	4.476	-8.285	1.00	0.00
H										

ATOM	4914	HA2	GLY	A	327	-0.552	7.199	-9.350	1.00	0.00
H										
ATOM	4915	HA3	GLY	A	327	-0.116	5.746	-10.279	1.00	0.00
H										
ATOM	4916	N	LEU	A	328	2.349	6.152	-8.518	1.00	0.00
N										
ATOM	4917	CA	LEU	A	328	3.774	6.482	-8.484	1.00	0.00
C										
ATOM	4918	C	LEU	A	328	4.528	5.338	-9.214	1.00	0.00
C										
ATOM	4919	O	LEU	A	328	4.566	4.184	-8.737	1.00	0.00
O										
ATOM	4920	CB	LEU	A	328	4.237	6.641	-7.030	1.00	0.00
C										
ATOM	4921	CG	LEU	A	328	5.662	7.157	-6.804	1.00	0.00
C										
ATOM	4922	CD1	LEU	A	328	5.827	8.671	-7.185	1.00	0.00
C										
ATOM	4923	CD2	LEU	A	328	6.156	6.851	-5.321	1.00	0.00
C										
ATOM	4924	H	LEU	A	328	1.984	5.455	-7.877	1.00	0.00
H										
ATOM	4925	HA	LEU	A	328	3.939	7.417	-9.017	1.00	0.00
H										
ATOM	4926	HB2	LEU	A	328	4.162	5.665	-6.553	1.00	0.00
H										
ATOM	4927	HB3	LEU	A	328	3.555	7.337	-6.543	1.00	0.00
H										
ATOM	4928	HG	LEU	A	328	6.310	6.593	-7.473	1.00	0.00
H										
ATOM	4929	HD11	LEU	A	328	5.155	9.274	-6.577	1.00	0.00
H										
ATOM	4930	HD12	LEU	A	328	6.856	8.981	-7.004	1.00	0.00
H										
ATOM	4931	HD13	LEU	A	328	5.587	8.809	-8.238	1.00	0.00
H										
ATOM	4932	HD21	LEU	A	328	6.145	5.776	-5.149	1.00	0.00
H										
ATOM	4933	HD22	LEU	A	328	7.170	7.229	-5.191	1.00	0.00
H										
ATOM	4934	HD23	LEU	A	328	5.493	7.340	-4.609	1.00	0.00
H										
ATOM	4935	N	SER	A	329	5.058	5.633	-10.407	1.00	0.00
N										
ATOM	4936	CA	SER	A	329	5.715	4.597	-11.175	1.00	0.00
C										
ATOM	4937	C	SER	A	329	7.031	4.241	-10.480	1.00	0.00
C										
ATOM	4938	O	SER	A	329	7.456	4.909	-9.496	1.00	0.00
O										
ATOM	4939	CB	SER	A	329	5.994	5.065	-12.582	1.00	0.00
C										
ATOM	4940	OG	SER	A	329	6.976	6.041	-12.526	1.00	0.00
O										
ATOM	4941	H	SER	A	329	4.998	6.578	-10.772	1.00	0.00
H										



ATOM	4942	HA	SER	A	329	5.077	3.715	-11.209	1.00	0.00
H										
ATOM	4943	HB2	SER	A	329	5.086	5.479	-13.019	1.00	0.00
H										
ATOM	4944	HB3	SER	A	329	6.339	4.229	-13.188	1.00	0.00
H										
ATOM	4945	HG	SER	A	329	7.799	5.659	-12.124	1.00	0.00
H										
ATOM	4946	N	TYR	A	330	7.634	3.163	-10.963	1.00	0.00
N										
ATOM	4947	CA	TYR	A	330	8.823	2.586	-10.385	1.00	0.00
C										
ATOM	4948	C	TYR	A	330	10.035	3.537	-10.515	1.00	0.00
C										
ATOM	4949	O	TYR	A	330	10.808	3.685	-9.572	1.00	0.00
O										
ATOM	4950	CB	TYR	A	330	9.039	1.183	-11.006	1.00	0.00
C										
ATOM	4951	CG	TYR	A	330	10.210	0.340	-10.472	1.00	0.00
C										
ATOM	4952	CD1	TYR	A	330	11.088	-0.257	-11.337	1.00	0.00
C										
ATOM	4953	CD2	TYR	A	330	10.393	0.138	-9.123	1.00	0.00
C										
ATOM	4954	CE1	TYR	A	330	12.128	-1.039	-10.880	1.00	0.00
C										
ATOM	4955	CE2	TYR	A	330	11.432	-0.629	-8.636	1.00	0.00
C										
ATOM	4956	CZ	TYR	A	330	12.300	-1.218	-9.530	1.00	0.00
C										
ATOM	4957	OH	TYR	A	330	13.352	-1.977	-9.100	1.00	0.00
O										
ATOM	4958	H	TYR	A	330	7.236	2.719	-11.785	1.00	0.00
H										
ATOM	4959	HA	TYR	A	330	8.632	2.445	-9.322	1.00	0.00
H										
ATOM	4960	HB2	TYR	A	330	9.197	1.321	-12.075	1.00	0.00
H										
ATOM	4961	HB3	TYR	A	330	8.126	0.612	-10.845	1.00	0.00
H										
ATOM	4962	HD1	TYR	A	330	10.962	-0.111	-12.409	1.00	0.00
H										
ATOM	4963	HD2	TYR	A	330	9.698	0.596	-8.420	1.00	0.00
H										
ATOM	4964	HE1	TYR	A	330	12.809	-1.512	-11.586	1.00	0.00
H										
ATOM	4965	HE2	TYR	A	330	11.563	-0.766	-7.564	1.00	0.00
H										
ATOM	4966	HH	TYR	A	330	14.202	-1.570	-9.411	1.00	0.00
H										
ATOM	4967	N	PRO	A	331	10.214	4.184	-11.670	1.00	0.00
N										
ATOM	4968	CA	PRO	A	331	11.250	5.186	-11.728	1.00	0.00
C										
ATOM	4969	C	PRO	A	331	10.994	6.396	-10.843	1.00	0.00
C										

ATOM	4970	O	PRO	A	331	11.913	6.956	-10.319	1.00	0.00
O										
ATOM	4971	CB	PRO	A	331	11.259	5.615	-13.226	1.00	0.00
C										
ATOM	4972	CG	PRO	A	331	10.440	4.595	-13.945	1.00	0.00
C										
ATOM	4973	CD	PRO	A	331	9.565	3.945	-12.980	1.00	0.00
C										
ATOM	4974	HA	PRO	A	331	12.208	4.738	-11.469	1.00	0.00
H										
ATOM	4975	HB2	PRO	A	331	12.277	5.625	-13.612	1.00	0.00
H										
ATOM	4976	HB3	PRO	A	331	10.818	6.604	-13.340	1.00	0.00
H										
ATOM	4977	HG2	PRO	A	331	11.094	3.856	-14.405	1.00	0.00
H										
ATOM	4978	HG3	PRO	A	331	9.842	5.080	-14.715	1.00	0.00
H										
ATOM	4979	HD2	PRO	A	331	8.570	4.388	-13.003	1.00	0.00
H										
ATOM	4980	HD3	PRO	A	331	9.492	2.878	-13.184	1.00	0.00
H										
ATOM	4981	N	GLU	A	332	9.744	6.805	-10.709	1.00	0.00
N										
ATOM	4982	CA	GLU	A	332	9.379	7.910	-9.839	1.00	0.00
C										
ATOM	4983	C	GLU	A	332	9.647	7.519	-8.421	1.00	0.00
C										
ATOM	4984	O	GLU	A	332	10.115	8.337	-7.673	1.00	0.00
O										
ATOM	4985	CB	GLU	A	332	7.917	8.264	-9.987	1.00	0.00
C										
ATOM	4986	CG	GLU	A	332	7.652	8.934	-11.306	1.00	0.00
C										
ATOM	4987	CD	GLU	A	332	6.149	8.973	-11.717	1.00	0.00
C										
ATOM	4988	OE1	GLU	A	332	5.877	9.433	-12.829	1.00	0.00
O										
ATOM	4989	OE2	GLU	A	332	5.257	8.560	-10.965	1.00	0.00
O1-										
ATOM	4990	H	GLU	A	332	9.014	6.331	-11.232	1.00	0.00
H										
ATOM	4991	HA	GLU	A	332	9.985	8.779	-10.091	1.00	0.00
H										
ATOM	4992	HB2	GLU	A	332	7.631	8.939	-9.182	1.00	0.00
H										
ATOM	4993	HB3	GLU	A	332	7.322	7.354	-9.925	1.00	0.00
H										
ATOM	4994	HG2	GLU	A	332	8.202	8.398	-12.077	1.00	0.00
H										
ATOM	4995	HG3	GLU	A	332	8.015	9.959	-11.247	1.00	0.00
H										
ATOM	4996	N	LEU	A	333	9.324	6.268	-8.059	1.00	0.00
N										
ATOM	4997	CA	LEU	A	333	9.649	5.722	-6.754	1.00	0.00
C										

ATOM	4998	C	LEU	A	333	11.143	5.821	-6.441	1.00	0.00
C										
ATOM	4999	O	LEU	A	333	11.536	6.300	-5.380	1.00	0.00
O										
ATOM	5000	CB	LEU	A	333	9.169	4.258	-6.637	1.00	0.00
C										
ATOM	5001	CG	LEU	A	333	9.556	3.473	-5.381	1.00	0.00
C										
ATOM	5002	CD1	LEU	A	333	9.129	4.287	-4.120	1.00	0.00
C										
ATOM	5003	CD2	LEU	A	333	8.986	1.987	-5.374	1.00	0.00
C										
ATOM	5004	H	LEU	A	333	8.832	5.680	-8.724	1.00	0.00
H										
ATOM	5005	HA	LEU	A	333	9.115	6.307	-6.007	1.00	0.00
H										
ATOM	5006	HB2	LEU	A	333	9.570	3.717	-7.493	1.00	0.00
H										
ATOM	5007	HB3	LEU	A	333	8.082	4.269	-6.691	1.00	0.00
H										
ATOM	5008	HG	LEU	A	333	10.642	3.402	-5.367	1.00	0.00
H										
ATOM	5009	HD11	LEU	A	333	8.052	4.445	-4.137	1.00	0.00
H										
ATOM	5010	HD12	LEU	A	333	9.401	3.734	-3.222	1.00	0.00
H										
ATOM	5011	HD13	LEU	A	333	9.638	5.250	-4.121	1.00	0.00
H										
ATOM	5012	HD21	LEU	A	333	9.376	1.445	-6.234	1.00	0.00
H										
ATOM	5013	HD22	LEU	A	333	9.295	1.485	-4.458	1.00	0.00
H										
ATOM	5014	HD23	LEU	A	333	7.899	2.015	-5.425	1.00	0.00
H										
ATOM	5015	N	ILE	A	334	11.958	5.398	-7.389	1.00	0.00
N										
ATOM	5016	CA	ILE	A	334	13.427	5.444	-7.291	1.00	0.00
C										
ATOM	5017	C	ILE	A	334	13.949	6.886	-7.131	1.00	0.00
C										
ATOM	5018	O	ILE	A	334	14.820	7.155	-6.269	1.00	0.00
O										
ATOM	5019	CB	ILE	A	334	14.017	4.678	-8.491	1.00	0.00
C										
ATOM	5020	CG1	ILE	A	334	13.728	3.168	-8.307	1.00	0.00
C										
ATOM	5021	CG2	ILE	A	334	15.531	4.915	-8.688	1.00	0.00
C										
ATOM	5022	CD1	ILE	A	334	13.751	2.354	-9.575	1.00	0.00
C										
ATOM	5023	H	ILE	A	334	11.548	5.018	-8.236	1.00	0.00
H										
ATOM	5024	HA	ILE	A	334	13.707	4.898	-6.391	1.00	0.00
H										
ATOM	5025	HB	ILE	A	334	13.503	5.013	-9.391	1.00	0.00
H										

ATOM	5026	HG12	ILE	A	334	12.741	3.066	-7.858	1.00	0.00
H										
ATOM	5027	HG13	ILE	A	334	14.478	2.761	-7.631	1.00	0.00
H										
ATOM	5028	HG21	ILE	A	334	16.068	4.591	-7.798	1.00	0.00
H										
ATOM	5029	HG22	ILE	A	334	15.878	4.346	-9.549	1.00	0.00
H										
ATOM	5030	HG23	ILE	A	334	15.713	5.976	-8.856	1.00	0.00
H										
ATOM	5031	HD11	ILE	A	334	14.734	2.429	-10.036	1.00	0.00
H										
ATOM	5032	HD12	ILE	A	334	13.537	1.312	-9.341	1.00	0.00
H										
ATOM	5033	HD13	ILE	A	334	12.997	2.733	-10.264	1.00	0.00
H										
ATOM	5034	N	THR	A	335	13.395	7.814	-7.917	1.00	0.00
N										
ATOM	5035	CA	THR	A	335	13.728	9.242	-7.826	1.00	0.00
C										
ATOM	5036	C	THR	A	335	13.291	9.828	-6.476	1.00	0.00
C										
ATOM	5037	O	THR	A	335	14.049	10.538	-5.790	1.00	0.00
O										
ATOM	5038	CB	THR	A	335	13.067	10.025	-8.978	1.00	0.00
C										
ATOM	5039	OG1	THR	A	335	13.656	9.594	-10.208	1.00	0.00
O										
ATOM	5040	CG2	THR	A	335	13.227	11.585	-8.819	1.00	0.00
C										
ATOM	5041	H	THR	A	335	12.713	7.519	-8.608	1.00	0.00
H										
ATOM	5042	HA	THR	A	335	14.808	9.349	-7.913	1.00	0.00
H										
ATOM	5043	HB	THR	A	335	12.005	9.785	-8.998	1.00	0.00
H										
ATOM	5044	HG21	THR	A	335	14.285	11.842	-8.804	1.00	0.00
H										
ATOM	5045	HG22	THR	A	335	12.744	12.087	-9.656	1.00	0.00
H										
ATOM	5046	HG23	THR	A	335	12.762	11.905	-7.887	1.00	0.00
H										
ATOM	5047	HG1	THR	A	335	13.502	8.620	-10.325	1.00	0.00
H										
ATOM	5048	N	LYS	A	336	12.088	9.493	-6.045	1.00	0.00
N										
ATOM	5049	CA	LYS	A	336	11.649	9.973	-4.756	1.00	0.00
C										
ATOM	5050	C	LYS	A	336	12.611	9.524	-3.633	1.00	0.00
C										
ATOM	5051	O	LYS	A	336	13.015	10.303	-2.773	1.00	0.00
O										
ATOM	5052	CB	LYS	A	336	10.200	9.543	-4.512	1.00	0.00
C										
ATOM	5053	CG	LYS	A	336	9.683	9.902	-3.099	1.00	0.00
C										

ATOM	5054	CD	LYS	A	336	9.701	11.435	-2.777	1.00	0.00
C										
ATOM	5055	CE	LYS	A	336	8.642	12.162	-3.633	1.00	0.00
C										
ATOM	5056	NZ	LYS	A	336	8.658	13.637	-3.369	1.00	0.00
N1+										
ATOM	5057	H	LYS	A	336	11.482	8.908	-6.611	1.00	0.00
H										
ATOM	5058	HA	LYS	A	336	11.667	11.062	-4.788	1.00	0.00
H										
ATOM	5059	HB2	LYS	A	336	10.133	8.464	-4.640	1.00	0.00
H										
ATOM	5060	HB3	LYS	A	336	9.565	10.036	-5.247	1.00	0.00
H										
ATOM	5061	HG2	LYS	A	336	10.309	9.393	-2.368	1.00	0.00
H										
ATOM	5062	HG3	LYS	A	336	8.658	9.547	-3.010	1.00	0.00
H										
ATOM	5063	HD2	LYS	A	336	10.687	11.840	-3.001	1.00	0.00
H										
ATOM	5064	HD3	LYS	A	336	9.479	11.586	-1.722	1.00	0.00
H										
ATOM	5065	HE2	LYS	A	336	7.657	11.768	-3.391	1.00	0.00
H										
ATOM	5066	HE3	LYS	A	336	8.855	11.987	-4.687	1.00	0.00
H										
ATOM	5067	HZ1	LYS	A	336	9.574	14.012	-3.597	1.00	0.00
H										
ATOM	5068	HZ2	LYS	A	336	7.955	14.091	-3.943	1.00	0.00
H										
ATOM	5069	HZ3	LYS	A	336	8.457	13.808	-2.389	1.00	0.00
H										
ATOM	5070	N	LEU	A	337	13.004	8.271	-3.654	1.00	0.00
N										
ATOM	5071	CA	LEU	A	337	13.966	7.737	-2.665	1.00	0.00
C										
ATOM	5072	C	LEU	A	337	15.318	8.442	-2.683	1.00	0.00
C										
ATOM	5073	O	LEU	A	337	15.899	8.756	-1.633	1.00	0.00
O										
ATOM	5074	CB	LEU	A	337	14.148	6.256	-2.846	1.00	0.00
C										
ATOM	5075	CG	LEU	A	337	13.021	5.415	-2.220	1.00	0.00
C										
ATOM	5076	CD1	LEU	A	337	12.979	4.010	-2.894	1.00	0.00
C										
ATOM	5077	CD2	LEU	A	337	13.144	5.321	-0.684	1.00	0.00
C										
ATOM	5078	H	LEU	A	337	12.636	7.651	-4.369	1.00	0.00
H										
ATOM	5079	HA	LEU	A	337	13.533	7.892	-1.677	1.00	0.00
H										
ATOM	5080	HB2	LEU	A	337	15.090	5.966	-2.384	1.00	0.00
H										
ATOM	5081	HB3	LEU	A	337	14.185	6.042	-3.913	1.00	0.00
H										

ATOM	5082	HG	LEU	A	337	12.078	5.913	-2.443	1.00	0.00
H										
ATOM	5083	HD11	LEU	A	337	13.932	3.506	-2.743	1.00	0.00
H										
ATOM	5084	HD12	LEU	A	337	12.180	3.418	-2.449	1.00	0.00
H										
ATOM	5085	HD13	LEU	A	337	12.794	4.125	-3.961	1.00	0.00
H										
ATOM	5086	HD21	LEU	A	337	13.097	6.321	-0.254	1.00	0.00
H										
ATOM	5087	HD22	LEU	A	337	12.326	4.718	-0.291	1.00	0.00
H										
ATOM	5088	HD23	LEU	A	337	14.094	4.858	-0.424	1.00	0.00
H										
ATOM	5089	N	ILE	A	338	15.755	8.797	-3.872	1.00	0.00
N										
ATOM	5090	CA	ILE	A	338	16.933	9.621	-4.048	1.00	0.00
C										
ATOM	5091	C	ILE	A	338	16.762	10.968	-3.411	1.00	0.00
C										
ATOM	5092	O	ILE	A	338	17.656	11.430	-2.690	1.00	0.00
O										
ATOM	5093	CB	ILE	A	338	17.281	9.768	-5.537	1.00	0.00
C										
ATOM	5094	CG1	ILE	A	338	17.737	8.414	-6.100	1.00	0.00
C										
ATOM	5095	CG2	ILE	A	338	18.348	10.823	-5.776	1.00	0.00
C										
ATOM	5096	CD1	ILE	A	338	17.698	8.366	-7.715	1.00	0.00
C										
ATOM	5097	H	ILE	A	338	15.249	8.483	-4.694	1.00	0.00
H										
ATOM	5098	HA	ILE	A	338	17.767	9.122	-3.557	1.00	0.00
H										
ATOM	5099	HB	ILE	A	338	16.379	10.070	-6.068	1.00	0.00
H										
ATOM	5100	HG12	ILE	A	338	17.080	7.636	-5.712	1.00	0.00
H										
ATOM	5101	HG13	ILE	A	338	18.757	8.225	-5.770	1.00	0.00
H										
ATOM	5102	HG21	ILE	A	338	19.256	10.548	-5.242	1.00	0.00
H										
ATOM	5103	HG22	ILE	A	338	18.560	10.890	-6.842	1.00	0.00
H										
ATOM	5104	HG23	ILE	A	338	17.992	11.787	-5.415	1.00	0.00
H										
ATOM	5105	HD11	ILE	A	338	18.357	9.134	-8.117	1.00	0.00
H										
ATOM	5106	HD12	ILE	A	338	18.030	7.387	-8.057	1.00	0.00
H										
ATOM	5107	HD13	ILE	A	338	16.680	8.545	-8.059	1.00	0.00
H										
ATOM	5108	N	GLU	A	339	15.644	11.644	-3.713	1.00	0.00
N										
ATOM	5109	CA	GLU	A	339	15.406	12.980	-3.147	1.00	0.00
C										

ATOM	5110	C	GLU	A	339	15.331	12.966	-1.620	1.00	0.00
C										
ATOM	5111	O	GLU	A	339	15.905	13.772	-0.992	1.00	0.00
O										
ATOM	5112	CB	GLU	A	339	14.135	13.627	-3.702	1.00	0.00
C										
ATOM	5113	CG	GLU	A	339	13.997	13.684	-5.228	1.00	0.00
C										
ATOM	5114	CD	GLU	A	339	14.955	14.631	-5.964	1.00	0.00
C										
ATOM	5115	OE1	GLU	A	339	15.855	15.236	-5.345	1.00	0.00
O										
ATOM	5116	OE2	GLU	A	339	14.802	14.757	-7.216	1.00	0.00
O1-										
ATOM	5117	H	GLU	A	339	14.957	11.231	-4.336	1.00	0.00
H										
ATOM	5118	HA	GLU	A	339	16.247	13.612	-3.429	1.00	0.00
H										
ATOM	5119	HB2	GLU	A	339	14.096	14.650	-3.329	1.00	0.00
H										
ATOM	5120	HB3	GLU	A	339	13.284	13.068	-3.315	1.00	0.00
H										
ATOM	5121	HG2	GLU	A	339	12.979	13.998	-5.457	1.00	0.00
H										
ATOM	5122	HG3	GLU	A	339	14.163	12.679	-5.614	1.00	0.00
H										
ATOM	5123	N	LEU	A	340	14.605	12.023	-1.049	1.00	0.00
N										
ATOM	5124	CA	LEU	A	340	14.546	11.803	0.393	1.00	0.00
C										
ATOM	5125	C	LEU	A	340	15.906	11.589	0.972	1.00	0.00
C										
ATOM	5126	O	LEU	A	340	16.256	12.138	2.007	1.00	0.00
O										
ATOM	5127	CB	LEU	A	340	13.718	10.537	0.631	1.00	0.00
C										
ATOM	5128	CG	LEU	A	340	12.217	10.700	0.359	1.00	0.00
C										
ATOM	5129	CD1	LEU	A	340	11.519	9.405	0.548	1.00	0.00
C										
ATOM	5130	CD2	LEU	A	340	11.674	11.812	1.245	1.00	0.00
C										
ATOM	5131	H	LEU	A	340	14.055	11.415	-1.648	1.00	0.00
H										
ATOM	5132	HA	LEU	A	340	14.067	12.653	0.877	1.00	0.00
H										
ATOM	5133	HB2	LEU	A	340	13.846	10.238	1.670	1.00	0.00
H										
ATOM	5134	HB3	LEU	A	340	14.100	9.754	-0.022	1.00	0.00
H										
ATOM	5135	HG	LEU	A	340	12.093	11.004	-0.679	1.00	0.00
H										
ATOM	5136	HD11	LEU	A	340	11.661	9.063	1.572	1.00	0.00
H										
ATOM	5137	HD12	LEU	A	340	10.456	9.534	0.352	1.00	0.00
H										

ATOM	5138	HD13	LEU	A	340	11.929	8.668	-0.141	1.00	0.00
H										
ATOM	5139	HD21	LEU	A	340	12.193	12.743	1.019	1.00	0.00
H										
ATOM	5140	HD22	LEU	A	340	10.608	11.936	1.060	1.00	0.00
H										
ATOM	5141	HD23	LEU	A	340	11.833	11.553	2.291	1.00	0.00
H										
ATOM	5142	N	ALA	A	341	16.689	10.758	0.309	1.00	0.00
N										
ATOM	5143	CA	ALA	A	341	18.072	10.537	0.731	1.00	0.00
C										
ATOM	5144	C	ALA	A	341	18.885	11.868	0.756	1.00	0.00
C										
ATOM	5145	O	ALA	A	341	19.692	12.111	1.654	1.00	0.00
O										
ATOM	5146	CB	ALA	A	341	18.733	9.496	-0.172	1.00	0.00
C										
ATOM	5147	H	ALA	A	341	16.327	10.267	-0.502	1.00	0.00
H										
ATOM	5148	HA	ALA	A	341	18.052	10.138	1.744	1.00	0.00
H										
ATOM	5149	HB1	ALA	A	341	18.724	9.851	-1.202	1.00	0.00
H										
ATOM	5150	HB2	ALA	A	341	19.761	9.338	0.149	1.00	0.00
H										
ATOM	5151	HB3	ALA	A	341	18.184	8.558	-0.107	1.00	0.00
H										
ATOM	5152	N	LYS	A	342	18.664	12.727	-0.216	1.00	0.00
N										
ATOM	5153	CA	LYS	A	342	19.346	14.012	-0.217	1.00	0.00
C										
ATOM	5154	C	LYS	A	342	18.860	14.870	0.855	1.00	0.00
C										
ATOM	5155	O	LYS	A	342	19.647	15.538	1.483	1.00	0.00
O										
ATOM	5156	CB	LYS	A	342	19.100	14.802	-1.475	1.00	0.00
C										
ATOM	5157	CG	LYS	A	342	19.539	14.152	-2.776	1.00	0.00
C										
ATOM	5158	CD	LYS	A	342	19.478	15.265	-3.812	1.00	0.00
C										
ATOM	5159	CE	LYS	A	342	18.791	14.910	-5.019	1.00	0.00
C										
ATOM	5160	NZ	LYS	A	342	18.666	16.216	-5.833	1.00	0.00
N1+										
ATOM	5161	H	LYS	A	342	18.018	12.494	-0.964	1.00	0.00
H										
ATOM	5162	HA	LYS	A	342	20.416	13.853	-0.095	1.00	0.00
H										
ATOM	5163	HB2	LYS	A	342	19.631	15.749	-1.381	1.00	0.00
H										
ATOM	5164	HB3	LYS	A	342	18.029	14.992	-1.544	1.00	0.00
H										
ATOM	5165	HG2	LYS	A	342	18.864	13.341	-3.045	1.00	0.00
H										



ATOM	5166	HG3	LYS	A	342	20.553	13.766	-2.688	1.00	0.00
H										
ATOM	5167	HD2	LYS	A	342	20.497	15.547	-4.070	1.00	0.00
H										
ATOM	5168	HD3	LYS	A	342	18.967	16.118	-3.367	1.00	0.00
H										
ATOM	5169	HE2	LYS	A	342	17.804	14.511	-4.790	1.00	0.00
H										
ATOM	5170	HE3	LYS	A	342	19.362	14.169	-5.576	1.00	0.00
H										
ATOM	5171	HZ1	LYS	A	342	19.592	16.582	-6.031	1.00	0.00
H										
ATOM	5172	HZ2	LYS	A	342	18.184	16.026	-6.706	1.00	0.00
H										
ATOM	5173	HZ3	LYS	A	342	18.140	16.900	-5.298	1.00	0.00
H										
ATOM	5174	N	GLU	A	343	17.540	14.891	1.061	1.00	0.00
N										
ATOM	5175	CA	GLU	A	343	16.974	15.763	2.105	1.00	0.00
C										
ATOM	5176	C	GLU	A	343	17.467	15.354	3.434	1.00	0.00
C										
ATOM	5177	O	GLU	A	343	17.915	16.170	4.189	1.00	0.00
O										
ATOM	5178	CB	GLU	A	343	15.460	15.771	2.104	1.00	0.00
C										
ATOM	5179	CG	GLU	A	343	14.931	16.156	0.735	1.00	0.00
C										
ATOM	5180	CD	GLU	A	343	13.466	16.509	0.741	1.00	0.00
C										
ATOM	5181	OE1	GLU	A	343	12.731	16.003	1.665	1.00	0.00
O										
ATOM	5182	OE2	GLU	A	343	13.076	17.311	-0.179	1.00	0.00
O1-										
ATOM	5183	H	GLU	A	343	16.928	14.308	0.499	1.00	0.00
H										
ATOM	5184	HA	GLU	A	343	17.317	16.780	1.917	1.00	0.00
H										
ATOM	5185	HB2	GLU	A	343	15.106	16.491	2.841	1.00	0.00
H										
ATOM	5186	HB3	GLU	A	343	15.097	14.778	2.362	1.00	0.00
H										
ATOM	5187	HG2	GLU	A	343	15.081	15.317	0.058	1.00	0.00
H										
ATOM	5188	HG3	GLU	A	343	15.492	17.018	0.377	1.00	0.00
H										
ATOM	5189	N	ARG	A	344	17.419	14.065	3.709	1.00	0.00
N										
ATOM	5190	CA	ARG	A	344	17.913	13.541	4.972	1.00	0.00
C										
ATOM	5191	C	ARG	A	344	19.355	13.853	5.261	1.00	0.00
C										
ATOM	5192	O	ARG	A	344	19.703	14.275	6.341	1.00	0.00
O										
ATOM	5193	CB	ARG	A	344	17.775	12.031	4.999	1.00	0.00
C										

ATOM	5194	CG	ARG	A	344	18.149	11.441	6.333	1.00	0.00
C										
ATOM	5195	CD	ARG	A	344	17.435	10.145	6.573	1.00	0.00
C										
ATOM	5196	NE	ARG	A	344	18.108	9.459	7.680	1.00	0.00
N1+										
ATOM	5197	CZ	ARG	A	344	19.160	8.661	7.539	1.00	0.00
C1+										
ATOM	5198	NH1	ARG	A	344	19.645	8.378	6.325	1.00	0.00
N1+										
ATOM	5199	NH2	ARG	A	344	19.702	8.106	8.612	1.00	0.00
N1+										
ATOM	5200	H	ARG	A	344	17.028	13.426	3.025	1.00	0.00
H										
ATOM	5201	HA	ARG	A	344	17.306	13.955	5.776	1.00	0.00
H										
ATOM	5202	HB2	ARG	A	344	18.426	11.608	4.235	1.00	0.00
H										
ATOM	5203	HB3	ARG	A	344	16.741	11.771	4.780	1.00	0.00
H										
ATOM	5204	HG2	ARG	A	344	17.882	12.145	7.120	1.00	0.00
H										
ATOM	5205	HG3	ARG	A	344	19.224	11.264	6.354	1.00	0.00
H										
ATOM	5206	HD2	ARG	A	344	17.476	9.529	5.676	1.00	0.00
H										
ATOM	5207	HD3	ARG	A	344	16.396	10.338	6.834	1.00	0.00
H										
ATOM	5208	HE2	ARG	A	344	17.746	9.604	8.617	1.00	0.00
H										
ATOM	5209	HE3	ARG	A	344	18.725	10.251	7.796	1.00	0.00
H										
ATOM	5210	HH11	ARG	A	344	20.449	7.767	6.229	1.00	0.00
H										
ATOM	5211	HH12	ARG	A	344	19.207	8.775	5.499	1.00	0.00
H										
ATOM	5212	HH13	ARG	A	344	19.030	7.579	6.266	1.00	0.00
H										
ATOM	5213	HH21	ARG	A	344	20.507	7.495	8.516	1.00	0.00
H										
ATOM	5214	HH22	ARG	A	344	19.314	8.292	9.531	1.00	0.00
H										
ATOM	5215	HH23	ARG	A	344	20.318	8.900	8.712	1.00	0.00
H										
ATOM	5216	N	HIS	A	345	20.189	13.585	4.287	1.00	0.00
N										
ATOM	5217	CA	HIS	A	345	21.608	13.878	4.393	1.00	0.00
C										
ATOM	5218	C	HIS	A	345	21.874	15.373	4.639	1.00	0.00
C										
ATOM	5219	O	HIS	A	345	22.711	15.726	5.435	1.00	0.00
O										
ATOM	5220	CB	HIS	A	345	22.339	13.447	3.102	1.00	0.00
C										
ATOM	5221	CG	HIS	A	345	23.827	13.592	3.189	1.00	0.00
C										

ATOM	5222	ND1	HIS	A	345	24.521	14.616	2.569	1.00	0.00
N										
ATOM	5223	CD2	HIS	A	345	24.747	12.866	3.860	1.00	0.00
C										
ATOM	5224	CE1	HIS	A	345	25.807	14.492	2.839	1.00	0.00
C										
ATOM	5225	NE2	HIS	A	345	25.972	13.444	3.621	1.00	0.00
N										
ATOM	5226	H	HIS	A	345	19.834	13.162	3.436	1.00	0.00
H										
ATOM	5227	HA	HIS	A	345	22.017	13.312	5.228	1.00	0.00
H										
ATOM	5228	HB2	HIS	A	345	21.979	14.063	2.279	1.00	0.00
H										
ATOM	5229	HB3	HIS	A	345	22.104	12.403	2.904	1.00	0.00
H										
ATOM	5230	HD1	HIS	A	345	24.107	15.346	1.998	1.00	0.00
H										
ATOM	5231	HD2	HIS	A	345	24.555	11.988	4.475	1.00	0.00
H										
ATOM	5232	HE1	HIS	A	345	26.599	15.146	2.477	1.00	0.00
H										
ATOM	5233	N	GLN	A	346	21.152	16.224	3.937	1.00	0.00
N										
ATOM	5234	CA	GLN	A	346	21.264	17.675	4.114	1.00	0.00
C										
ATOM	5235	C	GLN	A	346	20.797	18.070	5.506	1.00	0.00
C										
ATOM	5236	O	GLN	A	346	21.432	18.868	6.184	1.00	0.00
O										
ATOM	5237	CB	GLN	A	346	20.409	18.354	3.073	1.00	0.00
C										
ATOM	5238	CG	GLN	A	346	20.522	19.868	3.033	1.00	0.00
C										
ATOM	5239	CD	GLN	A	346	19.565	20.487	2.034	1.00	0.00
C										
ATOM	5240	OE1	GLN	A	346	19.234	21.662	2.125	1.00	0.00
O										
ATOM	5241	NE2	GLN	A	346	19.097	19.678	1.087	1.00	0.00
N										
ATOM	5242	H	GLN	A	346	20.496	15.863	3.251	1.00	0.00
H										
ATOM	5243	HA	GLN	A	346	22.302	17.977	3.982	1.00	0.00
H										
ATOM	5244	HB2	GLN	A	346	19.369	18.099	3.272	1.00	0.00
H										
ATOM	5245	HB3	GLN	A	346	20.697	17.969	2.096	1.00	0.00
H										
ATOM	5246	HG2	GLN	A	346	21.540	20.137	2.756	1.00	0.00
H										
ATOM	5247	HG3	GLN	A	346	20.299	20.263	4.023	1.00	0.00
H										
ATOM	5248	HE21	GLN	A	346	18.452	20.034	0.389	1.00	0.00
H										
ATOM	5249	HE22	GLN	A	346	19.384	18.705	1.063	1.00	0.00
H										

ATOM	5250	N	ASP	A	347	19.712	17.457	5.967	1.00	0.00
N										
ATOM	5251	CA	ASP	A	347	19.250	17.696	7.313	1.00	0.00
C										
ATOM	5252	C	ASP	A	347	20.269	17.267	8.357	1.00	0.00
C										
ATOM	5253	O	ASP	A	347	20.463	17.986	9.282	1.00	0.00
O										
ATOM	5254	CB	ASP	A	347	17.891	17.020	7.572	1.00	0.00
C										
ATOM	5255	CG	ASP	A	347	16.780	17.646	6.768	1.00	0.00
C										
ATOM	5256	OD1	ASP	A	347	17.058	18.661	6.112	1.00	0.00
O										
ATOM	5257	OD2	ASP	A	347	15.638	17.115	6.781	1.00	0.00
O1-										
ATOM	5258	H	ASP	A	347	19.203	16.816	5.367	1.00	0.00
H										
ATOM	5259	HA	ASP	A	347	19.106	18.770	7.422	1.00	0.00
H										
ATOM	5260	HB2	ASP	A	347	17.651	17.110	8.630	1.00	0.00
H										
ATOM	5261	HB3	ASP	A	347	17.967	15.967	7.305	1.00	0.00
H										
ATOM	5262	N	LYS	A	348	20.912	16.107	8.233	1.00	0.00
N										
ATOM	5263	CA	LYS	A	348	21.912	15.730	9.211	1.00	0.00
C										
ATOM	5264	C	LYS	A	348	23.054	16.735	9.140	1.00	0.00
C										
ATOM	5265	O	LYS	A	348	23.598	17.130	10.177	1.00	0.00
O										
ATOM	5266	CB	LYS	A	348	22.450	14.308	8.975	1.00	0.00
C										
ATOM	5267	CG	LYS	A	348	21.399	13.148	9.229	1.00	0.00
C										
ATOM	5268	CD	LYS	A	348	21.814	11.705	8.680	1.00	0.00
C										
ATOM	5269	CE	LYS	A	348	23.329	11.378	8.825	1.00	0.00
C										
ATOM	5270	NZ	LYS	A	348	24.429	12.444	8.412	1.00	0.00
N1+										
ATOM	5271	H	LYS	A	348	20.702	15.489	7.456	1.00	0.00
H										
ATOM	5272	HA	LYS	A	348	21.467	15.776	10.203	1.00	0.00
H										
ATOM	5273	HB2	LYS	A	348	23.296	14.151	9.642	1.00	0.00
H										
ATOM	5274	HB3	LYS	A	348	22.785	14.241	7.941	1.00	0.00
H										
ATOM	5275	HG2	LYS	A	348	20.464	13.432	8.749	1.00	0.00
H										
ATOM	5276	HG3	LYS	A	348	21.245	13.066	10.304	1.00	0.00
H										
ATOM	5277	HD2	LYS	A	348	21.554	11.654	7.624	1.00	0.00
H										

ATOM	5278	HD3	LYS	A	348	21.249	10.955	9.231	1.00	0.00
H										
ATOM	5279	HE2	LYS	A	348	23.515	10.490	8.223	1.00	0.00
H										
ATOM	5280	HE3	LYS	A	348	23.499	11.147	9.876	1.00	0.00
H										
ATOM	5281	HZ1	LYS	A	348	24.311	13.285	8.969	1.00	0.00
H										
ATOM	5282	HZ2	LYS	A	348	25.353	12.058	8.575	1.00	0.00
H										
ATOM	5283	HZ3	LYS	A	348	24.326	12.672	7.428	1.00	0.00
H										
ATOM	5284	N	GLN	A	349	23.410	17.190	7.931	1.00	0.00
N										
ATOM	5285	CA	GLN	A	349	24.487	18.173	7.784	1.00	0.00
C										
ATOM	5286	C	GLN	A	349	24.148	19.495	8.491	1.00	0.00
C										
ATOM	5287	O	GLN	A	349	24.977	20.066	9.155	1.00	0.00
O										
ATOM	5288	CB	GLN	A	349	24.767	18.442	6.318	1.00	0.00
C										
ATOM	5289	CG	GLN	A	349	25.486	17.304	5.585	1.00	0.00
C										
ATOM	5290	CD	GLN	A	349	25.754	17.683	4.112	1.00	0.00
C										
ATOM	5291	OE1	GLN	A	349	24.831	18.102	3.377	1.00	0.00
O										
ATOM	5292	NE2	GLN	A	349	27.004	17.541	3.682	1.00	0.00
N										
ATOM	5293	H	GLN	A	349	22.927	16.850	7.106	1.00	0.00
H										
ATOM	5294	HA	GLN	A	349	25.389	17.764	8.236	1.00	0.00
H										
ATOM	5295	HB2	GLN	A	349	25.386	19.335	6.249	1.00	0.00
H										
ATOM	5296	HB3	GLN	A	349	23.816	18.621	5.818	1.00	0.00
H										
ATOM	5297	HG2	GLN	A	349	24.864	16.411	5.616	1.00	0.00
H										
ATOM	5298	HG3	GLN	A	349	26.435	17.104	6.080	1.00	0.00
H										
ATOM	5299	HE21	GLN	A	349	27.240	17.775	2.723	1.00	0.00
H										
ATOM	5300	HE22	GLN	A	349	27.722	17.200	4.313	1.00	0.00
H										
ATOM	5301	N	LYS	A	350	22.913	19.962	8.356	1.00	0.00
N										
ATOM	5302	CA	LYS	A	350	22.458	21.129	9.121	1.00	0.00
C										
ATOM	5303	C	LYS	A	350	22.506	20.913	10.618	1.00	0.00
C										
ATOM	5304	O	LYS	A	350	22.988	21.771	11.330	1.00	0.00
O										
ATOM	5305	CB	LYS	A	350	21.047	21.541	8.740	1.00	0.00
C										

ATOM	5306	CG	LYS	A	350	20.977	22.540	7.620	1.00	0.00
C										
ATOM	5307	CD	LYS	A	350	20.942	21.889	6.244	1.00	0.00
C										
ATOM	5308	CE	LYS	A	350	20.470	22.914	5.187	1.00	0.00
C										
ATOM	5309	NZ	LYS	A	350	19.092	23.534	5.483	1.00	0.00
N1+										
ATOM	5310	H	LYS	A	350	22.274	19.506	7.713	1.00	0.00
H										
ATOM	5311	HA	LYS	A	350	23.121	21.960	8.884	1.00	0.00
H										
ATOM	5312	HB2	LYS	A	350	20.571	21.978	9.617	1.00	0.00
H										
ATOM	5313	HB3	LYS	A	350	20.502	20.649	8.436	1.00	0.00
H										
ATOM	5314	HG2	LYS	A	350	21.853	23.186	7.676	1.00	0.00
H										
ATOM	5315	HG3	LYS	A	350	20.076	23.139	7.745	1.00	0.00
H										
ATOM	5316	HD2	LYS	A	350	20.253	21.046	6.262	1.00	0.00
H										
ATOM	5317	HD3	LYS	A	350	21.939	21.538	5.985	1.00	0.00
H										
ATOM	5318	HE2	LYS	A	350	20.418	22.412	4.222	1.00	0.00
H										
ATOM	5319	HE3	LYS	A	350	21.203	23.718	5.139	1.00	0.00
H										
ATOM	5320	HZ1	LYS	A	350	19.123	24.018	6.375	1.00	0.00
H										
ATOM	5321	HZ2	LYS	A	350	18.852	24.193	4.749	1.00	0.00
H										
ATOM	5322	HZ3	LYS	A	350	18.391	22.801	5.521	1.00	0.00
H										
ATOM	5323	N	ASN	A	351	22.067	19.745	11.089	1.00	0.00
N										
ATOM	5324	CA	ASN	A	351	22.031	19.494	12.521	1.00	0.00
C										
ATOM	5325	C	ASN	A	351	23.405	19.411	13.102	1.00	0.00
C										
ATOM	5326	O	ASN	A	351	23.682	20.064	14.070	1.00	0.00
O										
ATOM	5327	CB	ASN	A	351	21.250	18.219	12.853	1.00	0.00
C										
ATOM	5328	CG	ASN	A	351	19.746	18.403	12.682	1.00	0.00
C										
ATOM	5329	OD1	ASN	A	351	19.236	19.537	12.547	1.00	0.00
O										
ATOM	5330	ND2	ASN	A	351	19.030	17.303	12.680	1.00	0.00
N										
ATOM	5331	H	ASN	A	351	21.756	19.027	10.443	1.00	0.00
H										
ATOM	5332	HA	ASN	A	351	21.520	20.331	12.993	1.00	0.00
H										
ATOM	5333	HB2	ASN	A	351	21.454	17.942	13.886	1.00	0.00
H										

ATOM	5334	HB3	ASN	A	351	21.583	17.422	12.191	1.00	0.00
H										
ATOM	5335	HD21	ASN	A	351	18.022	17.354	12.570	1.00	0.00
H										
ATOM	5336	HD22	ASN	A	351	19.484	16.402	12.788	1.00	0.00
H										
ATOM	5337	N	LYS	A	352	24.277	18.602	12.525	1.00	0.00
N										
ATOM	5338	CA	LYS	A	352	25.645	18.526	13.041	1.00	0.00
C										
ATOM	5339	C	LYS	A	352	26.299	19.893	13.096	1.00	0.00
C										
ATOM	5340	O	LYS	A	352	26.982	20.192	14.059	1.00	0.00
O										
ATOM	5341	CB	LYS	A	352	26.512	17.593	12.215	1.00	0.00
C										
ATOM	5342	CG	LYS	A	352	26.086	16.129	12.379	1.00	0.00
C										
ATOM	5343	CD	LYS	A	352	26.919	15.216	11.475	1.00	0.00
C										
ATOM	5344	CE	LYS	A	352	26.047	14.079	10.892	1.00	0.00
C										
ATOM	5345	NZ	LYS	A	352	26.848	13.104	10.003	1.00	0.00
N1+										
ATOM	5346	H	LYS	A	352	24.000	18.037	11.729	1.00	0.00
H										
ATOM	5347	HA	LYS	A	352	25.601	18.134	14.056	1.00	0.00
H										
ATOM	5348	HB2	LYS	A	352	27.548	17.697	12.536	1.00	0.00
H										
ATOM	5349	HB3	LYS	A	352	26.428	17.870	11.165	1.00	0.00
H										
ATOM	5350	HG2	LYS	A	352	25.034	16.032	12.113	1.00	0.00
H										
ATOM	5351	HG3	LYS	A	352	26.227	15.830	13.416	1.00	0.00
H										
ATOM	5352	HD2	LYS	A	352	27.730	14.782	12.057	1.00	0.00
H										
ATOM	5353	HD3	LYS	A	352	27.332	15.805	10.657	1.00	0.00
H										
ATOM	5354	HE2	LYS	A	352	25.253	14.523	10.294	1.00	0.00
H										
ATOM	5355	HE3	LYS	A	352	25.611	13.518	11.717	1.00	0.00
H										
ATOM	5356	HZ1	LYS	A	352	27.587	12.677	10.551	1.00	0.00
H										
ATOM	5357	HZ2	LYS	A	352	26.228	12.382	9.650	1.00	0.00
H										
ATOM	5358	HZ3	LYS	A	352	27.254	13.613	9.224	1.00	0.00
H										
ATOM	5359	N	TYR	A	353	26.081	20.710	12.069	1.00	0.00
N										
ATOM	5360	CA	TYR	A	353	26.587	22.072	12.059	1.00	0.00
C										
ATOM	5361	C	TYR	A	353	26.088	22.852	13.253	1.00	0.00
C										

ATOM	5362	O	TYR	A	353	26.868	23.482	13.970	1.00	0.00
O										
ATOM	5363	CB	TYR	A	353	26.197	22.798	10.752	1.00	0.00
C										
ATOM	5364	CG	TYR	A	353	26.602	24.282	10.644	1.00	0.00
C										
ATOM	5365	CD1	TYR	A	353	27.856	24.631	10.215	1.00	0.00
C										
ATOM	5366	CD2	TYR	A	353	25.718	25.297	10.974	1.00	0.00
C										
ATOM	5367	CE1	TYR	A	353	28.243	25.945	10.089	1.00	0.00
C										
ATOM	5368	CE2	TYR	A	353	26.072	26.648	10.867	1.00	0.00
C										
ATOM	5369	CZ	TYR	A	353	27.352	26.962	10.414	1.00	0.00
C										
ATOM	5370	OH	TYR	A	353	27.757	28.261	10.275	1.00	0.00
O										
ATOM	5371	H	TYR	A	353	25.547	20.375	11.274	1.00	0.00
H										
ATOM	5372	HA	TYR	A	353	27.674	22.030	12.111	1.00	0.00
H										
ATOM	5373	HB2	TYR	A	353	25.113	22.743	10.653	1.00	0.00
H										
ATOM	5374	HB3	TYR	A	353	26.664	22.266	9.925	1.00	0.00
H										
ATOM	5375	HD1	TYR	A	353	28.567	23.845	9.966	1.00	0.00
H										
ATOM	5376	HD2	TYR	A	353	24.720	25.036	11.326	1.00	0.00
H										
ATOM	5377	HE1	TYR	A	353	29.244	26.187	9.736	1.00	0.00
H										
ATOM	5378	HE2	TYR	A	353	25.364	27.432	11.131	1.00	0.00
H										
ATOM	5379	HH	TYR	A	353	27.999	28.432	9.327	1.00	0.00
H										
ATOM	5380	N	LYS	A	354	24.790	22.814	13.466	1.00	0.00
N										
ATOM	5381	CA	LYS	A	354	24.200	23.583	14.571	1.00	0.00
C										
ATOM	5382	C	LYS	A	354	24.677	23.057	15.934	1.00	0.00
C										
ATOM	5383	O	LYS	A	354	25.010	23.840	16.837	1.00	0.00
O										
ATOM	5384	CB	LYS	A	354	22.678	23.560	14.479	1.00	0.00
C										
ATOM	5385	CG	LYS	A	354	22.127	24.645	13.573	1.00	0.00
C										
ATOM	5386	CD	LYS	A	354	20.928	24.148	12.756	1.00	0.00
C										
ATOM	5387	CE	LYS	A	354	19.949	25.285	12.423	1.00	0.00
C										
ATOM	5388	NZ	LYS	A	354	18.701	24.767	11.753	1.00	0.00
N1+										
ATOM	5389	H	LYS	A	354	24.195	22.253	12.866	1.00	0.00
H										



ATOM	5390	HA	LYS	A	354	24.528	24.617	14.475	1.00	0.00
H										
ATOM	5391	HB2	LYS	A	354	22.267	23.699	15.478	1.00	0.00
H										
ATOM	5392	HB3	LYS	A	354	22.368	22.592	14.090	1.00	0.00
H										
ATOM	5393	HG2	LYS	A	354	22.912	24.966	12.889	1.00	0.00
H										
ATOM	5394	HG3	LYS	A	354	21.812	25.489	14.185	1.00	0.00
H										
ATOM	5395	HD2	LYS	A	354	20.402	23.387	13.331	1.00	0.00
H										
ATOM	5396	HD3	LYS	A	354	21.292	23.712	11.826	1.00	0.00
H										
ATOM	5397	HE2	LYS	A	354	20.442	25.991	11.755	1.00	0.00
H										
ATOM	5398	HE3	LYS	A	354	19.670	25.793	13.345	1.00	0.00
H										
ATOM	5399	HZ1	LYS	A	354	18.233	24.112	12.371	1.00	0.00
H										
ATOM	5400	HZ2	LYS	A	354	18.080	25.542	11.548	1.00	0.00
H										
ATOM	5401	HZ3	LYS	A	354	18.952	24.296	10.889	1.00	0.00
H										
ATOM	5402	N	ILE	A	355	24.733	21.738	16.054	1.00	0.00
N										
ATOM	5403	CA	ILE	A	355	25.195	21.086	17.266	1.00	0.00
C										
ATOM	5404	C	ILE	A	355	26.603	21.533	17.525	1.00	0.00
C										
ATOM	5405	O	ILE	A	355	26.884	22.223	18.485	1.00	0.00
O										
ATOM	5406	CB	ILE	A	355	25.114	19.548	17.155	1.00	0.00
C										
ATOM	5407	CG1	ILE	A	355	23.646	19.133	17.127	1.00	0.00
C										
ATOM	5408	CG2	ILE	A	355	25.868	18.874	18.308	1.00	0.00
C										
ATOM	5409	CD1	ILE	A	355	23.409	17.741	16.517	1.00	0.00
C										
ATOM	5410	H	ILE	A	355	24.443	21.163	15.270	1.00	0.00
H										
ATOM	5411	HA	ILE	A	355	24.569	21.409	18.096	1.00	0.00
H										
ATOM	5412	HB	ILE	A	355	25.576	19.245	16.217	1.00	0.00
H										
ATOM	5413	HG12	ILE	A	355	23.093	19.865	16.540	1.00	0.00
H										
ATOM	5414	HG13	ILE	A	355	23.270	19.130	18.149	1.00	0.00
H										
ATOM	5415	HG21	ILE	A	355	25.429	19.180	19.256	1.00	0.00
H										
ATOM	5416	HG22	ILE	A	355	25.796	17.793	18.206	1.00	0.00
H										
ATOM	5417	HG23	ILE	A	355	26.915	19.172	18.280	1.00	0.00
H										

ATOM	5418	HD11	ILE	A	355	23.947	16.994	17.099	1.00	0.00
H										
ATOM	5419	HD12	ILE	A	355	22.344	17.515	16.531	1.00	0.00
H										
ATOM	5420	HD13	ILE	A	355	23.769	17.729	15.489	1.00	0.00
H										
ATOM	5421	N	ASP	A	356	27.479	21.213	16.598	1.00	0.00
N										
ATOM	5422	CA	ASP	A	356	28.896	21.582	16.723	1.00	0.00
C										
ATOM	5423	C	ASP	A	356	29.160	23.060	17.022	1.00	0.00
C										
ATOM	5424	O	ASP	A	356	30.253	23.407	17.517	1.00	0.00
O										
ATOM	5425	CB	ASP	A	356	29.642	21.201	15.448	1.00	0.00
C										
ATOM	5426	CG	ASP	A	356	29.602	19.730	15.174	1.00	0.00
C										
ATOM	5427	OD1	ASP	A	356	28.854	18.984	15.835	1.00	0.00
O										
ATOM	5428	OD2	ASP	A	356	30.296	19.303	14.258	1.00	0.00
O1-										
ATOM	5429	H	ASP	A	356	27.170	20.701	15.778	1.00	0.00
H										
ATOM	5430	HA	ASP	A	356	29.319	20.999	17.540	1.00	0.00
H										
ATOM	5431	HB2	ASP	A	356	30.681	21.509	15.547	1.00	0.00
H										
ATOM	5432	HB3	ASP	A	356	29.186	21.725	14.609	1.00	0.00
H										
ATOM	5433	N	ARG	A	357	28.209	23.935	16.693	1.00	0.00
N										
ATOM	5434	CA	ARG	A	357	28.385	25.368	16.965	1.00	0.00
C										
ATOM	5435	C	ARG	A	357	27.937	25.826	18.349	1.00	0.00
C										
ATOM	5436	O	ARG	A	357	27.727	27.029	18.546	1.00	0.00
O										
ATOM	5437	CB	ARG	A	357	27.757	26.227	15.856	1.00	0.00
C										
ATOM	5438	CG	ARG	A	357	28.540	26.102	14.551	1.00	0.00
C										
ATOM	5439	CD	ARG	A	357	28.227	27.212	13.597	1.00	0.00
C										
ATOM	5440	NE	ARG	A	357	29.090	28.377	13.796	1.00	0.00
N1+										
ATOM	5441	CZ	ARG	A	357	28.686	29.641	13.761	1.00	0.00
C1+										
ATOM	5442	NH1	ARG	A	357	27.392	29.945	13.583	1.00	0.00
N1+										
ATOM	5443	NH2	ARG	A	357	29.590	30.611	13.946	1.00	0.00
N1+										
ATOM	5444	H	ARG	A	357	27.356	23.607	16.251	1.00	0.00
H										
ATOM	5445	HA	ARG	A	357	29.458	25.553	16.919	1.00	0.00
H										

ATOM	5446	HB2	ARG	A	357	27.756	27.269	16.172	1.00	0.00
H										
ATOM	5447	HB3	ARG	A	357	26.733	25.897	15.689	1.00	0.00
H										
ATOM	5448	HG2	ARG	A	357	28.287	25.154	14.080	1.00	0.00
H										
ATOM	5449	HG3	ARG	A	357	29.605	26.124	14.777	1.00	0.00
H										
ATOM	5450	HD2	ARG	A	357	27.192	27.515	13.740	1.00	0.00
H										
ATOM	5451	HD3	ARG	A	357	28.362	26.846	12.580	1.00	0.00
H										
ATOM	5452	HE2	ARG	A	357	30.075	28.205	13.975	1.00	0.00
H										
ATOM	5453	HE3	ARG	A	357	28.905	28.345	14.788	1.00	0.00
H										
ATOM	5454	HH11	ARG	A	357	27.097	30.916	13.558	1.00	0.00
H										
ATOM	5455	HH12	ARG	A	357	26.707	29.204	13.473	1.00	0.00
H										
ATOM	5456	HH13	ARG	A	357	27.533	29.962	12.583	1.00	0.00
H										
ATOM	5457	HH21	ARG	A	357	29.303	31.584	13.923	1.00	0.00
H										
ATOM	5458	HH22	ARG	A	357	30.564	30.372	14.109	1.00	0.00
H										
ATOM	5459	HH23	ARG	A	357	29.417	30.583	14.941	1.00	0.00
H										
ATOM	5460	N	SER	A	358	27.801	24.887	19.302	1.00	0.00
N										
ATOM	5461	CA	SER	A	358	28.128	25.195	20.730	1.00	0.00
C										
ATOM	5462	C	SER	A	358	29.132	24.224	21.357	1.00	0.00
C										
ATOM	5463	O	SER	A	358	28.944	22.997	21.296	1.00	0.00
O										
ATOM	5464	CB	SER	A	358	26.888	25.282	21.592	1.00	0.00
C										
ATOM	5465	OG	SER	A	358	26.444	26.618	21.619	1.00	0.00
O										
ATOM	5466	H	SER	A	358	27.474	23.959	19.050	1.00	0.00
H										
ATOM	5467	HA	SER	A	358	28.592	26.180	20.742	1.00	0.00
H										
ATOM	5468	HC	SER	A	358	30.017	24.610	21.860	1.00	0.00
H										
ATOM	5469	HB2	SER	A	358	27.123	24.955	22.604	1.00	0.00
H										
ATOM	5470	HB3	SER	A	358	26.108	24.646	21.176	1.00	0.00
H										
ATOM	5471	HG	SER	A	358	26.232	26.915	20.695	1.00	0.00
H										
TER	5472		SER	A	358					
ATOM	5473	N	LYS	B	3	51.222	-14.021	20.799	1.00	0.00
N										

ATOM	5474	CA	LYS	B	3	50.970	-12.557	21.097	1.00	0.00
C										
ATOM	5475	C	LYS	B	3	49.913	-11.878	20.229	1.00	0.00
C										
ATOM	5476	O	LYS	B	3	50.011	-11.833	19.011	1.00	0.00
O										
ATOM	5477	CB	LYS	B	3	52.250	-11.720	21.024	1.00	0.00
C										
ATOM	5478	CG	LYS	B	3	51.950	-10.220	21.188	1.00	0.00
C										
ATOM	5479	CD	LYS	B	3	53.207	-9.402	21.453	1.00	0.00
C										
ATOM	5480	CE	LYS	B	3	53.961	-9.933	22.583	1.00	0.00
C										
ATOM	5481	NZ	LYS	B	3	54.856	-8.889	23.212	1.00	0.00
N1+										
ATOM	5482	H1	LYS	B	3	51.535	-14.122	19.839	1.00	0.00
H										
ATOM	5483	H2	LYS	B	3	51.937	-14.376	21.426	1.00	0.00
H										
ATOM	5484	HA	LYS	B	3	50.616	-12.502	22.125	1.00	0.00
H										
ATOM	5485	HB2	LYS	B	3	52.725	-11.883	20.058	1.00	0.00
H										
ATOM	5486	HB3	LYS	B	3	52.925	-12.035	21.818	1.00	0.00
H										
ATOM	5487	HG2	LYS	B	3	51.265	-10.090	22.025	1.00	0.00
H										
ATOM	5488	HG3	LYS	B	3	51.481	-9.855	20.275	1.00	0.00
H										
ATOM	5489	HD2	LYS	B	3	52.921	-8.374	21.670	1.00	0.00
H										
ATOM	5490	HD3	LYS	B	3	53.837	-9.424	20.565	1.00	0.00
H										
ATOM	5491	HE2	LYS	B	3	54.578	-10.761	22.236	1.00	0.00
H										
ATOM	5492	HE3	LYS	B	3	53.260	-10.293	23.334	1.00	0.00
H										
ATOM	5493	HZ1	LYS	B	3	54.291	-8.115	23.546	1.00	0.00
H										
ATOM	5494	HZ2	LYS	B	3	55.360	-9.300	23.991	1.00	0.00
H										
ATOM	5495	HZ3	LYS	B	3	55.519	-8.551	22.521	1.00	0.00
H										
ATOM	5496	N	GLU	B	4	48.941	-11.292	20.913	1.00	0.00
N										
ATOM	5497	CA	GLU	B	4	47.752	-10.758	20.303	1.00	0.00
C										
ATOM	5498	C	GLU	B	4	47.931	-9.323	19.862	1.00	0.00
C										
ATOM	5499	O	GLU	B	4	48.761	-8.568	20.377	1.00	0.00
O										
ATOM	5500	CB	GLU	B	4	46.588	-10.855	21.266	1.00	0.00
C										
ATOM	5501	CG	GLU	B	4	46.474	-12.216	21.868	1.00	0.00
C										

ATOM	5502	CD	GLU	B	4	45.094	-12.504	22.375	1.00	0.00
C										
ATOM	5503	OE1	GLU	B	4	44.475	-11.646	23.042	1.00	0.00
O										
ATOM	5504	OE2	GLU	B	4	44.611	-13.599	22.079	1.00	0.00
O1-										
ATOM	5505	H	GLU	B	4	49.040	-11.216	21.920	1.00	0.00
H										
ATOM	5506	HA	GLU	B	4	47.520	-11.359	19.425	1.00	0.00
H										
ATOM	5507	HB2	GLU	B	4	45.667	-10.630	20.729	1.00	0.00
H										
ATOM	5508	HB3	GLU	B	4	46.730	-10.128	22.064	1.00	0.00
H										
ATOM	5509	HG2	GLU	B	4	47.174	-12.291	22.699	1.00	0.00
H										
ATOM	5510	HG3	GLU	B	4	46.729	-12.956	21.111	1.00	0.00
H										
ATOM	5511	N	ASN	B	5	47.150	-8.988	18.855	1.00	0.00
N										
ATOM	5512	CA	ASN	B	5	47.260	-7.722	18.187	1.00	0.00
C										
ATOM	5513	C	ASN	B	5	46.030	-6.845	18.504	1.00	0.00
C										
ATOM	5514	O	ASN	B	5	44.890	-7.287	18.368	1.00	0.00
O										
ATOM	5515	CB	ASN	B	5	47.463	-7.958	16.688	1.00	0.00
C										
ATOM	5516	CG	ASN	B	5	48.799	-8.634	16.398	1.00	0.00
C										
ATOM	5517	OD1	ASN	B	5	49.849	-8.051	16.599	1.00	0.00
O										
ATOM	5518	ND2	ASN	B	5	48.755	-9.880	15.967	1.00	0.00
N										
ATOM	5519	H	ASN	B	5	46.446	-9.648	18.541	1.00	0.00
H										
ATOM	5520	HA	ASN	B	5	48.144	-7.214	18.571	1.00	0.00
H										
ATOM	5521	HB2	ASN	B	5	47.434	-6.999	16.173	1.00	0.00
H										
ATOM	5522	HB3	ASN	B	5	46.659	-8.593	16.319	1.00	0.00
H										
ATOM	5523	HD21	ASN	B	5	49.616	-10.376	15.759	1.00	0.00
H										
ATOM	5524	HD22	ASN	B	5	47.860	-10.343	15.843	1.00	0.00
H										
ATOM	5525	N	ILE	B	6	46.292	-5.628	18.957	1.00	0.00
N										
ATOM	5526	CA	ILE	B	6	45.263	-4.752	19.416	1.00	0.00
C										
ATOM	5527	C	ILE	B	6	45.362	-3.462	18.685	1.00	0.00
C										
ATOM	5528	O	ILE	B	6	46.469	-2.991	18.436	1.00	0.00
O										
ATOM	5529	CB	ILE	B	6	45.406	-4.458	20.939	1.00	0.00
C										

ATOM	5530	CG1	ILE	B	6	45.337	-5.758	21.742	1.00	0.00
C										
ATOM	5531	CG2	ILE	B	6	44.280	-3.485	21.434	1.00	0.00
C										
ATOM	5532	CD1	ILE	B	6	43.984	-6.513	21.569	1.00	0.00
C										
ATOM	5533	H	ILE	B	6	47.255	-5.309	18.978	1.00	0.00
H										
ATOM	5534	HA	ILE	B	6	44.291	-5.204	19.224	1.00	0.00
H										
ATOM	5535	HB	ILE	B	6	46.373	-3.990	21.115	1.00	0.00
H										
ATOM	5536	HG12	ILE	B	6	45.469	-5.521	22.797	1.00	0.00
H										
ATOM	5537	HG13	ILE	B	6	46.143	-6.412	21.413	1.00	0.00
H										
ATOM	5538	HG21	ILE	B	6	43.305	-3.938	21.256	1.00	0.00
H										
ATOM	5539	HG22	ILE	B	6	44.404	-3.298	22.500	1.00	0.00
H										
ATOM	5540	HG23	ILE	B	6	44.348	-2.544	20.890	1.00	0.00
H										
ATOM	5541	HD11	ILE	B	6	43.841	-6.766	20.519	1.00	0.00
H										
ATOM	5542	HD12	ILE	B	6	43.999	-7.426	22.163	1.00	0.00
H										
ATOM	5543	HD13	ILE	B	6	43.167	-5.875	21.903	1.00	0.00
H										
ATOM	5544	N	CYS	B	7	44.213	-2.859	18.342	1.00	0.00
N										
ATOM	5545	CA	CYS	B	7	44.203	-1.497	17.782	1.00	0.00
C										
ATOM	5546	C	CYS	B	7	43.351	-0.631	18.663	1.00	0.00
C										
ATOM	5547	O	CYS	B	7	42.292	-1.066	19.091	1.00	0.00
O										
ATOM	5548	CB	CYS	B	7	43.713	-1.482	16.329	1.00	0.00
C										
ATOM	5549	SG	CYS	B	7	43.998	0.111	15.459	1.00	0.00
S										
ATOM	5550	H	CYS	B	7	43.334	-3.351	18.471	1.00	0.00
H										
ATOM	5551	HA	CYS	B	7	45.221	-1.111	17.804	1.00	0.00
H										
ATOM	5552	HB2	CYS	B	7	42.643	-1.687	16.326	1.00	0.00
H										
ATOM	5553	HB3	CYS	B	7	44.234	-2.268	15.784	1.00	0.00
H										
ATOM	5554	HG	CYS	B	7	45.370	0.391	15.435	1.00	0.00
H										
ATOM	5555	N	ILE	B	8	43.855	0.562	19.004	1.00	0.00
N										
ATOM	5556	CA	ILE	B	8	43.074	1.627	19.644	1.00	0.00
C										
ATOM	5557	C	ILE	B	8	42.769	2.709	18.630	1.00	0.00
C										

ATOM	5558	O	ILE	B	8	43.694	3.332	18.090	1.00	0.00
O										
ATOM	5559	CB	ILE	B	8	43.786	2.318	20.857	1.00	0.00
C										
ATOM	5560	CG1	ILE	B	8	44.370	1.320	21.875	1.00	0.00
C										
ATOM	5561	CG2	ILE	B	8	42.863	3.335	21.536	1.00	0.00
C										
ATOM	5562	CD1	ILE	B	8	43.471	0.264	22.363	1.00	0.00
C										
ATOM	5563	H	ILE	B	8	44.835	0.740	18.808	1.00	0.00
H										
ATOM	5564	HA	ILE	B	8	42.132	1.204	19.991	1.00	0.00
H										
ATOM	5565	HB	ILE	B	8	44.626	2.879	20.450	1.00	0.00
H										
ATOM	5566	HG12	ILE	B	8	44.706	1.891	22.739	1.00	0.00
H										
ATOM	5567	HG13	ILE	B	8	45.224	0.834	21.406	1.00	0.00
H										
ATOM	5568	HG21	ILE	B	8	41.970	2.829	21.900	1.00	0.00
H										
ATOM	5569	HG22	ILE	B	8	43.385	3.797	22.373	1.00	0.00
H										
ATOM	5570	HG23	ILE	B	8	42.577	4.102	20.818	1.00	0.00
H										
ATOM	5571	HD11	ILE	B	8	43.130	-0.339	21.523	1.00	0.00
H										
ATOM	5572	HD12	ILE	B	8	44.004	-0.368	23.071	1.00	0.00
H										
ATOM	5573	HD13	ILE	B	8	42.612	0.717	22.856	1.00	0.00
H										
ATOM	5574	N	VAL	B	9	41.462	2.948	18.410	1.00	0.00
N										
ATOM	5575	CA	VAL	B	9	40.939	4.042	17.593	1.00	0.00
C										
ATOM	5576	C	VAL	B	9	40.324	5.121	18.516	1.00	0.00
C										
ATOM	5577	O	VAL	B	9	39.525	4.836	19.422	1.00	0.00
O										
ATOM	5578	CB	VAL	B	9	39.918	3.525	16.577	1.00	0.00
C										
ATOM	5579	CG1	VAL	B	9	39.551	4.622	15.533	1.00	0.00
C										
ATOM	5580	CG2	VAL	B	9	40.474	2.235	15.922	1.00	0.00
C										
ATOM	5581	H	VAL	B	9	40.790	2.322	18.843	1.00	0.00
H										
ATOM	5582	HA	VAL	B	9	41.769	4.490	17.048	1.00	0.00
H										
ATOM	5583	HB	VAL	B	9	39.011	3.261	17.119	1.00	0.00
H										
ATOM	5584	HG11	VAL	B	9	40.448	4.928	14.997	1.00	0.00
H										
ATOM	5585	HG12	VAL	B	9	38.824	4.223	14.827	1.00	0.00
H										

ATOM	5586	HG13	VAL	B	9	39.124	5.483	16.046	1.00	0.00
H										
ATOM	5587	HG21	VAL	B	9	40.644	1.482	16.690	1.00	0.00
H										
ATOM	5588	HG22	VAL	B	9	39.755	1.857	15.196	1.00	0.00
H										
ATOM	5589	HG23	VAL	B	9	41.413	2.459	15.419	1.00	0.00
H										
ATOM	5590	N	PHE	B	10	40.728	6.358	18.278	1.00	0.00
N										
ATOM	5591	CA	PHE	B	10	40.379	7.451	19.112	1.00	0.00
C										
ATOM	5592	C	PHE	B	10	40.429	8.694	18.214	1.00	0.00
C										
ATOM	5593	O	PHE	B	10	40.823	8.633	17.020	1.00	0.00
O										
ATOM	5594	CB	PHE	B	10	41.361	7.548	20.291	1.00	0.00
C										
ATOM	5595	CG	PHE	B	10	42.772	7.914	19.873	1.00	0.00
C										
ATOM	5596	CD1	PHE	B	10	43.640	6.951	19.401	1.00	0.00
C										
ATOM	5597	CD2	PHE	B	10	43.190	9.213	19.893	1.00	0.00
C										
ATOM	5598	CE1	PHE	B	10	44.943	7.284	18.968	1.00	0.00
C										
ATOM	5599	CE2	PHE	B	10	44.490	9.558	19.469	1.00	0.00
C										
ATOM	5600	CZ	PHE	B	10	45.359	8.593	19.002	1.00	0.00
C										
ATOM	5601	H	PHE	B	10	41.311	6.532	17.466	1.00	0.00
H										
ATOM	5602	HA	PHE	B	10	39.367	7.314	19.490	1.00	0.00
H										
ATOM	5603	HB2	PHE	B	10	41.390	6.584	20.796	1.00	0.00
H										
ATOM	5604	HB3	PHE	B	10	40.997	8.308	20.981	1.00	0.00
H										
ATOM	5605	HD1	PHE	B	10	43.314	5.913	19.361	1.00	0.00
H										
ATOM	5606	HD2	PHE	B	10	42.512	9.992	20.240	1.00	0.00
H										
ATOM	5607	HE1	PHE	B	10	45.615	6.506	18.609	1.00	0.00
H										
ATOM	5608	HE2	PHE	B	10	44.812	10.598	19.511	1.00	0.00
H										
ATOM	5609	HZ	PHE	B	10	46.358	8.865	18.666	1.00	0.00
H										
ATOM	5610	N	GLY	B	11	40.046	9.816	18.807	1.00	0.00
N										
ATOM	5611	CA	GLY	B	11	39.927	11.092	18.119	1.00	0.00
C										
ATOM	5612	C	GLY	B	11	38.470	11.429	17.898	1.00	0.00
C										
ATOM	5613	O	GLY	B	11	37.684	11.460	18.828	1.00	0.00
O										



ATOM	5614	H	GLY	B	11	39.823	9.783	19.797	1.00	0.00
H										
ATOM	5615	HA2	GLY	B	11	40.432	11.031	17.156	1.00	0.00
H										
ATOM	5616	HA3	GLY	B	11	40.389	11.872	18.723	1.00	0.00
H										
ATOM	5617	N	GLY	B	12	38.088	11.631	16.653	1.00	0.00
N										
ATOM	5618	CA	GLY	B	12	36.730	12.002	16.348	1.00	0.00
C										
ATOM	5619	C	GLY	B	12	36.634	13.473	15.962	1.00	0.00
C										
ATOM	5620	O	GLY	B	12	37.461	14.300	16.348	1.00	0.00
O										
ATOM	5621	H	GLY	B	12	38.759	11.524	15.899	1.00	0.00
H										
ATOM	5622	HA2	GLY	B	12	36.107	11.823	17.224	1.00	0.00
H										
ATOM	5623	HA3	GLY	B	12	36.373	11.393	15.519	1.00	0.00
H										
ATOM	5624	N	LYS	B	13	35.610	13.755	15.167	1.00	0.00
N										
ATOM	5625	CA	LYS	B	13	35.292	15.087	14.686	1.00	0.00
C										
ATOM	5626	C	LYS	B	13	34.422	15.768	15.709	1.00	0.00
C										
ATOM	5627	O	LYS	B	13	34.361	17.009	15.750	1.00	0.00
O										
ATOM	5628	CB	LYS	B	13	34.554	15.030	13.331	1.00	0.00
C										
ATOM	5629	CG	LYS	B	13	35.430	14.584	12.161	1.00	0.00
C										
ATOM	5630	CD	LYS	B	13	35.231	15.430	10.917	1.00	0.00
C										
ATOM	5631	CE	LYS	B	13	33.933	15.083	10.155	1.00	0.00
C										
ATOM	5632	NZ	LYS	B	13	33.555	16.130	9.130	1.00	0.00
N1+										
ATOM	5633	H	LYS	B	13	35.010	12.990	14.876	1.00	0.00
H										
ATOM	5634	HA	LYS	B	13	36.214	15.654	14.567	1.00	0.00
H										
ATOM	5635	HB2	LYS	B	13	34.168	16.024	13.110	1.00	0.00
H										
ATOM	5636	HB3	LYS	B	13	33.724	14.331	13.423	1.00	0.00
H										
ATOM	5637	HG2	LYS	B	13	35.188	13.550	11.920	1.00	0.00
H										
ATOM	5638	HG3	LYS	B	13	36.474	14.652	12.463	1.00	0.00
H										
ATOM	5639	HD2	LYS	B	13	36.078	15.273	10.251	1.00	0.00
H										
ATOM	5640	HD3	LYS	B	13	35.191	16.478	11.212	1.00	0.00
H										
ATOM	5641	HE2	LYS	B	13	33.121	14.993	10.875	1.00	0.00
H										

ATOM	5642	HE3	LYS	B	13	34.073	14.132	9.644	1.00	0.00
H										
ATOM	5643	HZ1	LYS	B	13	34.300	16.220	8.447	1.00	0.00
H										
ATOM	5644	HZ2	LYS	B	13	32.698	15.852	8.662	1.00	0.00
H										
ATOM	5645	HZ3	LYS	B	13	33.412	17.022	9.594	1.00	0.00
H										
ATOM	5646	N	SER	B	14	33.735	14.948	16.508	1.00	0.00
N										
ATOM	5647	CA	SER	B	14	32.894	15.444	17.583	1.00	0.00
C										
ATOM	5648	C	SER	B	14	33.801	16.099	18.633	1.00	0.00
C										
ATOM	5649	O	SER	B	14	35.033	15.813	18.681	1.00	0.00
O										
ATOM	5650	CB	SER	B	14	31.980	14.339	18.165	1.00	0.00
C										
ATOM	5651	OG	SER	B	14	32.639	13.072	18.300	1.00	0.00
O										
ATOM	5652	H	SER	B	14	33.802	13.947	16.359	1.00	0.00
H										
ATOM	5653	HA	SER	B	14	32.251	16.221	17.170	1.00	0.00
H										
ATOM	5654	HB2	SER	B	14	31.124	14.215	17.504	1.00	0.00
H										
ATOM	5655	HB3	SER	B	14	31.637	14.657	19.148	1.00	0.00
H										
ATOM	5656	HG	SER	B	14	33.419	13.168	18.908	1.00	0.00
H										
ATOM	5657	N	ALA	B	15	33.200	17.018	19.417	1.00	0.00
N										
ATOM	5658	CA	ALA	B	15	33.931	17.880	20.375	1.00	0.00
C										
ATOM	5659	C	ALA	B	15	34.252	17.049	21.615	1.00	0.00
C										
ATOM	5660	O	ALA	B	15	34.099	17.485	22.736	1.00	0.00
O										
ATOM	5661	CB	ALA	B	15	33.108	19.117	20.735	1.00	0.00
C										
ATOM	5662	H	ALA	B	15	32.193	17.125	19.347	1.00	0.00
H										
ATOM	5663	HA	ALA	B	15	34.865	18.201	19.916	1.00	0.00
H										
ATOM	5664	HB1	ALA	B	15	32.168	18.809	21.190	1.00	0.00
H										
ATOM	5665	HB2	ALA	B	15	33.667	19.732	21.439	1.00	0.00
H										
ATOM	5666	HB3	ALA	B	15	32.904	19.692	19.833	1.00	0.00
H										
ATOM	5667	N	GLU	B	16	34.664	15.813	21.375	1.00	0.00
N										
ATOM	5668	CA	GLU	B	16	35.041	14.909	22.428	1.00	0.00
C										
ATOM	5669	C	GLU	B	16	36.431	14.350	22.144	1.00	0.00
C										

ATOM	5670	O	GLU	B	16	36.906	13.454	22.815	1.00	0.00
O										
ATOM	5671	CB	GLU	B	16	33.984	13.835	22.492	1.00	0.00
C										
ATOM	5672	CG	GLU	B	16	33.997	13.059	23.800	1.00	0.00
C										
ATOM	5673	CD	GLU	B	16	34.193	11.576	23.570	1.00	0.00
C										
ATOM	5674	OE1	GLU	B	16	34.768	11.213	22.508	1.00	0.00
O										
ATOM	5675	OE2	GLU	B	16	33.790	10.794	24.467	1.00	0.00
O1-										
ATOM	5676	H	GLU	B	16	34.717	15.493	20.413	1.00	0.00
H										
ATOM	5677	HA	GLU	B	16	35.060	15.450	23.373	1.00	0.00
H										
ATOM	5678	HB2	GLU	B	16	34.151	13.137	21.673	1.00	0.00
H										
ATOM	5679	HB3	GLU	B	16	33.008	14.303	22.377	1.00	0.00
H										
ATOM	5680	HG2	GLU	B	16	33.049	13.214	24.312	1.00	0.00
H										
ATOM	5681	HG3	GLU	B	16	34.810	13.430	24.422	1.00	0.00
H										
ATOM	5682	N	HIS	B	17	37.057	14.935	21.131	1.00	0.00
N										
ATOM	5683	CA	HIS	B	17	38.426	14.712	20.690	1.00	0.00
C										
ATOM	5684	C	HIS	B	17	39.378	14.535	21.836	1.00	0.00
C										
ATOM	5685	O	HIS	B	17	40.103	13.534	21.890	1.00	0.00
O										
ATOM	5686	CB	HIS	B	17	38.870	15.980	19.897	1.00	0.00
C										
ATOM	5687	CG	HIS	B	17	39.889	15.718	18.838	1.00	0.00
C										
ATOM	5688	ND1	HIS	B	17	39.704	14.770	17.849	1.00	0.00
N										
ATOM	5689	CD2	HIS	B	17	41.074	16.316	18.575	1.00	0.00
C										
ATOM	5690	CE1	HIS	B	17	40.744	14.792	17.033	1.00	0.00
C										
ATOM	5691	NE2	HIS	B	17	41.590	15.718	17.452	1.00	0.00
N										
ATOM	5692	H	HIS	B	17	36.520	15.616	20.603	1.00	0.00
H										
ATOM	5693	HA	HIS	B	17	38.465	13.839	20.040	1.00	0.00
H										
ATOM	5694	HB2	HIS	B	17	39.289	16.695	20.604	1.00	0.00
H										
ATOM	5695	HB3	HIS	B	17	37.989	16.412	19.423	1.00	0.00
H										
ATOM	5696	HD1	HIS	B	17	38.900	14.157	17.763	1.00	0.00
H										
ATOM	5697	HD2	HIS	B	17	41.532	17.121	19.147	1.00	0.00
H										

ATOM	5698	HE1	HIS	B	17	40.881	14.154	16.161	1.00	0.00
H										
ATOM	5699	N	GLU	B	18	39.386	15.514	22.745	1.00	0.00
N										
ATOM	5700	CA	GLU	B	18	40.379	15.552	23.822	1.00	0.00
C										
ATOM	5701	C	GLU	B	18	40.176	14.463	24.887	1.00	0.00
C										
ATOM	5702	O	GLU	B	18	41.124	13.789	25.321	1.00	0.00
O										
ATOM	5703	CB	GLU	B	18	40.534	16.993	24.393	1.00	0.00
C										
ATOM	5704	CG	GLU	B	18	39.435	17.579	25.312	1.00	0.00
C										
ATOM	5705	CD	GLU	B	18	39.789	19.009	25.864	1.00	0.00
C										
ATOM	5706	OE1	GLU	B	18	39.008	19.962	25.582	1.00	0.00
O										
ATOM	5707	OE2	GLU	B	18	40.844	19.204	26.555	1.00	0.00
O1-										
ATOM	5708	H	GLU	B	18	38.688	16.249	22.688	1.00	0.00
H										
ATOM	5709	HA	GLU	B	18	41.332	15.322	23.348	1.00	0.00
H										
ATOM	5710	HB2	GLU	B	18	40.620	17.663	23.539	1.00	0.00
H										
ATOM	5711	HB3	GLU	B	18	41.462	17.009	24.962	1.00	0.00
H										
ATOM	5712	HG2	GLU	B	18	39.296	16.907	26.157	1.00	0.00
H										
ATOM	5713	HG3	GLU	B	18	38.508	17.647	24.744	1.00	0.00
H										
ATOM	5714	N	VAL	B	19	38.935	14.227	25.278	1.00	0.00
N										
ATOM	5715	CA	VAL	B	19	38.648	13.158	26.225	1.00	0.00
C										
ATOM	5716	C	VAL	B	19	38.956	11.798	25.589	1.00	0.00
C										
ATOM	5717	O	VAL	B	19	39.562	10.923	26.231	1.00	0.00
O										
ATOM	5718	CB	VAL	B	19	37.203	13.192	26.634	1.00	0.00
C										
ATOM	5719	CG1	VAL	B	19	36.902	12.000	27.547	1.00	0.00
C										
ATOM	5720	CG2	VAL	B	19	36.894	14.518	27.281	1.00	0.00
C										
ATOM	5721	H	VAL	B	19	38.176	14.795	24.915	1.00	0.00
H										
ATOM	5722	HA	VAL	B	19	39.272	13.288	27.108	1.00	0.00
H										
ATOM	5723	HB	VAL	B	19	36.592	13.099	25.737	1.00	0.00
H										
ATOM	5724	HG11	VAL	B	19	37.532	12.054	28.434	1.00	0.00
H										
ATOM	5725	HG12	VAL	B	19	35.855	12.025	27.843	1.00	0.00
H										

ATOM	5726	HG13	VAL	B	19	37.106	11.073	27.013	1.00	0.00
H										
ATOM	5727	HG21	VAL	B	19	37.090	15.322	26.573	1.00	0.00
H										
ATOM	5728	HG22	VAL	B	19	35.847	14.542	27.577	1.00	0.00
H										
ATOM	5729	HG23	VAL	B	19	37.523	14.648	28.160	1.00	0.00
H										
ATOM	5730	N	SER	B	20	38.565	11.643	24.310	1.00	0.00
N										
ATOM	5731	CA	SER	B	20	38.959	10.495	23.554	1.00	0.00
C										
ATOM	5732	C	SER	B	20	40.490	10.291	23.576	1.00	0.00
C										
ATOM	5733	O	SER	B	20	40.970	9.177	23.846	1.00	0.00
O										
ATOM	5734	CB	SER	B	20	38.437	10.571	22.149	1.00	0.00
C										
ATOM	5735	OG	SER	B	20	38.890	9.458	21.432	1.00	0.00
O										
ATOM	5736	H	SER	B	20	37.981	12.352	23.876	1.00	0.00
H										
ATOM	5737	HA	SER	B	20	38.506	9.623	24.024	1.00	0.00
H										
ATOM	5738	HB2	SER	B	20	38.798	11.483	21.674	1.00	0.00
H										
ATOM	5739	HB3	SER	B	20	37.348	10.577	22.164	1.00	0.00
H										
ATOM	5740	HG	SER	B	20	38.560	8.628	21.866	1.00	0.00
H										
ATOM	5741	N	ILE	B	21	41.244	11.345	23.326	1.00	0.00
N										
ATOM	5742	CA	ILE	B	21	42.702	11.231	23.326	1.00	0.00
C										
ATOM	5743	C	ILE	B	21	43.243	10.824	24.739	1.00	0.00
C										
ATOM	5744	O	ILE	B	21	44.042	9.900	24.844	1.00	0.00
O										
ATOM	5745	CB	ILE	B	21	43.396	12.542	22.779	1.00	0.00
C										
ATOM	5746	CG1	ILE	B	21	43.144	12.706	21.272	1.00	0.00
C										
ATOM	5747	CG2	ILE	B	21	44.894	12.515	23.050	1.00	0.00
C										
ATOM	5748	CD1	ILE	B	21	43.656	13.990	20.702	1.00	0.00
C										
ATOM	5749	H	ILE	B	21	40.808	12.242	23.132	1.00	0.00
H										
ATOM	5750	HA	ILE	B	21	42.959	10.424	22.641	1.00	0.00
H										
ATOM	5751	HB	ILE	B	21	42.968	13.400	23.295	1.00	0.00
H										
ATOM	5752	HG12	ILE	B	21	42.070	12.659	21.098	1.00	0.00
H										
ATOM	5753	HG13	ILE	B	21	43.632	11.883	20.752	1.00	0.00
H										

ATOM	5754	HG21	ILE	B	21	45.337	11.652	22.556	1.00	0.00
H										
ATOM	5755	HG22	ILE	B	21	45.349	13.427	22.665	1.00	0.00
H										
ATOM	5756	HG23	ILE	B	21	45.067	12.448	24.123	1.00	0.00
H										
ATOM	5757	HD11	ILE	B	21	44.732	14.052	20.855	1.00	0.00
H										
ATOM	5758	HD12	ILE	B	21	43.438	14.027	19.636	1.00	0.00
H										
ATOM	5759	HD13	ILE	B	21	43.170	14.828	21.200	1.00	0.00
H										
ATOM	5760	N	LEU	B	22	42.767	11.475	25.799	1.00	0.00
N										
ATOM	5761	CA	LEU	B	22	43.175	11.166	27.181	1.00	0.00
C										
ATOM	5762	C	LEU	B	22	42.893	9.708	27.524	1.00	0.00
C										
ATOM	5763	O	LEU	B	22	43.684	9.043	28.172	1.00	0.00
O										
ATOM	5764	CB	LEU	B	22	42.365	12.012	28.146	1.00	0.00
C										
ATOM	5765	CG	LEU	B	22	42.779	12.367	29.574	1.00	0.00
C										
ATOM	5766	CD1	LEU	B	22	41.542	12.284	30.498	1.00	0.00
C										
ATOM	5767	CD2	LEU	B	22	44.017	11.605	30.140	1.00	0.00
C										
ATOM	5768	H	LEU	B	22	42.092	12.218	25.648	1.00	0.00
H										
ATOM	5769	HA	LEU	B	22	44.236	11.376	27.308	1.00	0.00
H										
ATOM	5770	HB2	LEU	B	22	41.407	11.504	28.241	1.00	0.00
H										
ATOM	5771	HB3	LEU	B	22	42.221	12.967	27.642	1.00	0.00
H										
ATOM	5772	HG	LEU	B	22	43.063	13.418	29.549	1.00	0.00
H										
ATOM	5773	HD11	LEU	B	22	41.139	11.273	30.475	1.00	0.00
H										
ATOM	5774	HD12	LEU	B	22	41.833	12.537	31.517	1.00	0.00
H										
ATOM	5775	HD13	LEU	B	22	40.784	12.985	30.153	1.00	0.00
H										
ATOM	5776	HD21	LEU	B	22	44.885	11.809	29.515	1.00	0.00
H										
ATOM	5777	HD22	LEU	B	22	44.215	11.940	31.157	1.00	0.00
H										
ATOM	5778	HD23	LEU	B	22	43.814	10.535	30.142	1.00	0.00
H										
ATOM	5779	N	THR	B	23	41.730	9.242	27.098	1.00	0.00
N										
ATOM	5780	CA	THR	B	23	41.279	7.877	27.307	1.00	0.00
C										
ATOM	5781	C	THR	B	23	42.204	6.920	26.548	1.00	0.00
C										

ATOM	5782	O	THR	B	23	42.612	5.884	27.111	1.00	0.00
O										
ATOM	5783	CB	THR	B	23	39.825	7.729	26.843	1.00	0.00
C										
ATOM	5784	OG1	THR	B	23	39.038	8.813	27.397	1.00	0.00
O										
ATOM	5785	CG2	THR	B	23	39.245	6.348	27.212	1.00	0.00
C										
ATOM	5786	H	THR	B	23	41.116	9.876	26.596	1.00	0.00
H										
ATOM	5787	HA	THR	B	23	41.334	7.648	28.370	1.00	0.00
H										
ATOM	5788	HB	THR	B	23	39.808	7.822	25.758	1.00	0.00
H										
ATOM	5789	HG21	THR	B	23	39.275	6.219	28.293	1.00	0.00
H										
ATOM	5790	HG22	THR	B	23	38.215	6.283	26.866	1.00	0.00
H										
ATOM	5791	HG23	THR	B	23	39.837	5.567	26.737	1.00	0.00
H										
ATOM	5792	HG1	THR	B	23	39.403	9.681	27.082	1.00	0.00
H										
ATOM	5793	N	ALA	B	24	42.576	7.276	25.311	1.00	0.00
N										
ATOM	5794	CA	ALA	B	24	43.527	6.447	24.503	1.00	0.00
C										
ATOM	5795	C	ALA	B	24	44.860	6.332	25.227	1.00	0.00
C										
ATOM	5796	O	ALA	B	24	45.404	5.241	25.350	1.00	0.00
O										
ATOM	5797	CB	ALA	B	24	43.732	7.045	23.144	1.00	0.00
C										
ATOM	5798	H	ALA	B	24	42.203	8.131	24.910	1.00	0.00
H										
ATOM	5799	HA	ALA	B	24	43.106	5.449	24.385	1.00	0.00
H										
ATOM	5800	HB1	ALA	B	24	44.141	8.049	23.247	1.00	0.00
H										
ATOM	5801	HB2	ALA	B	24	44.425	6.427	22.576	1.00	0.00
H										
ATOM	5802	HB3	ALA	B	24	42.778	7.094	22.621	1.00	0.00
H										
ATOM	5803	N	GLN	B	25	45.363	7.453	25.742	1.00	0.00
N										
ATOM	5804	CA	GLN	B	25	46.559	7.441	26.591	1.00	0.00
C										
ATOM	5805	C	GLN	B	25	46.398	6.589	27.833	1.00	0.00
C										
ATOM	5806	O	GLN	B	25	47.299	5.823	28.171	1.00	0.00
O										
ATOM	5807	CB	GLN	B	25	46.991	8.855	26.987	1.00	0.00
C										
ATOM	5808	CG	GLN	B	25	48.192	8.911	28.012	1.00	0.00
C										
ATOM	5809	CD	GLN	B	25	48.307	10.243	28.707	1.00	0.00
C										

ATOM	5810	OE1	GLN	B	25	47.294	10.842	29.033	1.00	0.00
O										
ATOM	5811	NE2	GLN	B	25	49.542	10.708	28.967	1.00	0.00
N										
ATOM	5812	H	GLN	B	25	44.907	8.338	25.542	1.00	0.00
H										
ATOM	5813	HA	GLN	B	25	47.368	7.008	26.004	1.00	0.00
H										
ATOM	5814	HB2	GLN	B	25	46.136	9.358	27.437	1.00	0.00
H										
ATOM	5815	HB3	GLN	B	25	47.290	9.385	26.084	1.00	0.00
H										
ATOM	5816	HG2	GLN	B	25	49.118	8.719	27.473	1.00	0.00
H										
ATOM	5817	HG3	GLN	B	25	48.043	8.138	28.764	1.00	0.00
H										
ATOM	5818	HE21	GLN	B	25	49.660	11.602	29.434	1.00	0.00
H										
ATOM	5819	HE22	GLN	B	25	50.356	10.166	28.696	1.00	0.00
H										
ATOM	5820	N	ASN	B	26	45.285	6.719	28.531	1.00	0.00
N										
ATOM	5821	CA	ASN	B	26	45.036	5.849	29.712	1.00	0.00
C										
ATOM	5822	C	ASN	B	26	45.038	4.338	29.333	1.00	0.00
C										
ATOM	5823	O	ASN	B	26	45.772	3.508	29.901	1.00	0.00
O										
ATOM	5824	CB	ASN	B	26	43.712	6.186	30.366	1.00	0.00
C										
ATOM	5825	CG	ASN	B	26	43.825	7.289	31.371	1.00	0.00
C										
ATOM	5826	OD1	ASN	B	26	43.884	7.037	32.569	1.00	0.00
O										
ATOM	5827	ND2	ASN	B	26	43.804	8.526	30.908	1.00	0.00
N										
ATOM	5828	H	ASN	B	26	44.597	7.415	28.261	1.00	0.00
H										
ATOM	5829	HA	ASN	B	26	45.830	6.021	30.437	1.00	0.00
H										
ATOM	5830	HB2	ASN	B	26	43.336	5.296	30.868	1.00	0.00
H										
ATOM	5831	HB3	ASN	B	26	43.010	6.492	29.592	1.00	0.00
H										
ATOM	5832	HD21	ASN	B	26	43.877	9.309	31.549	1.00	0.00
H										
ATOM	5833	HD22	ASN	B	26	43.713	8.693	29.911	1.00	0.00
H										
ATOM	5834	N	VAL	B	27	44.268	4.006	28.313	1.00	0.00
N										
ATOM	5835	CA	VAL	B	27	44.166	2.626	27.891	1.00	0.00
C										
ATOM	5836	C	VAL	B	27	45.493	2.128	27.363	1.00	0.00
C										
ATOM	5837	O	VAL	B	27	45.909	0.995	27.654	1.00	0.00
O										



ATOM	5838	CB	VAL	B	27	43.069	2.476	26.829	1.00	0.00
C										
ATOM	5839	CG1	VAL	B	27	43.101	1.105	26.221	1.00	0.00
C										
ATOM	5840	CG2	VAL	B	27	41.760	2.769	27.468	1.00	0.00
C										
ATOM	5841	H	VAL	B	27	43.744	4.724	27.822	1.00	0.00
H										
ATOM	5842	HA	VAL	B	27	43.892	2.022	28.755	1.00	0.00
H										
ATOM	5843	HB	VAL	B	27	43.243	3.209	26.043	1.00	0.00
H										
ATOM	5844	HG11	VAL	B	27	42.941	0.359	26.998	1.00	0.00
H										
ATOM	5845	HG12	VAL	B	27	42.315	1.022	25.471	1.00	0.00
H										
ATOM	5846	HG13	VAL	B	27	44.069	0.939	25.752	1.00	0.00
H										
ATOM	5847	HG21	VAL	B	27	41.766	3.786	27.858	1.00	0.00
H										
ATOM	5848	HG22	VAL	B	27	40.965	2.668	26.730	1.00	0.00
H										
ATOM	5849	HG23	VAL	B	27	41.589	2.068	28.284	1.00	0.00
H										
ATOM	5850	N	LEU	B	28	46.185	2.984	26.612	1.00	0.00
N										
ATOM	5851	CA	LEU	B	28	47.465	2.594	26.077	1.00	0.00
C										
ATOM	5852	C	LEU	B	28	48.459	2.312	27.171	1.00	0.00
C										
ATOM	5853	O	LEU	B	28	49.294	1.457	26.998	1.00	0.00
O										
ATOM	5854	CB	LEU	B	28	48.066	3.656	25.153	1.00	0.00
C										
ATOM	5855	CG	LEU	B	28	47.584	3.722	23.696	1.00	0.00
C										
ATOM	5856	CD1	LEU	B	28	48.184	4.991	23.093	1.00	0.00
C										
ATOM	5857	CD2	LEU	B	28	47.985	2.490	22.876	1.00	0.00
C										
ATOM	5858	H	LEU	B	28	45.812	3.908	26.417	1.00	0.00
H										
ATOM	5859	HA	LEU	B	28	47.327	1.681	25.500	1.00	0.00
H										
ATOM	5860	HB2	LEU	B	28	49.141	3.488	25.128	1.00	0.00
H										
ATOM	5861	HB3	LEU	B	28	47.861	4.626	25.603	1.00	0.00
H										
ATOM	5862	HG	LEU	B	28	46.498	3.810	23.689	1.00	0.00
H										
ATOM	5863	HD11	LEU	B	28	49.270	4.936	23.140	1.00	0.00
H										
ATOM	5864	HD12	LEU	B	28	47.869	5.083	22.054	1.00	0.00
H										
ATOM	5865	HD13	LEU	B	28	47.839	5.858	23.655	1.00	0.00
H										

ATOM	5866	HD21	LEU	B	28	47.553	1.598	23.327	1.00	0.00
H										
ATOM	5867	HD22	LEU	B	28	47.616	2.596	21.857	1.00	0.00
H										
ATOM	5868	HD23	LEU	B	28	49.070	2.401	22.862	1.00	0.00
H										
ATOM	5869	N	ASN	B	29	48.388	3.044	28.278	1.00	0.00
N										
ATOM	5870	CA	ASN	B	29	49.384	2.918	29.319	1.00	0.00
C										
ATOM	5871	C	ASN	B	29	49.042	1.803	30.297	1.00	0.00
C										
ATOM	5872	O	ASN	B	29	49.893	1.349	31.023	1.00	0.00
O										
ATOM	5873	CB	ASN	B	29	49.568	4.249	30.058	1.00	0.00
C										
ATOM	5874	CG	ASN	B	29	50.369	5.265	29.252	1.00	0.00
C										
ATOM	5875	OD1	ASN	B	29	50.941	4.947	28.213	1.00	0.00
O										
ATOM	5876	ND2	ASN	B	29	50.411	6.493	29.731	1.00	0.00
N										
ATOM	5877	H	ASN	B	29	47.623	3.701	28.395	1.00	0.00
H										
ATOM	5878	HA	ASN	B	29	50.331	2.666	28.845	1.00	0.00
H										
ATOM	5879	HB2	ASN	B	29	50.090	4.058	30.994	1.00	0.00
H										
ATOM	5880	HB3	ASN	B	29	48.585	4.669	30.269	1.00	0.00
H										
ATOM	5881	HD21	ASN	B	29	50.929	7.213	29.237	1.00	0.00
H										
ATOM	5882	HD22	ASN	B	29	49.925	6.718	30.593	1.00	0.00
H										
ATOM	5883	N	ALA	B	30	47.800	1.361	30.321	1.00	0.00
N										
ATOM	5884	CA	ALA	B	30	47.423	0.208	31.163	1.00	0.00
C										
ATOM	5885	C	ALA	B	30	47.542	-1.156	30.429	1.00	0.00
C										
ATOM	5886	O	ALA	B	30	47.400	-2.200	31.043	1.00	0.00
O										
ATOM	5887	CB	ALA	B	30	46.026	0.412	31.726	1.00	0.00
C										
ATOM	5888	H	ALA	B	30	47.094	1.819	29.753	1.00	0.00
H										
ATOM	5889	HA	ALA	B	30	48.111	0.184	32.006	1.00	0.00
H										
ATOM	5890	HB1	ALA	B	30	45.315	0.506	30.907	1.00	0.00
H										
ATOM	5891	HB2	ALA	B	30	45.756	-0.442	32.345	1.00	0.00
H										
ATOM	5892	HB3	ALA	B	30	46.007	1.318	32.329	1.00	0.00
H										
ATOM	5893	N	ILE	B	31	47.871	-1.137	29.142	1.00	0.00
N										

ATOM	5894	CA	ILE	B	31	47.975	-2.359	28.332	1.00	0.00
C										
ATOM	5895	C	ILE	B	31	49.377	-3.008	28.463	1.00	0.00
C										
ATOM	5896	O	ILE	B	31	50.398	-2.359	28.235	1.00	0.00
O										
ATOM	5897	CB	ILE	B	31	47.583	-2.020	26.827	1.00	0.00
C										
ATOM	5898	CG1	ILE	B	31	46.611	-3.016	26.225	1.00	0.00
C										
ATOM	5899	CG2	ILE	B	31	48.784	-1.877	25.893	1.00	0.00
C										
ATOM	5900	CD1	ILE	B	31	45.930	-2.461	24.926	1.00	0.00
C										
ATOM	5901	H	ILE	B	31	48.058	-0.242	28.700	1.00	0.00
H										
ATOM	5902	HA	ILE	B	31	47.244	-3.071	28.712	1.00	0.00
H										
ATOM	5903	HB	ILE	B	31	47.078	-1.055	26.842	1.00	0.00
H										
ATOM	5904	HG12	ILE	B	31	45.838	-3.240	26.959	1.00	0.00
H										
ATOM	5905	HG13	ILE	B	31	47.151	-3.928	25.976	1.00	0.00
H										
ATOM	5906	HG21	ILE	B	31	49.345	-2.810	25.878	1.00	0.00
H										
ATOM	5907	HG22	ILE	B	31	48.436	-1.647	24.887	1.00	0.00
H										
ATOM	5908	HG23	ILE	B	31	49.426	-1.073	26.248	1.00	0.00
H										
ATOM	5909	HD11	ILE	B	31	46.694	-2.239	24.182	1.00	0.00
H										
ATOM	5910	HD12	ILE	B	31	45.242	-3.207	24.529	1.00	0.00
H										
ATOM	5911	HD13	ILE	B	31	45.380	-1.552	25.164	1.00	0.00
H										
ATOM	5912	N	ASP	B	32	49.448	-4.282	28.832	1.00	0.00
N										
ATOM	5913	CA	ASP	B	32	50.774	-4.890	28.951	1.00	0.00
C										
ATOM	5914	C	ASP	B	32	51.260	-5.208	27.582	1.00	0.00
C										
ATOM	5915	O	ASP	B	32	50.581	-5.919	26.858	1.00	0.00
O										
ATOM	5916	CB	ASP	B	32	50.798	-6.166	29.798	1.00	0.00
C										
ATOM	5917	CG	ASP	B	32	52.181	-6.807	29.839	1.00	0.00
C										
ATOM	5918	OD1	ASP	B	32	52.629	-7.205	30.935	1.00	0.00
O										
ATOM	5919	OD2	ASP	B	32	52.832	-6.902	28.768	1.00	0.00
O1-										
ATOM	5920	H	ASP	B	32	48.608	-4.818	29.026	1.00	0.00
H										
ATOM	5921	HA	ASP	B	32	51.450	-4.163	29.399	1.00	0.00
H										

ATOM	5922	HB2	ASP	B	32	50.093	-6.880	29.375	1.00	0.00
H										
ATOM	5923	HB3	ASP	B	32	50.497	-5.918	30.814	1.00	0.00
H										
ATOM	5924	N	LYS	B	33	52.446	-4.704	27.264	1.00	0.00
N										
ATOM	5925	CA	LYS	B	33	52.983	-4.735	25.917	1.00	0.00
C										
ATOM	5926	C	LYS	B	33	53.746	-6.016	25.572	1.00	0.00
C										
ATOM	5927	O	LYS	B	33	54.238	-6.153	24.462	1.00	0.00
O										
ATOM	5928	CB	LYS	B	33	53.865	-3.487	25.651	1.00	0.00
C										
ATOM	5929	CG	LYS	B	33	53.109	-2.325	24.933	1.00	0.00
C										
ATOM	5930	CD	LYS	B	33	52.296	-1.433	25.907	1.00	0.00
C										
ATOM	5931	CE	LYS	B	33	51.974	-0.068	25.296	1.00	0.00
C										
ATOM	5932	NZ	LYS	B	33	52.169	1.078	26.263	1.00	0.00
N1+										
ATOM	5933	H	LYS	B	33	53.003	-4.277	27.997	1.00	0.00
H										
ATOM	5934	HA	LYS	B	33	52.136	-4.676	25.235	1.00	0.00
H										
ATOM	5935	HB2	LYS	B	33	54.706	-3.787	25.027	1.00	0.00
H										
ATOM	5936	HB3	LYS	B	33	54.235	-3.118	26.606	1.00	0.00
H										
ATOM	5937	HG2	LYS	B	33	52.424	-2.756	24.204	1.00	0.00
H										
ATOM	5938	HG3	LYS	B	33	53.840	-1.701	24.420	1.00	0.00
H										
ATOM	5939	HD2	LYS	B	33	52.877	-1.284	26.816	1.00	0.00
H										
ATOM	5940	HD3	LYS	B	33	51.363	-1.938	26.151	1.00	0.00
H										
ATOM	5941	HE2	LYS	B	33	50.935	-0.072	24.968	1.00	0.00
H										
ATOM	5942	HE3	LYS	B	33	52.625	0.089	24.437	1.00	0.00
H										
ATOM	5943	HZ1	LYS	B	33	53.136	1.100	26.571	1.00	0.00
H										
ATOM	5944	HZ2	LYS	B	33	51.941	1.953	25.801	1.00	0.00
H										
ATOM	5945	HZ3	LYS	B	33	51.561	0.950	27.066	1.00	0.00
H										
ATOM	5946	N	ASP	B	34	53.854	-6.940	26.518	1.00	0.00
N										
ATOM	5947	CA	ASP	B	34	54.444	-8.240	26.240	1.00	0.00
C										
ATOM	5948	C	ASP	B	34	53.340	-9.284	26.032	1.00	0.00
C										
ATOM	5949	O	ASP	B	34	53.612	-10.381	25.551	1.00	0.00
O										

ATOM	5950	CB	ASP	B	34	55.412	-8.669	27.348	1.00	0.00
C										
ATOM	5951	CG	ASP	B	34	56.629	-7.754	27.462	1.00	0.00
C										
ATOM	5952	OD1	ASP	B	34	57.107	-7.241	26.415	1.00	0.00
O										
ATOM	5953	OD2	ASP	B	34	57.127	-7.562	28.603	1.00	0.00
O1-										
ATOM	5954	H	ASP	B	34	53.518	-6.736	27.454	1.00	0.00
H										
ATOM	5955	HA	ASP	B	34	55.010	-8.161	25.313	1.00	0.00
H										
ATOM	5956	HB2	ASP	B	34	55.756	-9.680	27.136	1.00	0.00
H										
ATOM	5957	HB3	ASP	B	34	54.879	-8.659	28.298	1.00	0.00
H										
ATOM	5958	N	LYS	B	35	52.104	-8.953	26.389	1.00	0.00
N										
ATOM	5959	CA	LYS	B	35	50.956	-9.780	25.999	1.00	0.00
C										
ATOM	5960	C	LYS	B	35	50.329	-9.280	24.691	1.00	0.00
C										
ATOM	5961	O	LYS	B	35	49.800	-10.070	23.894	1.00	0.00
O										
ATOM	5962	CB	LYS	B	35	49.893	-9.834	27.115	1.00	0.00
C										
ATOM	5963	CG	LYS	B	35	50.165	-10.956	28.139	1.00	0.00
C										
ATOM	5964	CD	LYS	B	35	48.887	-11.536	28.830	1.00	0.00
C										
ATOM	5965	CE	LYS	B	35	47.815	-12.053	27.858	1.00	0.00
C										
ATOM	5966	NZ	LYS	B	35	46.585	-11.229	27.945	1.00	0.00
N1+										
ATOM	5967	H	LYS	B	35	51.951	-8.115	26.940	1.00	0.00
H										
ATOM	5968	HA	LYS	B	35	51.316	-10.794	25.831	1.00	0.00
H										
ATOM	5969	HB2	LYS	B	35	48.918	-10.005	26.660	1.00	0.00
H										
ATOM	5970	HB3	LYS	B	35	49.887	-8.879	27.638	1.00	0.00
H										
ATOM	5971	HG2	LYS	B	35	50.818	-10.557	28.914	1.00	0.00
H										
ATOM	5972	HG3	LYS	B	35	50.670	-11.771	27.623	1.00	0.00
H										
ATOM	5973	HD2	LYS	B	35	48.443	-10.750	29.439	1.00	0.00
H										
ATOM	5974	HD3	LYS	B	35	49.192	-12.363	29.470	1.00	0.00
H										
ATOM	5975	HE2	LYS	B	35	47.572	-13.085	28.109	1.00	0.00
H										
ATOM	5976	HE3	LYS	B	35	48.203	-12.009	26.842	1.00	0.00
H										
ATOM	5977	HZ1	LYS	B	35	46.805	-10.267	27.708	1.00	0.00
H										

ATOM	5978	HZ2	LYS	B	35	45.891	-11.587	27.296	1.00	0.00
H										
ATOM	5979	HZ3	LYS	B	35	46.217	-11.270	28.890	1.00	0.00
H										
ATOM	5980	N	TYR	B	36	50.421	-7.973	24.479	1.00	0.00
N										
ATOM	5981	CA	TYR	B	36	49.743	-7.328	23.387	1.00	0.00
C										
ATOM	5982	C	TYR	B	36	50.660	-6.500	22.495	1.00	0.00
C										
ATOM	5983	O	TYR	B	36	51.396	-5.645	22.957	1.00	0.00
O										
ATOM	5984	CB	TYR	B	36	48.615	-6.462	23.942	1.00	0.00
C										
ATOM	5985	CG	TYR	B	36	47.507	-7.275	24.587	1.00	0.00
C										
ATOM	5986	CD1	TYR	B	36	47.262	-7.211	25.963	1.00	0.00
C										
ATOM	5987	CD2	TYR	B	36	46.716	-8.115	23.823	1.00	0.00
C										
ATOM	5988	CE1	TYR	B	36	46.249	-7.987	26.566	1.00	0.00
C										
ATOM	5989	CE2	TYR	B	36	45.713	-8.877	24.398	1.00	0.00
C										
ATOM	5990	CZ	TYR	B	36	45.471	-8.821	25.766	1.00	0.00
C										
ATOM	5991	OH	TYR	B	36	44.443	-9.595	26.312	1.00	0.00
O										
ATOM	5992	H	TYR	B	36	50.987	-7.412	25.107	1.00	0.00
H										
ATOM	5993	HA	TYR	B	36	49.293	-8.105	22.770	1.00	0.00
H										
ATOM	5994	HB2	TYR	B	36	48.189	-5.881	23.125	1.00	0.00
H										
ATOM	5995	HB3	TYR	B	36	49.030	-5.787	24.689	1.00	0.00
H										
ATOM	5996	HD1	TYR	B	36	47.865	-6.549	26.582	1.00	0.00
H										
ATOM	5997	HD2	TYR	B	36	46.885	-8.178	22.749	1.00	0.00
H										
ATOM	5998	HE1	TYR	B	36	46.078	-7.935	27.640	1.00	0.00
H										
ATOM	5999	HE2	TYR	B	36	45.106	-9.528	23.771	1.00	0.00
H										
ATOM	6000	HH	TYR	B	36	43.773	-9.001	26.742	1.00	0.00
H										
ATOM	6001	N	HIS	B	37	50.570	-6.774	21.204	1.00	0.00
N										
ATOM	6002	CA	HIS	B	37	51.118	-5.934	20.151	1.00	0.00
C										
ATOM	6003	C	HIS	B	37	50.035	-4.914	19.836	1.00	0.00
C										
ATOM	6004	O	HIS	B	37	48.922	-5.289	19.473	1.00	0.00
O										
ATOM	6005	CB	HIS	B	37	51.341	-6.800	18.911	1.00	0.00
C										

ATOM	6006	CG	HIS	B	37	52.628	-6.556	18.223	1.00	0.00
C										
ATOM	6007	ND1	HIS	B	37	52.757	-5.639	17.198	1.00	0.00
N										
ATOM	6008	CD2	HIS	B	37	53.850	-7.110	18.402	1.00	0.00
C										
ATOM	6009	CE1	HIS	B	37	54.008	-5.637	16.779	1.00	0.00
C										
ATOM	6010	NE2	HIS	B	37	54.689	-6.525	17.490	1.00	0.00
N										
ATOM	6011	H	HIS	B	37	50.088	-7.625	20.931	1.00	0.00
H										
ATOM	6012	HA	HIS	B	37	52.040	-5.450	20.468	1.00	0.00
H										
ATOM	6013	HB2	HIS	B	37	50.535	-6.602	18.207	1.00	0.00
H										
ATOM	6014	HB3	HIS	B	37	51.309	-7.846	19.215	1.00	0.00
H										
ATOM	6015	HD1	HIS	B	37	52.010	-5.060	16.827	1.00	0.00
H										
ATOM	6016	HD2	HIS	B	37	54.116	-7.874	19.131	1.00	0.00
H										
ATOM	6017	HE1	HIS	B	37	54.413	-5.012	15.984	1.00	0.00
H										
ATOM	6018	N	VAL	B	38	50.360	-3.634	19.967	1.00	0.00
N										
ATOM	6019	CA	VAL	B	38	49.387	-2.545	19.898	1.00	0.00
C										
ATOM	6020	C	VAL	B	38	49.723	-1.471	18.826	1.00	0.00
C										
ATOM	6021	O	VAL	B	38	50.810	-0.932	18.811	1.00	0.00
O										
ATOM	6022	CB	VAL	B	38	49.254	-1.849	21.280	1.00	0.00
C										
ATOM	6023	CG1	VAL	B	38	48.109	-0.769	21.252	1.00	0.00
C										
ATOM	6024	CG2	VAL	B	38	49.031	-2.901	22.397	1.00	0.00
C										
ATOM	6025	H	VAL	B	38	51.335	-3.399	20.123	1.00	0.00
H										
ATOM	6026	HA	VAL	B	38	48.419	-2.977	19.647	1.00	0.00
H										
ATOM	6027	HB	VAL	B	38	50.192	-1.336	21.487	1.00	0.00
H										
ATOM	6028	HG11	VAL	B	38	47.163	-1.250	21.008	1.00	0.00
H										
ATOM	6029	HG12	VAL	B	38	48.033	-0.295	22.229	1.00	0.00
H										
ATOM	6030	HG13	VAL	B	38	48.339	-0.016	20.500	1.00	0.00
H										
ATOM	6031	HG21	VAL	B	38	49.877	-3.586	22.425	1.00	0.00
H										
ATOM	6032	HG22	VAL	B	38	48.940	-2.397	23.358	1.00	0.00
H										
ATOM	6033	HG23	VAL	B	38	48.119	-3.460	22.192	1.00	0.00
H										

ATOM	6034	N	ASP	B	39	48.745	-1.193	17.948	1.00	0.00
N										
ATOM	6035	CA	ASP	B	39	48.737	-0.042	17.065	1.00	0.00
C										
ATOM	6036	C	ASP	B	39	47.644	0.953	17.469	1.00	0.00
C										
ATOM	6037	O	ASP	B	39	46.671	0.614	18.156	1.00	0.00
O										
ATOM	6038	CB	ASP	B	39	48.497	-0.473	15.621	1.00	0.00
C										
ATOM	6039	CG	ASP	B	39	49.399	-1.623	15.182	1.00	0.00
C										
ATOM	6040	OD1	ASP	B	39	50.621	-1.607	15.505	1.00	0.00
O										
ATOM	6041	OD2	ASP	B	39	48.868	-2.543	14.525	1.00	0.00
O1-										
ATOM	6042	H	ASP	B	39	47.958	-1.832	17.899	1.00	0.00
H										
ATOM	6043	HA	ASP	B	39	49.704	0.455	17.127	1.00	0.00
H										
ATOM	6044	HB2	ASP	B	39	48.681	0.380	14.970	1.00	0.00
H										
ATOM	6045	HB3	ASP	B	39	47.460	-0.789	15.521	1.00	0.00
H										
ATOM	6046	N	ILE	B	40	47.798	2.182	17.011	1.00	0.00
N										
ATOM	6047	CA	ILE	B	40	46.792	3.210	17.217	1.00	0.00
C										
ATOM	6048	C	ILE	B	40	46.338	3.868	15.937	1.00	0.00
C										
ATOM	6049	O	ILE	B	40	47.095	4.006	14.985	1.00	0.00
O										
ATOM	6050	CB	ILE	B	40	47.294	4.276	18.226	1.00	0.00
C										
ATOM	6051	CG1	ILE	B	40	48.556	5.000	17.731	1.00	0.00
C										
ATOM	6052	CG2	ILE	B	40	47.621	3.611	19.516	1.00	0.00
C										
ATOM	6053	CD1	ILE	B	40	49.019	6.060	18.680	1.00	0.00
C										
ATOM	6054	H	ILE	B	40	48.644	2.415	16.500	1.00	0.00
H										
ATOM	6055	HA	ILE	B	40	45.922	2.728	17.660	1.00	0.00
H										
ATOM	6056	HB	ILE	B	40	46.505	5.008	18.392	1.00	0.00
H										
ATOM	6057	HG12	ILE	B	40	48.338	5.463	16.770	1.00	0.00
H										
ATOM	6058	HG13	ILE	B	40	49.353	4.268	17.609	1.00	0.00
H										
ATOM	6059	HG21	ILE	B	40	48.399	2.866	19.354	1.00	0.00
H										
ATOM	6060	HG22	ILE	B	40	47.974	4.355	20.229	1.00	0.00
H										
ATOM	6061	HG23	ILE	B	40	46.730	3.125	19.910	1.00	0.00
H										



ATOM	6062	HD11	ILE	B	40	49.248	5.609	19.644	1.00	0.00
H										
ATOM	6063	HD12	ILE	B	40	49.912	6.539	18.282	1.00	0.00
H										
ATOM	6064	HD13	ILE	B	40	48.233	6.804	18.805	1.00	0.00
H										
ATOM	6065	N	ILE	B	41	45.073	4.246	15.903	1.00	0.00
N										
ATOM	6066	CA	ILE	B	41	44.534	5.028	14.791	1.00	0.00
C										
ATOM	6067	C	ILE	B	41	43.879	6.262	15.362	1.00	0.00
C										
ATOM	6068	O	ILE	B	41	43.003	6.194	16.226	1.00	0.00
O										
ATOM	6069	CB	ILE	B	41	43.510	4.277	13.927	1.00	0.00
C										
ATOM	6070	CG1	ILE	B	41	44.115	3.026	13.288	1.00	0.00
C										
ATOM	6071	CG2	ILE	B	41	43.052	5.148	12.828	1.00	0.00
C										
ATOM	6072	CD1	ILE	B	41	43.066	2.228	12.405	1.00	0.00
C										
ATOM	6073	H	ILE	B	41	44.459	3.987	16.669	1.00	0.00
H										
ATOM	6074	HA	ILE	B	41	45.361	5.339	14.155	1.00	0.00
H										
ATOM	6075	HB	ILE	B	41	42.657	3.993	14.542	1.00	0.00
H										
ATOM	6076	HG12	ILE	B	41	44.477	2.370	14.078	1.00	0.00
H										
ATOM	6077	HG13	ILE	B	41	44.949	3.326	12.655	1.00	0.00
H										
ATOM	6078	HG21	ILE	B	41	43.904	5.434	12.212	1.00	0.00
H										
ATOM	6079	HG22	ILE	B	41	42.326	4.612	12.218	1.00	0.00
H										
ATOM	6080	HG23	ILE	B	41	42.588	6.042	13.242	1.00	0.00
H										
ATOM	6081	HD11	ILE	B	41	42.702	2.871	11.605	1.00	0.00
H										
ATOM	6082	HD12	ILE	B	41	43.547	1.350	11.975	1.00	0.00
H										
ATOM	6083	HD13	ILE	B	41	42.230	1.915	13.029	1.00	0.00
H										
ATOM	6084	N	TYR	B	42	44.357	7.388	14.897	1.00	0.00
N										
ATOM	6085	CA	TYR	B	42	43.865	8.662	15.285	1.00	0.00
C										
ATOM	6086	C	TYR	B	42	43.072	9.240	14.113	1.00	0.00
C										
ATOM	6087	O	TYR	B	42	43.592	9.390	12.991	1.00	0.00
O										
ATOM	6088	CB	TYR	B	42	45.054	9.553	15.624	1.00	0.00
C										
ATOM	6089	CG	TYR	B	42	44.698	10.976	15.945	1.00	0.00
C										

ATOM	6090	CD1	TYR	B	42	43.827	11.274	16.963	1.00	0.00
C										
ATOM	6091	CD2	TYR	B	42	45.231	12.014	15.212	1.00	0.00
C										
ATOM	6092	CE1	TYR	B	42	43.504	12.574	17.261	1.00	0.00
C										
ATOM	6093	CE2	TYR	B	42	44.910	13.326	15.492	1.00	0.00
C										
ATOM	6094	CZ	TYR	B	42	44.048	13.600	16.513	1.00	0.00
C										
ATOM	6095	OH	TYR	B	42	43.746	14.898	16.790	1.00	0.00
O										
ATOM	6096	H	TYR	B	42	45.117	7.349	14.226	1.00	0.00
H										
ATOM	6097	HA	TYR	B	42	43.218	8.560	16.155	1.00	0.00
H										
ATOM	6098	HB2	TYR	B	42	45.730	9.557	14.770	1.00	0.00
H										
ATOM	6099	HB3	TYR	B	42	45.562	9.127	16.488	1.00	0.00
H										
ATOM	6100	HD1	TYR	B	42	43.385	10.466	17.544	1.00	0.00
H										
ATOM	6101	HD2	TYR	B	42	45.919	11.795	14.396	1.00	0.00
H										
ATOM	6102	HE1	TYR	B	42	42.823	12.796	18.082	1.00	0.00
H										
ATOM	6103	HE2	TYR	B	42	45.340	14.135	14.904	1.00	0.00
H										
ATOM	6104	HH	TYR	B	42	44.026	15.112	17.718	1.00	0.00
H										
ATOM	6105	N	ILE	B	43	41.805	9.543	14.397	1.00	0.00
N										
ATOM	6106	CA	ILE	B	43	40.913	10.176	13.449	1.00	0.00
C										
ATOM	6107	C	ILE	B	43	40.836	11.649	13.846	1.00	0.00
C										
ATOM	6108	O	ILE	B	43	40.439	12.010	14.950	1.00	0.00
O										
ATOM	6109	CB	ILE	B	43	39.558	9.455	13.372	1.00	0.00
C										
ATOM	6110	CG1	ILE	B	43	39.779	7.939	13.298	1.00	0.00
C										
ATOM	6111	CG2	ILE	B	43	38.765	9.870	12.133	1.00	0.00
C										
ATOM	6112	CD1	ILE	B	43	38.511	7.087	13.511	1.00	0.00
C										
ATOM	6113	H	ILE	B	43	41.449	9.319	15.321	1.00	0.00
H										
ATOM	6114	HA	ILE	B	43	41.377	10.120	12.465	1.00	0.00
H										
ATOM	6115	HB	ILE	B	43	38.977	9.689	14.263	1.00	0.00
H										
ATOM	6116	HG12	ILE	B	43	40.503	7.665	14.064	1.00	0.00
H										
ATOM	6117	HG13	ILE	B	43	40.183	7.704	12.315	1.00	0.00
H										

ATOM	6118	HG21	ILE	B	43	39.335	9.624	11.238	1.00	0.00
H										
ATOM	6119	HG22	ILE	B	43	37.815	9.339	12.116	1.00	0.00
H										
ATOM	6120	HG23	ILE	B	43	38.581	10.943	12.163	1.00	0.00
H										
ATOM	6121	HD11	ILE	B	43	37.775	7.334	12.747	1.00	0.00
H										
ATOM	6122	HD12	ILE	B	43	38.767	6.031	13.441	1.00	0.00
H										
ATOM	6123	HD13	ILE	B	43	38.095	7.295	14.496	1.00	0.00
H										
ATOM	6124	N	THR	B	44	41.318	12.506	12.949	1.00	0.00
N										
ATOM	6125	CA	THR	B	44	41.338	13.949	13.157	1.00	0.00
C										
ATOM	6126	C	THR	B	44	39.933	14.525	13.220	1.00	0.00
C										
ATOM	6127	O	THR	B	44	38.984	13.864	12.828	1.00	0.00
O										
ATOM	6128	CB	THR	B	44	41.994	14.625	11.938	1.00	0.00
C										
ATOM	6129	OG1	THR	B	44	41.377	14.102	10.733	1.00	0.00
O										
ATOM	6130	CG2	THR	B	44	43.511	14.407	11.946	1.00	0.00
C										
ATOM	6131	H	THR	B	44	41.689	12.138	12.079	1.00	0.00
H										
ATOM	6132	HA	THR	B	44	41.887	14.193	14.065	1.00	0.00
H										
ATOM	6133	HB	THR	B	44	41.798	15.695	11.990	1.00	0.00
H										
ATOM	6134	HG21	THR	B	44	43.725	13.340	11.913	1.00	0.00
H										
ATOM	6135	HG22	THR	B	44	43.952	14.893	11.077	1.00	0.00
H										
ATOM	6136	HG23	THR	B	44	43.934	14.834	12.854	1.00	0.00
H										
ATOM	6137	HG1	THR	B	44	40.404	14.300	10.747	1.00	0.00
H										
ATOM	6138	N	ASN	B	45	39.808	15.795	13.631	1.00	0.00
N										
ATOM	6139	CA	ASN	B	45	38.555	16.533	13.355	1.00	0.00
C										
ATOM	6140	C	ASN	B	45	38.431	16.808	11.828	1.00	0.00
C										
ATOM	6141	O	ASN	B	45	38.197	17.950	11.417	1.00	0.00
O										
ATOM	6142	CB	ASN	B	45	38.486	17.887	14.101	1.00	0.00
C										
ATOM	6143	CG	ASN	B	45	38.819	17.796	15.596	1.00	0.00
C										
ATOM	6144	OD1	ASN	B	45	39.567	18.631	16.121	1.00	0.00
O										
ATOM	6145	ND2	ASN	B	45	38.242	16.810	16.292	1.00	0.00
N										

ATOM	6146	H	ASN	B	45	40.568	16.248	14.128	1.00	0.00
H										
ATOM	6147	HA	ASN	B	45	37.712	15.919	13.668	1.00	0.00
H										
ATOM	6148	HB2	ASN	B	45	37.476	18.283	13.999	1.00	0.00
H										
ATOM	6149	HB3	ASN	B	45	39.193	18.572	13.634	1.00	0.00
H										
ATOM	6150	HD21	ASN	B	45	38.432	16.711	17.284	1.00	0.00
H										
ATOM	6151	HD22	ASN	B	45	37.614	16.162	15.828	1.00	0.00
H										
ATOM	6152	N	ASP	B	46	38.607	15.779	10.991	1.00	0.00
N										
ATOM	6153	CA	ASP	B	46	38.589	15.949	9.516	1.00	0.00
C										
ATOM	6154	C	ASP	B	46	38.193	14.646	8.834	1.00	0.00
C										
ATOM	6155	O	ASP	B	46	37.833	14.621	7.643	1.00	0.00
O										
ATOM	6156	CB	ASP	B	46	39.969	16.397	8.969	1.00	0.00
C										
ATOM	6157	CG	ASP	B	46	40.041	17.868	8.670	1.00	0.00
C										
ATOM	6158	OD1	ASP	B	46	39.486	18.663	9.454	1.00	0.00
O										
ATOM	6159	OD2	ASP	B	46	40.681	18.250	7.655	1.00	0.00
O1-										
ATOM	6160	H	ASP	B	46	38.758	14.853	11.377	1.00	0.00
H										
ATOM	6161	HA	ASP	B	46	37.852	16.711	9.264	1.00	0.00
H										
ATOM	6162	HB2	ASP	B	46	40.172	15.848	8.051	1.00	0.00
H										
ATOM	6163	HB3	ASP	B	46	40.729	16.158	9.711	1.00	0.00
H										
ATOM	6164	N	GLY	B	47	38.287	13.556	9.588	1.00	0.00
N										
ATOM	6165	CA	GLY	B	47	38.091	12.224	9.045	1.00	0.00
C										
ATOM	6166	C	GLY	B	47	39.377	11.723	8.427	1.00	0.00
C										
ATOM	6167	O	GLY	B	47	39.364	10.735	7.680	1.00	0.00
O										
ATOM	6168	H	GLY	B	47	38.503	13.658	10.575	1.00	0.00
H										
ATOM	6169	HA2	GLY	B	47	37.313	12.256	8.283	1.00	0.00
H										
ATOM	6170	HA3	GLY	B	47	37.788	11.550	9.845	1.00	0.00
H										
ATOM	6171	N	ASP	B	48	40.488	12.401	8.710	1.00	0.00
N										
ATOM	6172	CA	ASP	B	48	41.774	11.869	8.330	1.00	0.00
C										
ATOM	6173	C	ASP	B	48	42.079	10.812	9.344	1.00	0.00
C										

ATOM	6174	O	ASP	B	48	42.116	11.107	10.532	1.00	0.00
O										
ATOM	6175	CB	ASP	B	48	42.850	12.944	8.373	1.00	0.00
C										
ATOM	6176	CG	ASP	B	48	43.897	12.748	7.326	1.00	0.00
C										
ATOM	6177	OD1	ASP	B	48	45.097	12.908	7.638	1.00	0.00
O										
ATOM	6178	OD2	ASP	B	48	43.513	12.461	6.175	1.00	0.00
O1-										
ATOM	6179	H	ASP	B	48	40.430	13.292	9.193	1.00	0.00
H										
ATOM	6180	HA	ASP	B	48	41.720	11.431	7.335	1.00	0.00
H										
ATOM	6181	HB2	ASP	B	48	43.327	12.922	9.352	1.00	0.00
H										
ATOM	6182	HB3	ASP	B	48	42.380	13.915	8.220	1.00	0.00
H										
ATOM	6183	N	TRP	B	49	42.273	9.587	8.865	1.00	0.00
N										
ATOM	6184	CA	TRP	B	49	42.635	8.468	9.687	1.00	0.00
C										
ATOM	6185	C	TRP	B	49	44.142	8.367	9.693	1.00	0.00
C										
ATOM	6186	O	TRP	B	49	44.746	8.283	8.621	1.00	0.00
O										
ATOM	6187	CB	TRP	B	49	42.023	7.168	9.150	1.00	0.00
C										
ATOM	6188	CG	TRP	B	49	40.583	7.051	9.449	1.00	0.00
C										
ATOM	6189	CD1	TRP	B	49	39.622	7.972	9.162	1.00	0.00
C										
ATOM	6190	CD2	TRP	B	49	39.905	5.943	10.064	1.00	0.00
C										
ATOM	6191	NE1	TRP	B	49	38.399	7.521	9.560	1.00	0.00
N										
ATOM	6192	CE2	TRP	B	49	38.536	6.284	10.124	1.00	0.00
C										
ATOM	6193	CE3	TRP	B	49	40.325	4.714	10.606	1.00	0.00
C										
ATOM	6194	CZ2	TRP	B	49	37.578	5.446	10.682	1.00	0.00
C										
ATOM	6195	CZ3	TRP	B	49	39.361	3.862	11.158	1.00	0.00
C										
ATOM	6196	CH2	TRP	B	49	38.000	4.237	11.175	1.00	0.00
C										
ATOM	6197	H	TRP	B	49	42.160	9.436	7.868	1.00	0.00
H										
ATOM	6198	HA	TRP	B	49	42.282	8.639	10.703	1.00	0.00
H										
ATOM	6199	HB2	TRP	B	49	42.543	6.325	9.603	1.00	0.00
H										
ATOM	6200	HB3	TRP	B	49	42.158	7.140	8.070	1.00	0.00
H										
ATOM	6201	HD1	TRP	B	49	39.805	8.933	8.682	1.00	0.00
H										

ATOM	6202	HE1	TRP	B	49	37.524	8.025	9.454	1.00	0.00
H										
ATOM	6203	HE3	TRP	B	49	41.377	4.432	10.596	1.00	0.00
H										
ATOM	6204	HZ2	TRP	B	49	36.530	5.739	10.726	1.00	0.00
H										
ATOM	6205	HZ3	TRP	B	49	39.663	2.903	11.577	1.00	0.00
H										
ATOM	6206	HH2	TRP	B	49	37.266	3.549	11.590	1.00	0.00
H										
ATOM	6207	N	ARG	B	50	44.740	8.366	10.885	1.00	0.00
N										
ATOM	6208	CA	ARG	B	50	46.195	8.334	11.026	1.00	0.00
C										
ATOM	6209	C	ARG	B	50	46.650	7.182	11.884	1.00	0.00
C										
ATOM	6210	O	ARG	B	50	46.288	7.101	13.056	1.00	0.00
O										
ATOM	6211	CB	ARG	B	50	46.689	9.642	11.617	1.00	0.00
C										
ATOM	6212	CG	ARG	B	50	46.566	10.754	10.604	1.00	0.00
C										
ATOM	6213	CD	ARG	B	50	46.893	12.090	11.171	1.00	0.00
C										
ATOM	6214	NE	ARG	B	50	46.453	13.156	10.285	1.00	0.00
N1+										
ATOM	6215	CZ	ARG	B	50	46.677	14.439	10.514	1.00	0.00
C1+										
ATOM	6216	NH1	ARG	B	50	47.347	14.823	11.595	1.00	0.00
N1+										
ATOM	6217	NH2	ARG	B	50	46.237	15.347	9.661	1.00	0.00
N1+										
ATOM	6218	H	ARG	B	50	44.166	8.388	11.722	1.00	0.00
H										
ATOM	6219	HA	ARG	B	50	46.633	8.218	10.036	1.00	0.00
H										
ATOM	6220	HB2	ARG	B	50	47.733	9.534	11.907	1.00	0.00
H										
ATOM	6221	HB3	ARG	B	50	46.093	9.888	12.494	1.00	0.00
H										
ATOM	6222	HG2	ARG	B	50	45.543	10.775	10.233	1.00	0.00
H										
ATOM	6223	HG3	ARG	B	50	47.247	10.550	9.779	1.00	0.00
H										
ATOM	6224	HD2	ARG	B	50	47.971	12.164	11.309	1.00	0.00
H										
ATOM	6225	HD3	ARG	B	50	46.396	12.200	12.134	1.00	0.00
H										
ATOM	6226	HE2	ARG	B	50	45.946	12.901	9.444	1.00	0.00
H										
ATOM	6227	HE3	ARG	B	50	47.325	13.095	9.778	1.00	0.00
H										
ATOM	6228	HH11	ARG	B	50	47.515	15.810	11.764	1.00	0.00
H										
ATOM	6229	HH12	ARG	B	50	47.691	14.130	12.252	1.00	0.00
H										

ATOM	6230	HH13	ARG	B	50	46.481	14.883	12.111	1.00	0.00
H										
ATOM	6231	HH21	ARG	B	50	46.408	16.333	9.835	1.00	0.00
H										
ATOM	6232	HH22	ARG	B	50	45.728	15.060	8.831	1.00	0.00
H										
ATOM	6233	HH23	ARG	B	50	47.106	15.287	9.149	1.00	0.00
H										
ATOM	6234	N	LYS	B	51	47.457	6.290	11.321	1.00	0.00
N										
ATOM	6235	CA	LYS	B	51	47.864	5.110	12.064	1.00	0.00
C										
ATOM	6236	C	LYS	B	51	49.285	5.236	12.560	1.00	0.00
C										
ATOM	6237	O	LYS	B	51	50.119	5.752	11.874	1.00	0.00
O										
ATOM	6238	CB	LYS	B	51	47.725	3.844	11.234	1.00	0.00
C										
ATOM	6239	CG	LYS	B	51	47.731	2.567	12.065	1.00	0.00
C										
ATOM	6240	CD	LYS	B	51	47.199	1.410	11.273	1.00	0.00
C										
ATOM	6241	CE	LYS	B	51	47.467	0.112	11.950	1.00	0.00
C										
ATOM	6242	NZ	LYS	B	51	46.977	-1.064	11.159	1.00	0.00
N1+										
ATOM	6243	H	LYS	B	51	47.789	6.433	10.373	1.00	0.00
H										
ATOM	6244	HA	LYS	B	51	47.212	5.017	12.931	1.00	0.00
H										
ATOM	6245	HB2	LYS	B	51	48.555	3.801	10.530	1.00	0.00
H										
ATOM	6246	HB3	LYS	B	51	46.786	3.893	10.685	1.00	0.00
H										
ATOM	6247	HG2	LYS	B	51	47.108	2.712	12.946	1.00	0.00
H										
ATOM	6248	HG3	LYS	B	51	48.752	2.348	12.374	1.00	0.00
H										
ATOM	6249	HD2	LYS	B	51	47.676	1.403	10.294	1.00	0.00
H										
ATOM	6250	HD3	LYS	B	51	46.124	1.530	11.152	1.00	0.00
H										
ATOM	6251	HE2	LYS	B	51	46.968	0.114	12.918	1.00	0.00
H										
ATOM	6252	HE3	LYS	B	51	48.541	0.010	12.096	1.00	0.00
H										
ATOM	6253	HZ1	LYS	B	51	47.441	-1.082	10.257	1.00	0.00
H										
ATOM	6254	HZ2	LYS	B	51	47.184	-1.921	11.663	1.00	0.00
H										
ATOM	6255	HZ3	LYS	B	51	45.975	-0.986	11.022	1.00	0.00
H										
ATOM	6256	N	GLN	B	52	49.536	4.742	13.760	1.00	0.00
N										
ATOM	6257	CA	GLN	B	52	50.866	4.530	14.225	1.00	0.00
C										

ATOM	6258	C	GLN	B	52	50.963	3.124	14.783	1.00	0.00
C										
ATOM	6259	O	GLN	B	52	50.141	2.685	15.600	1.00	0.00
O										
ATOM	6260	CB	GLN	B	52	51.277	5.552	15.299	1.00	0.00
C										
ATOM	6261	CG	GLN	B	52	52.736	5.429	15.649	1.00	0.00
C										
ATOM	6262	CD	GLN	B	52	53.186	6.356	16.749	1.00	0.00
C										
ATOM	6263	OE1	GLN	B	52	53.795	5.918	17.718	1.00	0.00
O										
ATOM	6264	NE2	GLN	B	52	52.916	7.648	16.597	1.00	0.00
N										
ATOM	6265	H	GLN	B	52	48.758	4.507	14.368	1.00	0.00
H										
ATOM	6266	HA	GLN	B	52	51.549	4.618	13.381	1.00	0.00
H										
ATOM	6267	HB2	GLN	B	52	50.683	5.382	16.195	1.00	0.00
H										
ATOM	6268	HB3	GLN	B	52	51.087	6.556	14.923	1.00	0.00
H										
ATOM	6269	HG2	GLN	B	52	53.321	5.648	14.757	1.00	0.00
H										
ATOM	6270	HG3	GLN	B	52	52.927	4.405	15.966	1.00	0.00
H										
ATOM	6271	HE21	GLN	B	52	53.199	8.313	17.310	1.00	0.00
H										
ATOM	6272	HE22	GLN	B	52	52.428	7.970	15.768	1.00	0.00
H										
ATOM	6273	N	ASN	B	53	52.029	2.455	14.379	1.00	0.00
N										
ATOM	6274	CA	ASN	B	53	52.190	1.062	14.604	1.00	0.00
C										
ATOM	6275	C	ASN	B	53	53.066	0.800	15.801	1.00	0.00
C										
ATOM	6276	O	ASN	B	53	53.927	1.593	16.173	1.00	0.00
O										
ATOM	6277	CB	ASN	B	53	52.748	0.407	13.339	1.00	0.00
C										
ATOM	6278	CG	ASN	B	53	51.695	0.282	12.238	1.00	0.00
C										
ATOM	6279	OD1	ASN	B	53	50.599	-0.207	12.471	1.00	0.00
O										
ATOM	6280	ND2	ASN	B	53	52.027	0.719	11.056	1.00	0.00
N										
ATOM	6281	H	ASN	B	53	52.762	2.957	13.888	1.00	0.00
H										
ATOM	6282	HA	ASN	B	53	51.208	0.635	14.802	1.00	0.00
H										
ATOM	6283	HB2	ASN	B	53	53.111	-0.588	13.591	1.00	0.00
H										
ATOM	6284	HB3	ASN	B	53	53.574	1.011	12.967	1.00	0.00
H										
ATOM	6285	HD21	ASN	B	53	51.365	0.660	10.289	1.00	0.00
H										



ATOM	6286	HD22	ASN	B	53	52.948	1.118	10.903	1.00	0.00
H										
ATOM	6287	N	ASN	B	54	52.802	-0.340	16.400	1.00	0.00
N										
ATOM	6288	CA	ASN	B	54	53.656	-0.937	17.385	1.00	0.00
C										
ATOM	6289	C	ASN	B	54	54.067	0.042	18.515	1.00	0.00
C										
ATOM	6290	O	ASN	B	54	55.243	0.448	18.655	1.00	0.00
O										
ATOM	6291	CB	ASN	B	54	54.850	-1.629	16.727	1.00	0.00
C										
ATOM	6292	CG	ASN	B	54	55.567	-2.561	17.698	1.00	0.00
C										
ATOM	6293	OD1	ASN	B	54	54.958	-3.010	18.703	1.00	0.00
O										
ATOM	6294	ND2	ASN	B	54	56.852	-2.868	17.423	1.00	0.00
N										
ATOM	6295	H	ASN	B	54	51.946	-0.825	16.151	1.00	0.00
H										
ATOM	6296	HA	ASN	B	54	53.071	-1.723	17.860	1.00	0.00
H										
ATOM	6297	HB2	ASN	B	54	55.552	-0.871	16.383	1.00	0.00
H										
ATOM	6298	HB3	ASN	B	54	54.497	-2.210	15.876	1.00	0.00
H										
ATOM	6299	HD21	ASN	B	54	57.370	-3.485	18.041	1.00	0.00
H										
ATOM	6300	HD22	ASN	B	54	57.301	-2.482	16.598	1.00	0.00
H										
ATOM	6301	N	ILE	B	55	53.064	0.411	19.308	1.00	0.00
N										
ATOM	6302	CA	ILE	B	55	53.266	1.292	20.421	1.00	0.00
C										
ATOM	6303	C	ILE	B	55	53.837	0.389	21.467	1.00	0.00
C										
ATOM	6304	O	ILE	B	55	53.211	-0.579	21.901	1.00	0.00
O										
ATOM	6305	CB	ILE	B	55	51.988	1.933	20.949	1.00	0.00
C										
ATOM	6306	CG1	ILE	B	55	51.244	2.678	19.806	1.00	0.00
C										
ATOM	6307	CG2	ILE	B	55	52.341	2.824	22.158	1.00	0.00
C										
ATOM	6308	CD1	ILE	B	55	52.095	3.715	19.086	1.00	0.00
C										
ATOM	6309	H	ILE	B	55	52.131	0.059	19.120	1.00	0.00
H										
ATOM	6310	HA	ILE	B	55	53.989	2.063	20.159	1.00	0.00
H										
ATOM	6311	HB	ILE	B	55	51.338	1.135	21.303	1.00	0.00
H										
ATOM	6312	HG12	ILE	B	55	50.378	3.182	20.233	1.00	0.00
H										
ATOM	6313	HG13	ILE	B	55	50.912	1.941	19.076	1.00	0.00
H										

ATOM	6314	HG21	ILE	B	55	53.041	3.598	21.846	1.00	0.00
H										
ATOM	6315	HG22	ILE	B	55	51.435	3.288	22.544	1.00	0.00
H										
ATOM	6316	HG23	ILE	B	55	52.797	2.215	22.937	1.00	0.00
H										
ATOM	6317	HD11	ILE	B	55	52.962	3.228	18.641	1.00	0.00
H										
ATOM	6318	HD12	ILE	B	55	51.505	4.190	18.304	1.00	0.00
H										
ATOM	6319	HD13	ILE	B	55	52.428	4.469	19.798	1.00	0.00
H										
ATOM	6320	N	THR	B	56	55.053	0.720	21.844	1.00	0.00
N										
ATOM	6321	CA	THR	B	56	55.898	-0.141	22.628	1.00	0.00
C										
ATOM	6322	C	THR	B	56	56.340	0.553	23.922	1.00	0.00
C										
ATOM	6323	O	THR	B	56	57.004	-0.060	24.733	1.00	0.00
O										
ATOM	6324	CB	THR	B	56	57.061	-0.560	21.724	1.00	0.00
C										
ATOM	6325	OG1	THR	B	56	57.769	-1.654	22.297	1.00	0.00
O										
ATOM	6326	CG2	THR	B	56	58.010	0.606	21.468	1.00	0.00
C										
ATOM	6327	H	THR	B	56	55.413	1.628	21.568	1.00	0.00
H										
ATOM	6328	HA	THR	B	56	55.330	-1.032	22.892	1.00	0.00
H										
ATOM	6329	HB	THR	B	56	56.651	-0.882	20.768	1.00	0.00
H										
ATOM	6330	HG21	THR	B	56	58.416	0.958	22.415	1.00	0.00
H										
ATOM	6331	HG22	THR	B	56	58.824	0.277	20.824	1.00	0.00
H										
ATOM	6332	HG23	THR	B	56	57.468	1.416	20.982	1.00	0.00
H										
ATOM	6333	HG1	THR	B	56	57.153	-2.425	22.408	1.00	0.00
H										
ATOM	6334	N	ALA	B	57	55.931	1.804	24.142	1.00	0.00
N										
ATOM	6335	CA	ALA	B	57	56.435	2.622	25.265	1.00	0.00
C										
ATOM	6336	C	ALA	B	57	55.365	3.516	25.892	1.00	0.00
C										
ATOM	6337	O	ALA	B	57	54.376	3.859	25.253	1.00	0.00
O										
ATOM	6338	CB	ALA	B	57	57.634	3.464	24.809	1.00	0.00
C										
ATOM	6339	H	ALA	B	57	55.246	2.210	23.513	1.00	0.00
H										
ATOM	6340	HA	ALA	B	57	56.787	1.940	26.037	1.00	0.00
H										
ATOM	6341	HB1	ALA	B	57	57.328	4.122	23.997	1.00	0.00
H										

ATOM	6342	HB2	ALA	B	57	57.996	4.062	25.644	1.00	0.00
H										
ATOM	6343	HB3	ALA	B	57	58.429	2.806	24.462	1.00	0.00
H										
ATOM	6344	N	GLU	B	58	55.542	3.878	27.157	1.00	0.00
N										
ATOM	6345	CA	GLU	B	58	54.500	4.638	27.870	1.00	0.00
C										
ATOM	6346	C	GLU	B	58	54.280	5.979	27.147	1.00	0.00
C										
ATOM	6347	O	GLU	B	58	55.240	6.597	26.694	1.00	0.00
O										
ATOM	6348	CB	GLU	B	58	54.875	4.882	29.338	1.00	0.00
C										
ATOM	6349	CG	GLU	B	58	55.153	3.594	30.185	1.00	0.00
C										
ATOM	6350	CD	GLU	B	58	53.907	3.011	30.920	1.00	0.00
C										
ATOM	6351	OE1	GLU	B	58	54.102	2.209	31.874	1.00	0.00
O										
ATOM	6352	OE2	GLU	B	58	52.754	3.350	30.564	1.00	0.00
O1-										
ATOM	6353	H	GLU	B	58	56.401	3.630	27.637	1.00	0.00
H										
ATOM	6354	HA	GLU	B	58	53.572	4.069	27.838	1.00	0.00
H										
ATOM	6355	HB2	GLU	B	58	54.055	5.423	29.808	1.00	0.00
H										
ATOM	6356	HB3	GLU	B	58	55.773	5.497	29.357	1.00	0.00
H										
ATOM	6357	HG2	GLU	B	58	55.905	3.837	30.934	1.00	0.00
H										
ATOM	6358	HG3	GLU	B	58	55.541	2.827	29.517	1.00	0.00
H										
ATOM	6359	N	ILE	B	59	53.022	6.404	27.015	1.00	0.00
N										
ATOM	6360	CA	ILE	B	59	52.708	7.687	26.380	1.00	0.00
C										
ATOM	6361	C	ILE	B	59	52.753	8.771	27.415	1.00	0.00
C										
ATOM	6362	O	ILE	B	59	51.774	9.020	28.086	1.00	0.00
O										
ATOM	6363	CB	ILE	B	59	51.296	7.705	25.669	1.00	0.00
C										
ATOM	6364	CG1	ILE	B	59	51.401	7.111	24.254	1.00	0.00
C										
ATOM	6365	CG2	ILE	B	59	50.751	9.136	25.577	1.00	0.00
C										
ATOM	6366	CD1	ILE	B	59	52.096	5.730	24.195	1.00	0.00
C										
ATOM	6367	H	ILE	B	59	52.264	5.825	27.363	1.00	0.00
H										
ATOM	6368	HA	ILE	B	59	53.471	7.895	25.632	1.00	0.00
H										
ATOM	6369	HB	ILE	B	59	50.602	7.102	26.252	1.00	0.00
H										

ATOM	6370	HG12	ILE	B	59	51.967	7.805	23.634	1.00	0.00
H										
ATOM	6371	HG13	ILE	B	59	50.394	7.004	23.853	1.00	0.00
H										
ATOM	6372	HG21	ILE	B	59	51.441	9.751	25.002	1.00	0.00
H										
ATOM	6373	HG22	ILE	B	59	49.780	9.124	25.085	1.00	0.00
H										
ATOM	6374	HG23	ILE	B	59	50.645	9.549	26.579	1.00	0.00
H										
ATOM	6375	HD11	ILE	B	59	51.538	5.017	24.800	1.00	0.00
H										
ATOM	6376	HD12	ILE	B	59	52.128	5.384	23.163	1.00	0.00
H										
ATOM	6377	HD13	ILE	B	59	53.111	5.818	24.580	1.00	0.00
H										
ATOM	6378	N	LYS	B	60	53.911	9.405	27.542	1.00	0.00
N										
ATOM	6379	CA	LYS	B	60	54.143	10.404	28.601	1.00	0.00
C										
ATOM	6380	C	LYS	B	60	53.200	11.626	28.474	1.00	0.00
C										
ATOM	6381	O	LYS	B	60	52.835	12.210	29.479	1.00	0.00
O										
ATOM	6382	CB	LYS	B	60	55.621	10.849	28.638	1.00	0.00
C										
ATOM	6383	CG	LYS	B	60	56.668	9.728	28.943	1.00	0.00
C										
ATOM	6384	CD	LYS	B	60	58.113	10.289	29.022	1.00	0.00
C										
ATOM	6385	CE	LYS	B	60	59.208	9.237	29.350	1.00	0.00
C										
ATOM	6386	NZ	LYS	B	60	60.606	9.843	29.513	1.00	0.00
N1+										
ATOM	6387	H	LYS	B	60	54.660	9.196	26.890	1.00	0.00
H										
ATOM	6388	HA	LYS	B	60	53.925	9.924	29.554	1.00	0.00
H										
ATOM	6389	HB2	LYS	B	60	55.719	11.615	29.406	1.00	0.00
H										
ATOM	6390	HB3	LYS	B	60	55.864	11.277	27.666	1.00	0.00
H										
ATOM	6391	HG2	LYS	B	60	56.624	8.981	28.152	1.00	0.00
H										
ATOM	6392	HG3	LYS	B	60	56.418	9.264	29.896	1.00	0.00
H										
ATOM	6393	HD2	LYS	B	60	58.137	11.054	29.797	1.00	0.00
H										
ATOM	6394	HD3	LYS	B	60	58.354	10.739	28.060	1.00	0.00
H										
ATOM	6395	HE2	LYS	B	60	59.240	8.509	28.541	1.00	0.00
H										
ATOM	6396	HE3	LYS	B	60	58.938	8.737	30.279	1.00	0.00
H										
ATOM	6397	HZ1	LYS	B	60	60.596	10.518	30.271	1.00	0.00
H										

ATOM	6398	HZ2	LYS	B	60	61.272	9.107	29.725	1.00	0.00
H										
ATOM	6399	HZ3	LYS	B	60	60.877	10.306	28.651	1.00	0.00
H										
ATOM	6400	N	SER	B	61	52.804	11.993	27.253	1.00	0.00
N										
ATOM	6401	CA	SER	B	61	51.925	13.152	27.021	1.00	0.00
C										
ATOM	6402	C	SER	B	61	50.810	12.878	26.005	1.00	0.00
C										
ATOM	6403	O	SER	B	61	50.987	12.205	24.995	1.00	0.00
O										
ATOM	6404	CB	SER	B	61	52.714	14.367	26.513	1.00	0.00
C										
ATOM	6405	OG	SER	B	61	51.834	15.417	26.151	1.00	0.00
O										
ATOM	6406	H	SER	B	61	53.121	11.453	26.454	1.00	0.00
H										
ATOM	6407	HA	SER	B	61	51.461	13.421	27.969	1.00	0.00
H										
ATOM	6408	HB2	SER	B	61	53.300	14.075	25.643	1.00	0.00
H										
ATOM	6409	HB3	SER	B	61	53.382	14.715	27.300	1.00	0.00
H										
ATOM	6410	HG	SER	B	61	51.299	15.689	26.942	1.00	0.00
H										
ATOM	6411	N	THR	B	62	49.678	13.494	26.272	1.00	0.00
N										
ATOM	6412	CA	THR	B	62	48.563	13.548	25.349	1.00	0.00
C										
ATOM	6413	C	THR	B	62	48.945	14.237	24.001	1.00	0.00
C										
ATOM	6414	O	THR	B	62	48.321	13.962	22.984	1.00	0.00
O										
ATOM	6415	CB	THR	B	62	47.390	14.261	26.082	1.00	0.00
C										
ATOM	6416	OG1	THR	B	62	46.250	13.402	26.160	1.00	0.00
O										
ATOM	6417	CG2	THR	B	62	47.066	15.615	25.473	1.00	0.00
C										
ATOM	6418	H	THR	B	62	49.581	13.955	27.171	1.00	0.00
H										
ATOM	6419	HA	THR	B	62	48.254	12.527	25.131	1.00	0.00
H										
ATOM	6420	HB	THR	B	62	47.719	14.444	27.104	1.00	0.00
H										
ATOM	6421	HG21	THR	B	62	46.782	15.486	24.430	1.00	0.00
H										
ATOM	6422	HG22	THR	B	62	46.242	16.071	26.020	1.00	0.00
H										
ATOM	6423	HG23	THR	B	62	47.942	16.259	25.533	1.00	0.00
H										
ATOM	6424	HG1	THR	B	62	46.489	12.579	26.661	1.00	0.00
H										
ATOM	6425	N	ASP	B	63	49.979	15.100	23.984	1.00	0.00
N										

ATOM	6426	CA	ASP	B	63	50.458	15.746	22.729	1.00	0.00
C										
ATOM	6427	C	ASP	B	63	50.960	14.717	21.744	1.00	0.00
C										
ATOM	6428	O	ASP	B	63	50.697	14.828	20.539	1.00	0.00
O										
ATOM	6429	CB	ASP	B	63	51.592	16.756	22.970	1.00	0.00
C										
ATOM	6430	CG	ASP	B	63	51.157	17.946	23.793	1.00	0.00
C										
ATOM	6431	OD1	ASP	B	63	49.941	18.209	23.817	1.00	0.00
O										
ATOM	6432	OD2	ASP	B	63	52.038	18.614	24.414	1.00	0.00
O1-										
ATOM	6433	H	ASP	B	63	50.449	15.319	24.857	1.00	0.00
H										
ATOM	6434	HA	ASP	B	63	49.621	16.274	22.275	1.00	0.00
H										
ATOM	6435	HB2	ASP	B	63	51.950	17.113	22.005	1.00	0.00
H										
ATOM	6436	HB3	ASP	B	63	52.402	16.250	23.493	1.00	0.00
H										
ATOM	6437	N	GLU	B	64	51.694	13.733	22.268	1.00	0.00
N										
ATOM	6438	CA	GLU	B	64	52.177	12.571	21.513	1.00	0.00
C										
ATOM	6439	C	GLU	B	64	51.157	11.908	20.620	1.00	0.00
C										
ATOM	6440	O	GLU	B	64	51.506	11.280	19.597	1.00	0.00
O										
ATOM	6441	CB	GLU	B	64	52.608	11.481	22.479	1.00	0.00
C										
ATOM	6442	CG	GLU	B	64	53.916	11.757	23.211	1.00	0.00
C										
ATOM	6443	CD	GLU	B	64	54.464	10.492	23.838	1.00	0.00
C										
ATOM	6444	OE1	GLU	B	64	54.307	9.413	23.194	1.00	0.00
O										
ATOM	6445	OE2	GLU	B	64	54.999	10.578	24.973	1.00	0.00
O1-										
ATOM	6446	H	GLU	B	64	51.934	13.793	23.253	1.00	0.00
H										
ATOM	6447	HA	GLU	B	64	53.034	12.871	20.911	1.00	0.00
H										
ATOM	6448	HB2	GLU	B	64	52.723	10.556	21.916	1.00	0.00
H										
ATOM	6449	HB3	GLU	B	64	51.823	11.358	23.223	1.00	0.00
H										
ATOM	6450	HG2	GLU	B	64	53.738	12.494	23.993	1.00	0.00
H										
ATOM	6451	HG3	GLU	B	64	54.645	12.148	22.503	1.00	0.00
H										
ATOM	6452	N	LEU	B	65	49.900	11.992	21.044	1.00	0.00
N										
ATOM	6453	CA	LEU	B	65	48.814	11.250	20.400	1.00	0.00
C										

ATOM	6454	C	LEU	B	65	47.995	12.058	19.391	1.00	0.00
C										
ATOM	6455	O	LEU	B	65	47.190	11.491	18.672	1.00	0.00
O										
ATOM	6456	CB	LEU	B	65	47.919	10.633	21.474	1.00	0.00
C										
ATOM	6457	CG	LEU	B	65	48.589	9.548	22.316	1.00	0.00
C										
ATOM	6458	CD1	LEU	B	65	47.649	9.173	23.460	1.00	0.00
C										
ATOM	6459	CD2	LEU	B	65	48.928	8.320	21.467	1.00	0.00
C										
ATOM	6460	H	LEU	B	65	49.687	12.588	21.837	1.00	0.00
H										
ATOM	6461	HA	LEU	B	65	49.271	10.426	19.853	1.00	0.00
H										
ATOM	6462	HB2	LEU	B	65	47.052	10.194	20.982	1.00	0.00
H										
ATOM	6463	HB3	LEU	B	65	47.593	11.429	22.142	1.00	0.00
H										
ATOM	6464	HG	LEU	B	65	49.510	9.949	22.736	1.00	0.00
H										
ATOM	6465	HD11	LEU	B	65	46.711	8.800	23.052	1.00	0.00
H										
ATOM	6466	HD12	LEU	B	65	48.111	8.400	24.071	1.00	0.00
H										
ATOM	6467	HD13	LEU	B	65	47.454	10.052	24.073	1.00	0.00
H										
ATOM	6468	HD21	LEU	B	65	49.608	8.609	20.667	1.00	0.00
H										
ATOM	6469	HD22	LEU	B	65	49.403	7.566	22.093	1.00	0.00
H										
ATOM	6470	HD23	LEU	B	65	48.014	7.912	21.038	1.00	0.00
H										
ATOM	6471	N	HIS	B	66	48.192	13.370	19.331	1.00	0.00
N										
ATOM	6472	CA	HIS	B	66	47.735	14.148	18.170	1.00	0.00
C										
ATOM	6473	C	HIS	B	66	48.615	13.832	16.971	1.00	0.00
C										
ATOM	6474	O	HIS	B	66	49.434	14.650	16.580	1.00	0.00
O										
ATOM	6475	CB	HIS	B	66	47.809	15.656	18.447	1.00	0.00
C										
ATOM	6476	CG	HIS	B	66	46.915	16.096	19.560	1.00	0.00
C										
ATOM	6477	ND1	HIS	B	66	45.732	16.770	19.343	1.00	0.00
N										
ATOM	6478	CD2	HIS	B	66	47.013	15.918	20.899	1.00	0.00
C										
ATOM	6479	CE1	HIS	B	66	45.145	16.994	20.503	1.00	0.00
C										
ATOM	6480	NE2	HIS	B	66	45.903	16.489	21.460	1.00	0.00
N										
ATOM	6481	H	HIS	B	66	48.664	13.842	20.096	1.00	0.00
H										

ATOM	6482	HA	HIS	B	66	46.706	13.877	17.940	1.00	0.00
H										
ATOM	6483	HB2	HIS	B	66	47.522	16.189	17.541	1.00	0.00
H										
ATOM	6484	HB3	HIS	B	66	48.836	15.910	18.707	1.00	0.00
H										
ATOM	6485	HD1	HIS	B	66	45.371	17.049	18.436	1.00	0.00
H										
ATOM	6486	HD2	HIS	B	66	47.821	15.416	21.429	1.00	0.00
H										
ATOM	6487	HE1	HIS	B	66	44.196	17.509	20.647	1.00	0.00
H										
ATOM	6488	N	LEU	B	67	48.432	12.658	16.377	1.00	0.00
N										
ATOM	6489	CA	LEU	B	67	49.315	12.192	15.323	1.00	0.00
C										
ATOM	6490	C	LEU	B	67	49.284	13.175	14.164	1.00	0.00
C										
ATOM	6491	O	LEU	B	67	48.229	13.709	13.832	1.00	0.00
O										
ATOM	6492	CB	LEU	B	67	48.934	10.785	14.861	1.00	0.00
C										
ATOM	6493	CG	LEU	B	67	48.817	9.672	15.917	1.00	0.00
C										
ATOM	6494	CD1	LEU	B	67	48.634	8.336	15.208	1.00	0.00
C										
ATOM	6495	CD2	LEU	B	67	50.006	9.611	16.892	1.00	0.00
C										
ATOM	6496	H	LEU	B	67	47.656	12.072	16.667	1.00	0.00
H										
ATOM	6497	HA	LEU	B	67	50.330	12.160	15.717	1.00	0.00
H										
ATOM	6498	HB2	LEU	B	67	49.688	10.468	14.142	1.00	0.00
H										
ATOM	6499	HB3	LEU	B	67	47.968	10.861	14.365	1.00	0.00
H										
ATOM	6500	HG	LEU	B	67	47.918	9.863	16.502	1.00	0.00
H										
ATOM	6501	HD11	LEU	B	67	49.493	8.145	14.566	1.00	0.00
H										
ATOM	6502	HD12	LEU	B	67	48.550	7.541	15.948	1.00	0.00
H										
ATOM	6503	HD13	LEU	B	67	47.729	8.367	14.604	1.00	0.00
H										
ATOM	6504	HD21	LEU	B	67	50.086	10.556	17.427	1.00	0.00
H										
ATOM	6505	HD22	LEU	B	67	49.850	8.803	17.605	1.00	0.00
H										
ATOM	6506	HD23	LEU	B	67	50.924	9.431	16.334	1.00	0.00
H										
ATOM	6507	N	GLU	B	68	50.468	13.473	13.622	1.00	0.00
N										
ATOM	6508	CA	GLU	B	68	50.648	14.363	12.453	1.00	0.00
C										
ATOM	6509	C	GLU	B	68	50.727	13.513	11.197	1.00	0.00
C										



ATOM	6510	O	GLU	B	68	50.461	13.999	10.101	1.00	0.00
O										
ATOM	6511	CB	GLU	B	68	51.921	15.209	12.591	1.00	0.00
C										
ATOM	6512	CG	GLU	B	68	51.951	16.048	13.882	1.00	0.00
C										
ATOM	6513	CD	GLU	B	68	53.288	16.727	14.159	1.00	0.00
C										
ATOM	6514	OE1	GLU	B	68	54.021	17.045	13.197	1.00	0.00
O										
ATOM	6515	OE2	GLU	B	68	53.604	16.954	15.355	1.00	0.00
O1-										
ATOM	6516	H	GLU	B	68	51.298	13.063	14.039	1.00	0.00
H										
ATOM	6517	HA	GLU	B	68	49.788	15.027	12.378	1.00	0.00
H										
ATOM	6518	HB2	GLU	B	68	51.984	15.883	11.738	1.00	0.00
H										
ATOM	6519	HB3	GLU	B	68	52.782	14.543	12.591	1.00	0.00
H										
ATOM	6520	HG2	GLU	B	68	51.722	15.392	14.720	1.00	0.00
H										
ATOM	6521	HG3	GLU	B	68	51.187	16.820	13.805	1.00	0.00
H										
ATOM	6522	N	ASN	B	69	51.067	12.233	11.393	1.00	0.00
N										
ATOM	6523	CA	ASN	B	69	51.249	11.256	10.319	1.00	0.00
C										
ATOM	6524	C	ASN	B	69	50.567	9.916	10.573	1.00	0.00
C										
ATOM	6525	O	ASN	B	69	50.484	9.439	11.719	1.00	0.00
O										
ATOM	6526	CB	ASN	B	69	52.749	10.991	10.105	1.00	0.00
C										
ATOM	6527	CG	ASN	B	69	53.410	12.078	9.325	1.00	0.00
C										
ATOM	6528	OD1	ASN	B	69	52.877	12.510	8.296	1.00	0.00
O										
ATOM	6529	ND2	ASN	B	69	54.586	12.539	9.793	1.00	0.00
N										
ATOM	6530	H	ASN	B	69	51.208	11.920	12.348	1.00	0.00
H										
ATOM	6531	HA	ASN	B	69	50.843	11.678	9.401	1.00	0.00
H										
ATOM	6532	HB2	ASN	B	69	52.866	10.052	9.566	1.00	0.00
H										
ATOM	6533	HB3	ASN	B	69	53.234	10.914	11.077	1.00	0.00
H										
ATOM	6534	HD21	ASN	B	69	55.074	13.278	9.298	1.00	0.00
H										
ATOM	6535	HD22	ASN	B	69	54.983	12.147	10.641	1.00	0.00
H										
ATOM	6536	N	GLY	B	70	50.127	9.306	9.473	1.00	0.00
N										
ATOM	6537	CA	GLY	B	70	49.632	7.944	9.480	1.00	0.00
C										

ATOM	6538	C	GLY	B	70	50.262	7.030	8.446	1.00	0.00
C										
ATOM	6539	O	GLY	B	70	50.757	7.479	7.420	1.00	0.00
O										
ATOM	6540	H	GLY	B	70	50.139	9.816	8.595	1.00	0.00
H										
ATOM	6541	HA2	GLY	B	70	48.559	7.973	9.297	1.00	0.00
H										
ATOM	6542	HA3	GLY	B	70	49.821	7.521	10.465	1.00	0.00
H										
ATOM	6543	N	GLU	B	71	50.257	5.737	8.725	1.00	0.00
N										
ATOM	6544	CA	GLU	B	71	50.433	4.720	7.688	1.00	0.00
C										
ATOM	6545	C	GLU	B	71	49.447	5.016	6.545	1.00	0.00
C										
ATOM	6546	O	GLU	B	71	48.286	4.634	6.601	1.00	0.00
O										
ATOM	6547	CB	GLU	B	71	50.181	3.336	8.283	1.00	0.00
C										
ATOM	6548	CG	GLU	B	71	50.606	2.169	7.421	1.00	0.00
C										
ATOM	6549	CD	GLU	B	71	50.487	0.807	8.154	1.00	0.00
C										
ATOM	6550	OE1	GLU	B	71	51.133	-0.200	7.711	1.00	0.00
O										
ATOM	6551	OE2	GLU	B	71	49.756	0.763	9.176	1.00	0.00
O1-										
ATOM	6552	H	GLU	B	71	50.127	5.442	9.687	1.00	0.00
H										
ATOM	6553	HA	GLU	B	71	51.452	4.768	7.306	1.00	0.00
H										
ATOM	6554	HB2	GLU	B	71	49.113	3.242	8.472	1.00	0.00
H										
ATOM	6555	HB3	GLU	B	71	50.724	3.272	9.225	1.00	0.00
H										
ATOM	6556	HG2	GLU	B	71	51.644	2.315	7.124	1.00	0.00
H										
ATOM	6557	HG3	GLU	B	71	49.975	2.143	6.534	1.00	0.00
H										
ATOM	6558	N	ALA	B	72	49.944	5.720	5.525	1.00	0.00
N										
ATOM	6559	CA	ALA	B	72	49.148	6.362	4.443	1.00	0.00
C										
ATOM	6560	C	ALA	B	72	47.910	5.614	3.934	1.00	0.00
C										
ATOM	6561	O	ALA	B	72	46.986	6.259	3.412	1.00	0.00
O										
ATOM	6562	CB	ALA	B	72	50.073	6.691	3.265	1.00	0.00
C										
ATOM	6563	H	ALA	B	72	50.952	5.827	5.484	1.00	0.00
H										
ATOM	6564	HA	ALA	B	72	48.795	7.314	4.838	1.00	0.00
H										
ATOM	6565	HB1	ALA	B	72	50.525	5.774	2.891	1.00	0.00
H										

ATOM	6566	HB2	ALA	B	72	49.495	7.161	2.470	1.00	0.00
H										
ATOM	6567	HB3	ALA	B	72	50.855	7.372	3.597	1.00	0.00
H										
ATOM	6568	N	LEU	B	73	47.886	4.282	4.133	1.00	0.00
N										
ATOM	6569	CA	LEU	B	73	46.873	3.332	3.591	1.00	0.00
C										
ATOM	6570	C	LEU	B	73	45.414	3.733	3.787	1.00	0.00
C										
ATOM	6571	O	LEU	B	73	45.097	4.624	4.573	1.00	0.00
O										
ATOM	6572	CB	LEU	B	73	47.090	1.937	4.217	1.00	0.00
C										
ATOM	6573	CG	LEU	B	73	48.480	1.258	4.076	1.00	0.00
C										
ATOM	6574	CD1	LEU	B	73	48.596	0.005	5.001	1.00	0.00
C										
ATOM	6575	CD2	LEU	B	73	48.740	0.910	2.592	1.00	0.00
C										
ATOM	6576	H	LEU	B	73	48.627	3.889	4.705	1.00	0.00
H										
ATOM	6577	HA	LEU	B	73	47.047	3.242	2.520	1.00	0.00
H										
ATOM	6578	HB2	LEU	B	73	46.361	1.267	3.765	1.00	0.00
H										
ATOM	6579	HB3	LEU	B	73	46.887	2.030	5.283	1.00	0.00
H										
ATOM	6580	HG	LEU	B	73	49.237	1.976	4.389	1.00	0.00
H										
ATOM	6581	HD11	LEU	B	73	47.827	-0.718	4.730	1.00	0.00
H										
ATOM	6582	HD12	LEU	B	73	49.579	-0.447	4.879	1.00	0.00
H										
ATOM	6583	HD13	LEU	B	73	48.461	0.306	6.039	1.00	0.00
H										
ATOM	6584	HD21	LEU	B	73	48.721	1.822	1.997	1.00	0.00
H										
ATOM	6585	HD22	LEU	B	73	49.715	0.434	2.496	1.00	0.00
H										
ATOM	6586	HD23	LEU	B	73	47.968	0.229	2.238	1.00	0.00
H										
ATOM	6587	N	GLU	B	74	44.514	3.051	3.088	1.00	0.00
N										
ATOM	6588	CA	GLU	B	74	43.086	3.383	3.200	1.00	0.00
C										
ATOM	6589	C	GLU	B	74	42.514	2.718	4.410	1.00	0.00
C										
ATOM	6590	O	GLU	B	74	43.025	1.686	4.842	1.00	0.00
O										
ATOM	6591	CB	GLU	B	74	42.295	2.950	1.969	1.00	0.00
C										
ATOM	6592	CG	GLU	B	74	42.787	3.546	0.674	1.00	0.00
C										
ATOM	6593	CD	GLU	B	74	42.785	5.052	0.726	1.00	0.00
C										

ATOM	6594	OE1	GLU	B	74	43.803	5.679	1.141	1.00	0.00
O										
ATOM	6595	OE2	GLU	B	74	41.760	5.624	0.341	1.00	0.00
O1-										
ATOM	6596	H	GLU	B	74	44.813	2.299	2.475	1.00	0.00
H										
ATOM	6597	HA	GLU	B	74	42.988	4.461	3.316	1.00	0.00
H										
ATOM	6598	HB2	GLU	B	74	41.257	3.248	2.109	1.00	0.00
H										
ATOM	6599	HB3	GLU	B	74	42.355	1.866	1.890	1.00	0.00
H										
ATOM	6600	HG2	GLU	B	74	42.138	3.219	-0.136	1.00	0.00
H										
ATOM	6601	HG3	GLU	B	74	43.803	3.199	0.488	1.00	0.00
H										
ATOM	6602	N	ILE	B	75	41.431	3.304	4.916	1.00	0.00
N										
ATOM	6603	CA	ILE	B	75	40.744	2.849	6.146	1.00	0.00
C										
ATOM	6604	C	ILE	B	75	40.614	1.341	6.250	1.00	0.00
C										
ATOM	6605	O	ILE	B	75	40.962	0.751	7.246	1.00	0.00
O										
ATOM	6606	CB	ILE	B	75	39.346	3.414	6.257	1.00	0.00
C										
ATOM	6607	CG1	ILE	B	75	39.379	4.934	6.402	1.00	0.00
C										
ATOM	6608	CG2	ILE	B	75	38.599	2.746	7.455	1.00	0.00
C										
ATOM	6609	CD1	ILE	B	75	37.978	5.516	6.567	1.00	0.00
C										
ATOM	6610	H	ILE	B	75	41.054	4.111	4.429	1.00	0.00
H										
ATOM	6611	HA	ILE	B	75	41.319	3.198	7.003	1.00	0.00
H										
ATOM	6612	HB	ILE	B	75	38.807	3.171	5.342	1.00	0.00
H										
ATOM	6613	HG12	ILE	B	75	39.837	5.364	5.512	1.00	0.00
H										
ATOM	6614	HG13	ILE	B	75	39.974	5.192	7.277	1.00	0.00
H										
ATOM	6615	HG21	ILE	B	75	39.142	2.945	8.378	1.00	0.00
H										
ATOM	6616	HG22	ILE	B	75	37.593	3.157	7.530	1.00	0.00
H										
ATOM	6617	HG23	ILE	B	75	38.541	1.671	7.293	1.00	0.00
H										
ATOM	6618	HD11	ILE	B	75	37.514	5.097	7.458	1.00	0.00
H										
ATOM	6619	HD12	ILE	B	75	38.044	6.598	6.667	1.00	0.00
H										
ATOM	6620	HD13	ILE	B	75	37.377	5.268	5.694	1.00	0.00
H										
ATOM	6621	N	SER	B	76	40.078	0.753	5.210	1.00	0.00
N										

ATOM	6622	CA	SER	B	76	39.981	-0.678	5.046	1.00	0.00
C										
ATOM	6623	C	SER	B	76	41.297	-1.398	5.437	1.00	0.00
C										
ATOM	6624	O	SER	B	76	41.326	-2.291	6.331	1.00	0.00
O										
ATOM	6625	CB	SER	B	76	39.677	-0.940	3.576	1.00	0.00
C										
ATOM	6626	OG	SER	B	76	38.974	-2.141	3.465	1.00	0.00
O										
ATOM	6627	H	SER	B	76	39.707	1.342	4.471	1.00	0.00
H										
ATOM	6628	HA	SER	B	76	39.165	-1.058	5.658	1.00	0.00
H										
ATOM	6629	HB2	SER	B	76	40.609	-1.009	3.017	1.00	0.00
H										
ATOM	6630	HB3	SER	B	76	39.074	-0.126	3.177	1.00	0.00
H										
ATOM	6631	HG	SER	B	76	38.125	-2.076	3.976	1.00	0.00
H										
ATOM	6632	N	GLN	B	77	42.378	-0.990	4.769	1.00	0.00
N										
ATOM	6633	CA	GLN	B	77	43.697	-1.595	4.974	1.00	0.00
C										
ATOM	6634	C	GLN	B	77	44.189	-1.303	6.385	1.00	0.00
C										
ATOM	6635	O	GLN	B	77	44.783	-2.166	7.020	1.00	0.00
O										
ATOM	6636	CB	GLN	B	77	44.696	-1.108	3.905	1.00	0.00
C										
ATOM	6637	CG	GLN	B	77	44.204	-1.517	2.494	1.00	0.00
C										
ATOM	6638	CD	GLN	B	77	44.917	-0.824	1.313	1.00	0.00
C										
ATOM	6639	OE1	GLN	B	77	45.425	0.289	1.418	1.00	0.00
O										
ATOM	6640	NE2	GLN	B	77	44.908	-1.494	0.176	1.00	0.00
N										
ATOM	6641	H	GLN	B	77	42.284	-0.236	4.097	1.00	0.00
H										
ATOM	6642	HA	GLN	B	77	43.593	-2.674	4.870	1.00	0.00
H										
ATOM	6643	HB2	GLN	B	77	45.671	-1.557	4.091	1.00	0.00
H										
ATOM	6644	HB3	GLN	B	77	44.780	-0.024	3.957	1.00	0.00
H										
ATOM	6645	HG2	GLN	B	77	43.143	-1.283	2.428	1.00	0.00
H										
ATOM	6646	HG3	GLN	B	77	44.347	-2.591	2.388	1.00	0.00
H										
ATOM	6647	HE21	GLN	B	77	45.357	-1.104	-0.647	1.00	0.00
H										
ATOM	6648	HE22	GLN	B	77	44.453	-2.400	0.124	1.00	0.00
H										
ATOM	6649	N	LEU	B	78	43.876	-0.111	6.889	1.00	0.00
N										

ATOM	6650	CA	LEU	B	78	44.343	0.291	8.199	1.00	0.00
C										
ATOM	6651	C	LEU	B	78	43.689	-0.595	9.267	1.00	0.00
C										
ATOM	6652	O	LEU	B	78	44.273	-0.824	10.338	1.00	0.00
O										
ATOM	6653	CB	LEU	B	78	43.993	1.760	8.494	1.00	0.00
C										
ATOM	6654	CG	LEU	B	78	44.616	2.935	7.709	1.00	0.00
C										
ATOM	6655	CD1	LEU	B	78	44.125	4.219	8.372	1.00	0.00
C										
ATOM	6656	CD2	LEU	B	78	46.093	2.916	7.690	1.00	0.00
C										
ATOM	6657	H	LEU	B	78	43.301	0.526	6.346	1.00	0.00
H										
ATOM	6658	HA	LEU	B	78	45.424	0.166	8.246	1.00	0.00
H										
ATOM	6659	HB2	LEU	B	78	44.246	1.927	9.540	1.00	0.00
H										
ATOM	6660	HB3	LEU	B	78	42.916	1.846	8.363	1.00	0.00
H										
ATOM	6661	HG	LEU	B	78	44.251	2.906	6.684	1.00	0.00
H										
ATOM	6662	HD11	LEU	B	78	44.446	4.236	9.412	1.00	0.00
H										
ATOM	6663	HD12	LEU	B	78	44.541	5.079	7.850	1.00	0.00
H										
ATOM	6664	HD13	LEU	B	78	43.038	4.258	8.327	1.00	0.00
H										
ATOM	6665	HD21	LEU	B	78	46.438	1.994	7.224	1.00	0.00
H										
ATOM	6666	HD22	LEU	B	78	46.460	3.769	7.122	1.00	0.00
H										
ATOM	6667	HD23	LEU	B	78	46.470	2.970	8.710	1.00	0.00
H										
ATOM	6668	N	LEU	B	79	42.467	-1.053	8.995	1.00	0.00
N										
ATOM	6669	CA	LEU	B	79	41.742	-1.872	9.963	1.00	0.00
C										
ATOM	6670	C	LEU	B	79	41.858	-3.385	9.799	1.00	0.00
C										
ATOM	6671	O	LEU	B	79	41.770	-4.101	10.765	1.00	0.00
O										
ATOM	6672	CB	LEU	B	79	40.254	-1.427	10.019	1.00	0.00
C										
ATOM	6673	CG	LEU	B	79	40.058	-0.091	10.718	1.00	0.00
C										
ATOM	6674	CD1	LEU	B	79	38.630	0.394	10.583	1.00	0.00
C										
ATOM	6675	CD2	LEU	B	79	40.438	-0.310	12.184	1.00	0.00
C										
ATOM	6676	H	LEU	B	79	42.035	-0.830	8.104	1.00	0.00
H										
ATOM	6677	HA	LEU	B	79	42.167	-1.638	10.938	1.00	0.00
H										

ATOM	6678	HB2	LEU	B	79	39.685	-2.186	10.555	1.00	0.00
H										
ATOM	6679	HB3	LEU	B	79	39.878	-1.344	9.000	1.00	0.00
H										
ATOM	6680	HG	LEU	B	79	40.730	0.645	10.279	1.00	0.00
H										
ATOM	6681	HD11	LEU	B	79	37.955	-0.334	11.031	1.00	0.00
H										
ATOM	6682	HD12	LEU	B	79	38.522	1.350	11.092	1.00	0.00
H										
ATOM	6683	HD13	LEU	B	79	38.386	0.515	9.529	1.00	0.00
H										
ATOM	6684	HD21	LEU	B	79	41.476	-0.633	12.246	1.00	0.00
H										
ATOM	6685	HD22	LEU	B	79	40.315	0.622	12.734	1.00	0.00
H										
ATOM	6686	HD23	LEU	B	79	39.793	-1.074	12.616	1.00	0.00
H										
ATOM	6687	N	LYS	B	80	42.104	-3.884	8.613	1.00	0.00
N										
ATOM	6688	CA	LYS	B	80	42.102	-5.331	8.397	1.00	0.00
C										
ATOM	6689	C	LYS	B	80	43.423	-6.082	8.681	1.00	0.00
C										
ATOM	6690	O	LYS	B	80	43.454	-7.306	8.584	1.00	0.00
O										
ATOM	6691	CB	LYS	B	80	41.638	-5.643	6.969	1.00	0.00
C										
ATOM	6692	CG	LYS	B	80	40.241	-5.057	6.653	1.00	0.00
C										
ATOM	6693	CD	LYS	B	80	39.357	-5.959	5.815	1.00	0.00
C										
ATOM	6694	CE	LYS	B	80	39.897	-6.191	4.400	1.00	0.00
C										
ATOM	6695	NZ	LYS	B	80	38.779	-6.593	3.466	1.00	0.00
N1+										
ATOM	6696	H	LYS	B	80	42.298	-3.261	7.836	1.00	0.00
H										
ATOM	6697	HA	LYS	B	80	41.353	-5.748	9.069	1.00	0.00
H										
ATOM	6698	HB2	LYS	B	80	41.599	-6.724	6.844	1.00	0.00
H										
ATOM	6699	HB3	LYS	B	80	42.359	-5.223	6.269	1.00	0.00
H										
ATOM	6700	HG2	LYS	B	80	40.379	-4.120	6.115	1.00	0.00
H										
ATOM	6701	HG3	LYS	B	80	39.732	-4.863	7.596	1.00	0.00
H										
ATOM	6702	HD2	LYS	B	80	38.371	-5.503	5.738	1.00	0.00
H										
ATOM	6703	HD3	LYS	B	80	39.273	-6.923	6.315	1.00	0.00
H										
ATOM	6704	HE2	LYS	B	80	40.644	-6.983	4.427	1.00	0.00
H										
ATOM	6705	HE3	LYS	B	80	40.355	-5.273	4.036	1.00	0.00
H										

ATOM	6706	HZ1	LYS	B	80	38.082	-5.856	3.436	1.00	0.00
H										
ATOM	6707	HZ2	LYS	B	80	39.154	-6.743	2.535	1.00	0.00
H										
ATOM	6708	HZ3	LYS	B	80	38.351	-7.451	3.800	1.00	0.00
H										
ATOM	6709	N	GLU	B	81	44.500	-5.370	8.987	1.00	0.00
N										
ATOM	6710	CA	GLU	B	81	45.751	-6.025	9.327	1.00	0.00
C										
ATOM	6711	C	GLU	B	81	46.464	-5.214	10.368	1.00	0.00
C										
ATOM	6712	O	GLU	B	81	46.513	-3.983	10.287	1.00	0.00
O										
ATOM	6713	CB	GLU	B	81	46.703	-6.168	8.129	1.00	0.00
C										
ATOM	6714	CG	GLU	B	81	46.222	-7.060	7.030	1.00	0.00
C										
ATOM	6715	CD	GLU	B	81	47.258	-7.192	5.950	1.00	0.00
C										
ATOM	6716	OE1	GLU	B	81	48.449	-6.908	6.237	1.00	0.00
O										
ATOM	6717	OE2	GLU	B	81	46.880	-7.591	4.818	1.00	0.00
O1-										
ATOM	6718	H	GLU	B	81	44.449	-4.356	8.983	1.00	0.00
H										
ATOM	6719	HA	GLU	B	81	45.537	-7.013	9.731	1.00	0.00
H										
ATOM	6720	HB2	GLU	B	81	47.648	-6.567	8.496	1.00	0.00
H										
ATOM	6721	HB3	GLU	B	81	46.867	-5.176	7.710	1.00	0.00
H										
ATOM	6722	HG2	GLU	B	81	45.314	-6.639	6.602	1.00	0.00
H										
ATOM	6723	HG3	GLU	B	81	46.008	-8.046	7.440	1.00	0.00
H										
ATOM	6724	N	SER	B	82	47.007	-5.938	11.331	1.00	0.00
N										
ATOM	6725	CA	SER	B	82	47.770	-5.349	12.376	1.00	0.00
C										
ATOM	6726	C	SER	B	82	49.123	-5.140	11.805	1.00	0.00
C										
ATOM	6727	O	SER	B	82	49.412	-5.597	10.691	1.00	0.00
O										
ATOM	6728	CB	SER	B	82	47.828	-6.240	13.598	1.00	0.00
C										
ATOM	6729	OG	SER	B	82	48.432	-7.463	13.318	1.00	0.00
O										
ATOM	6730	H	SER	B	82	46.876	-6.944	11.324	1.00	0.00
H										
ATOM	6731	HA	SER	B	82	47.336	-4.388	12.646	1.00	0.00
H										
ATOM	6732	HB2	SER	B	82	46.814	-6.420	13.951	1.00	0.00
H										
ATOM	6733	HB3	SER	B	82	48.399	-5.735	14.376	1.00	0.00
H										



ATOM	6734	HG	SER	B	82	49.360	-7.309	13.000	1.00	0.00
H										
ATOM	6735	N	SER	B	83	49.957	-4.461	12.576	1.00	0.00
N										
ATOM	6736	CA	SER	B	83	51.341	-4.215	12.169	1.00	0.00
C										
ATOM	6737	C	SER	B	83	52.090	-5.543	12.054	1.00	0.00
C										
ATOM	6738	O	SER	B	83	53.055	-5.674	11.304	1.00	0.00
O										
ATOM	6739	CB	SER	B	83	52.004	-3.318	13.204	1.00	0.00
C										
ATOM	6740	OG	SER	B	83	51.812	-3.826	14.524	1.00	0.00
O										
ATOM	6741	H	SER	B	83	49.630	-4.104	13.468	1.00	0.00
H										
ATOM	6742	HA	SER	B	83	51.348	-3.714	11.202	1.00	0.00
H										
ATOM	6743	HB2	SER	B	83	51.571	-2.321	13.140	1.00	0.00
H										
ATOM	6744	HB3	SER	B	83	53.072	-3.264	12.996	1.00	0.00
H										
ATOM	6745	HG	SER	B	83	52.209	-4.734	14.590	1.00	0.00
H										
ATOM	6746	N	SER	B	84	51.635	-6.543	12.793	1.00	0.00
N										
ATOM	6747	CA	SER	B	84	52.258	-7.848	12.773	1.00	0.00
C										
ATOM	6748	C	SER	B	84	51.903	-8.683	11.532	1.00	0.00
C										
ATOM	6749	O	SER	B	84	52.341	-9.822	11.427	1.00	0.00
O										
ATOM	6750	CB	SER	B	84	51.824	-8.620	14.016	1.00	0.00
C										
ATOM	6751	OG	SER	B	84	50.548	-9.184	13.768	1.00	0.00
O										
ATOM	6752	H	SER	B	84	50.828	-6.390	13.389	1.00	0.00
H										
ATOM	6753	HA	SER	B	84	53.339	-7.717	12.806	1.00	0.00
H										
ATOM	6754	HB2	SER	B	84	51.769	-7.944	14.868	1.00	0.00
H										
ATOM	6755	HB3	SER	B	84	52.542	-9.412	14.227	1.00	0.00
H										
ATOM	6756	HG	SER	B	84	50.603	-9.797	12.989	1.00	0.00
H										
ATOM	6757	N	GLY	B	85	51.063	-8.151	10.639	1.00	0.00
N										
ATOM	6758	CA	GLY	B	85	50.665	-8.863	9.435	1.00	0.00
C										
ATOM	6759	C	GLY	B	85	49.414	-9.703	9.565	1.00	0.00
C										
ATOM	6760	O	GLY	B	85	48.934	-10.223	8.575	1.00	0.00
O										
ATOM	6761	H	GLY	B	85	50.692	-7.222	10.806	1.00	0.00
H										

ATOM	6762	HA2	GLY	B	85	51.484	-9.521	9.147	1.00	0.00
H										
ATOM	6763	HA3	GLY	B	85	50.497	-8.128	8.649	1.00	0.00
H										
ATOM	6764	N	GLN	B	86	48.879	-9.836	10.781	1.00	0.00
N										
ATOM	6765	CA	GLN	B	86	47.674	-10.621	11.023	1.00	0.00
C										
ATOM	6766	C	GLN	B	86	46.522	-9.680	11.355	1.00	0.00
C										
ATOM	6767	O	GLN	B	86	46.737	-8.571	11.761	1.00	0.00
O										
ATOM	6768	CB	GLN	B	86	47.870	-11.552	12.225	1.00	0.00
C										
ATOM	6769	CG	GLN	B	86	49.105	-12.483	12.201	1.00	0.00
C										
ATOM	6770	CD	GLN	B	86	49.223	-13.260	13.524	1.00	0.00
C										
ATOM	6771	OE1	GLN	B	86	48.264	-13.269	14.349	1.00	0.00
O										
ATOM	6772	NE2	GLN	B	86	50.389	-13.888	13.756	1.00	0.00
N										
ATOM	6773	H	GLN	B	86	49.328	-9.374	11.566	1.00	0.00
H										
ATOM	6774	HA	GLN	B	86	47.430	-11.207	10.138	1.00	0.00
H										
ATOM	6775	HB2	GLN	B	86	46.985	-12.183	12.299	1.00	0.00
H										
ATOM	6776	HB3	GLN	B	86	47.947	-10.928	13.114	1.00	0.00
H										
ATOM	6777	HG2	GLN	B	86	50.003	-11.884	12.057	1.00	0.00
H										
ATOM	6778	HG3	GLN	B	86	49.005	-13.190	11.379	1.00	0.00
H										
ATOM	6779	HE21	GLN	B	86	50.520	-14.415	14.614	1.00	0.00
H										
ATOM	6780	HE22	GLN	B	86	51.139	-13.835	13.073	1.00	0.00
H										
ATOM	6781	N	PRO	B	87	45.288	-10.125	11.189	1.00	0.00
N										
ATOM	6782	CA	PRO	B	87	44.181	-9.345	11.735	1.00	0.00
C										
ATOM	6783	C	PRO	B	87	44.316	-9.099	13.233	1.00	0.00
C										
ATOM	6784	O	PRO	B	87	45.073	-9.781	13.931	1.00	0.00
O										
ATOM	6785	CB	PRO	B	87	42.944	-10.208	11.429	1.00	0.00
C										
ATOM	6786	CG	PRO	B	87	43.321	-11.020	10.313	1.00	0.00
C										
ATOM	6787	CD	PRO	B	87	44.804	-11.311	10.475	1.00	0.00
C										
ATOM	6788	HA	PRO	B	87	44.106	-8.394	11.210	1.00	0.00
H										
ATOM	6789	HB2	PRO	B	87	42.093	-9.579	11.173	1.00	0.00
H										

ATOM	6790	HB3	PRO	B	87	42.691	-10.831	12.286	1.00	0.00
H										
ATOM	6791	HG2	PRO	B	87	43.142	-10.486	9.381	1.00	0.00
H										
ATOM	6792	HG3	PRO	B	87	42.753	-11.949	10.314	1.00	0.00
H										
ATOM	6793	HD2	PRO	B	87	44.965	-12.215	11.060	1.00	0.00
H										
ATOM	6794	HD3	PRO	B	87	45.292	-11.414	9.507	1.00	0.00
H										
ATOM	6795	N	TYR	B	88	43.643	-8.066	13.688	1.00	0.00
N										
ATOM	6796	CA	TYR	B	88	43.568	-7.741	15.074	1.00	0.00
C										
ATOM	6797	C	TYR	B	88	42.708	-8.779	15.755	1.00	0.00
C										
ATOM	6798	O	TYR	B	88	41.731	-9.299	15.178	1.00	0.00
O										
ATOM	6799	CB	TYR	B	88	42.946	-6.345	15.250	1.00	0.00
C										
ATOM	6800	CG	TYR	B	88	43.842	-5.228	14.747	1.00	0.00
C										
ATOM	6801	CD1	TYR	B	88	43.574	-4.562	13.552	1.00	0.00
C										
ATOM	6802	CD2	TYR	B	88	44.996	-4.893	15.438	1.00	0.00
C										
ATOM	6803	CE1	TYR	B	88	44.402	-3.521	13.117	1.00	0.00
C										
ATOM	6804	CE2	TYR	B	88	45.832	-3.899	15.017	1.00	0.00
C										
ATOM	6805	CZ	TYR	B	88	45.544	-3.213	13.864	1.00	0.00
C										
ATOM	6806	OH	TYR	B	88	46.412	-2.249	13.466	1.00	0.00
O										
ATOM	6807	H	TYR	B	88	43.155	-7.474	13.024	1.00	0.00
H										
ATOM	6808	HA	TYR	B	88	44.567	-7.753	15.507	1.00	0.00
H										
ATOM	6809	HB2	TYR	B	88	42.751	-6.183	16.309	1.00	0.00
H										
ATOM	6810	HB3	TYR	B	88	42.007	-6.312	14.699	1.00	0.00
H										
ATOM	6811	HD1	TYR	B	88	42.713	-4.854	12.952	1.00	0.00
H										
ATOM	6812	HD2	TYR	B	88	45.244	-5.441	16.346	1.00	0.00
H										
ATOM	6813	HE1	TYR	B	88	44.162	-2.961	12.214	1.00	0.00
H										
ATOM	6814	HE2	TYR	B	88	46.722	-3.652	15.593	1.00	0.00
H										
ATOM	6815	HH	TYR	B	88	45.937	-1.379	13.409	1.00	0.00
H										
ATOM	6816	N	ASP	B	89	43.085	-9.061	16.995	1.00	0.00
N										
ATOM	6817	CA	ASP	B	89	42.254	-9.789	17.929	1.00	0.00
C										

ATOM	6818	C	ASP	B	89	41.122	-8.877	18.467	1.00	0.00
C										
ATOM	6819	O	ASP	B	89	40.035	-9.326	18.692	1.00	0.00
O										
ATOM	6820	CB	ASP	B	89	43.167	-10.327	19.023	1.00	0.00
C										
ATOM	6821	CG	ASP	B	89	44.133	-11.358	18.472	1.00	0.00
C										
ATOM	6822	OD1	ASP	B	89	43.642	-12.432	18.124	1.00	0.00
O										
ATOM	6823	OD2	ASP	B	89	45.342	-11.071	18.322	1.00	0.00
O1-										
ATOM	6824	H	ASP	B	89	44.001	-8.751	17.304	1.00	0.00
H										
ATOM	6825	HA	ASP	B	89	41.802	-10.632	17.408	1.00	0.00
H										
ATOM	6826	HB2	ASP	B	89	42.558	-10.790	19.799	1.00	0.00
H										
ATOM	6827	HB3	ASP	B	89	43.734	-9.502	19.451	1.00	0.00
H										
ATOM	6828	N	ALA	B	90	41.379	-7.590	18.625	1.00	0.00
N										
ATOM	6829	CA	ALA	B	90	40.366	-6.651	19.158	1.00	0.00
C										
ATOM	6830	C	ALA	B	90	40.739	-5.239	18.824	1.00	0.00
C										
ATOM	6831	O	ALA	B	90	41.931	-4.858	18.933	1.00	0.00
O										
ATOM	6832	CB	ALA	B	90	40.190	-6.802	20.689	1.00	0.00
C										
ATOM	6833	H	ALA	B	90	42.296	-7.236	18.374	1.00	0.00
H										
ATOM	6834	HA	ALA	B	90	39.412	-6.873	18.682	1.00	0.00
H										
ATOM	6835	HB1	ALA	B	90	41.138	-6.599	21.185	1.00	0.00
H										
ATOM	6836	HB2	ALA	B	90	39.438	-6.096	21.039	1.00	0.00
H										
ATOM	6837	HB3	ALA	B	90	39.869	-7.817	20.919	1.00	0.00
H										
ATOM	6838	N	VAL	B	91	39.745	-4.477	18.386	1.00	0.00
N										
ATOM	6839	CA	VAL	B	91	39.888	-3.043	18.203	1.00	0.00
C										
ATOM	6840	C	VAL	B	91	38.995	-2.294	19.189	1.00	0.00
C										
ATOM	6841	O	VAL	B	91	37.828	-2.629	19.275	1.00	0.00
O										
ATOM	6842	CB	VAL	B	91	39.512	-2.623	16.748	1.00	0.00
C										
ATOM	6843	CG1	VAL	B	91	39.630	-1.066	16.555	1.00	0.00
C										
ATOM	6844	CG2	VAL	B	91	40.358	-3.412	15.702	1.00	0.00
C										
ATOM	6845	H	VAL	B	91	38.853	-4.912	18.171	1.00	0.00
H										

ATOM	6846	HA	VAL	B	91	40.925	-2.768	18.390	1.00	0.00
H										
ATOM	6847	HB	VAL	B	91	38.468	-2.892	16.591	1.00	0.00
H										
ATOM	6848	HG11	VAL	B	91	40.654	-0.752	16.753	1.00	0.00
H										
ATOM	6849	HG12	VAL	B	91	39.362	-0.806	15.532	1.00	0.00
H										
ATOM	6850	HG13	VAL	B	91	38.956	-0.562	17.246	1.00	0.00
H										
ATOM	6851	HG21	VAL	B	91	40.173	-4.479	15.816	1.00	0.00
H										
ATOM	6852	HG22	VAL	B	91	40.076	-3.100	14.697	1.00	0.00
H										
ATOM	6853	HG23	VAL	B	91	41.416	-3.208	15.862	1.00	0.00
H										
ATOM	6854	N	PHE	B	92	39.557	-1.321	19.928	1.00	0.00
N										
ATOM	6855	CA	PHE	B	92	38.849	-0.463	20.886	1.00	0.00
C										
ATOM	6856	C	PHE	B	92	38.432	0.803	20.126	1.00	0.00
C										
ATOM	6857	O	PHE	B	92	39.302	1.553	19.627	1.00	0.00
O										
ATOM	6858	CB	PHE	B	92	39.751	0.015	22.054	1.00	0.00
C										
ATOM	6859	CG	PHE	B	92	40.003	-0.993	23.099	1.00	0.00
C										
ATOM	6860	CD1	PHE	B	92	39.273	-0.969	24.304	1.00	0.00
C										
ATOM	6861	CD2	PHE	B	92	40.970	-2.000	22.909	1.00	0.00
C										
ATOM	6862	CE1	PHE	B	92	39.481	-1.921	25.283	1.00	0.00
C										
ATOM	6863	CE2	PHE	B	92	41.180	-2.956	23.898	1.00	0.00
C										
ATOM	6864	CZ	PHE	B	92	40.406	-2.931	25.069	1.00	0.00
C										
ATOM	6865	H	PHE	B	92	40.553	-1.167	19.814	1.00	0.00
H										
ATOM	6866	HA	PHE	B	92	37.970	-0.976	21.274	1.00	0.00
H										
ATOM	6867	HB2	PHE	B	92	39.271	0.874	22.522	1.00	0.00
H										
ATOM	6868	HB3	PHE	B	92	40.711	0.317	21.638	1.00	0.00
H										
ATOM	6869	HD1	PHE	B	92	38.533	-0.187	24.466	1.00	0.00
H										
ATOM	6870	HD2	PHE	B	92	41.552	-2.030	21.989	1.00	0.00
H										
ATOM	6871	HE1	PHE	B	92	38.923	-1.878	26.217	1.00	0.00
H										
ATOM	6872	HE2	PHE	B	92	41.942	-3.722	23.764	1.00	0.00
H										
ATOM	6873	HZ	PHE	B	92	40.533	-3.713	25.816	1.00	0.00
H										

ATOM	6874	N	PRO	B	93	37.113	1.029	19.995	1.00	0.00
N										
ATOM	6875	CA	PRO	B	93	36.617	2.279	19.487	1.00	0.00
C										
ATOM	6876	C	PRO	B	93	36.417	3.247	20.632	1.00	0.00
C										
ATOM	6877	O	PRO	B	93	35.322	3.325	21.171	1.00	0.00
O										
ATOM	6878	CB	PRO	B	93	35.297	1.883	18.811	1.00	0.00
C										
ATOM	6879	CG	PRO	B	93	34.840	0.619	19.560	1.00	0.00
C										
ATOM	6880	CD	PRO	B	93	36.038	0.050	20.245	1.00	0.00
C										
ATOM	6881	HA	PRO	B	93	37.309	2.693	18.756	1.00	0.00
H										
ATOM	6882	HB2	PRO	B	93	35.455	1.668	17.755	1.00	0.00
H										
ATOM	6883	HB3	PRO	B	93	34.559	2.678	18.913	1.00	0.00
H										
ATOM	6884	HG2	PRO	B	93	34.436	-0.106	18.855	1.00	0.00
H										
ATOM	6885	HG3	PRO	B	93	34.079	0.876	20.294	1.00	0.00
H										
ATOM	6886	HD2	PRO	B	93	35.855	-0.055	21.313	1.00	0.00
H										
ATOM	6887	HD3	PRO	B	93	36.296	-0.920	19.824	1.00	0.00
H										
ATOM	6888	N	LEU	B	94	37.487	3.993	20.985	1.00	0.00
N										
ATOM	6889	CA	LEU	B	94	37.441	4.958	22.063	1.00	0.00
C										
ATOM	6890	C	LEU	B	94	36.946	6.309	21.598	1.00	0.00
C										
ATOM	6891	O	LEU	B	94	37.542	7.356	21.908	1.00	0.00
O										
ATOM	6892	CB	LEU	B	94	38.779	5.084	22.764	1.00	0.00
C										
ATOM	6893	CG	LEU	B	94	39.319	3.773	23.348	1.00	0.00
C										
ATOM	6894	CD1	LEU	B	94	40.677	4.082	24.068	1.00	0.00
C										
ATOM	6895	CD2	LEU	B	94	38.304	3.070	24.296	1.00	0.00
C										
ATOM	6896	H	LEU	B	94	38.356	3.872	20.475	1.00	0.00
H										
ATOM	6897	HA	LEU	B	94	36.726	4.588	22.797	1.00	0.00
H										
ATOM	6898	HB2	LEU	B	94	38.670	5.799	23.578	1.00	0.00
H										
ATOM	6899	HB3	LEU	B	94	39.505	5.460	22.045	1.00	0.00
H										
ATOM	6900	HG	LEU	B	94	39.525	3.098	22.519	1.00	0.00
H										
ATOM	6901	HD11	LEU	B	94	40.509	4.806	24.864	1.00	0.00
H										

ATOM	6902	HD12	LEU	B	94	41.080	3.164	24.492	1.00	0.00
H										
ATOM	6903	HD13	LEU	B	94	41.384	4.491	23.348	1.00	0.00
H										
ATOM	6904	HD21	LEU	B	94	37.394	2.838	23.746	1.00	0.00
H										
ATOM	6905	HD22	LEU	B	94	38.743	2.149	24.677	1.00	0.00
H										
ATOM	6906	HD23	LEU	B	94	38.067	3.731	25.128	1.00	0.00
H										
ATOM	6907	N	LEU	B	95	35.834	6.287	20.873	1.00	0.00
N										
ATOM	6908	CA	LEU	B	95	35.261	7.500	20.333	1.00	0.00
C										
ATOM	6909	C	LEU	B	95	33.810	7.274	19.947	1.00	0.00
C										
ATOM	6910	O	LEU	B	95	33.423	6.172	19.668	1.00	0.00
O										
ATOM	6911	CB	LEU	B	95	36.024	7.969	19.099	1.00	0.00
C										
ATOM	6912	CG	LEU	B	95	35.943	7.191	17.767	1.00	0.00
C										
ATOM	6913	CD1	LEU	B	95	36.788	7.908	16.771	1.00	0.00
C										
ATOM	6914	CD2	LEU	B	95	36.443	5.743	17.893	1.00	0.00
C										
ATOM	6915	H	LEU	B	95	35.375	5.399	20.694	1.00	0.00
H										
ATOM	6916	HA	LEU	B	95	35.307	8.279	21.092	1.00	0.00
H										
ATOM	6917	HB2	LEU	B	95	37.076	7.996	19.378	1.00	0.00
H										
ATOM	6918	HB3	LEU	B	95	35.678	8.980	18.888	1.00	0.00
H										
ATOM	6919	HG	LEU	B	95	34.910	7.184	17.420	1.00	0.00
H										
ATOM	6920	HD11	LEU	B	95	37.816	7.944	17.127	1.00	0.00
H										
ATOM	6921	HD12	LEU	B	95	36.751	7.382	15.818	1.00	0.00
H										
ATOM	6922	HD13	LEU	B	95	36.413	8.922	16.640	1.00	0.00
H										
ATOM	6923	HD21	LEU	B	95	35.837	5.212	18.626	1.00	0.00
H										
ATOM	6924	HD22	LEU	B	95	36.362	5.246	16.927	1.00	0.00
H										
ATOM	6925	HD23	LEU	B	95	37.483	5.745	18.215	1.00	0.00
H										
ATOM	6926	N	HIS	B	96	33.032	8.358	19.927	1.00	0.00
N										
ATOM	6927	CA	HIS	B	96	31.770	8.384	19.245	1.00	0.00
C										
ATOM	6928	C	HIS	B	96	31.933	8.498	17.718	1.00	0.00
C										
ATOM	6929	O	HIS	B	96	32.979	8.838	17.188	1.00	0.00
O										

ATOM	6930	CB	HIS	B	96	30.957	9.557	19.754	1.00	0.00
C										
ATOM	6931	CG	HIS	B	96	30.524	9.414	21.178	1.00	0.00
C										
ATOM	6932	ND1	HIS	B	96	29.914	8.273	21.658	1.00	0.00
N										
ATOM	6933	CD2	HIS	B	96	30.576	10.282	22.217	1.00	0.00
C										
ATOM	6934	CE1	HIS	B	96	29.636	8.431	22.940	1.00	0.00
C										
ATOM	6935	NE2	HIS	B	96	30.019	9.646	23.303	1.00	0.00
N										
ATOM	6936	H	HIS	B	96	33.343	9.194	20.412	1.00	0.00
H										
ATOM	6937	HA	HIS	B	96	31.233	7.464	19.471	1.00	0.00
H										
ATOM	6938	HB2	HIS	B	96	30.069	9.655	19.132	1.00	0.00
H										
ATOM	6939	HB3	HIS	B	96	31.562	10.459	19.667	1.00	0.00
H										
ATOM	6940	HD1	HIS	B	96	29.711	7.442	21.111	1.00	0.00
H										
ATOM	6941	HD2	HIS	B	96	30.982	11.293	22.197	1.00	0.00
H										
ATOM	6942	HE1	HIS	B	96	29.172	7.689	23.588	1.00	0.00
H										
ATOM	6943	N	GLY	B	97	30.871	8.196	16.997	1.00	0.00
N										
ATOM	6944	CA	GLY	B	97	30.855	8.427	15.538	1.00	0.00
C										
ATOM	6945	C	GLY	B	97	31.157	9.875	15.256	1.00	0.00
C										
ATOM	6946	O	GLY	B	97	30.657	10.748	15.939	1.00	0.00
O										
ATOM	6947	H	GLY	B	97	30.053	7.800	17.450	1.00	0.00
H										
ATOM	6948	HA2	GLY	B	97	29.871	8.178	15.142	1.00	0.00
H										
ATOM	6949	HA3	GLY	B	97	31.608	7.800	15.063	1.00	0.00
H										
ATOM	6950	N	PRO	B	98	32.053	10.158	14.308	1.00	0.00
N										
ATOM	6951	CA	PRO	B	98	32.329	11.570	14.025	1.00	0.00
C										
ATOM	6952	C	PRO	B	98	31.133	12.490	13.701	1.00	0.00
C										
ATOM	6953	O	PRO	B	98	31.340	13.636	13.292	1.00	0.00
O										
ATOM	6954	CB	PRO	B	98	33.355	11.495	12.887	1.00	0.00
C										
ATOM	6955	CG	PRO	B	98	34.140	10.205	13.240	1.00	0.00
C										
ATOM	6956	CD	PRO	B	98	32.987	9.265	13.586	1.00	0.00
C										
ATOM	6957	HA	PRO	B	98	32.835	11.986	14.895	1.00	0.00
H										



ATOM	6958	HB2	PRO	B	98	34.007	12.367	12.886	1.00	0.00
H										
ATOM	6959	HB3	PRO	B	98	32.865	11.407	11.918	1.00	0.00
H										
ATOM	6960	HG2	PRO	B	98	34.803	10.358	14.090	1.00	0.00
H										
ATOM	6961	HG3	PRO	B	98	34.716	9.840	12.391	1.00	0.00
H										
ATOM	6962	HD2	PRO	B	98	32.527	8.858	12.687	1.00	0.00
H										
ATOM	6963	HD3	PRO	B	98	33.322	8.448	14.223	1.00	0.00
H										
ATOM	6964	N	ASN	B	99	29.910	12.002	13.908	1.00	0.00
N										
ATOM	6965	CA	ASN	B	99	28.759	12.864	14.153	1.00	0.00
C										
ATOM	6966	C	ASN	B	99	28.372	12.945	15.638	1.00	0.00
C										
ATOM	6967	O	ASN	B	99	27.289	13.437	15.954	1.00	0.00
O										
ATOM	6968	CB	ASN	B	99	27.552	12.354	13.373	1.00	0.00
C										
ATOM	6969	CG	ASN	B	99	27.897	11.993	11.942	1.00	0.00
C										
ATOM	6970	OD1	ASN	B	99	28.267	12.872	11.171	1.00	0.00
O										
ATOM	6971	ND2	ASN	B	99	27.796	10.689	11.579	1.00	0.00
N										
ATOM	6972	H	ASN	B	99	29.775	10.996	13.895	1.00	0.00
H										
ATOM	6973	HA	ASN	B	99	28.997	13.867	13.803	1.00	0.00
H										
ATOM	6974	HB2	ASN	B	99	26.789	13.131	13.363	1.00	0.00
H										
ATOM	6975	HB3	ASN	B	99	27.163	11.469	13.873	1.00	0.00
H										
ATOM	6976	HD21	ASN	B	99	28.017	10.408	10.629	1.00	0.00
H										
ATOM	6977	HD22	ASN	B	99	27.498	9.995	12.257	1.00	0.00
H										
ATOM	6978	N	GLY	B	100	29.258	12.487	16.536	1.00	0.00
N										
ATOM	6979	CA	GLY	B	100	28.895	12.192	17.920	1.00	0.00
C										
ATOM	6980	C	GLY	B	100	28.066	10.905	18.035	1.00	0.00
C										
ATOM	6981	O	GLY	B	100	27.627	10.541	19.133	1.00	0.00
O										
ATOM	6982	H	GLY	B	100	30.219	12.340	16.242	1.00	0.00
H										
ATOM	6983	HA2	GLY	B	100	28.312	13.023	18.315	1.00	0.00
H										
ATOM	6984	HA3	GLY	B	100	29.806	12.077	18.506	1.00	0.00
H										
ATOM	6985	N	GLU	B	101	27.873	10.207	16.913	1.00	0.00
N										

ATOM	6986	CA	GLU	B	101	26.975	9.035	16.829	1.00	0.00
C										
ATOM	6987	C	GLU	B	101	27.655	7.840	17.459	1.00	0.00
C										
ATOM	6988	O	GLU	B	101	28.910	7.763	17.484	1.00	0.00
O										
ATOM	6989	CB	GLU	B	101	26.626	8.703	15.357	1.00	0.00
C										
ATOM	6990	CG	GLU	B	101	25.268	9.224	14.849	1.00	0.00
C										
ATOM	6991	CD	GLU	B	101	25.271	9.689	13.364	1.00	0.00
C										
ATOM	6992	OE1	GLU	B	101	26.064	9.139	12.544	1.00	0.00
O										
ATOM	6993	OE2	GLU	B	101	24.488	10.627	13.021	1.00	0.00
O1-										
ATOM	6994	H	GLU	B	101	28.368	10.496	16.075	1.00	0.00
H										
ATOM	6995	HA	GLU	B	101	26.057	9.250	17.373	1.00	0.00
H										
ATOM	6996	HB2	GLU	B	101	26.628	7.619	15.251	1.00	0.00
H										
ATOM	6997	HB3	GLU	B	101	27.404	9.131	14.726	1.00	0.00
H										
ATOM	6998	HG2	GLU	B	101	24.974	10.069	15.470	1.00	0.00
H										
ATOM	6999	HG3	GLU	B	101	24.536	8.425	14.954	1.00	0.00
H										
ATOM	7000	N	ASP	B	102	26.851	6.904	17.976	1.00	0.00
N										
ATOM	7001	CA	ASP	B	102	27.359	5.593	18.334	1.00	0.00
C										
ATOM	7002	C	ASP	B	102	26.772	4.538	17.364	1.00	0.00
C										
ATOM	7003	O	ASP	B	102	25.717	4.721	16.793	1.00	0.00
O										
ATOM	7004	CB	ASP	B	102	26.948	5.260	19.757	1.00	0.00
C										
ATOM	7005	CG	ASP	B	102	27.787	5.998	20.828	1.00	0.00
C										
ATOM	7006	OD1	ASP	B	102	28.889	6.510	20.510	1.00	0.00
O										
ATOM	7007	OD2	ASP	B	102	27.359	5.998	22.017	1.00	0.00
O1-										
ATOM	7008	H	ASP	B	102	25.869	7.115	18.120	1.00	0.00
H										
ATOM	7009	HA	ASP	B	102	28.446	5.591	18.259	1.00	0.00
H										
ATOM	7010	HB2	ASP	B	102	27.063	4.188	19.907	1.00	0.00
H										
ATOM	7011	HB3	ASP	B	102	25.903	5.535	19.888	1.00	0.00
H										
ATOM	7012	N	GLY	B	103	27.443	3.406	17.216	1.00	0.00
N										
ATOM	7013	CA	GLY	B	103	26.901	2.359	16.401	1.00	0.00
C										

ATOM	7014	C	GLY	B	103	27.309	2.429	14.966	1.00	0.00
C										
ATOM	7015	O	GLY	B	103	27.083	1.467	14.249	1.00	0.00
O										
ATOM	7016	H	GLY	B	103	28.338	3.280	17.678	1.00	0.00
H										
ATOM	7017	HA2	GLY	B	103	25.815	2.415	16.451	1.00	0.00
H										
ATOM	7018	HA3	GLY	B	103	27.235	1.404	16.805	1.00	0.00
H										
ATOM	7019	N	THR	B	104	27.874	3.582	14.542	1.00	0.00
N										
ATOM	7020	CA	THR	B	104	28.323	3.791	13.182	1.00	0.00
C										
ATOM	7021	C	THR	B	104	29.700	3.159	12.899	1.00	0.00
C										
ATOM	7022	O	THR	B	104	29.888	2.487	11.902	1.00	0.00
O										
ATOM	7023	CB	THR	B	104	28.293	5.291	12.815	1.00	0.00
C										
ATOM	7024	OG1	THR	B	104	29.154	6.033	13.678	1.00	0.00
O										
ATOM	7025	CG2	THR	B	104	26.868	5.825	12.860	1.00	0.00
C										
ATOM	7026	H	THR	B	104	27.988	4.338	15.210	1.00	0.00
H										
ATOM	7027	HA	THR	B	104	27.606	3.292	12.532	1.00	0.00
H										
ATOM	7028	HB	THR	B	104	28.661	5.397	11.796	1.00	0.00
H										
ATOM	7029	HG21	THR	B	104	26.464	5.699	13.864	1.00	0.00
H										
ATOM	7030	HG22	THR	B	104	26.868	6.882	12.599	1.00	0.00
H										
ATOM	7031	HG23	THR	B	104	26.251	5.276	12.150	1.00	0.00
H										
ATOM	7032	HG1	THR	B	104	30.084	5.697	13.586	1.00	0.00
H										
ATOM	7033	N	ILE	B	105	30.656	3.355	13.799	1.00	0.00
N										
ATOM	7034	CA	ILE	B	105	31.984	2.755	13.667	1.00	0.00
C										
ATOM	7035	C	ILE	B	105	31.907	1.274	13.862	1.00	0.00
C										
ATOM	7036	O	ILE	B	105	32.608	0.506	13.198	1.00	0.00
O										
ATOM	7037	CB	ILE	B	105	33.054	3.399	14.642	1.00	0.00
C										
ATOM	7038	CG1	ILE	B	105	34.478	2.823	14.397	1.00	0.00
C										
ATOM	7039	CG2	ILE	B	105	32.799	3.047	16.030	1.00	0.00
C										
ATOM	7040	CD1	ILE	B	105	35.585	3.923	14.049	1.00	0.00
C										
ATOM	7041	H	ILE	B	105	30.459	3.940	14.605	1.00	0.00
H										

ATOM	7042	HA	ILE	B	105	32.322	2.933	12.647	1.00	0.00
H										
ATOM	7043	HB	ILE	B	105	33.063	4.482	14.526	1.00	0.00
H										
ATOM	7044	HG12	ILE	B	105	34.423	2.121	13.567	1.00	0.00
H										
ATOM	7045	HG13	ILE	B	105	34.792	2.297	15.297	1.00	0.00
H										
ATOM	7046	HG21	ILE	B	105	32.840	1.965	16.143	1.00	0.00
H										
ATOM	7047	HG22	ILE	B	105	33.553	3.508	16.666	1.00	0.00
H										
ATOM	7048	HG23	ILE	B	105	31.812	3.405	16.320	1.00	0.00
H										
ATOM	7049	HD11	ILE	B	105	35.666	4.630	14.873	1.00	0.00
H										
ATOM	7050	HD12	ILE	B	105	36.546	3.435	13.894	1.00	0.00
H										
ATOM	7051	HD13	ILE	B	105	35.297	4.454	13.143	1.00	0.00
H										
ATOM	7052	N	GLN	B	106	31.040	0.851	14.770	1.00	0.00
N										
ATOM	7053	CA	GLN	B	106	30.733	-0.585	14.920	1.00	0.00
C										
ATOM	7054	C	GLN	B	106	30.307	-1.220	13.613	1.00	0.00
C										
ATOM	7055	O	GLN	B	106	30.752	-2.310	13.309	1.00	0.00
O										
ATOM	7056	CB	GLN	B	106	29.706	-0.843	15.978	1.00	0.00
C										
ATOM	7057	CG	GLN	B	106	30.192	-0.514	17.355	1.00	0.00
C										
ATOM	7058	CD	GLN	B	106	30.215	1.016	17.650	1.00	0.00
C										
ATOM	7059	OE1	GLN	B	106	29.680	1.838	16.887	1.00	0.00
O										
ATOM	7060	NE2	GLN	B	106	30.900	1.383	18.731	1.00	0.00
N										
ATOM	7061	H	GLN	B	106	30.578	1.525	15.372	1.00	0.00
H										
ATOM	7062	HA	GLN	B	106	31.651	-1.079	15.234	1.00	0.00
H										
ATOM	7063	HB2	GLN	B	106	29.433	-1.897	15.948	1.00	0.00
H										
ATOM	7064	HB3	GLN	B	106	28.828	-0.235	15.765	1.00	0.00
H										
ATOM	7065	HG2	GLN	B	106	31.203	-0.903	17.466	1.00	0.00
H										
ATOM	7066	HG3	GLN	B	106	29.536	-0.996	18.078	1.00	0.00
H										
ATOM	7067	HE21	GLN	B	106	30.959	2.364	18.986	1.00	0.00
H										
ATOM	7068	HE22	GLN	B	106	31.364	0.682	19.300	1.00	0.00
H										
ATOM	7069	N	GLY	B	107	29.453	-0.541	12.830	1.00	0.00
N										

ATOM	7070	CA	GLY	B	107	29.009	-1.088	11.547	1.00	0.00
C										
ATOM	7071	C	GLY	B	107	30.120	-1.140	10.520	1.00	0.00
C										
ATOM	7072	O	GLY	B	107	30.200	-2.056	9.694	1.00	0.00
O										
ATOM	7073	H	GLY	B	107	29.110	0.365	13.132	1.00	0.00
H										
ATOM	7074	HA2	GLY	B	107	28.205	-0.462	11.160	1.00	0.00
H										
ATOM	7075	HA3	GLY	B	107	28.636	-2.098	11.709	1.00	0.00
H										
ATOM	7076	N	LEU	B	108	30.987	-0.124	10.546	1.00	0.00
N										
ATOM	7077	CA	LEU	B	108	32.152	-0.131	9.696	1.00	0.00
C										
ATOM	7078	C	LEU	B	108	32.921	-1.382	10.035	1.00	0.00
C										
ATOM	7079	O	LEU	B	108	33.303	-2.157	9.157	1.00	0.00
O										
ATOM	7080	CB	LEU	B	108	33.000	1.120	9.918	1.00	0.00
C										
ATOM	7081	CG	LEU	B	108	34.397	1.095	9.253	1.00	0.00
C										
ATOM	7082	CD1	LEU	B	108	34.248	1.020	7.681	1.00	0.00
C										
ATOM	7083	CD2	LEU	B	108	35.280	2.232	9.744	1.00	0.00
C										
ATOM	7084	H	LEU	B	108	30.824	0.660	11.170	1.00	0.00
H										
ATOM	7085	HA	LEU	B	108	31.837	-0.173	8.654	1.00	0.00
H										
ATOM	7086	HB2	LEU	B	108	33.139	1.246	10.991	1.00	0.00
H										
ATOM	7087	HB3	LEU	B	108	32.452	1.973	9.520	1.00	0.00
H										
ATOM	7088	HG	LEU	B	108	34.876	0.169	9.566	1.00	0.00
H										
ATOM	7089	HD11	LEU	B	108	33.699	1.891	7.327	1.00	0.00
H										
ATOM	7090	HD12	LEU	B	108	35.236	1.003	7.223	1.00	0.00
H										
ATOM	7091	HD13	LEU	B	108	33.707	0.115	7.410	1.00	0.00
H										
ATOM	7092	HD21	LEU	B	108	35.414	2.148	10.822	1.00	0.00
H										
ATOM	7093	HD22	LEU	B	108	36.250	2.177	9.252	1.00	0.00
H										
ATOM	7094	HD23	LEU	B	108	34.808	3.185	9.510	1.00	0.00
H										
ATOM	7095	N	PHE	B	109	33.216	-1.569	11.320	1.00	0.00
N										
ATOM	7096	CA	PHE	B	109	33.993	-2.766	11.775	1.00	0.00
C										
ATOM	7097	C	PHE	B	109	33.345	-4.078	11.324	1.00	0.00
C										

ATOM	7098	O	PHE	B	109	34.020	-5.024	10.846	1.00	0.00
O										
ATOM	7099	CB	PHE	B	109	34.109	-2.825	13.299	1.00	0.00
C										
ATOM	7100	CG	PHE	B	109	34.952	-1.770	13.907	1.00	0.00
C										
ATOM	7101	CD1	PHE	B	109	35.943	-1.105	13.207	1.00	0.00
C										
ATOM	7102	CD2	PHE	B	109	34.765	-1.444	15.229	1.00	0.00
C										
ATOM	7103	CE1	PHE	B	109	36.730	-0.129	13.824	1.00	0.00
C										
ATOM	7104	CE2	PHE	B	109	35.550	-0.491	15.842	1.00	0.00
C										
ATOM	7105	CZ	PHE	B	109	36.551	0.157	15.128	1.00	0.00
C										
ATOM	7106	H	PHE	B	109	32.908	-0.886	12.005	1.00	0.00
H										
ATOM	7107	HA	PHE	B	109	34.995	-2.711	11.352	1.00	0.00
H										
ATOM	7108	HB2	PHE	B	109	34.532	-3.792	13.568	1.00	0.00
H										
ATOM	7109	HB3	PHE	B	109	33.107	-2.739	13.717	1.00	0.00
H										
ATOM	7110	HD1	PHE	B	109	36.112	-1.346	12.159	1.00	0.00
H										
ATOM	7111	HD2	PHE	B	109	33.985	-1.946	15.800	1.00	0.00
H										
ATOM	7112	HE1	PHE	B	109	37.489	0.401	13.250	1.00	0.00
H										
ATOM	7113	HE2	PHE	B	109	35.385	-0.245	16.890	1.00	0.00
H										
ATOM	7114	HZ	PHE	B	109	37.187	0.892	15.620	1.00	0.00
H										
ATOM	7115	N	GLU	B	110	32.043	-4.150	11.527	1.00	0.00
N										
ATOM	7116	CA	GLU	B	110	31.293	-5.315	11.115	1.00	0.00
C										
ATOM	7117	C	GLU	B	110	31.401	-5.576	9.641	1.00	0.00
C										
ATOM	7118	O	GLU	B	110	31.592	-6.717	9.218	1.00	0.00
O										
ATOM	7119	CB	GLU	B	110	29.864	-5.164	11.480	1.00	0.00
C										
ATOM	7120	CG	GLU	B	110	29.635	-5.086	12.975	1.00	0.00
C										
ATOM	7121	CD	GLU	B	110	29.235	-6.407	13.560	1.00	0.00
C										
ATOM	7122	OE1	GLU	B	110	29.336	-7.418	12.851	1.00	0.00
O										
ATOM	7123	OE2	GLU	B	110	28.822	-6.445	14.730	1.00	0.00
O1-										
ATOM	7124	H	GLU	B	110	31.562	-3.378	11.978	1.00	0.00
H										
ATOM	7125	HA	GLU	B	110	31.690	-6.180	11.644	1.00	0.00
H										

ATOM	7126	HB2	GLU	B	110	29.314	-6.020	11.090	1.00	0.00
H										
ATOM	7127	HB3	GLU	B	110	29.485	-4.251	11.024	1.00	0.00
H										
ATOM	7128	HG2	GLU	B	110	28.844	-4.363	13.171	1.00	0.00
H										
ATOM	7129	HG3	GLU	B	110	30.555	-4.755	13.453	1.00	0.00
H										
ATOM	7130	N	VAL	B	111	31.322	-4.527	8.832	1.00	0.00
N										
ATOM	7131	CA	VAL	B	111	31.480	-4.678	7.385	1.00	0.00
C										
ATOM	7132	C	VAL	B	111	32.887	-5.140	6.990	1.00	0.00
C										
ATOM	7133	O	VAL	B	111	33.061	-5.860	6.009	1.00	0.00
O										
ATOM	7134	CB	VAL	B	111	31.152	-3.348	6.661	1.00	0.00
C										
ATOM	7135	CG1	VAL	B	111	31.729	-3.315	5.206	1.00	0.00
C										
ATOM	7136	CG2	VAL	B	111	29.598	-3.072	6.680	1.00	0.00
C										
ATOM	7137	H	VAL	B	111	31.149	-3.606	9.223	1.00	0.00
H										
ATOM	7138	HA	VAL	B	111	30.770	-5.431	7.045	1.00	0.00
H										
ATOM	7139	HB	VAL	B	111	31.632	-2.546	7.220	1.00	0.00
H										
ATOM	7140	HG11	VAL	B	111	31.301	-4.132	4.627	1.00	0.00
H										
ATOM	7141	HG12	VAL	B	111	31.476	-2.366	4.736	1.00	0.00
H										
ATOM	7142	HG13	VAL	B	111	32.812	-3.425	5.242	1.00	0.00
H										
ATOM	7143	HG21	VAL	B	111	29.253	-3.006	7.711	1.00	0.00
H										
ATOM	7144	HG22	VAL	B	111	29.389	-2.134	6.167	1.00	0.00
H										
ATOM	7145	HG23	VAL	B	111	29.078	-3.885	6.175	1.00	0.00
H										
ATOM	7146	N	LEU	B	112	33.896	-4.687	7.715	1.00	0.00
N										
ATOM	7147	CA	LEU	B	112	35.267	-5.105	7.454	1.00	0.00
C										
ATOM	7148	C	LEU	B	112	35.675	-6.409	8.171	1.00	0.00
C										
ATOM	7149	O	LEU	B	112	36.800	-6.851	8.026	1.00	0.00
O										
ATOM	7150	CB	LEU	B	112	36.247	-3.978	7.843	1.00	0.00
C										
ATOM	7151	CG	LEU	B	112	36.207	-2.632	7.093	1.00	0.00
C										
ATOM	7152	CD1	LEU	B	112	37.216	-1.736	7.808	1.00	0.00
C										
ATOM	7153	CD2	LEU	B	112	36.477	-2.812	5.602	1.00	0.00
C										

ATOM	7154	H	LEU	B	112	33.711	-4.034	8.470	1.00	0.00
H										
ATOM	7155	HA	LEU	B	112	35.364	-5.273	6.382	1.00	0.00
H										
ATOM	7156	HB2	LEU	B	112	37.252	-4.378	7.718	1.00	0.00
H										
ATOM	7157	HB3	LEU	B	112	36.072	-3.758	8.895	1.00	0.00
H										
ATOM	7158	HG	LEU	B	112	35.215	-2.199	7.214	1.00	0.00
H										
ATOM	7159	HD11	LEU	B	112	38.205	-2.190	7.757	1.00	0.00
H										
ATOM	7160	HD12	LEU	B	112	37.240	-0.760	7.326	1.00	0.00
H										
ATOM	7161	HD13	LEU	B	112	36.923	-1.619	8.850	1.00	0.00
H										
ATOM	7162	HD21	LEU	B	112	35.721	-3.467	5.173	1.00	0.00
H										
ATOM	7163	HD22	LEU	B	112	36.441	-1.843	5.107	1.00	0.00
H										
ATOM	7164	HD23	LEU	B	112	37.462	-3.254	5.462	1.00	0.00
H										
ATOM	7165	N	ASP	B	113	34.768	-6.991	8.932	1.00	0.00
N										
ATOM	7166	CA	ASP	B	113	34.989	-8.202	9.737	1.00	0.00
C										
ATOM	7167	C	ASP	B	113	36.136	-8.005	10.736	1.00	0.00
C										
ATOM	7168	O	ASP	B	113	36.991	-8.869	10.939	1.00	0.00
O										
ATOM	7169	CB	ASP	B	113	35.198	-9.451	8.855	1.00	0.00
C										
ATOM	7170	CG	ASP	B	113	34.868	-10.760	9.583	1.00	0.00
C										
ATOM	7171	OD1	ASP	B	113	33.939	-10.795	10.457	1.00	0.00
O										
ATOM	7172	OD2	ASP	B	113	35.543	-11.784	9.250	1.00	0.00
O1-										
ATOM	7173	H	ASP	B	113	33.845	-6.570	8.964	1.00	0.00
H										
ATOM	7174	HA	ASP	B	113	34.083	-8.369	10.319	1.00	0.00
H										
ATOM	7175	HB2	ASP	B	113	36.240	-9.483	8.539	1.00	0.00
H										
ATOM	7176	HB3	ASP	B	113	34.556	-9.369	7.979	1.00	0.00
H										
ATOM	7177	N	VAL	B	114	36.100	-6.851	11.381	1.00	0.00
N										
ATOM	7178	CA	VAL	B	114	37.039	-6.522	12.411	1.00	0.00
C										
ATOM	7179	C	VAL	B	114	36.458	-6.794	13.823	1.00	0.00
C										
ATOM	7180	O	VAL	B	114	35.379	-6.309	14.170	1.00	0.00
O										
ATOM	7181	CB	VAL	B	114	37.417	-5.034	12.314	1.00	0.00
C										



ATOM	7182	CG1	VAL	B	114	38.156	-4.615	13.575	1.00	0.00
C										
ATOM	7183	CG2	VAL	B	114	38.178	-4.783	10.933	1.00	0.00
C										
ATOM	7184	H	VAL	B	114	35.382	-6.176	11.138	1.00	0.00
H										
ATOM	7185	HA	VAL	B	114	37.936	-7.124	12.276	1.00	0.00
H										
ATOM	7186	HB	VAL	B	114	36.488	-4.466	12.279	1.00	0.00
H										
ATOM	7187	HG11	VAL	B	114	39.060	-5.213	13.682	1.00	0.00
H										
ATOM	7188	HG12	VAL	B	114	38.423	-3.562	13.506	1.00	0.00
H										
ATOM	7189	HG13	VAL	B	114	37.514	-4.771	14.441	1.00	0.00
H										
ATOM	7190	HG21	VAL	B	114	37.524	-5.052	10.104	1.00	0.00
H										
ATOM	7191	HG22	VAL	B	114	38.450	-3.732	10.854	1.00	0.00
H										
ATOM	7192	HG23	VAL	B	114	39.078	-5.395	10.898	1.00	0.00
H										
ATOM	7193	N	PRO	B	115	37.177	-7.572	14.632	1.00	0.00
N										
ATOM	7194	CA	PRO	B	115	36.671	-7.817	15.997	1.00	0.00
C										
ATOM	7195	C	PRO	B	115	36.817	-6.538	16.818	1.00	0.00
C										
ATOM	7196	O	PRO	B	115	37.834	-5.859	16.711	1.00	0.00
O										
ATOM	7197	CB	PRO	B	115	37.593	-8.899	16.514	1.00	0.00
C										
ATOM	7198	CG	PRO	B	115	38.860	-8.730	15.671	1.00	0.00
C										
ATOM	7199	CD	PRO	B	115	38.440	-8.285	14.354	1.00	0.00
C										
ATOM	7200	HA	PRO	B	115	35.636	-8.157	15.978	1.00	0.00
H										
ATOM	7201	HB2	PRO	B	115	37.156	-9.886	16.365	1.00	0.00
H										
ATOM	7202	HB3	PRO	B	115	37.808	-8.754	17.572	1.00	0.00
H										
ATOM	7203	HG2	PRO	B	115	39.387	-9.680	15.594	1.00	0.00
H										
ATOM	7204	HG3	PRO	B	115	39.514	-7.988	16.125	1.00	0.00
H										
ATOM	7205	HD2	PRO	B	115	39.178	-7.617	13.913	1.00	0.00
H										
ATOM	7206	HD3	PRO	B	115	38.273	-9.132	13.689	1.00	0.00
H										
ATOM	7207	N	TYR	B	116	35.833	-6.185	17.599	1.00	0.00
N										
ATOM	7208	CA	TYR	B	116	35.893	-4.901	18.313	1.00	0.00
C										
ATOM	7209	C	TYR	B	116	35.346	-5.045	19.727	1.00	0.00
C										

ATOM	7210	O	TYR	B	116	34.535	-5.926	20.007	1.00	0.00
O										
ATOM	7211	CB	TYR	B	116	35.150	-3.804	17.516	1.00	0.00
C										
ATOM	7212	CG	TYR	B	116	33.660	-4.066	17.273	1.00	0.00
C										
ATOM	7213	CD1	TYR	B	116	32.706	-3.550	18.115	1.00	0.00
C										
ATOM	7214	CD2	TYR	B	116	33.224	-4.843	16.205	1.00	0.00
C										
ATOM	7215	CE1	TYR	B	116	31.374	-3.825	17.932	1.00	0.00
C										
ATOM	7216	CE2	TYR	B	116	31.860	-5.121	16.000	1.00	0.00
C										
ATOM	7217	CZ	TYR	B	116	30.958	-4.558	16.848	1.00	0.00
C										
ATOM	7218	OH	TYR	B	116	29.619	-4.785	16.712	1.00	0.00
O										
ATOM	7219	H	TYR	B	116	35.029	-6.795	17.713	1.00	0.00
H										
ATOM	7220	HA	TYR	B	116	36.939	-4.609	18.387	1.00	0.00
H										
ATOM	7221	HB2	TYR	B	116	35.636	-3.705	16.547	1.00	0.00
H										
ATOM	7222	HB3	TYR	B	116	35.241	-2.869	18.066	1.00	0.00
H										
ATOM	7223	HD1	TYR	B	116	33.011	-2.912	18.942	1.00	0.00
H										
ATOM	7224	HD2	TYR	B	116	33.957	-5.247	15.509	1.00	0.00
H										
ATOM	7225	HE1	TYR	B	116	30.642	-3.460	18.651	1.00	0.00
H										
ATOM	7226	HE2	TYR	B	116	31.536	-5.768	15.186	1.00	0.00
H										
ATOM	7227	HH	TYR	B	116	29.141	-3.917	16.639	1.00	0.00
H										
ATOM	7228	N	VAL	B	117	35.837	-4.174	20.591	1.00	0.00
N										
ATOM	7229	CA	VAL	B	117	35.446	-4.091	21.971	1.00	0.00
C										
ATOM	7230	C	VAL	B	117	34.121	-3.377	22.147	1.00	0.00
C										
ATOM	7231	O	VAL	B	117	33.820	-2.434	21.452	1.00	0.00
O										
ATOM	7232	CB	VAL	B	117	36.517	-3.364	22.842	1.00	0.00
C										
ATOM	7233	CG1	VAL	B	117	36.081	-3.347	24.311	1.00	0.00
C										
ATOM	7234	CG2	VAL	B	117	37.862	-4.064	22.691	1.00	0.00
C										
ATOM	7235	H	VAL	B	117	36.538	-3.520	20.258	1.00	0.00
H										
ATOM	7236	HA	VAL	B	117	35.334	-5.106	22.351	1.00	0.00
H										
ATOM	7237	HB	VAL	B	117	36.615	-2.337	22.493	1.00	0.00
H										

ATOM	7238	HG11	VAL	B	117	35.966	-4.370	24.667	1.00	0.00
H										
ATOM	7239	HG12	VAL	B	117	36.837	-2.838	24.908	1.00	0.00
H										
ATOM	7240	HG13	VAL	B	117	35.132	-2.822	24.402	1.00	0.00
H										
ATOM	7241	HG21	VAL	B	117	38.169	-4.040	21.646	1.00	0.00
H										
ATOM	7242	HG22	VAL	B	117	38.608	-3.554	23.300	1.00	0.00
H										
ATOM	7243	HG23	VAL	B	117	37.772	-5.099	23.019	1.00	0.00
H										
ATOM	7244	N	GLY	B	118	33.315	-3.890	23.060	1.00	0.00
N										
ATOM	7245	CA	GLY	B	118	32.166	-3.166	23.512	1.00	0.00
C										
ATOM	7246	C	GLY	B	118	30.926	-3.546	22.721	1.00	0.00
C										
ATOM	7247	O	GLY	B	118	30.792	-4.635	22.172	1.00	0.00
O										
ATOM	7248	H	GLY	B	118	33.513	-4.808	23.445	1.00	0.00
H										
ATOM	7249	HA2	GLY	B	118	32.350	-2.099	23.392	1.00	0.00
H										
ATOM	7250	HA3	GLY	B	118	31.998	-3.390	24.564	1.00	0.00
H										
ATOM	7251	N	ASN	B	119	30.017	-2.601	22.738	1.00	0.00
N										
ATOM	7252	CA	ASN	B	119	28.664	-2.751	22.251	1.00	0.00
C										
ATOM	7253	C	ASN	B	119	28.600	-2.822	20.773	1.00	0.00
C										
ATOM	7254	O	ASN	B	119	29.384	-2.170	20.076	1.00	0.00
O										
ATOM	7255	CB	ASN	B	119	27.838	-1.597	22.804	1.00	0.00
C										
ATOM	7256	CG	ASN	B	119	27.439	-1.854	24.218	1.00	0.00
C										
ATOM	7257	OD1	ASN	B	119	26.558	-2.673	24.438	1.00	0.00
O										
ATOM	7258	ND2	ASN	B	119	28.156	-1.272	25.193	1.00	0.00
N										
ATOM	7259	H	ASN	B	119	30.283	-1.699	23.121	1.00	0.00
H										
ATOM	7260	HA	ASN	B	119	28.261	-3.679	22.653	1.00	0.00
H										
ATOM	7261	HB2	ASN	B	119	26.942	-1.478	22.197	1.00	0.00
H										
ATOM	7262	HB3	ASN	B	119	28.429	-0.684	22.761	1.00	0.00
H										
ATOM	7263	HD21	ASN	B	119	27.910	-1.427	26.165	1.00	0.00
H										
ATOM	7264	HD22	ASN	B	119	28.944	-0.677	24.957	1.00	0.00
H										
ATOM	7265	N	GLY	B	120	27.700	-3.659	20.292	1.00	0.00
N										

ATOM	7266	CA	GLY	B	120	27.442	-3.771	18.870	1.00	0.00
C										
ATOM	7267	C	GLY	B	120	26.574	-2.651	18.353	1.00	0.00
C										
ATOM	7268	O	GLY	B	120	26.246	-1.703	19.047	1.00	0.00
O										
ATOM	7269	H	GLY	B	120	27.174	-4.241	20.936	1.00	0.00
H										
ATOM	7270	HA2	GLY	B	120	26.941	-4.719	18.679	1.00	0.00
H										
ATOM	7271	HA3	GLY	B	120	28.393	-3.750	18.339	1.00	0.00
H										
ATOM	7272	N	VAL	B	121	26.164	-2.808	17.103	1.00	0.00
N										
ATOM	7273	CA	VAL	B	121	25.513	-1.762	16.362	1.00	0.00
C										
ATOM	7274	C	VAL	B	121	24.187	-1.454	17.033	1.00	0.00
C										
ATOM	7275	O	VAL	B	121	23.908	-0.350	17.319	1.00	0.00
O										
ATOM	7276	CB	VAL	B	121	25.362	-2.171	14.858	1.00	0.00
C										
ATOM	7277	CG1	VAL	B	121	24.442	-1.167	14.083	1.00	0.00
C										
ATOM	7278	CG2	VAL	B	121	26.749	-2.270	14.177	1.00	0.00
C										
ATOM	7279	H	VAL	B	121	26.316	-3.704	16.650	1.00	0.00
H										
ATOM	7280	HA	VAL	B	121	26.136	-0.870	16.412	1.00	0.00
H										
ATOM	7281	HB	VAL	B	121	24.896	-3.155	14.820	1.00	0.00
H										
ATOM	7282	HG11	VAL	B	121	24.875	-0.169	14.128	1.00	0.00
H										
ATOM	7283	HG12	VAL	B	121	24.359	-1.480	13.043	1.00	0.00
H										
ATOM	7284	HG13	VAL	B	121	23.453	-1.155	14.539	1.00	0.00
H										
ATOM	7285	HG21	VAL	B	121	27.352	-3.020	14.687	1.00	0.00
H										
ATOM	7286	HG22	VAL	B	121	26.622	-2.555	13.134	1.00	0.00
H										
ATOM	7287	HG23	VAL	B	121	27.250	-1.304	14.231	1.00	0.00
H										
ATOM	7288	N	LEU	B	122	23.325	-2.430	17.235	1.00	0.00
N										
ATOM	7289	CA	LEU	B	122	22.023	-2.139	17.734	1.00	0.00
C										
ATOM	7290	C	LEU	B	122	22.147	-1.565	19.157	1.00	0.00
C										
ATOM	7291	O	LEU	B	122	21.524	-0.586	19.525	1.00	0.00
O										
ATOM	7292	CB	LEU	B	122	21.110	-3.402	17.681	1.00	0.00
C										
ATOM	7293	CG	LEU	B	122	19.726	-3.163	18.291	1.00	0.00
C										

ATOM	7294	CD1	LEU	B	122	19.041	-1.972	17.658	1.00	0.00
C										
ATOM	7295	CD2	LEU	B	122	18.816	-4.426	18.185	1.00	0.00
C										
ATOM	7296	H	LEU	B	122	23.589	-3.390	17.035	1.00	0.00
H										
ATOM	7297	HA	LEU	B	122	21.580	-1.374	17.098	1.00	0.00
H										
ATOM	7298	HB2	LEU	B	122	21.598	-4.206	18.230	1.00	0.00
H										
ATOM	7299	HB3	LEU	B	122	20.985	-3.697	16.640	1.00	0.00
H										
ATOM	7300	HG	LEU	B	122	19.864	-2.942	19.348	1.00	0.00
H										
ATOM	7301	HD11	LEU	B	122	18.922	-2.147	16.590	1.00	0.00
H										
ATOM	7302	HD12	LEU	B	122	18.062	-1.831	18.114	1.00	0.00
H										
ATOM	7303	HD13	LEU	B	122	19.646	-1.080	17.814	1.00	0.00
H										
ATOM	7304	HD21	LEU	B	122	19.283	-5.255	18.714	1.00	0.00
H										
ATOM	7305	HD22	LEU	B	122	17.845	-4.212	18.629	1.00	0.00
H										
ATOM	7306	HD23	LEU	B	122	18.685	-4.692	17.137	1.00	0.00
H										
ATOM	7307	N	SER	B	123	22.944	-2.201	19.965	1.00	0.00
N										
ATOM	7308	CA	SER	B	123	23.109	-1.743	21.302	1.00	0.00
C										
ATOM	7309	C	SER	B	123	23.688	-0.319	21.425	1.00	0.00
C										
ATOM	7310	O	SER	B	123	23.134	0.532	22.153	1.00	0.00
O										
ATOM	7311	CB	SER	B	123	24.026	-2.735	22.032	1.00	0.00
C										
ATOM	7312	OG	SER	B	123	24.039	-2.285	23.338	1.00	0.00
O										
ATOM	7313	H	SER	B	123	23.447	-3.022	19.642	1.00	0.00
H										
ATOM	7314	HA	SER	B	123	22.135	-1.758	21.789	1.00	0.00
H										
ATOM	7315	HB2	SER	B	123	25.029	-2.719	21.608	1.00	0.00
H										
ATOM	7316	HB3	SER	B	123	23.625	-3.746	21.976	1.00	0.00
H										
ATOM	7317	HG	SER	B	123	23.115	-2.295	23.701	1.00	0.00
H										
ATOM	7318	N	ALA	B	124	24.778	-0.043	20.712	1.00	0.00
N										
ATOM	7319	CA	ALA	B	124	25.371	1.311	20.731	1.00	0.00
C										
ATOM	7320	C	ALA	B	124	24.372	2.369	20.184	1.00	0.00
C										
ATOM	7321	O	ALA	B	124	24.177	3.388	20.804	1.00	0.00
O										

ATOM	7322	CB	ALA	B	124	26.796	1.339	19.955	1.00	0.00
C										
ATOM	7323	H	ALA	B	124	25.207	-0.771	20.149	1.00	0.00
H										
ATOM	7324	HA	ALA	B	124	25.567	1.562	21.772	1.00	0.00
H										
ATOM	7325	HB1	ALA	B	124	26.651	1.038	18.919	1.00	0.00
H										
ATOM	7326	HB2	ALA	B	124	27.207	2.347	19.986	1.00	0.00
H										
ATOM	7327	HB3	ALA	B	124	27.487	0.651	20.439	1.00	0.00
H										
ATOM	7328	N	ALA	B	125	23.665	2.087	19.081	1.00	0.00
N										
ATOM	7329	CA	ALA	B	125	22.655	3.009	18.572	1.00	0.00
C										
ATOM	7330	C	ALA	B	125	21.458	3.173	19.547	1.00	0.00
C										
ATOM	7331	O	ALA	B	125	20.915	4.276	19.728	1.00	0.00
O										
ATOM	7332	CB	ALA	B	125	22.158	2.531	17.189	1.00	0.00
C										
ATOM	7333	H	ALA	B	125	23.836	1.215	18.590	1.00	0.00
H										
ATOM	7334	HA	ALA	B	125	23.122	3.984	18.444	1.00	0.00
H										
ATOM	7335	HB1	ALA	B	125	21.723	1.537	17.283	1.00	0.00
H										
ATOM	7336	HB2	ALA	B	125	21.405	3.223	16.815	1.00	0.00
H										
ATOM	7337	HB3	ALA	B	125	22.996	2.496	16.494	1.00	0.00
H										
ATOM	7338	N	SER	B	126	21.035	2.045	20.144	1.00	0.00
N										
ATOM	7339	CA	SER	B	126	19.917	2.000	21.052	1.00	0.00
C										
ATOM	7340	C	SER	B	126	20.149	2.913	22.229	1.00	0.00
C										
ATOM	7341	O	SER	B	126	19.254	3.625	22.681	1.00	0.00
O										
ATOM	7342	CB	SER	B	126	19.700	0.572	21.608	1.00	0.00
C										
ATOM	7343	OG	SER	B	126	19.086	-0.285	20.661	1.00	0.00
O										
ATOM	7344	H	SER	B	126	21.529	1.181	19.945	1.00	0.00
H										
ATOM	7345	HA	SER	B	126	19.018	2.318	20.526	1.00	0.00
H										
ATOM	7346	HB2	SER	B	126	19.064	0.632	22.490	1.00	0.00
H										
ATOM	7347	HB3	SER	B	126	20.666	0.153	21.885	1.00	0.00
H										
ATOM	7348	HG	SER	B	126	19.661	-0.353	19.854	1.00	0.00
H										
ATOM	7349	N	SER	B	127	21.368	2.849	22.748	1.00	0.00
N										

ATOM	7350	CA	SER	B	127	21.701	3.549	23.947	1.00	0.00
C										
ATOM	7351	C	SER	B	127	21.879	5.017	23.704	1.00	0.00
C										
ATOM	7352	O	SER	B	127	21.897	5.760	24.665	1.00	0.00
O										
ATOM	7353	CB	SER	B	127	22.961	2.975	24.599	1.00	0.00
C										
ATOM	7354	OG	SER	B	127	22.587	2.160	25.701	1.00	0.00
O										
ATOM	7355	H	SER	B	127	22.078	2.292	22.284	1.00	0.00
H										
ATOM	7356	HA	SER	B	127	20.876	3.424	24.647	1.00	0.00
H										
ATOM	7357	HB2	SER	B	127	23.594	3.790	24.947	1.00	0.00
H										
ATOM	7358	HB3	SER	B	127	23.507	2.376	23.872	1.00	0.00
H										
ATOM	7359	HG	SER	B	127	22.009	1.418	25.383	1.00	0.00
H										
ATOM	7360	N	MET	B	128	22.098	5.421	22.456	1.00	0.00
N										
ATOM	7361	CA	MET	B	128	22.231	6.851	22.142	1.00	0.00
C										
ATOM	7362	C	MET	B	128	20.889	7.514	21.797	1.00	0.00
C										
ATOM	7363	O	MET	B	128	20.828	8.721	21.615	1.00	0.00
O										
ATOM	7364	CB	MET	B	128	23.251	7.095	21.027	1.00	0.00
C										
ATOM	7365	CG	MET	B	128	24.706	7.071	21.526	1.00	0.00
C										
ATOM	7366	SD	MET	B	128	25.362	8.378	22.663	1.00	0.00
S										
ATOM	7367	CE	MET	B	128	26.166	9.447	21.462	1.00	0.00
C										
ATOM	7368	H	MET	B	128	22.174	4.735	21.712	1.00	0.00
H										
ATOM	7369	HA	MET	B	128	22.611	7.342	23.037	1.00	0.00
H										
ATOM	7370	HB2	MET	B	128	23.053	8.069	20.583	1.00	0.00
H										
ATOM	7371	HB3	MET	B	128	23.131	6.320	20.271	1.00	0.00
H										
ATOM	7372	HG2	MET	B	128	25.336	7.093	20.638	1.00	0.00
H										
ATOM	7373	HG3	MET	B	128	24.838	6.121	22.042	1.00	0.00
H										
ATOM	7374	HE1	MET	B	128	25.429	9.809	20.747	1.00	0.00
H										
ATOM	7375	HE2	MET	B	128	26.619	10.294	21.976	1.00	0.00
H										
ATOM	7376	HE3	MET	B	128	26.938	8.887	20.936	1.00	0.00
H										
ATOM	7377	N	ASP	B	129	19.830	6.716	21.690	1.00	0.00
N										

ATOM	7378	CA	ASP	B	129	18.504	7.232	21.460	1.00	0.00
C										
ATOM	7379	C	ASP	B	129	17.734	7.015	22.753	1.00	0.00
C										
ATOM	7380	O	ASP	B	129	17.330	5.913	23.093	1.00	0.00
O										
ATOM	7381	CB	ASP	B	129	17.839	6.559	20.268	1.00	0.00
C										
ATOM	7382	CG	ASP	B	129	16.465	7.162	19.940	1.00	0.00
C										
ATOM	7383	OD1	ASP	B	129	15.622	7.421	20.862	1.00	0.00
O										
ATOM	7384	OD2	ASP	B	129	16.222	7.359	18.743	1.00	0.00
O1-										
ATOM	7385	H	ASP	B	129	19.960	5.713	21.773	1.00	0.00
H										
ATOM	7386	HA	ASP	B	129	18.572	8.302	21.267	1.00	0.00
H										
ATOM	7387	HB2	ASP	B	129	17.711	5.501	20.491	1.00	0.00
H										
ATOM	7388	HB3	ASP	B	129	18.485	6.671	19.399	1.00	0.00
H										
ATOM	7389	N	LYS	B	130	17.533	8.117	23.455	1.00	0.00
N										
ATOM	7390	CA	LYS	B	130	16.864	8.139	24.733	1.00	0.00
C										
ATOM	7391	C	LYS	B	130	15.479	7.589	24.684	1.00	0.00
C										
ATOM	7392	O	LYS	B	130	15.100	6.869	25.593	1.00	0.00
O										
ATOM	7393	CB	LYS	B	130	16.852	9.537	25.338	1.00	0.00
C										
ATOM	7394	CG	LYS	B	130	18.233	10.118	25.515	1.00	0.00
C										
ATOM	7395	CD	LYS	B	130	19.253	9.158	26.224	1.00	0.00
C										
ATOM	7396	CE	LYS	B	130	20.692	9.370	25.691	1.00	0.00
C										
ATOM	7397	NZ	LYS	B	130	21.698	8.736	26.600	1.00	0.00
N1+										
ATOM	7398	H	LYS	B	130	17.868	8.996	23.074	1.00	0.00
H										
ATOM	7399	HA	LYS	B	130	17.437	7.504	25.406	1.00	0.00
H										
ATOM	7400	HB2	LYS	B	130	16.369	9.489	26.313	1.00	0.00
H										
ATOM	7401	HB3	LYS	B	130	16.281	10.193	24.682	1.00	0.00
H										
ATOM	7402	HG2	LYS	B	130	18.147	11.025	26.112	1.00	0.00
H										
ATOM	7403	HG3	LYS	B	130	18.627	10.367	24.531	1.00	0.00
H										
ATOM	7404	HD2	LYS	B	130	18.955	8.127	26.040	1.00	0.00
H										
ATOM	7405	HD3	LYS	B	130	19.239	9.355	27.295	1.00	0.00
H										



ATOM	7406	HE2	LYS	B	130	20.894	10.438	25.625	1.00	0.00
H										
ATOM	7407	HE3	LYS	B	130	20.775	8.924	24.701	1.00	0.00
H										
ATOM	7408	HZ1	LYS	B	130	21.517	7.739	26.662	1.00	0.00
H										
ATOM	7409	HZ2	LYS	B	130	22.631	8.888	26.230	1.00	0.00
H										
ATOM	7410	HZ3	LYS	B	130	21.628	9.151	27.524	1.00	0.00
H										
ATOM	7411	N	LEU	B	131	14.763	7.794	23.604	1.00	0.00
N										
ATOM	7412	CA	LEU	B	131	13.425	7.240	23.538	1.00	0.00
C										
ATOM	7413	C	LEU	B	131	13.444	5.732	23.384	1.00	0.00
C										
ATOM	7414	O	LEU	B	131	12.838	5.045	24.155	1.00	0.00
O										
ATOM	7415	CB	LEU	B	131	12.574	7.935	22.445	1.00	0.00
C										
ATOM	7416	CG	LEU	B	131	11.186	7.300	22.288	1.00	0.00
C										
ATOM	7417	CD1	LEU	B	131	10.186	7.469	23.580	1.00	0.00
C										
ATOM	7418	CD2	LEU	B	131	10.555	7.779	20.990	1.00	0.00
C										
ATOM	7419	H	LEU	B	131	15.139	8.331	22.829	1.00	0.00
H										
ATOM	7420	HA	LEU	B	131	12.947	7.454	24.493	1.00	0.00
H										
ATOM	7421	HB2	LEU	B	131	13.100	7.863	21.494	1.00	0.00
H										
ATOM	7422	HB3	LEU	B	131	12.450	8.983	22.713	1.00	0.00
H										
ATOM	7423	HG	LEU	B	131	11.352	6.230	22.169	1.00	0.00
H										
ATOM	7424	HD11	LEU	B	131	10.021	8.528	23.775	1.00	0.00
H										
ATOM	7425	HD12	LEU	B	131	9.233	6.986	23.367	1.00	0.00
H										
ATOM	7426	HD13	LEU	B	131	10.640	7.005	24.454	1.00	0.00
H										
ATOM	7427	HD21	LEU	B	131	11.185	7.488	20.151	1.00	0.00
H										
ATOM	7428	HD22	LEU	B	131	9.569	7.329	20.878	1.00	0.00
H										
ATOM	7429	HD23	LEU	B	131	10.458	8.864	21.012	1.00	0.00
H										
ATOM	7430	N	VAL	B	132	14.222	5.206	22.450	1.00	0.00
N										
ATOM	7431	CA	VAL	B	132	14.367	3.776	22.260	1.00	0.00
C										
ATOM	7432	C	VAL	B	132	14.835	3.165	23.554	1.00	0.00
C										
ATOM	7433	O	VAL	B	132	14.236	2.218	24.041	1.00	0.00
O										

ATOM	7434	CB	VAL	B	132	15.268	3.408	21.010	1.00	0.00
C										
ATOM	7435	CG1	VAL	B	132	15.544	1.871	20.899	1.00	0.00
C										
ATOM	7436	CG2	VAL	B	132	14.599	3.862	19.709	1.00	0.00
C										
ATOM	7437	H	VAL	B	132	14.739	5.832	21.840	1.00	0.00
H										
ATOM	7438	HA	VAL	B	132	13.372	3.379	22.063	1.00	0.00
H										
ATOM	7439	HB	VAL	B	132	16.222	3.925	21.107	1.00	0.00
H										
ATOM	7440	HG11	VAL	B	132	14.599	1.339	20.798	1.00	0.00
H										
ATOM	7441	HG12	VAL	B	132	16.165	1.676	20.026	1.00	0.00
H										
ATOM	7442	HG13	VAL	B	132	16.060	1.529	21.795	1.00	0.00
H										
ATOM	7443	HG21	VAL	B	132	14.453	4.941	19.733	1.00	0.00
H										
ATOM	7444	HG22	VAL	B	132	15.234	3.600	18.864	1.00	0.00
H										
ATOM	7445	HG23	VAL	B	132	13.634	3.368	19.605	1.00	0.00
H										
ATOM	7446	N	MET	B	133	15.832	3.772	24.175	1.00	0.00
N										
ATOM	7447	CA	MET	B	133	16.327	3.291	25.463	1.00	0.00
C										
ATOM	7448	C	MET	B	133	15.221	3.149	26.523	1.00	0.00
C										
ATOM	7449	O	MET	B	133	15.084	2.145	27.212	1.00	0.00
O										
ATOM	7450	CB	MET	B	133	17.403	4.260	25.950	1.00	0.00
C										
ATOM	7451	CG	MET	B	133	18.148	3.740	27.099	1.00	0.00
C										
ATOM	7452	SD	MET	B	133	19.132	4.945	27.938	1.00	0.00
S										
ATOM	7453	CE	MET	B	133	20.463	5.307	26.765	1.00	0.00
C										
ATOM	7454	H	MET	B	133	16.261	4.587	23.749	1.00	0.00
H										
ATOM	7455	HA	MET	B	133	16.786	2.315	25.312	1.00	0.00
H										
ATOM	7456	HB2	MET	B	133	16.926	5.196	26.238	1.00	0.00
H										
ATOM	7457	HB3	MET	B	133	18.101	4.444	25.135	1.00	0.00
H										
ATOM	7458	HG2	MET	B	133	18.807	2.948	26.747	1.00	0.00
H										
ATOM	7459	HG3	MET	B	133	17.433	3.329	27.810	1.00	0.00
H										
ATOM	7460	HE1	MET	B	133	20.037	5.694	25.840	1.00	0.00
H										
ATOM	7461	HE2	MET	B	133	21.133	6.050	27.195	1.00	0.00
H										

ATOM	7462	HE3	MET	B	133	21.019	4.395	26.554	1.00	0.00
H										
ATOM	7463	N	LYS	B	134	14.442	4.199	26.686	1.00	0.00
N										
ATOM	7464	CA	LYS	B	134	13.384	4.159	27.668	1.00	0.00
C										
ATOM	7465	C	LYS	B	134	12.316	3.127	27.369	1.00	0.00
C										
ATOM	7466	O	LYS	B	134	11.771	2.533	28.300	1.00	0.00
O										
ATOM	7467	CB	LYS	B	134	12.759	5.525	27.767	1.00	0.00
C										
ATOM	7468	CG	LYS	B	134	13.688	6.534	28.399	1.00	0.00
C										
ATOM	7469	CD	LYS	B	134	12.909	7.747	28.618	1.00	0.00
C										
ATOM	7470	CE	LYS	B	134	13.733	8.863	29.094	1.00	0.00
C										
ATOM	7471	NZ	LYS	B	134	14.115	8.633	30.469	1.00	0.00
N1+										
ATOM	7472	H	LYS	B	134	14.585	5.032	26.124	1.00	0.00
H										
ATOM	7473	HA	LYS	B	134	13.826	3.918	28.633	1.00	0.00
H										
ATOM	7474	HB2	LYS	B	134	11.856	5.454	28.370	1.00	0.00
H										
ATOM	7475	HB3	LYS	B	134	12.502	5.866	26.765	1.00	0.00
H										
ATOM	7476	HG2	LYS	B	134	14.524	6.742	27.734	1.00	0.00
H										
ATOM	7477	HG3	LYS	B	134	14.064	6.154	29.348	1.00	0.00
H										
ATOM	7478	HD2	LYS	B	134	12.139	7.540	29.360	1.00	0.00
H										
ATOM	7479	HD3	LYS	B	134	12.438	8.035	27.679	1.00	0.00
H										
ATOM	7480	HE2	LYS	B	134	13.165	9.789	29.026	1.00	0.00
H										
ATOM	7481	HE3	LYS	B	134	14.628	8.941	28.478	1.00	0.00
H										
ATOM	7482	HZ1	LYS	B	134	14.645	7.770	30.533	1.00	0.00
H										
ATOM	7483	HZ2	LYS	B	134	14.685	9.406	30.796	1.00	0.00
H										
ATOM	7484	HZ3	LYS	B	134	13.281	8.561	31.044	1.00	0.00
H										
ATOM	7485	N	GLN	B	135	12.002	2.909	26.086	1.00	0.00
N										
ATOM	7486	CA	GLN	B	135	11.007	1.889	25.732	1.00	0.00
C										
ATOM	7487	C	GLN	B	135	11.530	0.514	26.016	1.00	0.00
C										
ATOM	7488	O	GLN	B	135	10.768	-0.395	26.400	1.00	0.00
O										
ATOM	7489	CB	GLN	B	135	10.603	1.952	24.267	1.00	0.00
C										

ATOM	7490	CG	GLN	B	135	10.145	3.369	23.737	1.00	0.00
C										
ATOM	7491	CD	GLN	B	135	9.886	3.339	22.223	1.00	0.00
C										
ATOM	7492	OE1	GLN	B	135	9.040	2.611	21.777	1.00	0.00
O										
ATOM	7493	NE2	GLN	B	135	10.679	4.064	21.442	1.00	0.00
N										
ATOM	7494	H	GLN	B	135	12.453	3.451	25.356	1.00	0.00
H										
ATOM	7495	HA	GLN	B	135	10.118	2.051	26.340	1.00	0.00
H										
ATOM	7496	HB2	GLN	B	135	9.777	1.258	24.118	1.00	0.00
H										
ATOM	7497	HB3	GLN	B	135	11.457	1.633	23.671	1.00	0.00
H										
ATOM	7498	HG2	GLN	B	135	10.926	4.097	23.949	1.00	0.00
H										
ATOM	7499	HG3	GLN	B	135	9.228	3.660	24.248	1.00	0.00
H										
ATOM	7500	HE21	GLN	B	135	10.536	4.067	20.437	1.00	0.00
H										
ATOM	7501	HE22	GLN	B	135	11.427	4.615	21.850	1.00	0.00
H										
ATOM	7502	N	LEU	B	136	12.830	0.316	25.812	1.00	0.00
N										
ATOM	7503	CA	LEU	B	136	13.427	-0.979	26.112	1.00	0.00
C										
ATOM	7504	C	LEU	B	136	13.412	-1.186	27.625	1.00	0.00
C										
ATOM	7505	O	LEU	B	136	13.024	-2.245	28.080	1.00	0.00
O										
ATOM	7506	CB	LEU	B	136	14.833	-1.033	25.499	1.00	0.00
C										
ATOM	7507	CG	LEU	B	136	14.871	-1.008	23.959	1.00	0.00
C										
ATOM	7508	CD1	LEU	B	136	16.263	-1.103	23.382	1.00	0.00
C										
ATOM	7509	CD2	LEU	B	136	13.987	-2.161	23.407	1.00	0.00
C										
ATOM	7510	H	LEU	B	136	13.406	1.068	25.447	1.00	0.00
H										
ATOM	7511	HA	LEU	B	136	12.818	-1.756	25.651	1.00	0.00
H										
ATOM	7512	HB2	LEU	B	136	15.313	-1.951	25.834	1.00	0.00
H										
ATOM	7513	HB3	LEU	B	136	15.395	-0.175	25.865	1.00	0.00
H										
ATOM	7514	HG	LEU	B	136	14.436	-0.066	23.629	1.00	0.00
H										
ATOM	7515	HD11	LEU	B	136	16.725	-2.036	23.701	1.00	0.00
H										
ATOM	7516	HD12	LEU	B	136	16.208	-1.079	22.295	1.00	0.00
H										
ATOM	7517	HD13	LEU	B	136	16.860	-0.263	23.734	1.00	0.00
H										

ATOM	7518	HD21	LEU	B	136	12.961	-2.028	23.749	1.00	0.00
H										
ATOM	7519	HD22	LEU	B	136	14.011	-2.147	22.318	1.00	0.00
H										
ATOM	7520	HD23	LEU	B	136	14.369	-3.115	23.767	1.00	0.00
H										
ATOM	7521	N	PHE	B	137	13.756	-0.173	28.433	1.00	0.00
N										
ATOM	7522	CA	PHE	B	137	13.745	-0.353	29.908	1.00	0.00
C										
ATOM	7523	C	PHE	B	137	12.310	-0.675	30.468	1.00	0.00
C										
ATOM	7524	O	PHE	B	137	12.130	-1.493	31.362	1.00	0.00
O										
ATOM	7525	CB	PHE	B	137	14.273	0.895	30.613	1.00	0.00
C										
ATOM	7526	CG	PHE	B	137	15.713	1.213	30.360	1.00	0.00
C										
ATOM	7527	CD1	PHE	B	137	16.174	2.514	30.538	1.00	0.00
C										
ATOM	7528	CD2	PHE	B	137	16.630	0.248	29.957	1.00	0.00
C										
ATOM	7529	CE1	PHE	B	137	17.513	2.827	30.339	1.00	0.00
C										
ATOM	7530	CE2	PHE	B	137	17.946	0.566	29.803	1.00	0.00
C										
ATOM	7531	CZ	PHE	B	137	18.384	1.838	29.970	1.00	0.00
C										
ATOM	7532	H	PHE	B	137	14.025	0.721	28.035	1.00	0.00
H										
ATOM	7533	HA	PHE	B	137	14.401	-1.186	30.154	1.00	0.00
H										
ATOM	7534	HB2	PHE	B	137	14.142	0.756	31.685	1.00	0.00
H										
ATOM	7535	HB3	PHE	B	137	13.677	1.745	30.282	1.00	0.00
H										
ATOM	7536	HD1	PHE	B	137	15.477	3.296	30.837	1.00	0.00
H										
ATOM	7537	HD2	PHE	B	137	16.293	-0.769	29.763	1.00	0.00
H										
ATOM	7538	HE1	PHE	B	137	17.865	3.848	30.475	1.00	0.00
H										
ATOM	7539	HE2	PHE	B	137	18.658	-0.215	29.541	1.00	0.00
H										
ATOM	7540	HZ	PHE	B	137	19.435	2.074	29.810	1.00	0.00
H										
ATOM	7541	N	GLU	B	138	11.327	0.010	29.920	1.00	0.00
N										
ATOM	7542	CA	GLU	B	138	9.934	-0.090	30.278	1.00	0.00
C										
ATOM	7543	C	GLU	B	138	9.468	-1.505	30.029	1.00	0.00
C										
ATOM	7544	O	GLU	B	138	8.916	-2.181	30.910	1.00	0.00
O										
ATOM	7545	CB	GLU	B	138	9.159	0.921	29.388	1.00	0.00
C										

ATOM	7546	CG	GLU	B	138	7.636	0.931	29.564	1.00	0.00
C										
ATOM	7547	CD	GLU	B	138	6.967	2.018	28.683	1.00	0.00
C										
ATOM	7548	OE1	GLU	B	138	6.812	1.839	27.414	1.00	0.00
O										
ATOM	7549	OE2	GLU	B	138	6.637	3.066	29.284	1.00	0.00
O1-										
ATOM	7550	H	GLU	B	138	11.572	0.664	29.183	1.00	0.00
H										
ATOM	7551	HA	GLU	B	138	9.803	0.164	31.329	1.00	0.00
H										
ATOM	7552	HB2	GLU	B	138	9.374	0.684	28.347	1.00	0.00
H										
ATOM	7553	HB3	GLU	B	138	9.529	1.920	29.616	1.00	0.00
H										
ATOM	7554	HG2	GLU	B	138	7.402	1.130	30.609	1.00	0.00
H										
ATOM	7555	HG3	GLU	B	138	7.242	-0.044	29.283	1.00	0.00
H										
ATOM	7556	N	HIS	B	139	9.735	-1.978	28.822	1.00	0.00
N										
ATOM	7557	CA	HIS	B	139	9.356	-3.340	28.477	1.00	0.00
C										
ATOM	7558	C	HIS	B	139	9.956	-4.297	29.474	1.00	0.00
C										
ATOM	7559	O	HIS	B	139	9.266	-5.191	29.979	1.00	0.00
O										
ATOM	7560	CB	HIS	B	139	9.784	-3.728	27.078	1.00	0.00
C										
ATOM	7561	CG	HIS	B	139	9.367	-5.118	26.725	1.00	0.00
C										
ATOM	7562	ND1	HIS	B	139	8.165	-5.395	26.108	1.00	0.00
N										
ATOM	7563	CD2	HIS	B	139	9.966	-6.311	26.951	1.00	0.00
C										
ATOM	7564	CE1	HIS	B	139	8.052	-6.707	25.953	1.00	0.00
C										
ATOM	7565	NE2	HIS	B	139	9.123	-7.287	26.471	1.00	0.00
N										
ATOM	7566	H	HIS	B	139	10.204	-1.392	28.138	1.00	0.00
H										
ATOM	7567	HA	HIS	B	139	8.272	-3.419	28.538	1.00	0.00
H										
ATOM	7568	HB2	HIS	B	139	10.868	-3.659	27.011	1.00	0.00
H										
ATOM	7569	HB3	HIS	B	139	9.331	-3.036	26.369	1.00	0.00
H										
ATOM	7570	HD1	HIS	B	139	7.478	-4.706	25.819	1.00	0.00
H										
ATOM	7571	HD2	HIS	B	139	10.933	-6.469	27.425	1.00	0.00
H										
ATOM	7572	HE1	HIS	B	139	7.218	-7.221	25.479	1.00	0.00
H										
ATOM	7573	N	ARG	B	140	11.205	-4.042	29.844	1.00	0.00
N										

ATOM	7574	CA	ARG	B	140	11.941	-4.903	30.801	1.00	0.00
C										
ATOM	7575	C	ARG	B	140	11.426	-4.801	32.254	1.00	0.00
C										
ATOM	7576	O	ARG	B	140	11.805	-5.603	33.131	1.00	0.00
O										
ATOM	7577	CB	ARG	B	140	13.428	-4.536	30.793	1.00	0.00
C										
ATOM	7578	CG	ARG	B	140	14.312	-5.602	31.387	1.00	0.00
C										
ATOM	7579	CD	ARG	B	140	14.599	-6.721	30.342	1.00	0.00
C										
ATOM	7580	NE	ARG	B	140	15.236	-7.839	31.006	1.00	0.00
N1+										
ATOM	7581	CZ	ARG	B	140	15.616	-8.963	30.412	1.00	0.00
C1+										
ATOM	7582	NH1	ARG	B	140	15.528	-9.130	29.116	1.00	0.00
N1+										
ATOM	7583	NH2	ARG	B	140	16.159	-9.921	31.142	1.00	0.00
N1+										
ATOM	7584	H	ARG	B	140	11.674	-3.228	29.458	1.00	0.00
H										
ATOM	7585	HA	ARG	B	140	11.843	-5.938	30.475	1.00	0.00
H										
ATOM	7586	HB2	ARG	B	140	13.560	-3.620	31.366	1.00	0.00
H										
ATOM	7587	HB3	ARG	B	140	13.736	-4.367	29.762	1.00	0.00
H										
ATOM	7588	HG2	ARG	B	140	13.814	-6.039	32.252	1.00	0.00
H										
ATOM	7589	HG3	ARG	B	140	15.254	-5.153	31.699	1.00	0.00
H										
ATOM	7590	HD2	ARG	B	140	15.258	-6.335	29.566	1.00	0.00
H										
ATOM	7591	HD3	ARG	B	140	13.662	-7.049	29.893	1.00	0.00
H										
ATOM	7592	HE2	ARG	B	140	15.405	-7.757	32.003	1.00	0.00
H										
ATOM	7593	HE3	ARG	B	140	16.142	-7.434	30.819	1.00	0.00
H										
ATOM	7594	HH11	ARG	B	140	15.828	-10.004	28.695	1.00	0.00
H										
ATOM	7595	HH12	ARG	B	140	15.159	-8.386	28.532	1.00	0.00
H										
ATOM	7596	HH13	ARG	B	140	14.596	-9.504	29.227	1.00	0.00
H										
ATOM	7597	HH21	ARG	B	140	16.455	-10.787	30.703	1.00	0.00
H										
ATOM	7598	HH22	ARG	B	140	16.279	-9.791	32.141	1.00	0.00
H										
ATOM	7599	HH23	ARG	B	140	17.074	-9.526	30.980	1.00	0.00
H										
ATOM	7600	N	GLY	B	141	10.638	-3.758	32.511	1.00	0.00
N										
ATOM	7601	CA	GLY	B	141	10.014	-3.537	33.809	1.00	0.00
C										

ATOM	7602	C	GLY	B	141	10.880	-2.725	34.724	1.00	0.00
C										
ATOM	7603	O	GLY	B	141	10.660	-2.729	35.923	1.00	0.00
O										
ATOM	7604	H	GLY	B	141	10.465	-3.087	31.769	1.00	0.00
H										
ATOM	7605	HA2	GLY	B	141	9.822	-4.503	34.274	1.00	0.00
H										
ATOM	7606	HA3	GLY	B	141	9.072	-3.011	33.660	1.00	0.00
H										
ATOM	7607	N	LEU	B	142	11.873	-2.016	34.168	1.00	0.00
N										
ATOM	7608	CA	LEU	B	142	12.742	-1.152	34.979	1.00	0.00
C										
ATOM	7609	C	LEU	B	142	12.010	0.159	35.342	1.00	0.00
C										
ATOM	7610	O	LEU	B	142	11.272	0.721	34.520	1.00	0.00
O										
ATOM	7611	CB	LEU	B	142	14.046	-0.847	34.215	1.00	0.00
C										
ATOM	7612	CG	LEU	B	142	15.044	-1.984	34.170	1.00	0.00
C										
ATOM	7613	CD1	LEU	B	142	16.133	-1.740	33.142	1.00	0.00
C										
ATOM	7614	CD2	LEU	B	142	15.650	-2.154	35.563	1.00	0.00
C										
ATOM	7615	H	LEU	B	142	12.028	-2.077	33.167	1.00	0.00
H										
ATOM	7616	HA	LEU	B	142	12.993	-1.677	35.900	1.00	0.00
H										
ATOM	7617	HB2	LEU	B	142	14.527	0.005	34.694	1.00	0.00
H										
ATOM	7618	HB3	LEU	B	142	13.784	-0.587	33.190	1.00	0.00
H										
ATOM	7619	HG	LEU	B	142	14.517	-2.899	33.907	1.00	0.00
H										
ATOM	7620	HD11	LEU	B	142	16.668	-0.825	33.391	1.00	0.00
H										
ATOM	7621	HD12	LEU	B	142	16.827	-2.579	33.142	1.00	0.00
H										
ATOM	7622	HD13	LEU	B	142	15.684	-1.641	32.155	1.00	0.00
H										
ATOM	7623	HD21	LEU	B	142	14.860	-2.381	36.277	1.00	0.00
H										
ATOM	7624	HD22	LEU	B	142	16.372	-2.970	35.548	1.00	0.00
H										
ATOM	7625	HD23	LEU	B	142	16.151	-1.232	35.856	1.00	0.00
H										
ATOM	7626	N	PRO	B	143	12.165	0.637	36.588	1.00	0.00
N										
ATOM	7627	CA	PRO	B	143	11.450	1.878	36.971	1.00	0.00
C										
ATOM	7628	C	PRO	B	143	12.077	3.097	36.340	1.00	0.00
C										
ATOM	7629	O	PRO	B	143	13.292	3.209	36.322	1.00	0.00
O										



ATOM	7630	CB	PRO	B	143	11.637	1.930	38.504	1.00	0.00
C										
ATOM	7631	CG	PRO	B	143	12.907	1.208	38.726	1.00	0.00
C										
ATOM	7632	CD	PRO	B	143	12.932	0.084	37.725	1.00	0.00
C										
ATOM	7633	HA	PRO	B	143	10.394	1.810	36.713	1.00	0.00
H										
ATOM	7634	HB2	PRO	B	143	10.813	1.432	39.013	1.00	0.00
H										
ATOM	7635	HB3	PRO	B	143	11.710	2.959	38.852	1.00	0.00
H										
ATOM	7636	HG2	PRO	B	143	12.944	0.812	39.740	1.00	0.00
H										
ATOM	7637	HG3	PRO	B	143	13.753	1.875	38.566	1.00	0.00
H										
ATOM	7638	HD2	PRO	B	143	13.953	-0.155	37.430	1.00	0.00
H										
ATOM	7639	HD3	PRO	B	143	12.452	-0.808	38.125	1.00	0.00
H										
ATOM	7640	N	GLN	B	144	11.239	4.005	35.872	1.00	0.00
N										
ATOM	7641	CA	GLN	B	144	11.633	5.230	35.209	1.00	0.00
C										
ATOM	7642	C	GLN	B	144	10.750	6.356	35.705	1.00	0.00
C										
ATOM	7643	O	GLN	B	144	9.633	6.141	36.001	1.00	0.00
O										
ATOM	7644	CB	GLN	B	144	11.414	5.077	33.682	1.00	0.00
C										
ATOM	7645	CG	GLN	B	144	12.444	4.168	33.050	1.00	0.00
C										
ATOM	7646	CD	GLN	B	144	12.409	4.088	31.555	1.00	0.00
C										
ATOM	7647	OE1	GLN	B	144	13.379	4.426	30.939	1.00	0.00
O										
ATOM	7648	NE2	GLN	B	144	11.348	3.555	30.978	1.00	0.00
N										
ATOM	7649	H	GLN	B	144	10.246	3.831	35.986	1.00	0.00
H										
ATOM	7650	HA	GLN	B	144	12.679	5.452	35.419	1.00	0.00
H										
ATOM	7651	HB2	GLN	B	144	11.480	6.060	33.217	1.00	0.00
H										
ATOM	7652	HB3	GLN	B	144	10.424	4.660	33.509	1.00	0.00
H										
ATOM	7653	HG2	GLN	B	144	12.290	3.164	33.443	1.00	0.00
H										
ATOM	7654	HG3	GLN	B	144	13.431	4.525	33.343	1.00	0.00
H										
ATOM	7655	HE21	GLN	B	144	11.300	3.489	29.966	1.00	0.00
H										
ATOM	7656	HE22	GLN	B	144	10.581	3.211	31.546	1.00	0.00
H										
ATOM	7657	N	LEU	B	145	11.269	7.560	35.741	1.00	0.00
N										

ATOM	7658	CA	LEU	B	145	10.486	8.753	35.948	1.00	0.00
C										
ATOM	7659	C	LEU	B	145	9.495	9.014	34.797	1.00	0.00
C										
ATOM	7660	O	LEU	B	145	9.772	8.681	33.635	1.00	0.00
O										
ATOM	7661	CB	LEU	B	145	11.453	9.955	36.100	1.00	0.00
C										
ATOM	7662	CG	LEU	B	145	12.218	10.087	37.420	1.00	0.00
C										
ATOM	7663	CD1	LEU	B	145	13.466	11.018	37.325	1.00	0.00
C										
ATOM	7664	CD2	LEU	B	145	11.228	10.599	38.532	1.00	0.00
C										
ATOM	7665	H	LEU	B	145	12.272	7.657	35.617	1.00	0.00
H										
ATOM	7666	HA	LEU	B	145	9.922	8.642	36.873	1.00	0.00
H										
ATOM	7667	HB2	LEU	B	145	10.867	10.864	35.971	1.00	0.00
H										
ATOM	7668	HB3	LEU	B	145	12.191	9.883	35.302	1.00	0.00
H										
ATOM	7669	HG	LEU	B	145	12.562	9.095	37.709	1.00	0.00
H										
ATOM	7670	HD11	LEU	B	145	13.152	12.018	37.029	1.00	0.00
H										
ATOM	7671	HD12	LEU	B	145	13.959	11.065	38.295	1.00	0.00
H										
ATOM	7672	HD13	LEU	B	145	14.159	10.622	36.584	1.00	0.00
H										
ATOM	7673	HD21	LEU	B	145	10.413	9.887	38.648	1.00	0.00
H										
ATOM	7674	HD22	LEU	B	145	11.762	10.697	39.476	1.00	0.00
H										
ATOM	7675	HD23	LEU	B	145	10.825	11.568	38.241	1.00	0.00
H										
ATOM	7676	N	PRO	B	146	8.343	9.621	35.106	1.00	0.00
N										
ATOM	7677	CA	PRO	B	146	7.424	10.019	34.043	1.00	0.00
C										
ATOM	7678	C	PRO	B	146	8.132	10.776	32.931	1.00	0.00
C										
ATOM	7679	O	PRO	B	146	9.070	11.540	33.194	1.00	0.00
O										
ATOM	7680	CB	PRO	B	146	6.450	10.953	34.749	1.00	0.00
C										
ATOM	7681	CG	PRO	B	146	6.437	10.497	36.164	1.00	0.00
C										
ATOM	7682	CD	PRO	B	146	7.809	9.928	36.442	1.00	0.00
C										
ATOM	7683	HA	PRO	B	146	6.902	9.151	33.643	1.00	0.00
H										
ATOM	7684	HB2	PRO	B	146	5.456	10.872	34.311	1.00	0.00
H										
ATOM	7685	HB3	PRO	B	146	6.793	11.985	34.682	1.00	0.00
H										

ATOM	7686	HG2	PRO	B	146	5.676	9.731	36.306	1.00	0.00
H										
ATOM	7687	HG3	PRO	B	146	6.236	11.336	36.828	1.00	0.00
H										
ATOM	7688	HD2	PRO	B	146	8.436	10.659	36.951	1.00	0.00
H										
ATOM	7689	HD3	PRO	B	146	7.739	9.026	37.048	1.00	0.00
H										
ATOM	7690	N	TYR	B	147	7.717	10.519	31.699	1.00	0.00
N										
ATOM	7691	CA	TYR	B	147	8.202	11.251	30.545	1.00	0.00
C										
ATOM	7692	C	TYR	B	147	7.206	11.105	29.442	1.00	0.00
C										
ATOM	7693	O	TYR	B	147	6.314	10.258	29.501	1.00	0.00
O										
ATOM	7694	CB	TYR	B	147	9.563	10.733	30.035	1.00	0.00
C										
ATOM	7695	CG	TYR	B	147	9.478	9.403	29.316	1.00	0.00
C										
ATOM	7696	CD1	TYR	B	147	9.428	8.218	30.047	1.00	0.00
C										
ATOM	7697	CD2	TYR	B	147	9.405	9.329	27.904	1.00	0.00
C										
ATOM	7698	CE1	TYR	B	147	9.314	6.984	29.422	1.00	0.00
C										
ATOM	7699	CE2	TYR	B	147	9.330	8.091	27.259	1.00	0.00
C										
ATOM	7700	CZ	TYR	B	147	9.283	6.915	28.029	1.00	0.00
C										
ATOM	7701	OH	TYR	B	147	9.188	5.651	27.462	1.00	0.00
O										
ATOM	7702	H	TYR	B	147	7.034	9.782	31.558	1.00	0.00
H										
ATOM	7703	HA	TYR	B	147	8.296	12.305	30.804	1.00	0.00
H										
ATOM	7704	HB2	TYR	B	147	10.230	10.620	30.889	1.00	0.00
H										
ATOM	7705	HB3	TYR	B	147	9.976	11.470	29.347	1.00	0.00
H										
ATOM	7706	HD1	TYR	B	147	9.480	8.261	31.134	1.00	0.00
H										
ATOM	7707	HD2	TYR	B	147	9.408	10.245	27.315	1.00	0.00
H										
ATOM	7708	HE1	TYR	B	147	9.249	6.074	30.016	1.00	0.00
H										
ATOM	7709	HE2	TYR	B	147	9.309	8.038	26.172	1.00	0.00
H										
ATOM	7710	HH	TYR	B	147	8.352	5.212	27.769	1.00	0.00
H										
ATOM	7711	N	ILE	B	148	7.416	11.942	28.439	1.00	0.00
N										
ATOM	7712	CA	ILE	B	148	6.610	12.029	27.215	1.00	0.00
C										
ATOM	7713	C	ILE	B	148	7.598	12.163	26.073	1.00	0.00
C										

ATOM	7714	O	ILE	B	148	8.714	12.649	26.261	1.00	0.00
O										
ATOM	7715	CB	ILE	B	148	5.690	13.311	27.363	1.00	0.00
C										
ATOM	7716	CG1	ILE	B	148	4.468	12.973	28.204	1.00	0.00
C										
ATOM	7717	CG2	ILE	B	148	5.314	13.980	26.050	1.00	0.00
C										
ATOM	7718	CD1	ILE	B	148	3.820	14.210	28.764	1.00	0.00
C										
ATOM	7719	H	ILE	B	148	8.202	12.579	28.523	1.00	0.00
H										
ATOM	7720	HA	ILE	B	148	6.003	11.134	27.092	1.00	0.00
H										
ATOM	7721	HB	ILE	B	148	6.265	14.042	27.930	1.00	0.00
H										
ATOM	7722	HG12	ILE	B	148	4.774	12.331	29.028	1.00	0.00
H										
ATOM	7723	HG13	ILE	B	148	3.746	12.447	27.582	1.00	0.00
H										
ATOM	7724	HG21	ILE	B	148	4.770	13.274	25.425	1.00	0.00
H										
ATOM	7725	HG22	ILE	B	148	4.685	14.846	26.251	1.00	0.00
H										
ATOM	7726	HG23	ILE	B	148	6.218	14.300	25.534	1.00	0.00
H										
ATOM	7727	HD11	ILE	B	148	3.506	14.857	27.946	1.00	0.00
H										
ATOM	7728	HD12	ILE	B	148	2.952	13.928	29.358	1.00	0.00
H										
ATOM	7729	HD13	ILE	B	148	4.534	14.741	29.393	1.00	0.00
H										
ATOM	7730	N	SER	B	149	7.235	11.679	24.903	1.00	0.00
N										
ATOM	7731	CA	SER	B	149	8.049	11.862	23.735	1.00	0.00
C										
ATOM	7732	C	SER	B	149	7.180	12.098	22.538	1.00	0.00
C										
ATOM	7733	O	SER	B	149	6.005	11.770	22.560	1.00	0.00
O										
ATOM	7734	CB	SER	B	149	8.935	10.636	23.472	1.00	0.00
C										
ATOM	7735	OG	SER	B	149	8.197	9.632	22.818	1.00	0.00
O										
ATOM	7736	H	SER	B	149	6.363	11.166	24.826	1.00	0.00
H										
ATOM	7737	HA	SER	B	149	8.686	12.732	23.883	1.00	0.00
H										
ATOM	7738	HB2	SER	B	149	9.306	10.250	24.421	1.00	0.00
H										
ATOM	7739	HB3	SER	B	149	9.777	10.929	22.846	1.00	0.00
H										
ATOM	7740	HG	SER	B	149	7.859	9.981	21.952	1.00	0.00
H										
ATOM	7741	N	PHE	B	150	7.793	12.682	21.503	1.00	0.00
N										

ATOM	7742	CA	PHE	B	150	7.123	13.038	20.264	1.00	0.00
C										
ATOM	7743	C	PHE	B	150	8.158	13.534	19.248	1.00	0.00
C										
ATOM	7744	O	PHE	B	150	9.253	14.047	19.603	1.00	0.00
O										
ATOM	7745	CB	PHE	B	150	6.024	14.117	20.500	1.00	0.00
C										
ATOM	7746	CG	PHE	B	150	6.521	15.335	21.284	1.00	0.00
C										
ATOM	7747	CD1	PHE	B	150	7.078	16.426	20.630	1.00	0.00
C										
ATOM	7748	CD2	PHE	B	150	6.487	15.352	22.669	1.00	0.00
C										
ATOM	7749	CE1	PHE	B	150	7.594	17.508	21.330	1.00	0.00
C										
ATOM	7750	CE2	PHE	B	150	6.989	16.429	23.386	1.00	0.00
C										
ATOM	7751	CZ	PHE	B	150	7.524	17.522	22.704	1.00	0.00
C										
ATOM	7752	H	PHE	B	150	8.783	12.889	21.588	1.00	0.00
H										
ATOM	7753	HA	PHE	B	150	6.647	12.145	19.862	1.00	0.00
H										
ATOM	7754	HB2	PHE	B	150	5.206	13.661	21.055	1.00	0.00
H										
ATOM	7755	HB3	PHE	B	150	5.660	14.456	19.531	1.00	0.00
H										
ATOM	7756	HD1	PHE	B	150	7.110	16.433	19.541	1.00	0.00
H										
ATOM	7757	HD2	PHE	B	150	6.059	14.506	23.204	1.00	0.00
H										
ATOM	7758	HE1	PHE	B	150	8.050	18.340	20.796	1.00	0.00
H										
ATOM	7759	HE2	PHE	B	150	6.966	16.421	24.475	1.00	0.00
H										
ATOM	7760	HZ	PHE	B	150	7.885	18.387	23.259	1.00	0.00
H										
ATOM	7761	N	LEU	B	151	7.785	13.350	17.991	1.00	0.00
N										
ATOM	7762	CA	LEU	B	151	8.433	13.905	16.834	1.00	0.00
C										
ATOM	7763	C	LEU	B	151	8.025	15.382	16.626	1.00	0.00
C										
ATOM	7764	O	LEU	B	151	6.956	15.849	17.087	1.00	0.00
O										
ATOM	7765	CB	LEU	B	151	8.077	13.064	15.606	1.00	0.00
C										
ATOM	7766	CG	LEU	B	151	8.612	11.610	15.532	1.00	0.00
C										
ATOM	7767	CD1	LEU	B	151	7.803	10.715	14.520	1.00	0.00
C										
ATOM	7768	CD2	LEU	B	151	10.152	11.553	15.174	1.00	0.00
C										
ATOM	7769	H	LEU	B	151	6.970	12.766	17.830	1.00	0.00
H										

ATOM	7770	HA	LEU	B	151	9.510	13.861	16.985	1.00	0.00
H										
ATOM	7771	HB2	LEU	B	151	8.456	13.592	14.732	1.00	0.00
H										
ATOM	7772	HB3	LEU	B	151	6.990	13.011	15.555	1.00	0.00
H										
ATOM	7773	HG	LEU	B	151	8.492	11.170	16.521	1.00	0.00
H										
ATOM	7774	HD11	LEU	B	151	7.869	11.146	13.522	1.00	0.00
H										
ATOM	7775	HD12	LEU	B	151	8.221	9.710	14.510	1.00	0.00
H										
ATOM	7776	HD13	LEU	B	151	6.759	10.671	14.828	1.00	0.00
H										
ATOM	7777	HD21	LEU	B	151	10.722	12.083	15.936	1.00	0.00
H										
ATOM	7778	HD22	LEU	B	151	10.477	10.515	15.134	1.00	0.00
H										
ATOM	7779	HD23	LEU	B	151	10.317	12.023	14.205	1.00	0.00
H										
ATOM	7780	N	ARG	B	152	8.907	16.106	15.945	1.00	0.00
N										
ATOM	7781	CA	ARG	B	152	8.643	17.487	15.504	1.00	0.00
C										
ATOM	7782	C	ARG	B	152	7.353	17.543	14.747	1.00	0.00
C										
ATOM	7783	O	ARG	B	152	6.561	18.438	14.970	1.00	0.00
O										
ATOM	7784	CB	ARG	B	152	9.783	18.026	14.620	1.00	0.00
C										
ATOM	7785	CG	ARG	B	152	9.748	19.548	14.389	1.00	0.00
C										
ATOM	7786	CD	ARG	B	152	10.665	20.009	13.267	1.00	0.00
C										
ATOM	7787	NE	ARG	B	152	10.260	19.289	12.058	1.00	0.00
N1+										
ATOM	7788	CZ	ARG	B	152	10.956	18.308	11.459	1.00	0.00
C1+										
ATOM	7789	NH1	ARG	B	152	12.174	17.976	11.908	1.00	0.00
N1+										
ATOM	7790	NH2	ARG	B	152	10.442	17.677	10.396	1.00	0.00
N1+										
ATOM	7791	H	ARG	B	152	9.804	15.689	15.718	1.00	0.00
H										
ATOM	7792	HA	ARG	B	152	8.556	18.122	16.384	1.00	0.00
H										
ATOM	7793	HB2	ARG	B	152	9.723	17.534	13.650	1.00	0.00
H										
ATOM	7794	HB3	ARG	B	152	10.730	17.776	15.096	1.00	0.00
H										
ATOM	7795	HG2	ARG	B	152	10.052	20.044	15.310	1.00	0.00
H										
ATOM	7796	HG3	ARG	B	152	8.727	19.837	14.141	1.00	0.00
H										
ATOM	7797	HD2	ARG	B	152	11.700	19.777	13.511	1.00	0.00
H										

ATOM	7798	HD3	ARG	B	152	10.560	21.083	13.116	1.00	0.00
H										
ATOM	7799	HE2	ARG	B	152	9.376	19.555	11.635	1.00	0.00
H										
ATOM	7800	HE3	ARG	B	152	9.783	18.604	12.626	1.00	0.00
H										
ATOM	7801	HH11	ARG	B	152	12.698	17.235	11.454	1.00	0.00
H										
ATOM	7802	HH12	ARG	B	152	12.573	18.466	12.702	1.00	0.00
H										
ATOM	7803	HH13	ARG	B	152	12.589	18.652	11.283	1.00	0.00
H										
ATOM	7804	HH21	ARG	B	152	10.967	16.936	9.943	1.00	0.00
H										
ATOM	7805	HH22	ARG	B	152	9.527	17.940	10.043	1.00	0.00
H										
ATOM	7806	HH23	ARG	B	152	10.011	16.998	11.007	1.00	0.00
H										
ATOM	7807	N	SER	B	153	7.141	16.609	13.824	1.00	0.00
N										
ATOM	7808	CA	SER	B	153	5.878	16.577	13.068	1.00	0.00
C										
ATOM	7809	C	SER	B	153	4.647	16.471	13.977	1.00	0.00
C										
ATOM	7810	O	SER	B	153	3.636	17.110	13.729	1.00	0.00
O										
ATOM	7811	CB	SER	B	153	5.879	15.463	12.009	1.00	0.00
C										
ATOM	7812	OG	SER	B	153	5.878	14.210	12.597	1.00	0.00
O										
ATOM	7813	H	SER	B	153	7.856	15.913	13.639	1.00	0.00
H										
ATOM	7814	HA	SER	B	153	5.801	17.524	12.535	1.00	0.00
H										
ATOM	7815	HB2	SER	B	153	6.769	15.564	11.389	1.00	0.00
H										
ATOM	7816	HB3	SER	B	153	4.990	15.564	11.387	1.00	0.00
H										
ATOM	7817	HG	SER	B	153	5.066	14.110	13.160	1.00	0.00
H										
ATOM	7818	N	GLU	B	154	4.754	15.686	15.043	1.00	0.00
N										
ATOM	7819	CA	GLU	B	154	3.696	15.593	16.037	1.00	0.00
C										
ATOM	7820	C	GLU	B	154	3.488	16.915	16.803	1.00	0.00
C										
ATOM	7821	O	GLU	B	154	2.369	17.338	16.994	1.00	0.00
O										
ATOM	7822	CB	GLU	B	154	3.957	14.424	16.987	1.00	0.00
C										
ATOM	7823	CG	GLU	B	154	3.555	13.128	16.330	1.00	0.00
C										
ATOM	7824	CD	GLU	B	154	4.261	11.904	16.870	1.00	0.00
C										
ATOM	7825	OE1	GLU	B	154	5.158	12.068	17.722	1.00	0.00
O										

ATOM	7826	OE2	GLU	B	154	3.915	10.774	16.400	1.00	0.00
O1-										
ATOM	7827	H	GLU	B	154	5.597	15.136	15.168	1.00	0.00
H										
ATOM	7828	HA	GLU	B	154	2.770	15.378	15.505	1.00	0.00
H										
ATOM	7829	HB2	GLU	B	154	3.376	14.563	17.898	1.00	0.00
H										
ATOM	7830	HB3	GLU	B	154	5.017	14.390	17.234	1.00	0.00
H										
ATOM	7831	HG2	GLU	B	154	3.773	13.205	15.266	1.00	0.00
H										
ATOM	7832	HG3	GLU	B	154	2.483	12.993	16.472	1.00	0.00
H										
ATOM	7833	N	TYR	B	155	4.561	17.557	17.230	1.00	0.00
N										
ATOM	7834	CA	TYR	B	155	4.424	18.773	17.961	1.00	0.00
C										
ATOM	7835	C	TYR	B	155	3.805	19.820	17.088	1.00	0.00
C										
ATOM	7836	O	TYR	B	155	2.910	20.558	17.520	1.00	0.00
O										
ATOM	7837	CB	TYR	B	155	5.773	19.287	18.430	1.00	0.00
C										
ATOM	7838	CG	TYR	B	155	5.625	20.417	19.418	1.00	0.00
C										
ATOM	7839	CD1	TYR	B	155	5.253	20.151	20.723	1.00	0.00
C										
ATOM	7840	CD2	TYR	B	155	5.838	21.736	19.036	1.00	0.00
C										
ATOM	7841	CE1	TYR	B	155	5.101	21.153	21.642	1.00	0.00
C										
ATOM	7842	CE2	TYR	B	155	5.686	22.763	19.932	1.00	0.00
C										
ATOM	7843	CZ	TYR	B	155	5.324	22.455	21.256	1.00	0.00
C										
ATOM	7844	OH	TYR	B	155	5.165	23.427	22.182	1.00	0.00
O										
ATOM	7845	H	TYR	B	155	5.484	17.184	17.037	1.00	0.00
H										
ATOM	7846	HA	TYR	B	155	3.784	18.602	18.826	1.00	0.00
H										
ATOM	7847	HB2	TYR	B	155	6.334	19.644	17.567	1.00	0.00
H										
ATOM	7848	HB3	TYR	B	155	6.316	18.472	18.905	1.00	0.00
H										
ATOM	7849	HD1	TYR	B	155	5.076	19.121	21.026	1.00	0.00
H										
ATOM	7850	HD2	TYR	B	155	6.129	21.958	18.010	1.00	0.00
H										
ATOM	7851	HE1	TYR	B	155	4.809	20.924	22.665	1.00	0.00
H										
ATOM	7852	HE2	TYR	B	155	5.841	23.797	19.625	1.00	0.00
H										
ATOM	7853	HH	TYR	B	155	5.790	23.271	22.937	1.00	0.00
H										



ATOM	7854	N	GLU	B	156	4.271	19.918	15.852	1.00	0.00
N										
ATOM	7855	CA	GLU	B	156	3.718	20.965	14.983	1.00	0.00
C										
ATOM	7856	C	GLU	B	156	2.213	20.774	14.723	1.00	0.00
C										
ATOM	7857	O	GLU	B	156	1.494	21.767	14.614	1.00	0.00
O										
ATOM	7858	CB	GLU	B	156	4.551	21.214	13.717	1.00	0.00
C										
ATOM	7859	CG	GLU	B	156	4.804	20.042	12.838	1.00	0.00
C										
ATOM	7860	CD	GLU	B	156	6.176	20.081	12.117	1.00	0.00
C										
ATOM	7861	OE1	GLU	B	156	7.094	20.846	12.475	1.00	0.00
O										
ATOM	7862	OE2	GLU	B	156	6.328	19.309	11.167	1.00	0.00
O1-										
ATOM	7863	H	GLU	B	156	4.990	19.287	15.515	1.00	0.00
H										
ATOM	7864	HA	GLU	B	156	3.793	21.886	15.560	1.00	0.00
H										
ATOM	7865	HB2	GLU	B	156	5.518	21.605	14.031	1.00	0.00
H										
ATOM	7866	HB3	GLU	B	156	4.031	21.965	13.123	1.00	0.00
H										
ATOM	7867	HG2	GLU	B	156	4.020	20.005	12.082	1.00	0.00
H										
ATOM	7868	HG3	GLU	B	156	4.763	19.141	13.448	1.00	0.00
H										
ATOM	7869	N	LYS	B	157	1.737	19.533	14.728	1.00	0.00
N										
ATOM	7870	CA	LYS	B	157	0.302	19.227	14.546	1.00	0.00
C										
ATOM	7871	C	LYS	B	157	-0.532	19.245	15.848	1.00	0.00
C										
ATOM	7872	O	LYS	B	157	-1.677	19.731	15.852	1.00	0.00
O										
ATOM	7873	CB	LYS	B	157	0.120	17.852	13.875	1.00	0.00
C										
ATOM	7874	CG	LYS	B	157	0.082	17.862	12.352	1.00	0.00
C										
ATOM	7875	CD	LYS	B	157	-0.208	16.461	11.768	1.00	0.00
C										
ATOM	7876	CE	LYS	B	157	0.984	15.481	11.923	1.00	0.00
C										
ATOM	7877	NZ	LYS	B	157	0.713	14.052	11.425	1.00	0.00
N1+										
ATOM	7878	H	LYS	B	157	2.385	18.764	14.862	1.00	0.00
H										
ATOM	7879	HA	LYS	B	157	-0.113	19.979	13.877	1.00	0.00
H										
ATOM	7880	HB2	LYS	B	157	-0.818	17.428	14.231	1.00	0.00
H										
ATOM	7881	HB3	LYS	B	157	0.947	17.215	14.185	1.00	0.00
H										

ATOM	7882	HG2	LYS	B	157	1.046	18.206	11.979	1.00	0.00
H										
ATOM	7883	HG3	LYS	B	157	-0.699	18.547	12.025	1.00	0.00
H										
ATOM	7884	HD2	LYS	B	157	-0.435	16.567	10.708	1.00	0.00
H										
ATOM	7885	HD3	LYS	B	157	-1.071	16.042	12.284	1.00	0.00
H										
ATOM	7886	HE2	LYS	B	157	1.244	15.428	12.979	1.00	0.00
H										
ATOM	7887	HE3	LYS	B	157	1.827	15.882	11.361	1.00	0.00
H										
ATOM	7888	HZ1	LYS	B	157	0.481	14.076	10.437	1.00	0.00
H										
ATOM	7889	HZ2	LYS	B	157	1.541	13.483	11.564	1.00	0.00
H										
ATOM	7890	HZ3	LYS	B	157	-0.063	13.654	11.945	1.00	0.00
H										
ATOM	7891	N	TYR	B	158	0.018	18.706	16.936	1.00	0.00
N										
ATOM	7892	CA	TYR	B	158	-0.755	18.492	18.163	1.00	0.00
C										
ATOM	7893	C	TYR	B	158	-0.134	19.147	19.393	1.00	0.00
C										
ATOM	7894	O	TYR	B	158	-0.123	18.574	20.475	1.00	0.00
O										
ATOM	7895	CB	TYR	B	158	-0.888	16.994	18.426	1.00	0.00
C										
ATOM	7896	CG	TYR	B	158	-1.377	16.157	17.266	1.00	0.00
C										
ATOM	7897	CD1	TYR	B	158	-0.595	15.122	16.774	1.00	0.00
C										
ATOM	7898	CD2	TYR	B	158	-2.637	16.355	16.711	1.00	0.00
C										
ATOM	7899	CE1	TYR	B	158	-1.017	14.329	15.717	1.00	0.00
C										
ATOM	7900	CE2	TYR	B	158	-3.093	15.557	15.645	1.00	0.00
C										
ATOM	7901	CZ	TYR	B	158	-2.256	14.544	15.153	1.00	0.00
C										
ATOM	7902	OH	TYR	B	158	-2.656	13.716	14.119	1.00	0.00
O										
ATOM	7903	H	TYR	B	158	0.997	18.438	16.914	1.00	0.00
H										
ATOM	7904	HA	TYR	B	158	-1.751	18.907	18.019	1.00	0.00
H										
ATOM	7905	HB2	TYR	B	158	-1.587	16.862	19.250	1.00	0.00
H										
ATOM	7906	HB3	TYR	B	158	0.092	16.619	18.717	1.00	0.00
H										
ATOM	7907	HD1	TYR	B	158	0.375	14.928	17.229	1.00	0.00
H										
ATOM	7908	HD2	TYR	B	158	-3.280	17.140	17.107	1.00	0.00
H										
ATOM	7909	HE1	TYR	B	158	-0.371	13.540	15.334	1.00	0.00
H										

ATOM	7910	HE2	TYR	B	158	-4.077	15.723	15.210	1.00	0.00
H										
ATOM	7911	HH	TYR	B	158	-2.680	12.776	14.438	1.00	0.00
H										
ATOM	7912	N	GLU	B	159	0.371	20.359	19.223	1.00	0.00
N										
ATOM	7913	CA	GLU	B	159	1.079	21.042	20.294	1.00	0.00
C										
ATOM	7914	C	GLU	B	159	0.239	21.209	21.564	1.00	0.00
C										
ATOM	7915	O	GLU	B	159	0.719	20.940	22.674	1.00	0.00
O										
ATOM	7916	CB	GLU	B	159	1.560	22.404	19.810	1.00	0.00
C										
ATOM	7917	CG	GLU	B	159	1.962	23.323	20.968	1.00	0.00
C										
ATOM	7918	CD	GLU	B	159	2.372	24.683	20.522	1.00	0.00
C										
ATOM	7919	OE1	GLU	B	159	2.453	24.894	19.287	1.00	0.00
O										
ATOM	7920	OE2	GLU	B	159	2.597	25.529	21.429	1.00	0.00
O1-										
ATOM	7921	H	GLU	B	159	0.262	20.822	18.326	1.00	0.00
H										
ATOM	7922	HA	GLU	B	159	1.956	20.448	20.548	1.00	0.00
H										
ATOM	7923	HB2	GLU	B	159	0.758	22.880	19.248	1.00	0.00
H										
ATOM	7924	HB3	GLU	B	159	2.423	22.261	19.161	1.00	0.00
H										
ATOM	7925	HG2	GLU	B	159	2.797	22.867	21.499	1.00	0.00
H										
ATOM	7926	HG3	GLU	B	159	1.113	23.422	21.643	1.00	0.00
H										
ATOM	7927	N	HIS	B	160	-1.000	21.670	21.392	1.00	0.00
N										
ATOM	7928	CA	HIS	B	160	-1.951	21.867	22.522	1.00	0.00
C										
ATOM	7929	C	HIS	B	160	-2.171	20.550	23.283	1.00	0.00
C										
ATOM	7930	O	HIS	B	160	-2.181	20.525	24.507	1.00	0.00
O										
ATOM	7931	CB	HIS	B	160	-3.303	22.391	22.024	1.00	0.00
C										
ATOM	7932	CG	HIS	B	160	-4.341	22.486	23.104	1.00	0.00
C										
ATOM	7933	ND1	HIS	B	160	-4.744	23.690	23.648	1.00	0.00
N										
ATOM	7934	CD2	HIS	B	160	-5.037	21.526	23.764	1.00	0.00
C										
ATOM	7935	CE1	HIS	B	160	-5.652	23.467	24.583	1.00	0.00
C										
ATOM	7936	NE2	HIS	B	160	-5.841	22.162	24.679	1.00	0.00
N										
ATOM	7937	H	HIS	B	160	-1.308	21.897	20.452	1.00	0.00
H										

ATOM	7938	HA	HIS	B	160	-1.527	22.599	23.209	1.00	0.00
H										
ATOM	7939	HB2	HIS	B	160	-3.670	21.718	21.251	1.00	0.00
H										
ATOM	7940	HB3	HIS	B	160	-3.154	23.384	21.601	1.00	0.00
H										
ATOM	7941	HD1	HIS	B	160	-4.397	24.604	23.373	1.00	0.00
H										
ATOM	7942	HD2	HIS	B	160	-4.971	20.452	23.599	1.00	0.00
H										
ATOM	7943	HE1	HIS	B	160	-6.158	24.229	25.174	1.00	0.00
H										
ATOM	7944	N	ASN	B	161	-2.336	19.468	22.531	1.00	0.00
N										
ATOM	7945	CA	ASN	B	161	-2.523	18.148	23.090	1.00	0.00
C										
ATOM	7946	C	ASN	B	161	-1.261	17.734	23.851	1.00	0.00
C										
ATOM	7947	O	ASN	B	161	-1.321	17.263	24.978	1.00	0.00
O										
ATOM	7948	CB	ASN	B	161	-2.859	17.167	21.958	1.00	0.00
C										
ATOM	7949	CG	ASN	B	161	-3.957	17.720	20.998	1.00	0.00
C										
ATOM	7950	OD1	ASN	B	161	-3.728	18.671	20.205	1.00	0.00
O										
ATOM	7951	ND2	ASN	B	161	-5.152	17.140	21.086	1.00	0.00
N										
ATOM	7952	H	ASN	B	161	-2.330	19.573	21.521	1.00	0.00
H										
ATOM	7953	HA	ASN	B	161	-3.359	18.178	23.787	1.00	0.00
H										
ATOM	7954	HB2	ASN	B	161	-3.214	16.236	22.396	1.00	0.00
H										
ATOM	7955	HB3	ASN	B	161	-1.955	16.975	21.382	1.00	0.00
H										
ATOM	7956	HD21	ASN	B	161	-5.912	17.452	20.490	1.00	0.00
H										
ATOM	7957	HD22	ASN	B	161	-5.303	16.387	21.749	1.00	0.00
H										
ATOM	7958	N	ILE	B	162	-0.105	17.965	23.253	1.00	0.00
N										
ATOM	7959	CA	ILE	B	162	1.142	17.575	23.878	1.00	0.00
C										
ATOM	7960	C	ILE	B	162	1.419	18.380	25.136	1.00	0.00
C										
ATOM	7961	O	ILE	B	162	1.859	17.831	26.134	1.00	0.00
O										
ATOM	7962	CB	ILE	B	162	2.316	17.697	22.897	1.00	0.00
C										
ATOM	7963	CG1	ILE	B	162	2.240	16.546	21.888	1.00	0.00
C										
ATOM	7964	CG2	ILE	B	162	3.678	17.711	23.666	1.00	0.00
C										
ATOM	7965	CD1	ILE	B	162	2.700	16.916	20.522	1.00	0.00
C										

ATOM	7966	H	ILE	B	162	-0.091	18.421	22.346	1.00	0.00
H										
ATOM	7967	HA	ILE	B	162	1.057	16.528	24.165	1.00	0.00
H										
ATOM	7968	HB	ILE	B	162	2.217	18.637	22.356	1.00	0.00
H										
ATOM	7969	HG12	ILE	B	162	1.206	16.213	21.824	1.00	0.00
H										
ATOM	7970	HG13	ILE	B	162	2.863	15.730	22.251	1.00	0.00
H										
ATOM	7971	HG21	ILE	B	162	3.786	16.787	24.231	1.00	0.00
H										
ATOM	7972	HG22	ILE	B	162	4.497	17.798	22.953	1.00	0.00
H										
ATOM	7973	HG23	ILE	B	162	3.701	18.559	24.349	1.00	0.00
H										
ATOM	7974	HD11	ILE	B	162	3.739	17.242	20.564	1.00	0.00
H										
ATOM	7975	HD12	ILE	B	162	2.618	16.052	19.865	1.00	0.00
H										
ATOM	7976	HD13	ILE	B	162	2.082	17.726	20.137	1.00	0.00
H										
ATOM	7977	N	LEU	B	163	1.152	19.681	25.091	1.00	0.00
N										
ATOM	7978	CA	LEU	B	163	1.338	20.507	26.273	1.00	0.00
C										
ATOM	7979	C	LEU	B	163	0.352	20.161	27.375	1.00	0.00
C										
ATOM	7980	O	LEU	B	163	0.697	20.216	28.554	1.00	0.00
O										
ATOM	7981	CB	LEU	B	163	1.239	21.982	25.926	1.00	0.00
C										
ATOM	7982	CG	LEU	B	163	2.421	22.467	25.076	1.00	0.00
C										
ATOM	7983	CD1	LEU	B	163	2.088	23.901	24.540	1.00	0.00
C										
ATOM	7984	CD2	LEU	B	163	3.735	22.447	25.898	1.00	0.00
C										
ATOM	7985	H	LEU	B	163	0.818	20.100	24.229	1.00	0.00
H										
ATOM	7986	HA	LEU	B	163	2.341	20.322	26.654	1.00	0.00
H										
ATOM	7987	HB2	LEU	B	163	1.215	22.558	26.850	1.00	0.00
H										
ATOM	7988	HB3	LEU	B	163	0.318	22.149	25.370	1.00	0.00
H										
ATOM	7989	HG	LEU	B	163	2.535	21.797	24.225	1.00	0.00
H										
ATOM	7990	HD11	LEU	B	163	1.932	24.575	25.380	1.00	0.00
H										
ATOM	7991	HD12	LEU	B	163	2.917	24.263	23.933	1.00	0.00
H										
ATOM	7992	HD13	LEU	B	163	1.185	23.860	23.933	1.00	0.00
H										
ATOM	7993	HD21	LEU	B	163	3.938	21.432	26.234	1.00	0.00
H										

ATOM	7994	HD22	LEU	B	163	4.558	22.795	25.275	1.00	0.00
H										
ATOM	7995	HD23	LEU	B	163	3.633	23.102	26.762	1.00	0.00
H										
ATOM	7996	N	LYS	B	164	-0.871	19.803	27.000	1.00	0.00
N										
ATOM	7997	CA	LYS	B	164	-1.826	19.268	27.969	1.00	0.00
C										
ATOM	7998	C	LYS	B	164	-1.233	18.009	28.654	1.00	0.00
C										
ATOM	7999	O	LYS	B	164	-1.184	17.907	29.881	1.00	0.00
O										
ATOM	8000	CB	LYS	B	164	-3.141	18.949	27.262	1.00	0.00
C										
ATOM	8001	CG	LYS	B	164	-4.261	18.452	28.169	1.00	0.00
C										
ATOM	8002	CD	LYS	B	164	-4.965	17.184	27.588	1.00	0.00
C										
ATOM	8003	CE	LYS	B	164	-3.972	15.976	27.340	1.00	0.00
C										
ATOM	8004	NZ	LYS	B	164	-3.283	16.005	25.996	1.00	0.00
N1+										
ATOM	8005	H	LYS	B	164	-1.146	19.903	26.028	1.00	0.00
H										
ATOM	8006	HA	LYS	B	164	-2.013	20.025	28.730	1.00	0.00
H										
ATOM	8007	HB2	LYS	B	164	-2.945	18.180	26.516	1.00	0.00
H										
ATOM	8008	HB3	LYS	B	164	-3.486	19.856	26.767	1.00	0.00
H										
ATOM	8009	HG2	LYS	B	164	-5.000	19.244	28.282	1.00	0.00
H										
ATOM	8010	HG3	LYS	B	164	-3.841	18.206	29.143	1.00	0.00
H										
ATOM	8011	HD2	LYS	B	164	-5.430	17.451	26.640	1.00	0.00
H										
ATOM	8012	HD3	LYS	B	164	-5.733	16.863	28.290	1.00	0.00
H										
ATOM	8013	HE2	LYS	B	164	-4.538	15.049	27.413	1.00	0.00
H										
ATOM	8014	HE3	LYS	B	164	-3.208	15.998	28.116	1.00	0.00
H										
ATOM	8015	HZ1	LYS	B	164	-2.740	16.859	25.913	1.00	0.00
H										
ATOM	8016	HZ2	LYS	B	164	-2.667	15.203	25.914	1.00	0.00
H										
ATOM	8017	HZ3	LYS	B	164	-3.979	15.974	25.258	1.00	0.00
H										
ATOM	8018	N	LEU	B	165	-0.738	17.084	27.834	1.00	0.00
N										
ATOM	8019	CA	LEU	B	165	-0.208	15.821	28.305	1.00	0.00
C										
ATOM	8020	C	LEU	B	165	0.917	16.009	29.319	1.00	0.00
C										
ATOM	8021	O	LEU	B	165	1.068	15.207	30.227	1.00	0.00
O										

ATOM	8022	CB	LEU	B	165	0.308	14.995	27.123	1.00	0.00
C										
ATOM	8023	CG	LEU	B	165	0.130	13.462	27.075	1.00	0.00
C										
ATOM	8024	CD1	LEU	B	165	1.385	12.879	26.545	1.00	0.00
C										
ATOM	8025	CD2	LEU	B	165	-0.258	12.796	28.419	1.00	0.00
C										
ATOM	8026	H	LEU	B	165	-0.732	17.272	26.837	1.00	0.00
H										
ATOM	8027	HA	LEU	B	165	-1.014	15.268	28.785	1.00	0.00
H										
ATOM	8028	HB2	LEU	B	165	1.379	15.183	27.061	1.00	0.00
H										
ATOM	8029	HB3	LEU	B	165	-0.182	15.390	26.234	1.00	0.00
H										
ATOM	8030	HG	LEU	B	165	-0.661	13.245	26.359	1.00	0.00
H										
ATOM	8031	HD11	LEU	B	165	2.214	13.144	27.200	1.00	0.00
H										
ATOM	8032	HD12	LEU	B	165	1.291	11.795	26.499	1.00	0.00
H										
ATOM	8033	HD13	LEU	B	165	1.573	13.270	25.546	1.00	0.00
H										
ATOM	8034	HD21	LEU	B	165	-1.205	13.206	28.767	1.00	0.00
H										
ATOM	8035	HD22	LEU	B	165	-0.358	11.721	28.276	1.00	0.00
H										
ATOM	8036	HD23	LEU	B	165	0.516	12.994	29.159	1.00	0.00
H										
ATOM	8037	N	VAL	B	166	1.728	17.046	29.146	1.00	0.00
N										
ATOM	8038	CA	VAL	B	166	2.812	17.360	30.093	1.00	0.00
C										
ATOM	8039	C	VAL	B	166	2.231	17.842	31.429	1.00	0.00
C										
ATOM	8040	O	VAL	B	166	2.657	17.391	32.512	1.00	0.00
O										
ATOM	8041	CB	VAL	B	166	3.755	18.431	29.532	1.00	0.00
C										
ATOM	8042	CG1	VAL	B	166	4.538	19.128	30.654	1.00	0.00
C										
ATOM	8043	CG2	VAL	B	166	4.696	17.809	28.444	1.00	0.00
C										
ATOM	8044	H	VAL	B	166	1.597	17.642	28.335	1.00	0.00
H										
ATOM	8045	HA	VAL	B	166	3.387	16.453	30.273	1.00	0.00
H										
ATOM	8046	HB	VAL	B	166	3.141	19.186	29.042	1.00	0.00
H										
ATOM	8047	HG11	VAL	B	166	5.132	18.392	31.194	1.00	0.00
H										
ATOM	8048	HG12	VAL	B	166	5.197	19.881	30.223	1.00	0.00
H										
ATOM	8049	HG13	VAL	B	166	3.841	19.606	31.340	1.00	0.00
H										

ATOM	8050	HG21	VAL	B	166	4.094	17.404	27.632	1.00	0.00
H										
ATOM	8051	HG22	VAL	B	166	5.360	18.580	28.055	1.00	0.00
H										
ATOM	8052	HG23	VAL	B	166	5.289	17.012	28.890	1.00	0.00
H										
ATOM	8053	N	ASN	B	167	1.247	18.736	31.338	1.00	0.00
N										
ATOM	8054	CA	ASN	B	167	0.547	19.271	32.508	1.00	0.00
C										
ATOM	8055	C	ASN	B	167	-0.180	18.173	33.289	1.00	0.00
C										
ATOM	8056	O	ASN	B	167	-0.164	18.168	34.518	1.00	0.00
O										
ATOM	8057	CB	ASN	B	167	-0.436	20.358	32.055	1.00	0.00
C										
ATOM	8058	CG	ASN	B	167	-1.033	21.127	33.209	1.00	0.00
C										
ATOM	8059	OD1	ASN	B	167	-0.313	21.783	33.974	1.00	0.00
O										
ATOM	8060	ND2	ASN	B	167	-2.362	21.073	33.338	1.00	0.00
N										
ATOM	8061	H	ASN	B	167	0.970	19.061	30.417	1.00	0.00
H										
ATOM	8062	HA	ASN	B	167	1.283	19.729	33.167	1.00	0.00
H										
ATOM	8063	HB2	ASN	B	167	-1.243	19.886	31.497	1.00	0.00
H										
ATOM	8064	HB3	ASN	B	167	0.092	21.057	31.408	1.00	0.00
H										
ATOM	8065	HD21	ASN	B	167	-2.819	21.571	34.095	1.00	0.00
H										
ATOM	8066	HD22	ASN	B	167	-2.915	20.535	32.678	1.00	0.00
H										
ATOM	8067	N	ASP	B	168	-0.784	17.229	32.572	1.00	0.00
N										
ATOM	8068	CA	ASP	B	168	-1.532	16.138	33.210	1.00	0.00
C										
ATOM	8069	C	ASP	B	168	-0.669	15.035	33.805	1.00	0.00
C										
ATOM	8070	O	ASP	B	168	-1.102	14.345	34.731	1.00	0.00
O										
ATOM	8071	CB	ASP	B	168	-2.496	15.472	32.217	1.00	0.00
C										
ATOM	8072	CG	ASP	B	168	-3.555	16.411	31.714	1.00	0.00
C										
ATOM	8073	OD1	ASP	B	168	-3.930	17.368	32.453	1.00	0.00
O										
ATOM	8074	OD2	ASP	B	168	-4.001	16.187	30.566	1.00	0.00
O1-										
ATOM	8075	H	ASP	B	168	-0.727	17.264	31.559	1.00	0.00
H										
ATOM	8076	HA	ASP	B	168	-2.127	16.568	34.015	1.00	0.00
H										
ATOM	8077	HB2	ASP	B	168	-2.982	14.634	32.713	1.00	0.00
H										



ATOM	8078	HB3	ASP	B	168	-1.922	15.108	31.366	1.00	0.00
H										
ATOM	8079	N	LYS	B	169	0.530	14.854	33.251	1.00	0.00
N										
ATOM	8080	CA	LYS	B	169	1.359	13.693	33.572	1.00	0.00
C										
ATOM	8081	C	LYS	B	169	2.652	14.000	34.292	1.00	0.00
C										
ATOM	8082	O	LYS	B	169	3.140	13.158	35.051	1.00	0.00
O										
ATOM	8083	CB	LYS	B	169	1.685	12.928	32.295	1.00	0.00
C										
ATOM	8084	CG	LYS	B	169	0.438	12.327	31.642	1.00	0.00
C										
ATOM	8085	CD	LYS	B	169	0.143	10.889	32.170	1.00	0.00
C										
ATOM	8086	CE	LYS	B	169	-1.092	10.252	31.467	1.00	0.00
C										
ATOM	8087	NZ	LYS	B	169	-0.933	10.123	29.964	1.00	0.00
N1+										
ATOM	8088	H	LYS	B	169	0.877	15.541	32.589	1.00	0.00
H										
ATOM	8089	HA	LYS	B	169	0.773	13.035	34.211	1.00	0.00
H										
ATOM	8090	HB2	LYS	B	169	2.376	12.122	32.537	1.00	0.00
H										
ATOM	8091	HB3	LYS	B	169	2.156	13.611	31.589	1.00	0.00
H										
ATOM	8092	HG2	LYS	B	169	0.591	12.283	30.565	1.00	0.00
H										
ATOM	8093	HG3	LYS	B	169	-0.417	12.965	31.861	1.00	0.00
H										
ATOM	8094	HD2	LYS	B	169	-0.049	10.940	33.241	1.00	0.00
H										
ATOM	8095	HD3	LYS	B	169	1.014	10.262	31.987	1.00	0.00
H										
ATOM	8096	HE2	LYS	B	169	-1.963	10.874	31.669	1.00	0.00
H										
ATOM	8097	HE3	LYS	B	169	-1.251	9.259	31.883	1.00	0.00
H										
ATOM	8098	HZ1	LYS	B	169	-0.130	9.537	29.758	1.00	0.00
H										
ATOM	8099	HZ2	LYS	B	169	-1.769	9.703	29.570	1.00	0.00
H										
ATOM	8100	HZ3	LYS	B	169	-0.793	11.043	29.558	1.00	0.00
H										
ATOM	8101	N	LEU	B	170	3.231	15.168	34.046	1.00	0.00
N										
ATOM	8102	CA	LEU	B	170	4.539	15.481	34.588	1.00	0.00
C										
ATOM	8103	C	LEU	B	170	4.412	16.586	35.629	1.00	0.00
C										
ATOM	8104	O	LEU	B	170	3.577	17.473	35.511	1.00	0.00
O										
ATOM	8105	CB	LEU	B	170	5.513	15.896	33.471	1.00	0.00
C										

ATOM	8106	CG	LEU	B	170	5.770	14.996	32.233	1.00	0.00
C										
ATOM	8107	CD1	LEU	B	170	6.927	15.550	31.367	1.00	0.00
C										
ATOM	8108	CD2	LEU	B	170	6.025	13.568	32.605	1.00	0.00
C										
ATOM	8109	H	LEU	B	170	2.752	15.853	33.470	1.00	0.00
H										
ATOM	8110	HA	LEU	B	170	4.933	14.591	35.076	1.00	0.00
H										
ATOM	8111	HB2	LEU	B	170	6.481	16.043	33.948	1.00	0.00
H										
ATOM	8112	HB3	LEU	B	170	5.150	16.848	33.087	1.00	0.00
H										
ATOM	8113	HG	LEU	B	170	4.868	15.017	31.623	1.00	0.00
H										
ATOM	8114	HD11	LEU	B	170	7.839	15.591	31.962	1.00	0.00
H										
ATOM	8115	HD12	LEU	B	170	7.082	14.898	30.509	1.00	0.00
H										
ATOM	8116	HD13	LEU	B	170	6.675	16.552	31.021	1.00	0.00
H										
ATOM	8117	HD21	LEU	B	170	5.160	13.171	33.134	1.00	0.00
H										
ATOM	8118	HD22	LEU	B	170	6.199	12.983	31.703	1.00	0.00
H										
ATOM	8119	HD23	LEU	B	170	6.902	13.512	33.248	1.00	0.00
H										
ATOM	8120	N	ASN	B	171	5.230	16.515	36.667	1.00	0.00
N										
ATOM	8121	CA	ASN	B	171	5.382	17.633	37.594	1.00	0.00
C										
ATOM	8122	C	ASN	B	171	6.545	18.549	37.169	1.00	0.00
C										
ATOM	8123	O	ASN	B	171	7.656	18.064	36.945	1.00	0.00
O										
ATOM	8124	CB	ASN	B	171	5.650	17.081	38.995	1.00	0.00
C										
ATOM	8125	CG	ASN	B	171	4.421	16.479	39.627	1.00	0.00
C										
ATOM	8126	OD1	ASN	B	171	4.290	15.257	39.732	1.00	0.00
O										
ATOM	8127	ND2	ASN	B	171	3.510	17.342	40.073	1.00	0.00
N										
ATOM	8128	H	ASN	B	171	5.763	15.666	36.822	1.00	0.00
H										
ATOM	8129	HA	ASN	B	171	4.460	18.212	37.609	1.00	0.00
H										
ATOM	8130	HB2	ASN	B	171	6.005	17.894	39.628	1.00	0.00
H										
ATOM	8131	HB3	ASN	B	171	6.418	16.313	38.926	1.00	0.00
H										
ATOM	8132	HD21	ASN	B	171	2.659	17.002	40.509	1.00	0.00
H										
ATOM	8133	HD22	ASN	B	171	3.666	18.340	39.977	1.00	0.00
H										

ATOM	8134	N	TYR	B	172	6.324	19.850	37.053	1.00	0.00
N										
ATOM	8135	CA	TYR	B	172	7.451	20.766	36.909	1.00	0.00
C										
ATOM	8136	C	TYR	B	172	8.405	20.658	38.123	1.00	0.00
C										
ATOM	8137	O	TYR	B	172	8.004	20.221	39.213	1.00	0.00
O										
ATOM	8138	CB	TYR	B	172	6.958	22.202	36.692	1.00	0.00
C										
ATOM	8139	CG	TYR	B	172	6.399	22.360	35.297	1.00	0.00
C										
ATOM	8140	CD1	TYR	B	172	5.055	22.085	35.025	1.00	0.00
C										
ATOM	8141	CD2	TYR	B	172	7.231	22.700	34.236	1.00	0.00
C										
ATOM	8142	CE1	TYR	B	172	4.538	22.183	33.738	1.00	0.00
C										
ATOM	8143	CE2	TYR	B	172	6.736	22.812	32.956	1.00	0.00
C										
ATOM	8144	CZ	TYR	B	172	5.385	22.548	32.703	1.00	0.00
C										
ATOM	8145	OH	TYR	B	172	4.900	22.662	31.416	1.00	0.00
O										
ATOM	8146	H	TYR	B	172	5.375	20.209	37.064	1.00	0.00
H										
ATOM	8147	HA	TYR	B	172	8.008	20.470	36.022	1.00	0.00
H										
ATOM	8148	HB2	TYR	B	172	7.790	22.892	36.826	1.00	0.00
H										
ATOM	8149	HB3	TYR	B	172	6.179	22.428	37.419	1.00	0.00
H										
ATOM	8150	HD1	TYR	B	172	4.398	21.788	35.840	1.00	0.00
H										
ATOM	8151	HD2	TYR	B	172	8.289	22.881	34.420	1.00	0.00
H										
ATOM	8152	HE1	TYR	B	172	3.486	21.977	33.546	1.00	0.00
H										
ATOM	8153	HE2	TYR	B	172	7.396	23.106	32.141	1.00	0.00
H										
ATOM	8154	HH	TYR	B	172	4.184	23.350	31.392	1.00	0.00
H										
ATOM	8155	N	PRO	B	173	9.695	20.960	37.926	1.00	0.00
N										
ATOM	8156	CA	PRO	B	173	10.348	21.243	36.678	1.00	0.00
C										
ATOM	8157	C	PRO	B	173	10.577	19.972	35.834	1.00	0.00
C										
ATOM	8158	O	PRO	B	173	10.664	18.827	36.347	1.00	0.00
O										
ATOM	8159	CB	PRO	B	173	11.670	21.827	37.131	1.00	0.00
C										
ATOM	8160	CG	PRO	B	173	11.970	21.098	38.335	1.00	0.00
C										
ATOM	8161	CD	PRO	B	173	10.655	20.998	39.033	1.00	0.00
C										

ATOM	8162	HA	PRO	B	173	9.781	21.980	36.110	1.00	0.00
H										
ATOM	8163	HB2	PRO	B	173	11.574	22.893	37.336	1.00	0.00
H										
ATOM	8164	HB3	PRO	B	173	12.442	21.670	36.379	1.00	0.00
H										
ATOM	8165	HG2	PRO	B	173	12.692	21.639	38.945	1.00	0.00
H										
ATOM	8166	HG3	PRO	B	173	12.361	20.109	38.101	1.00	0.00
H										
ATOM	8167	HD2	PRO	B	173	10.598	20.090	39.632	1.00	0.00
H										
ATOM	8168	HD3	PRO	B	173	10.483	21.865	39.670	1.00	0.00
H										
ATOM	8169	N	VAL	B	174	10.657	20.167	34.538	1.00	0.00
N										
ATOM	8170	CA	VAL	B	174	10.838	19.060	33.641	1.00	0.00
C										
ATOM	8171	C	VAL	B	174	12.063	19.393	32.818	1.00	0.00
C										
ATOM	8172	O	VAL	B	174	12.490	20.565	32.803	1.00	0.00
O										
ATOM	8173	CB	VAL	B	174	9.583	18.824	32.778	1.00	0.00
C										
ATOM	8174	CG1	VAL	B	174	8.354	18.657	33.689	1.00	0.00
C										
ATOM	8175	CG2	VAL	B	174	9.360	19.982	31.767	1.00	0.00
C										
ATOM	8176	H	VAL	B	174	10.591	21.110	34.166	1.00	0.00
H										
ATOM	8177	HA	VAL	B	174	11.039	18.163	34.224	1.00	0.00
H										
ATOM	8178	HB	VAL	B	174	9.722	17.901	32.217	1.00	0.00
H										
ATOM	8179	HG11	VAL	B	174	8.219	19.559	34.285	1.00	0.00
H										
ATOM	8180	HG12	VAL	B	174	7.469	18.491	33.077	1.00	0.00
H										
ATOM	8181	HG13	VAL	B	174	8.505	17.805	34.349	1.00	0.00
H										
ATOM	8182	HG21	VAL	B	174	10.223	20.059	31.107	1.00	0.00
H										
ATOM	8183	HG22	VAL	B	174	8.468	19.782	31.176	1.00	0.00
H										
ATOM	8184	HG23	VAL	B	174	9.234	20.918	32.309	1.00	0.00
H										
ATOM	8185	N	PHE	B	175	12.632	18.378	32.163	1.00	0.00
N										
ATOM	8186	CA	PHE	B	175	13.717	18.563	31.225	1.00	0.00
C										
ATOM	8187	C	PHE	B	175	13.203	18.248	29.842	1.00	0.00
C										
ATOM	8188	O	PHE	B	175	12.621	17.188	29.630	1.00	0.00
O										
ATOM	8189	CB	PHE	B	175	14.922	17.666	31.581	1.00	0.00
C										

ATOM	8190	CG	PHE	B	175	15.595	18.072	32.855	1.00	0.00
C										
ATOM	8191	CD1	PHE	B	175	15.090	17.672	34.071	1.00	0.00
C										
ATOM	8192	CD2	PHE	B	175	16.686	18.961	32.837	1.00	0.00
C										
ATOM	8193	CE1	PHE	B	175	15.686	18.096	35.266	1.00	0.00
C										
ATOM	8194	CE2	PHE	B	175	17.276	19.384	34.005	1.00	0.00
C										
ATOM	8195	CZ	PHE	B	175	16.775	18.945	35.232	1.00	0.00
C										
ATOM	8196	H	PHE	B	175	12.290	17.438	32.331	1.00	0.00
H										
ATOM	8197	HA	PHE	B	175	14.033	19.605	31.254	1.00	0.00
H										
ATOM	8198	HB2	PHE	B	175	15.647	17.722	30.771	1.00	0.00
H										
ATOM	8199	HB3	PHE	B	175	14.572	16.640	31.685	1.00	0.00
H										
ATOM	8200	HD1	PHE	B	175	14.219	17.020	34.105	1.00	0.00
H										
ATOM	8201	HD2	PHE	B	175	17.068	19.320	31.883	1.00	0.00
H										
ATOM	8202	HE1	PHE	B	175	15.291	17.756	36.222	1.00	0.00
H										
ATOM	8203	HE2	PHE	B	175	18.130	20.059	33.973	1.00	0.00
H										
ATOM	8204	HZ	PHE	B	175	17.243	19.271	36.160	1.00	0.00
H										
ATOM	8205	N	VAL	B	176	13.399	19.194	28.923	1.00	0.00
N										
ATOM	8206	CA	VAL	B	176	13.313	18.952	27.508	1.00	0.00
C										
ATOM	8207	C	VAL	B	176	14.705	18.546	27.040	1.00	0.00
C										
ATOM	8208	O	VAL	B	176	15.691	19.261	27.276	1.00	0.00
O										
ATOM	8209	CB	VAL	B	176	12.863	20.214	26.692	1.00	0.00
C										
ATOM	8210	CG1	VAL	B	176	12.761	19.883	25.274	1.00	0.00
C										
ATOM	8211	CG2	VAL	B	176	11.504	20.777	27.178	1.00	0.00
C										
ATOM	8212	H	VAL	B	176	13.620	20.133	29.238	1.00	0.00
H										
ATOM	8213	HA	VAL	B	176	12.617	18.136	27.323	1.00	0.00
H										
ATOM	8214	HB	VAL	B	176	13.619	20.989	26.811	1.00	0.00
H										
ATOM	8215	HG11	VAL	B	176	12.028	19.090	25.138	1.00	0.00
H										
ATOM	8216	HG12	VAL	B	176	12.448	20.765	24.717	1.00	0.00
H										
ATOM	8217	HG13	VAL	B	176	13.730	19.548	24.909	1.00	0.00
H										

ATOM	8218	HG21	VAL	B	176	11.583	21.065	28.225	1.00	0.00
H										
ATOM	8219	HG22	VAL	B	176	11.238	21.649	26.582	1.00	0.00
H										
ATOM	8220	HG23	VAL	B	176	10.734	20.014	27.069	1.00	0.00
H										
ATOM	8221	N	LYS	B	177	14.745	17.417	26.333	1.00	0.00
N										
ATOM	8222	CA	LYS	B	177	15.961	16.768	25.855	1.00	0.00
C										
ATOM	8223	C	LYS	B	177	15.748	16.276	24.431	1.00	0.00
C										
ATOM	8224	O	LYS	B	177	14.763	15.560	24.155	1.00	0.00
O										
ATOM	8225	CB	LYS	B	177	16.275	15.521	26.695	1.00	0.00
C										
ATOM	8226	CG	LYS	B	177	16.442	15.770	28.144	1.00	0.00
C										
ATOM	8227	CD	LYS	B	177	16.806	14.514	28.895	1.00	0.00
C										
ATOM	8228	CE	LYS	B	177	17.456	14.866	30.276	1.00	0.00
C										
ATOM	8229	NZ	LYS	B	177	18.097	13.661	30.942	1.00	0.00
N1+										
ATOM	8230	H	LYS	B	177	13.859	16.974	26.109	1.00	0.00
H										
ATOM	8231	HA	LYS	B	177	16.797	17.465	25.890	1.00	0.00
H										
ATOM	8232	HB2	LYS	B	177	17.198	15.084	26.319	1.00	0.00
H										
ATOM	8233	HB3	LYS	B	177	15.458	14.812	26.566	1.00	0.00
H										
ATOM	8234	HG2	LYS	B	177	15.507	16.160	28.544	1.00	0.00
H										
ATOM	8235	HG3	LYS	B	177	17.232	16.506	28.285	1.00	0.00
H										
ATOM	8236	HD2	LYS	B	177	17.514	13.936	28.303	1.00	0.00
H										
ATOM	8237	HD3	LYS	B	177	15.906	13.924	29.063	1.00	0.00
H										
ATOM	8238	HE2	LYS	B	177	16.683	15.260	30.935	1.00	0.00
H										
ATOM	8239	HE3	LYS	B	177	18.220	15.626	30.119	1.00	0.00
H										
ATOM	8240	HZ1	LYS	B	177	18.824	13.289	30.340	1.00	0.00
H										
ATOM	8241	HZ2	LYS	B	177	18.502	13.941	31.830	1.00	0.00
H										
ATOM	8242	HZ3	LYS	B	177	17.392	12.948	31.101	1.00	0.00
H										
ATOM	8243	N	PRO	B	178	16.666	16.620	23.529	1.00	0.00
N										
ATOM	8244	CA	PRO	B	178	16.664	15.945	22.229	1.00	0.00
C										
ATOM	8245	C	PRO	B	178	16.931	14.421	22.406	1.00	0.00
C										

ATOM	8246	O	PRO	B	178	17.742	14.025	23.238	1.00	0.00
O										
ATOM	8247	CB	PRO	B	178	17.807	16.629	21.461	1.00	0.00
C										
ATOM	8248	CG	PRO	B	178	18.047	17.885	22.163	1.00	0.00
C										
ATOM	8249	CD	PRO	B	178	17.750	17.601	23.626	1.00	0.00
C										
ATOM	8250	HA	PRO	B	178	15.715	16.107	21.720	1.00	0.00
H										
ATOM	8251	HB2	PRO	B	178	17.513	16.819	20.430	1.00	0.00
H										
ATOM	8252	HB3	PRO	B	178	18.701	16.008	21.475	1.00	0.00
H										
ATOM	8253	HG2	PRO	B	178	17.386	18.664	21.785	1.00	0.00
H										
ATOM	8254	HG3	PRO	B	178	19.083	18.198	22.039	1.00	0.00
H										
ATOM	8255	HD2	PRO	B	178	18.618	17.183	24.133	1.00	0.00
H										
ATOM	8256	HD3	PRO	B	178	17.424	18.501	24.146	1.00	0.00
H										
ATOM	8257	N	ALA	B	179	16.229	13.595	21.660	1.00	0.00
N										
ATOM	8258	CA	ALA	B	179	16.348	12.151	21.852	1.00	0.00
C										
ATOM	8259	C	ALA	B	179	17.758	11.606	21.523	1.00	0.00
C										
ATOM	8260	O	ALA	B	179	18.234	10.647	22.165	1.00	0.00
O										
ATOM	8261	CB	ALA	B	179	15.262	11.406	21.038	1.00	0.00
C										
ATOM	8262	H	ALA	B	179	15.603	13.962	20.950	1.00	0.00
H										
ATOM	8263	HA	ALA	B	179	16.160	11.948	22.905	1.00	0.00
H										
ATOM	8264	HB1	ALA	B	179	15.381	11.634	19.980	1.00	0.00
H										
ATOM	8265	HB2	ALA	B	179	15.365	10.333	21.192	1.00	0.00
H										
ATOM	8266	HB3	ALA	B	179	14.275	11.728	21.369	1.00	0.00
H										
ATOM	8267	N	ASN	B	180	18.407	12.245	20.541	1.00	0.00
N										
ATOM	8268	CA	ASN	B	180	19.545	11.674	19.786	1.00	0.00
C										
ATOM	8269	C	ASN	B	180	20.807	12.462	19.879	1.00	0.00
C										
ATOM	8270	O	ASN	B	180	21.617	12.434	18.932	1.00	0.00
O										
ATOM	8271	CB	ASN	B	180	19.243	11.625	18.297	1.00	0.00
C										
ATOM	8272	CG	ASN	B	180	18.041	10.808	17.983	1.00	0.00
C										
ATOM	8273	OD1	ASN	B	180	18.048	9.608	18.239	1.00	0.00
O										

ATOM	8274	ND2	ASN	B	180	16.974	11.446	17.449	1.00	0.00
N										
ATOM	8275	H	ASN	B	180	18.099	13.181	20.299	1.00	0.00
H										
ATOM	8276	HA	ASN	B	180	19.733	10.662	20.142	1.00	0.00
H										
ATOM	8277	HB2	ASN	B	180	20.101	11.196	17.781	1.00	0.00
H										
ATOM	8278	HB3	ASN	B	180	19.077	12.641	17.941	1.00	0.00
H										
ATOM	8279	HD21	ASN	B	180	16.134	10.925	17.220	1.00	0.00
H										
ATOM	8280	HD22	ASN	B	180	17.014	12.446	17.277	1.00	0.00
H										
ATOM	8281	N	LEU	B	181	20.977	13.222	20.956	1.00	0.00
N										
ATOM	8282	CA	LEU	B	181	22.303	13.671	21.297	1.00	0.00
C										
ATOM	8283	C	LEU	B	181	22.783	12.761	22.454	1.00	0.00
C										
ATOM	8284	O	LEU	B	181	22.125	11.731	22.771	1.00	0.00
O										
ATOM	8285	CB	LEU	B	181	22.338	15.183	21.605	1.00	0.00
C										
ATOM	8286	CG	LEU	B	181	21.666	16.111	20.554	1.00	0.00
C										
ATOM	8287	CD1	LEU	B	181	22.306	17.480	20.613	1.00	0.00
C										
ATOM	8288	CD2	LEU	B	181	21.667	15.572	19.122	1.00	0.00
C										
ATOM	8289	H	LEU	B	181	20.183	13.483	21.531	1.00	0.00
H										
ATOM	8290	HA	LEU	B	181	22.949	13.490	20.439	1.00	0.00
H										
ATOM	8291	HB2	LEU	B	181	23.382	15.481	21.692	1.00	0.00
H										
ATOM	8292	HB3	LEU	B	181	21.835	15.341	22.558	1.00	0.00
H										
ATOM	8293	HG	LEU	B	181	20.625	16.231	20.851	1.00	0.00
H										
ATOM	8294	HD11	LEU	B	181	23.370	17.394	20.395	1.00	0.00
H										
ATOM	8295	HD12	LEU	B	181	21.837	18.132	19.878	1.00	0.00
H										
ATOM	8296	HD13	LEU	B	181	22.172	17.901	21.609	1.00	0.00
H										
ATOM	8297	HD21	LEU	B	181	21.131	14.625	19.090	1.00	0.00
H										
ATOM	8298	HD22	LEU	B	181	21.177	16.289	18.464	1.00	0.00
H										
ATOM	8299	HD23	LEU	B	181	22.694	15.419	18.792	1.00	0.00
H										
ATOM	8300	N	GLY	B	182	23.935	13.104	23.019	1.00	0.00
N										
ATOM	8301	CA	GLY	B	182	24.554	12.322	24.094	1.00	0.00
C										



ATOM	8302	C	GLY	B	182	24.611	13.074	25.417	1.00	0.00
C										
ATOM	8303	O	GLY	B	182	23.914	12.727	26.389	1.00	0.00
O										
ATOM	8304	H	GLY	B	182	24.406	13.942	22.693	1.00	0.00
H										
ATOM	8305	HA2	GLY	B	182	25.570	12.065	23.796	1.00	0.00
H										
ATOM	8306	HA3	GLY	B	182	23.976	11.410	24.237	1.00	0.00
H										
ATOM	8307	N	SER	B	183	25.463	14.091	25.464	1.00	0.00
N										
ATOM	8308	CA	SER	B	183	25.556	14.960	26.641	1.00	0.00
C										
ATOM	8309	C	SER	B	183	25.658	16.414	26.167	1.00	0.00
C										
ATOM	8310	O	SER	B	183	26.632	17.119	26.489	1.00	0.00
O										
ATOM	8311	CB	SER	B	183	26.763	14.575	27.507	1.00	0.00
C										
ATOM	8312	OG	SER	B	183	26.893	15.454	28.619	1.00	0.00
O										
ATOM	8313	H	SER	B	183	26.064	14.271	24.666	1.00	0.00
H										
ATOM	8314	HA	SER	B	183	24.649	14.847	27.233	1.00	0.00
H										
ATOM	8315	HB2	SER	B	183	27.667	14.630	26.902	1.00	0.00
H										
ATOM	8316	HB3	SER	B	183	26.630	13.557	27.871	1.00	0.00
H										
ATOM	8317	HG	SER	B	183	26.073	15.406	29.176	1.00	0.00
H										
ATOM	8318	N	SER	B	184	24.646	16.856	25.415	1.00	0.00
N										
ATOM	8319	CA	SER	B	184	24.812	18.062	24.610	1.00	0.00
C										
ATOM	8320	C	SER	B	184	23.669	19.107	24.695	1.00	0.00
C										
ATOM	8321	O	SER	B	184	22.792	19.077	25.564	1.00	0.00
O										
ATOM	8322	CB	SER	B	184	25.108	17.663	23.136	1.00	0.00
C										
ATOM	8323	OG	SER	B	184	26.176	16.734	23.050	1.00	0.00
O										
ATOM	8324	H	SER	B	184	23.764	16.355	25.404	1.00	0.00
H										
ATOM	8325	HA	SER	B	184	25.709	18.557	24.980	1.00	0.00
H										
ATOM	8326	HB2	SER	B	184	25.372	18.558	22.574	1.00	0.00
H										
ATOM	8327	HB3	SER	B	184	24.214	17.215	22.705	1.00	0.00
H										
ATOM	8328	HG	SER	B	184	25.942	15.913	23.556	1.00	0.00
H										
ATOM	8329	N	VAL	B	185	23.743	20.050	23.779	1.00	0.00
N										

ATOM	8330	CA	VAL	B	185	22.829	21.160	23.695	1.00	0.00
C										
ATOM	8331	C	VAL	B	185	21.428	20.696	23.408	1.00	0.00
C										
ATOM	8332	O	VAL	B	185	21.187	19.517	23.172	1.00	0.00
O										
ATOM	8333	CB	VAL	B	185	23.297	22.112	22.570	1.00	0.00
C										
ATOM	8334	CG1	VAL	B	185	24.572	22.901	23.034	1.00	0.00
C										
ATOM	8335	CG2	VAL	B	185	23.538	21.294	21.265	1.00	0.00
C										
ATOM	8336	H	VAL	B	185	24.488	19.992	23.092	1.00	0.00
H										
ATOM	8337	HA	VAL	B	185	22.837	21.699	24.641	1.00	0.00
H										
ATOM	8338	HB	VAL	B	185	22.502	22.832	22.379	1.00	0.00
H										
ATOM	8339	HG11	VAL	B	185	25.371	22.198	23.264	1.00	0.00
H										
ATOM	8340	HG12	VAL	B	185	24.896	23.569	22.237	1.00	0.00
H										
ATOM	8341	HG13	VAL	B	185	24.335	23.485	23.922	1.00	0.00
H										
ATOM	8342	HG21	VAL	B	185	22.611	20.807	20.966	1.00	0.00
H										
ATOM	8343	HG22	VAL	B	185	23.868	21.964	20.472	1.00	0.00
H										
ATOM	8344	HG23	VAL	B	185	24.303	20.541	21.445	1.00	0.00
H										
ATOM	8345	N	GLY	B	186	20.494	21.633	23.447	1.00	0.00
N										
ATOM	8346	CA	GLY	B	186	19.091	21.308	23.258	1.00	0.00
C										
ATOM	8347	C	GLY	B	186	18.406	21.050	24.573	1.00	0.00
C										
ATOM	8348	O	GLY	B	186	17.236	21.362	24.699	1.00	0.00
O										
ATOM	8349	H	GLY	B	186	20.763	22.598	23.612	1.00	0.00
H										
ATOM	8350	HA2	GLY	B	186	19.014	20.417	22.637	1.00	0.00
H										
ATOM	8351	HA3	GLY	B	186	18.598	22.142	22.759	1.00	0.00
H										
ATOM	8352	N	ILE	B	187	19.146	20.519	25.557	1.00	0.00
N										
ATOM	8353	CA	ILE	B	187	18.614	20.233	26.902	1.00	0.00
C										
ATOM	8354	C	ILE	B	187	18.343	21.495	27.695	1.00	0.00
C										
ATOM	8355	O	ILE	B	187	19.219	22.338	27.852	1.00	0.00
O										
ATOM	8356	CB	ILE	B	187	19.570	19.399	27.776	1.00	0.00
C										
ATOM	8357	CG1	ILE	B	187	19.868	18.041	27.134	1.00	0.00
C										

ATOM	8358	CG2	ILE	B	187	18.956	19.170	29.172	1.00	0.00
C										
ATOM	8359	CD1	ILE	B	187	20.573	17.084	28.071	1.00	0.00
C										
ATOM	8360	H	ILE	B	187	20.119	20.304	25.367	1.00	0.00
H										
ATOM	8361	HA	ILE	B	187	17.679	19.686	26.794	1.00	0.00
H										
ATOM	8362	HB	ILE	B	187	20.505	19.945	27.890	1.00	0.00
H										
ATOM	8363	HG12	ILE	B	187	20.500	18.201	26.262	1.00	0.00
H										
ATOM	8364	HG13	ILE	B	187	18.927	17.591	26.822	1.00	0.00
H										
ATOM	8365	HG21	ILE	B	187	18.011	18.638	29.070	1.00	0.00
H										
ATOM	8366	HG22	ILE	B	187	19.642	18.580	29.778	1.00	0.00
H										
ATOM	8367	HG23	ILE	B	187	18.781	20.131	29.654	1.00	0.00
H										
ATOM	8368	HD11	ILE	B	187	19.948	16.906	28.945	1.00	0.00
H										
ATOM	8369	HD12	ILE	B	187	20.755	16.142	27.557	1.00	0.00
H										
ATOM	8370	HD13	ILE	B	187	21.522	17.517	28.385	1.00	0.00
H										
ATOM	8371	N	SER	B	188	17.120	21.619	28.180	1.00	0.00
N										
ATOM	8372	CA	SER	B	188	16.765	22.672	29.113	1.00	0.00
C										
ATOM	8373	C	SER	B	188	15.846	22.160	30.202	1.00	0.00
C										
ATOM	8374	O	SER	B	188	14.914	21.403	29.940	1.00	0.00
O										
ATOM	8375	CB	SER	B	188	16.133	23.892	28.411	1.00	0.00
C										
ATOM	8376	OG	SER	B	188	16.063	23.751	27.008	1.00	0.00
O										
ATOM	8377	H	SER	B	188	16.407	20.958	27.891	1.00	0.00
H										
ATOM	8378	HA	SER	B	188	17.683	23.009	29.591	1.00	0.00
H										
ATOM	8379	HB2	SER	B	188	16.731	24.773	28.641	1.00	0.00
H										
ATOM	8380	HB3	SER	B	188	15.123	24.029	28.796	1.00	0.00
H										
ATOM	8381	HG	SER	B	188	15.512	22.957	26.782	1.00	0.00
H										
ATOM	8382	N	LYS	B	189	16.160	22.570	31.431	1.00	0.00
N										
ATOM	8383	CA	LYS	B	189	15.273	22.427	32.577	1.00	0.00
C										
ATOM	8384	C	LYS	B	189	14.225	23.524	32.492	1.00	0.00
C										
ATOM	8385	O	LYS	B	189	14.553	24.698	32.256	1.00	0.00
O										

ATOM	8386	CB	LYS	B	189	16.050	22.539	33.897	1.00	0.00
C										
ATOM	8387	CG	LYS	B	189	15.168	22.734	35.147	1.00	0.00
C										
ATOM	8388	CD	LYS	B	189	15.910	22.629	36.507	1.00	0.00
C										
ATOM	8389	CE	LYS	B	189	17.447	22.466	36.402	1.00	0.00
C										
ATOM	8390	NZ	LYS	B	189	18.119	23.528	35.570	1.00	0.00
N1+										
ATOM	8391	H	LYS	B	189	17.066	23.005	31.576	1.00	0.00
H										
ATOM	8392	HA	LYS	B	189	14.781	21.457	32.531	1.00	0.00
H										
ATOM	8393	HB2	LYS	B	189	16.726	23.390	33.822	1.00	0.00
H										
ATOM	8394	HB3	LYS	B	189	16.629	21.627	34.029	1.00	0.00
H										
ATOM	8395	HG2	LYS	B	189	14.388	21.975	35.130	1.00	0.00
H										
ATOM	8396	HG3	LYS	B	189	14.714	23.722	35.087	1.00	0.00
H										
ATOM	8397	HD2	LYS	B	189	15.515	21.767	37.042	1.00	0.00
H										
ATOM	8398	HD3	LYS	B	189	15.704	23.535	37.075	1.00	0.00
H										
ATOM	8399	HE2	LYS	B	189	17.660	21.496	35.956	1.00	0.00
H										
ATOM	8400	HE3	LYS	B	189	17.866	22.503	37.407	1.00	0.00
H										
ATOM	8401	HZ1	LYS	B	189	17.940	24.441	35.978	1.00	0.00
H										
ATOM	8402	HZ2	LYS	B	189	19.119	23.358	35.546	1.00	0.00
H										
ATOM	8403	HZ3	LYS	B	189	17.748	23.502	34.625	1.00	0.00
H										
ATOM	8404	N	CYS	B	190	12.969	23.138	32.682	1.00	0.00
N										
ATOM	8405	CA	CYS	B	190	11.852	24.061	32.519	1.00	0.00
C										
ATOM	8406	C	CYS	B	190	11.018	24.032	33.793	1.00	0.00
C										
ATOM	8407	O	CYS	B	190	10.596	22.960	34.275	1.00	0.00
O										
ATOM	8408	CB	CYS	B	190	11.018	23.715	31.285	1.00	0.00
C										
ATOM	8409	SG	CYS	B	190	12.018	23.629	29.723	1.00	0.00
S										
ATOM	8410	H	CYS	B	190	12.782	22.177	32.947	1.00	0.00
H										
ATOM	8411	HA	CYS	B	190	12.252	25.066	32.393	1.00	0.00
H										
ATOM	8412	HB2	CYS	B	190	10.251	24.478	31.162	1.00	0.00
H										
ATOM	8413	HB3	CYS	B	190	10.546	22.748	31.447	1.00	0.00
H										

ATOM	8414	HG	CYS	B	190	13.005	22.645	29.854	1.00	0.00
H										
ATOM	8415	N	ASN	B	191	10.819	25.227	34.342	1.00	0.00
N										
ATOM	8416	CA	ASN	B	191	10.134	25.403	35.598	1.00	0.00
C										
ATOM	8417	C	ASN	B	191	8.649	25.706	35.361	1.00	0.00
C										
ATOM	8418	O	ASN	B	191	7.858	25.729	36.304	1.00	0.00
O										
ATOM	8419	CB	ASN	B	191	10.841	26.497	36.414	1.00	0.00
C										
ATOM	8420	CG	ASN	B	191	12.273	26.084	36.858	1.00	0.00
C										
ATOM	8421	OD1	ASN	B	191	12.535	24.936	37.267	1.00	0.00
O										
ATOM	8422	ND2	ASN	B	191	13.193	27.038	36.809	1.00	0.00
N										
ATOM	8423	H	ASN	B	191	11.164	26.050	33.856	1.00	0.00
H										
ATOM	8424	HA	ASN	B	191	10.204	24.469	36.154	1.00	0.00
H										
ATOM	8425	HB2	ASN	B	191	10.248	26.708	37.303	1.00	0.00
H										
ATOM	8426	HB3	ASN	B	191	10.911	27.397	35.803	1.00	0.00
H										
ATOM	8427	HD21	ASN	B	191	14.149	26.837	37.085	1.00	0.00
H										
ATOM	8428	HD22	ASN	B	191	12.942	27.971	36.495	1.00	0.00
H										
ATOM	8429	N	ASN	B	192	8.271	25.907	34.102	1.00	0.00
N										
ATOM	8430	CA	ASN	B	192	6.880	26.235	33.743	1.00	0.00
C										
ATOM	8431	C	ASN	B	192	6.610	26.086	32.254	1.00	0.00
C										
ATOM	8432	O	ASN	B	192	7.549	25.860	31.463	1.00	0.00
O										
ATOM	8433	CB	ASN	B	192	6.530	27.660	34.193	1.00	0.00
C										
ATOM	8434	CG	ASN	B	192	7.506	28.697	33.661	1.00	0.00
C										
ATOM	8435	OD1	ASN	B	192	8.197	29.359	34.443	1.00	0.00
O										
ATOM	8436	ND2	ASN	B	192	7.563	28.852	32.332	1.00	0.00
N										
ATOM	8437	H	ASN	B	192	8.964	25.833	33.364	1.00	0.00
H										
ATOM	8438	HA	ASN	B	192	6.225	25.546	34.273	1.00	0.00
H										
ATOM	8439	HB2	ASN	B	192	6.543	27.695	35.281	1.00	0.00
H										
ATOM	8440	HB3	ASN	B	192	5.532	27.904	33.833	1.00	0.00
H										
ATOM	8441	HD21	ASN	B	192	8.199	29.532	31.928	1.00	0.00
H										

ATOM	8442	HD22	ASN	B	192	6.971	28.291	31.729	1.00	0.00
H										
ATOM	8443	N	GLU	B	193	5.337	26.198	31.880	1.00	0.00
N										
ATOM	8444	CA	GLU	B	193	4.910	25.948	30.512	1.00	0.00
C										
ATOM	8445	C	GLU	B	193	5.594	26.848	29.478	1.00	0.00
C										
ATOM	8446	O	GLU	B	193	5.915	26.404	28.355	1.00	0.00
O										
ATOM	8447	CB	GLU	B	193	3.394	26.098	30.366	1.00	0.00
C										
ATOM	8448	CG	GLU	B	193	2.869	25.477	29.068	1.00	0.00
C										
ATOM	8449	CD	GLU	B	193	1.382	25.671	28.838	1.00	0.00
C										
ATOM	8450	OE1	GLU	B	193	0.757	24.721	28.329	1.00	0.00
O										
ATOM	8451	OE2	GLU	B	193	0.830	26.765	29.136	1.00	0.00
O1-										
ATOM	8452	H	GLU	B	193	4.644	26.468	32.570	1.00	0.00
H										
ATOM	8453	HA	GLU	B	193	5.164	24.916	30.271	1.00	0.00
H										
ATOM	8454	HB2	GLU	B	193	3.145	27.158	30.373	1.00	0.00
H										
ATOM	8455	HB3	GLU	B	193	2.911	25.606	31.209	1.00	0.00
H										
ATOM	8456	HG2	GLU	B	193	3.074	24.408	29.094	1.00	0.00
H										
ATOM	8457	HG3	GLU	B	193	3.404	25.929	28.234	1.00	0.00
H										
ATOM	8458	N	ALA	B	194	5.795	28.105	29.846	1.00	0.00
N										
ATOM	8459	CA	ALA	B	194	6.428	29.078	28.944	1.00	0.00
C										
ATOM	8460	C	ALA	B	194	7.884	28.753	28.729	1.00	0.00
C										
ATOM	8461	O	ALA	B	194	8.367	28.913	27.639	1.00	0.00
O										
ATOM	8462	CB	ALA	B	194	6.255	30.555	29.471	1.00	0.00
C										
ATOM	8463	H	ALA	B	194	5.505	28.402	30.772	1.00	0.00
H										
ATOM	8464	HA	ALA	B	194	5.928	29.009	27.979	1.00	0.00
H										
ATOM	8465	HB1	ALA	B	194	6.716	30.646	30.453	1.00	0.00
H										
ATOM	8466	HB2	ALA	B	194	6.735	31.245	28.779	1.00	0.00
H										
ATOM	8467	HB3	ALA	B	194	5.195	30.792	29.544	1.00	0.00
H										
ATOM	8468	N	GLU	B	195	8.579	28.267	29.759	1.00	0.00
N										
ATOM	8469	CA	GLU	B	195	9.957	27.772	29.590	1.00	0.00
C										

ATOM	8470	C	GLU	B	195	9.971	26.442	28.795	1.00	0.00
C										
ATOM	8471	O	GLU	B	195	10.868	26.203	27.992	1.00	0.00
O										
ATOM	8472	CB	GLU	B	195	10.669	27.647	30.951	1.00	0.00
C										
ATOM	8473	CG	GLU	B	195	10.750	28.988	31.711	1.00	0.00
C										
ATOM	8474	CD	GLU	B	195	11.726	28.959	32.888	1.00	0.00
C										
ATOM	8475	OE1	GLU	B	195	12.180	27.875	33.322	1.00	0.00
O										
ATOM	8476	OE2	GLU	B	195	12.053	30.048	33.382	1.00	0.00
O1-										
ATOM	8477	H	GLU	B	195	8.150	28.237	30.678	1.00	0.00
H										
ATOM	8478	HA	GLU	B	195	10.501	28.510	29.003	1.00	0.00
H										
ATOM	8479	HB2	GLU	B	195	11.681	27.281	30.782	1.00	0.00
H										
ATOM	8480	HB3	GLU	B	195	10.123	26.932	31.565	1.00	0.00
H										
ATOM	8481	HG2	GLU	B	195	9.759	29.231	32.090	1.00	0.00
H										
ATOM	8482	HG3	GLU	B	195	11.072	29.761	31.014	1.00	0.00
H										
ATOM	8483	N	LEU	B	196	8.944	25.619	28.996	1.00	0.00
N										
ATOM	8484	CA	LEU	B	196	8.742	24.386	28.228	1.00	0.00
C										
ATOM	8485	C	LEU	B	196	8.739	24.714	26.733	1.00	0.00
C										
ATOM	8486	O	LEU	B	196	9.425	24.052	25.960	1.00	0.00
O										
ATOM	8487	CB	LEU	B	196	7.419	23.661	28.615	1.00	0.00
C										
ATOM	8488	CG	LEU	B	196	7.371	22.107	28.541	1.00	0.00
C										
ATOM	8489	CD1	LEU	B	196	5.993	21.580	28.237	1.00	0.00
C										
ATOM	8490	CD2	LEU	B	196	8.380	21.504	27.582	1.00	0.00
C										
ATOM	8491	H	LEU	B	196	8.268	25.857	29.715	1.00	0.00
H										
ATOM	8492	HA	LEU	B	196	9.575	23.713	28.431	1.00	0.00
H										
ATOM	8493	HB2	LEU	B	196	6.641	24.038	27.953	1.00	0.00
H										
ATOM	8494	HB3	LEU	B	196	7.189	23.941	29.642	1.00	0.00
H										
ATOM	8495	HG	LEU	B	196	7.631	21.742	29.534	1.00	0.00
H										
ATOM	8496	HD11	LEU	B	196	5.660	21.970	27.276	1.00	0.00
H										
ATOM	8497	HD12	LEU	B	196	6.021	20.493	28.198	1.00	0.00
H										

ATOM	8498	HD13	LEU	B	196	5.303	21.898	29.017	1.00	0.00
H										
ATOM	8499	HD21	LEU	B	196	9.387	21.781	27.893	1.00	0.00
H										
ATOM	8500	HD22	LEU	B	196	8.284	20.420	27.588	1.00	0.00
H										
ATOM	8501	HD23	LEU	B	196	8.195	21.880	26.577	1.00	0.00
H										
ATOM	8502	N	LYS	B	197	7.966	25.744	26.341	1.00	0.00
N										
ATOM	8503	CA	LYS	B	197	7.779	26.026	24.930	1.00	0.00
C										
ATOM	8504	C	LYS	B	197	9.057	26.599	24.336	1.00	0.00
C										
ATOM	8505	O	LYS	B	197	9.441	26.241	23.218	1.00	0.00
O										
ATOM	8506	CB	LYS	B	197	6.625	26.959	24.684	1.00	0.00
C										
ATOM	8507	CG	LYS	B	197	5.226	26.397	24.959	1.00	0.00
C										
ATOM	8508	CD	LYS	B	197	4.224	27.081	24.024	1.00	0.00
C										
ATOM	8509	CE	LYS	B	197	2.913	27.505	24.672	1.00	0.00
C										
ATOM	8510	NZ	LYS	B	197	2.177	28.576	23.785	1.00	0.00
N1+										
ATOM	8511	H	LYS	B	197	7.512	26.326	27.037	1.00	0.00
H										
ATOM	8512	HA	LYS	B	197	7.566	25.085	24.424	1.00	0.00
H										
ATOM	8513	HB2	LYS	B	197	6.661	27.262	23.639	1.00	0.00
H										
ATOM	8514	HB3	LYS	B	197	6.763	27.831	25.320	1.00	0.00
H										
ATOM	8515	HG2	LYS	B	197	4.952	26.590	25.995	1.00	0.00
H										
ATOM	8516	HG3	LYS	B	197	5.221	25.323	24.777	1.00	0.00
H										
ATOM	8517	HD2	LYS	B	197	3.992	26.390	23.215	1.00	0.00
H										
ATOM	8518	HD3	LYS	B	197	4.700	27.972	23.615	1.00	0.00
H										
ATOM	8519	HE2	LYS	B	197	3.120	27.932	25.652	1.00	0.00
H										
ATOM	8520	HE3	LYS	B	197	2.272	26.632	24.785	1.00	0.00
H										
ATOM	8521	HZ1	LYS	B	197	1.980	28.182	22.871	1.00	0.00
H										
ATOM	8522	HZ2	LYS	B	197	1.307	28.846	24.232	1.00	0.00
H										
ATOM	8523	HZ3	LYS	B	197	2.771	29.393	23.680	1.00	0.00
H										
ATOM	8524	N	GLU	B	198	9.742	27.451	25.086	1.00	0.00
N										
ATOM	8525	CA	GLU	B	198	11.075	27.895	24.674	1.00	0.00
C										



ATOM	8526	C	GLU	B	198	11.948	26.651	24.517	1.00	0.00
C										
ATOM	8527	O	GLU	B	198	12.596	26.448	23.486	1.00	0.00
O										
ATOM	8528	CB	GLU	B	198	11.703	28.884	25.675	1.00	0.00
C										
ATOM	8529	CG	GLU	B	198	12.913	29.631	25.096	1.00	0.00
C										
ATOM	8530	CD	GLU	B	198	13.460	30.785	25.945	1.00	0.00
C										
ATOM	8531	OE1	GLU	B	198	14.233	30.554	26.898	1.00	0.00
O										
ATOM	8532	OE2	GLU	B	198	13.160	31.955	25.629	1.00	0.00
O1-										
ATOM	8533	H	GLU	B	198	9.341	27.797	25.951	1.00	0.00
H										
ATOM	8534	HA	GLU	B	198	10.993	28.386	23.706	1.00	0.00
H										
ATOM	8535	HB2	GLU	B	198	12.025	28.329	26.555	1.00	0.00
H										
ATOM	8536	HB3	GLU	B	198	10.948	29.614	25.962	1.00	0.00
H										
ATOM	8537	HG2	GLU	B	198	12.621	30.038	24.129	1.00	0.00
H										
ATOM	8538	HG3	GLU	B	198	13.716	28.908	24.959	1.00	0.00
H										
ATOM	8539	N	GLY	B	199	11.922	25.822	25.553	1.00	0.00
N										
ATOM	8540	CA	GLY	B	199	12.636	24.544	25.581	1.00	0.00
C										
ATOM	8541	C	GLY	B	199	12.441	23.630	24.388	1.00	0.00
C										
ATOM	8542	O	GLY	B	199	13.423	23.222	23.763	1.00	0.00
O										
ATOM	8543	H	GLY	B	199	11.378	26.087	26.368	1.00	0.00
H										
ATOM	8544	HA2	GLY	B	199	12.309	24.002	26.468	1.00	0.00
H										
ATOM	8545	HA3	GLY	B	199	13.700	24.761	25.660	1.00	0.00
H										
ATOM	8546	N	ILE	B	200	11.185	23.344	24.055	1.00	0.00
N										
ATOM	8547	CA	ILE	B	200	10.865	22.519	22.877	1.00	0.00
C										
ATOM	8548	C	ILE	B	200	11.481	23.170	21.645	1.00	0.00
C										
ATOM	8549	O	ILE	B	200	12.103	22.487	20.836	1.00	0.00
O										
ATOM	8550	CB	ILE	B	200	9.327	22.372	22.593	1.00	0.00
C										
ATOM	8551	CG1	ILE	B	200	8.534	21.789	23.789	1.00	0.00
C										
ATOM	8552	CG2	ILE	B	200	9.104	21.538	21.396	1.00	0.00
C										
ATOM	8553	CD1	ILE	B	200	9.047	20.554	24.313	1.00	0.00
C										

ATOM	8554	H	ILE	B	200	10.427	23.704	24.627	1.00	0.00
H										
ATOM	8555	HA	ILE	B	200	11.297	21.529	23.009	1.00	0.00
H										
ATOM	8556	HB	ILE	B	200	8.931	23.365	22.384	1.00	0.00
H										
ATOM	8557	HG12	ILE	B	200	7.509	21.618	23.463	1.00	0.00
H										
ATOM	8558	HG13	ILE	B	200	8.541	22.526	24.591	1.00	0.00
H										
ATOM	8559	HG21	ILE	B	200	9.531	20.550	21.558	1.00	0.00
H										
ATOM	8560	HG22	ILE	B	200	8.034	21.446	21.212	1.00	0.00
H										
ATOM	8561	HG23	ILE	B	200	9.581	22.004	20.535	1.00	0.00
H										
ATOM	8562	HD11	ILE	B	200	10.069	20.704	24.659	1.00	0.00
H										
ATOM	8563	HD12	ILE	B	200	8.427	20.227	25.145	1.00	0.00
H										
ATOM	8564	HD13	ILE	B	200	9.037	19.796	23.532	1.00	0.00
H										
ATOM	8565	N	LYS	B	201	11.292	24.488	21.484	1.00	0.00
N										
ATOM	8566	CA	LYS	B	201	11.721	25.165	20.237	1.00	0.00
C										
ATOM	8567	C	LYS	B	201	13.242	25.096	20.086	1.00	0.00
C										
ATOM	8568	O	LYS	B	201	13.737	24.805	19.024	1.00	0.00
O										
ATOM	8569	CB	LYS	B	201	11.268	26.628	20.174	1.00	0.00
C										
ATOM	8570	CG	LYS	B	201	10.553	27.099	18.865	1.00	0.00
C										
ATOM	8571	CD	LYS	B	201	10.942	26.363	17.511	1.00	0.00
C										
ATOM	8572	CE	LYS	B	201	10.594	27.218	16.231	1.00	0.00
C										
ATOM	8573	NZ	LYS	B	201	9.549	26.622	15.293	1.00	0.00
N1+										
ATOM	8574	H	LYS	B	201	10.851	25.028	22.223	1.00	0.00
H										
ATOM	8575	HA	LYS	B	201	11.274	24.636	19.396	1.00	0.00
H										
ATOM	8576	HB2	LYS	B	201	12.151	27.250	20.307	1.00	0.00
H										
ATOM	8577	HB3	LYS	B	201	10.579	26.793	21.001	1.00	0.00
H										
ATOM	8578	HG2	LYS	B	201	10.773	28.157	18.736	1.00	0.00
H										
ATOM	8579	HG3	LYS	B	201	9.482	26.966	19.012	1.00	0.00
H										
ATOM	8580	HD2	LYS	B	201	10.399	25.420	17.458	1.00	0.00
H										
ATOM	8581	HD3	LYS	B	201	12.013	26.165	17.517	1.00	0.00
H										

ATOM	8582	HE2	LYS	B	201	11.512	27.357	15.662	1.00	0.00
H										
ATOM	8583	HE3	LYS	B	201	10.226	28.187	16.567	1.00	0.00
H										
ATOM	8584	HZ1	LYS	B	201	8.676	26.497	15.795	1.00	0.00
H										
ATOM	8585	HZ2	LYS	B	201	9.401	27.248	14.508	1.00	0.00
H										
ATOM	8586	HZ3	LYS	B	201	9.875	25.723	14.952	1.00	0.00
H										
ATOM	8587	N	GLU	B	202	13.978	25.361	21.156	1.00	0.00
N										
ATOM	8588	CA	GLU	B	202	15.450	25.328	21.089	1.00	0.00
C										
ATOM	8589	C	GLU	B	202	15.891	23.916	20.769	1.00	0.00
C										
ATOM	8590	O	GLU	B	202	16.806	23.734	19.993	1.00	0.00
O										
ATOM	8591	CB	GLU	B	202	16.144	25.863	22.386	1.00	0.00
C										
ATOM	8592	CG	GLU	B	202	15.534	27.203	22.912	1.00	0.00
C										
ATOM	8593	CD	GLU	B	202	16.536	28.349	23.259	1.00	0.00
C										
ATOM	8594	OE1	GLU	B	202	16.993	29.078	22.329	1.00	0.00
O										
ATOM	8595	OE2	GLU	B	202	16.798	28.592	24.466	1.00	0.00
O1-										
ATOM	8596	H	GLU	B	202	13.522	25.591	22.033	1.00	0.00
H										
ATOM	8597	HA	GLU	B	202	15.758	25.966	20.262	1.00	0.00
H										
ATOM	8598	HB2	GLU	B	202	17.199	26.025	22.171	1.00	0.00
H										
ATOM	8599	HB3	GLU	B	202	16.044	25.109	23.166	1.00	0.00
H										
ATOM	8600	HG2	GLU	B	202	14.969	26.976	23.815	1.00	0.00
H										
ATOM	8601	HG3	GLU	B	202	14.857	27.580	22.146	1.00	0.00
H										
ATOM	8602	N	ALA	B	203	15.226	22.919	21.354	1.00	0.00
N										
ATOM	8603	CA	ALA	B	203	15.616	21.520	21.138	1.00	0.00
C										
ATOM	8604	C	ALA	B	203	15.302	21.097	19.713	1.00	0.00
C										
ATOM	8605	O	ALA	B	203	16.070	20.332	19.116	1.00	0.00
O										
ATOM	8606	CB	ALA	B	203	14.934	20.580	22.129	1.00	0.00
C										
ATOM	8607	H	ALA	B	203	14.438	23.131	21.958	1.00	0.00
H										
ATOM	8608	HA	ALA	B	203	16.692	21.443	21.284	1.00	0.00
H										
ATOM	8609	HB1	ALA	B	203	13.853	20.655	22.015	1.00	0.00
H										

ATOM	8610	HB2	ALA	B	203	15.250	19.557	21.934	1.00	0.00
H										
ATOM	8611	HB3	ALA	B	203	15.212	20.859	23.144	1.00	0.00
H										
ATOM	8612	N	PHE	B	204	14.204	21.603	19.140	1.00	0.00
N										
ATOM	8613	CA	PHE	B	204	13.866	21.199	17.784	1.00	0.00
C										
ATOM	8614	C	PHE	B	204	14.861	21.698	16.752	1.00	0.00
C										
ATOM	8615	O	PHE	B	204	14.822	21.268	15.624	1.00	0.00
O										
ATOM	8616	CB	PHE	B	204	12.411	21.512	17.415	1.00	0.00
C										
ATOM	8617	CG	PHE	B	204	11.445	20.420	17.809	1.00	0.00
C										
ATOM	8618	CD1	PHE	B	204	10.222	20.725	18.358	1.00	0.00
C										
ATOM	8619	CD2	PHE	B	204	11.776	19.083	17.646	1.00	0.00
C										
ATOM	8620	CE1	PHE	B	204	9.347	19.745	18.689	1.00	0.00
C										
ATOM	8621	CE2	PHE	B	204	10.900	18.098	17.990	1.00	0.00
C										
ATOM	8622	CZ	PHE	B	204	9.686	18.422	18.514	1.00	0.00
C										
ATOM	8623	H	PHE	B	204	13.616	22.259	19.644	1.00	0.00
H										
ATOM	8624	HA	PHE	B	204	13.947	20.113	17.771	1.00	0.00
H										
ATOM	8625	HB2	PHE	B	204	12.351	21.654	16.337	1.00	0.00
H										
ATOM	8626	HB3	PHE	B	204	12.117	22.432	17.919	1.00	0.00
H										
ATOM	8627	HD1	PHE	B	204	9.953	21.767	18.529	1.00	0.00
H										
ATOM	8628	HD2	PHE	B	204	12.749	18.817	17.237	1.00	0.00
H										
ATOM	8629	HE1	PHE	B	204	8.370	20.005	19.095	1.00	0.00
H										
ATOM	8630	HE2	PHE	B	204	11.170	17.053	17.846	1.00	0.00
H										
ATOM	8631	HZ	PHE	B	204	8.985	17.637	18.794	1.00	0.00
H										
ATOM	8632	N	GLN	B	205	15.767	22.578	17.167	1.00	0.00
N										
ATOM	8633	CA	GLN	B	205	16.800	23.111	16.293	1.00	0.00
C										
ATOM	8634	C	GLN	B	205	17.933	22.100	16.083	1.00	0.00
C										
ATOM	8635	O	GLN	B	205	18.629	22.159	15.068	1.00	0.00
O										
ATOM	8636	CB	GLN	B	205	17.332	24.448	16.831	1.00	0.00
C										
ATOM	8637	CG	GLN	B	205	16.336	25.628	16.659	1.00	0.00
C										

ATOM	8638	CD	GLN	B	205	16.619	26.834	17.575	1.00	0.00
C										
ATOM	8639	OE1	GLN	B	205	17.252	26.704	18.653	1.00	0.00
O										
ATOM	8640	NE2	GLN	B	205	16.131	28.041	17.151	1.00	0.00
N										
ATOM	8641	H	GLN	B	205	15.736	22.891	18.132	1.00	0.00
H										
ATOM	8642	HA	GLN	B	205	16.345	23.304	15.323	1.00	0.00
H										
ATOM	8643	HB2	GLN	B	205	18.250	24.693	16.299	1.00	0.00
H										
ATOM	8644	HB3	GLN	B	205	17.547	24.331	17.892	1.00	0.00
H										
ATOM	8645	HG2	GLN	B	205	15.334	25.262	16.876	1.00	0.00
H										
ATOM	8646	HG3	GLN	B	205	16.383	25.966	15.625	1.00	0.00
H										
ATOM	8647	HE21	GLN	B	205	16.284	28.874	17.709	1.00	0.00
H										
ATOM	8648	HE22	GLN	B	205	15.617	28.102	16.278	1.00	0.00
H										
ATOM	8649	N	PHE	B	206	18.111	21.163	17.017	1.00	0.00
N										
ATOM	8650	CA	PHE	B	206	19.171	20.159	16.916	1.00	0.00
C										
ATOM	8651	C	PHE	B	206	18.676	18.749	16.662	1.00	0.00
C										
ATOM	8652	O	PHE	B	206	19.474	17.839	16.413	1.00	0.00
O										
ATOM	8653	CB	PHE	B	206	19.967	20.123	18.207	1.00	0.00
C										
ATOM	8654	CG	PHE	B	206	20.347	21.457	18.683	1.00	0.00
C										
ATOM	8655	CD1	PHE	B	206	19.629	22.077	19.700	1.00	0.00
C										
ATOM	8656	CD2	PHE	B	206	21.389	22.138	18.070	1.00	0.00
C										
ATOM	8657	CE1	PHE	B	206	19.983	23.366	20.123	1.00	0.00
C										
ATOM	8658	CE2	PHE	B	206	21.744	23.379	18.472	1.00	0.00
C										
ATOM	8659	CZ	PHE	B	206	21.050	24.015	19.496	1.00	0.00
C										
ATOM	8660	H	PHE	B	206	17.493	21.147	17.822	1.00	0.00
H										
ATOM	8661	HA	PHE	B	206	19.840	20.443	16.105	1.00	0.00
H										
ATOM	8662	HB2	PHE	B	206	20.874	19.543	18.040	1.00	0.00
H										
ATOM	8663	HB3	PHE	B	206	19.363	19.640	18.974	1.00	0.00
H										
ATOM	8664	HD1	PHE	B	206	18.792	21.562	20.168	1.00	0.00
H										
ATOM	8665	HD2	PHE	B	206	21.930	21.665	17.252	1.00	0.00
H										

ATOM	8666	HE1	PHE	B	206	19.435	23.855	20.927	1.00	0.00
H										
ATOM	8667	HE2	PHE	B	206	22.580	23.885	17.990	1.00	0.00
H										
ATOM	8668	HZ	PHE	B	206	21.338	25.017	19.809	1.00	0.00
H										
ATOM	8669	N	ASP	B	207	17.378	18.551	16.764	1.00	0.00
N										
ATOM	8670	CA	ASP	B	207	16.827	17.224	16.695	1.00	0.00
C										
ATOM	8671	C	ASP	B	207	15.337	17.254	16.385	1.00	0.00
C										
ATOM	8672	O	ASP	B	207	14.628	18.108	16.831	1.00	0.00
O										
ATOM	8673	CB	ASP	B	207	17.028	16.541	18.039	1.00	0.00
C										
ATOM	8674	CG	ASP	B	207	17.113	15.037	17.931	1.00	0.00
C										
ATOM	8675	OD1	ASP	B	207	16.703	14.469	16.899	1.00	0.00
O										
ATOM	8676	OD2	ASP	B	207	17.619	14.436	18.898	1.00	0.00
O1-										
ATOM	8677	H	ASP	B	207	16.759	19.345	16.893	1.00	0.00
H										
ATOM	8678	HA	ASP	B	207	17.345	16.659	15.922	1.00	0.00
H										
ATOM	8679	HB2	ASP	B	207	16.190	16.796	18.686	1.00	0.00
H										
ATOM	8680	HB3	ASP	B	207	17.953	16.910	18.481	1.00	0.00
H										
ATOM	8681	N	ARG	B	208	14.897	16.261	15.666	1.00	0.00
N										
ATOM	8682	CA	ARG	B	208	13.509	16.106	15.266	1.00	0.00
C										
ATOM	8683	C	ARG	B	208	12.643	15.227	16.204	1.00	0.00
C										
ATOM	8684	O	ARG	B	208	11.462	15.047	15.938	1.00	0.00
O										
ATOM	8685	CB	ARG	B	208	13.512	15.439	13.912	1.00	0.00
C										
ATOM	8686	CG	ARG	B	208	14.116	14.035	13.965	1.00	0.00
C										
ATOM	8687	CD	ARG	B	208	14.476	13.525	12.612	1.00	0.00
C										
ATOM	8688	NE	ARG	B	208	13.329	13.014	11.870	1.00	0.00
N1+										
ATOM	8689	CZ	ARG	B	208	12.704	11.847	12.124	1.00	0.00
C1+										
ATOM	8690	NH1	ARG	B	208	13.033	11.108	13.183	1.00	0.00
N1+										
ATOM	8691	NH2	ARG	B	208	11.688	11.446	11.332	1.00	0.00
N1+										
ATOM	8692	H	ARG	B	208	15.562	15.555	15.368	1.00	0.00
H										
ATOM	8693	HA	ARG	B	208	13.052	17.091	15.177	1.00	0.00
H										

ATOM	8694	HB2	ARG	B	208	14.096	16.047	13.222	1.00	0.00
H										
ATOM	8695	HB3	ARG	B	208	12.486	15.367	13.554	1.00	0.00
H										
ATOM	8696	HG2	ARG	B	208	13.390	13.358	14.413	1.00	0.00
H										
ATOM	8697	HG3	ARG	B	208	15.015	14.063	14.580	1.00	0.00
H										
ATOM	8698	HD2	ARG	B	208	15.201	12.721	12.726	1.00	0.00
H										
ATOM	8699	HD3	ARG	B	208	14.923	14.339	12.042	1.00	0.00
H										
ATOM	8700	HE2	ARG	B	208	12.975	13.580	11.105	1.00	0.00
H										
ATOM	8701	HE3	ARG	B	208	12.705	13.487	12.508	1.00	0.00
H										
ATOM	8702	HH11	ARG	B	208	12.552	10.232	13.359	1.00	0.00
H										
ATOM	8703	HH12	ARG	B	208	13.764	11.422	13.813	1.00	0.00
H										
ATOM	8704	HH13	ARG	B	208	13.721	10.619	12.628	1.00	0.00
H										
ATOM	8705	HH21	ARG	B	208	11.214	10.568	11.519	1.00	0.00
H										
ATOM	8706	HH22	ARG	B	208	11.397	12.023	10.549	1.00	0.00
H										
ATOM	8707	HH23	ARG	B	208	11.032	11.928	11.930	1.00	0.00
H										
ATOM	8708	N	LYS	B	209	13.253	14.672	17.258	1.00	0.00
N										
ATOM	8709	CA	LYS	B	209	12.588	13.835	18.197	1.00	0.00
C										
ATOM	8710	C	LYS	B	209	13.020	14.266	19.595	1.00	0.00
C										
ATOM	8711	O	LYS	B	209	14.211	14.436	19.858	1.00	0.00
O										
ATOM	8712	CB	LYS	B	209	12.973	12.389	17.895	1.00	0.00
C										
ATOM	8713	CG	LYS	B	209	12.104	11.356	18.521	1.00	0.00
C										
ATOM	8714	CD	LYS	B	209	12.380	9.901	17.916	1.00	0.00
C										
ATOM	8715	CE	LYS	B	209	13.681	9.272	18.476	1.00	0.00
C										
ATOM	8716	NZ	LYS	B	209	14.181	7.985	17.838	1.00	0.00
N1+										
ATOM	8717	H	LYS	B	209	14.241	14.858	17.395	1.00	0.00
H										
ATOM	8718	HA	LYS	B	209	11.510	13.955	18.094	1.00	0.00
H										
ATOM	8719	HB2	LYS	B	209	13.991	12.231	18.248	1.00	0.00
H										
ATOM	8720	HB3	LYS	B	209	12.937	12.250	16.816	1.00	0.00
H										
ATOM	8721	HG2	LYS	B	209	11.062	11.619	18.346	1.00	0.00
H										

ATOM	8722	HG3	LYS	B	209	12.297	11.335	19.592	1.00	0.00
H										
ATOM	8723	HD2	LYS	B	209	12.467	9.982	16.834	1.00	0.00
H										
ATOM	8724	HD3	LYS	B	209	11.541	9.253	18.165	1.00	0.00
H										
ATOM	8725	HE2	LYS	B	209	13.513	9.067	19.532	1.00	0.00
H										
ATOM	8726	HE3	LYS	B	209	14.471	10.014	18.371	1.00	0.00
H										
ATOM	8727	HZ1	LYS	B	209	14.367	8.146	16.853	1.00	0.00
H										
ATOM	8728	HZ2	LYS	B	209	15.035	7.688	18.300	1.00	0.00
H										
ATOM	8729	HZ3	LYS	B	209	13.475	7.263	17.935	1.00	0.00
H										
ATOM	8730	N	LEU	B	210	12.039	14.486	20.478	1.00	0.00
N										
ATOM	8731	CA	LEU	B	210	12.284	14.938	21.848	1.00	0.00
C										
ATOM	8732	C	LEU	B	210	11.664	14.035	22.929	1.00	0.00
C										
ATOM	8733	O	LEU	B	210	10.647	13.411	22.736	1.00	0.00
O										
ATOM	8734	CB	LEU	B	210	11.719	16.360	22.073	1.00	0.00
C										
ATOM	8735	CG	LEU	B	210	11.982	17.432	21.009	1.00	0.00
C										
ATOM	8736	CD1	LEU	B	210	11.574	18.813	21.559	1.00	0.00
C										
ATOM	8737	CD2	LEU	B	210	13.422	17.398	20.570	1.00	0.00
C										
ATOM	8738	H	LEU	B	210	11.080	14.332	20.184	1.00	0.00
H										
ATOM	8739	HA	LEU	B	210	13.360	14.971	22.008	1.00	0.00
H										
ATOM	8740	HB2	LEU	B	210	12.137	16.727	23.009	1.00	0.00
H										
ATOM	8741	HB3	LEU	B	210	10.638	16.264	22.172	1.00	0.00
H										
ATOM	8742	HG	LEU	B	210	11.358	17.213	20.144	1.00	0.00
H										
ATOM	8743	HD11	LEU	B	210	12.158	19.036	22.451	1.00	0.00
H										
ATOM	8744	HD12	LEU	B	210	11.761	19.575	20.803	1.00	0.00
H										
ATOM	8745	HD13	LEU	B	210	10.514	18.805	21.812	1.00	0.00
H										
ATOM	8746	HD21	LEU	B	210	13.650	16.420	20.150	1.00	0.00
H										
ATOM	8747	HD22	LEU	B	210	13.589	18.165	19.815	1.00	0.00
H										
ATOM	8748	HD23	LEU	B	210	14.067	17.585	21.427	1.00	0.00
H										
ATOM	8749	N	VAL	B	211	12.273	14.084	24.104	1.00	0.00
N										



ATOM	8750	CA	VAL	B	211	11.726	13.507	25.329	1.00	0.00
C										
ATOM	8751	C	VAL	B	211	11.630	14.636	26.346	1.00	0.00
C										
ATOM	8752	O	VAL	B	211	12.461	15.561	26.391	1.00	0.00
O										
ATOM	8753	CB	VAL	B	211	12.565	12.258	25.893	1.00	0.00
C										
ATOM	8754	CG1	VAL	B	211	12.102	11.818	27.251	1.00	0.00
C										
ATOM	8755	CG2	VAL	B	211	12.365	11.083	25.007	1.00	0.00
C										
ATOM	8756	H	VAL	B	211	13.173	14.550	24.156	1.00	0.00
H										
ATOM	8757	HA	VAL	B	211	10.715	13.163	25.115	1.00	0.00
H										
ATOM	8758	HB	VAL	B	211	13.623	12.514	25.931	1.00	0.00
H										
ATOM	8759	HG11	VAL	B	211	11.055	11.522	27.199	1.00	0.00
H										
ATOM	8760	HG12	VAL	B	211	12.702	10.973	27.583	1.00	0.00
H										
ATOM	8761	HG13	VAL	B	211	12.212	12.641	27.956	1.00	0.00
H										
ATOM	8762	HG21	VAL	B	211	12.706	11.324	24.002	1.00	0.00
H										
ATOM	8763	HG22	VAL	B	211	12.934	10.238	25.391	1.00	0.00
H										
ATOM	8764	HG23	VAL	B	211	11.307	10.826	24.979	1.00	0.00
H										
ATOM	8765	N	ILE	B	212	10.550	14.587	27.105	1.00	0.00
N										
ATOM	8766	CA	ILE	B	212	10.308	15.538	28.183	1.00	0.00
C										
ATOM	8767	C	ILE	B	212	10.269	14.660	29.388	1.00	0.00
C										
ATOM	8768	O	ILE	B	212	9.407	13.779	29.437	1.00	0.00
O										
ATOM	8769	CB	ILE	B	212	8.909	16.235	28.092	1.00	0.00
C										
ATOM	8770	CG1	ILE	B	212	8.608	16.689	26.672	1.00	0.00
C										
ATOM	8771	CG2	ILE	B	212	8.793	17.388	29.149	1.00	0.00
C										
ATOM	8772	CD1	ILE	B	212	9.306	17.912	26.276	1.00	0.00
C										
ATOM	8773	H	ILE	B	212	9.862	13.861	26.931	1.00	0.00
H										
ATOM	8774	HA	ILE	B	212	11.112	16.270	28.252	1.00	0.00
H										
ATOM	8775	HB	ILE	B	212	8.162	15.487	28.353	1.00	0.00
H										
ATOM	8776	HG12	ILE	B	212	7.537	16.865	26.589	1.00	0.00
H										
ATOM	8777	HG13	ILE	B	212	8.900	15.893	25.989	1.00	0.00
H										

ATOM	8778	HG21	ILE	B	212	9.569	18.130	28.963	1.00	0.00
H										
ATOM	8779	HG22	ILE	B	212	7.814	17.858	29.068	1.00	0.00
H										
ATOM	8780	HG23	ILE	B	212	8.917	16.977	30.150	1.00	0.00
H										
ATOM	8781	HD11	ILE	B	212	10.382	17.754	26.341	1.00	0.00
H										
ATOM	8782	HD12	ILE	B	212	9.038	18.168	25.252	1.00	0.00
H										
ATOM	8783	HD13	ILE	B	212	9.019	18.726	26.940	1.00	0.00
H										
ATOM	8784	N	GLU	B	213	11.194	14.860	30.331	1.00	0.00
N										
ATOM	8785	CA	GLU	B	213	11.157	14.096	31.552	1.00	0.00
C										
ATOM	8786	C	GLU	B	213	10.985	14.895	32.824	1.00	0.00
C										
ATOM	8787	O	GLU	B	213	11.462	16.049	32.951	1.00	0.00
O										
ATOM	8788	CB	GLU	B	213	12.347	13.148	31.674	1.00	0.00
C										
ATOM	8789	CG	GLU	B	213	13.421	13.379	30.663	1.00	0.00
C										
ATOM	8790	CD	GLU	B	213	14.570	12.424	30.808	1.00	0.00
C										
ATOM	8791	OE1	GLU	B	213	14.435	11.331	30.263	1.00	0.00
O										
ATOM	8792	OE2	GLU	B	213	15.624	12.800	31.387	1.00	0.00
O1-										
ATOM	8793	H	GLU	B	213	11.924	15.551	30.187	1.00	0.00
H										
ATOM	8794	HA	GLU	B	213	10.276	13.460	31.479	1.00	0.00
H										
ATOM	8795	HB2	GLU	B	213	11.984	12.128	31.559	1.00	0.00
H										
ATOM	8796	HB3	GLU	B	213	12.781	13.270	32.666	1.00	0.00
H										
ATOM	8797	HG2	GLU	B	213	13.795	14.395	30.779	1.00	0.00
H										
ATOM	8798	HG3	GLU	B	213	12.993	13.261	29.668	1.00	0.00
H										
ATOM	8799	N	GLN	B	214	10.333	14.238	33.786	1.00	0.00
N										
ATOM	8800	CA	GLN	B	214	10.120	14.794	35.077	1.00	0.00
C										
ATOM	8801	C	GLN	B	214	11.461	14.862	35.759	1.00	0.00
C										
ATOM	8802	O	GLN	B	214	12.252	13.941	35.668	1.00	0.00
O										
ATOM	8803	CB	GLN	B	214	9.159	13.919	35.877	1.00	0.00
C										
ATOM	8804	CG	GLN	B	214	8.322	14.660	36.871	1.00	0.00
C										
ATOM	8805	CD	GLN	B	214	7.392	13.713	37.603	1.00	0.00
C										

ATOM	8806	OE1	GLN	B	214	6.178	13.644	37.323	1.00	0.00
O										
ATOM	8807	NE2	GLN	B	214	7.951	12.966	38.549	1.00	0.00
N										
ATOM	8808	H	GLN	B	214	9.977	13.309	33.589	1.00	0.00
H										
ATOM	8809	HA	GLN	B	214	9.707	15.797	34.980	1.00	0.00
H										
ATOM	8810	HB2	GLN	B	214	9.745	13.175	36.414	1.00	0.00
H										
ATOM	8811	HB3	GLN	B	214	8.492	13.420	35.176	1.00	0.00
H										
ATOM	8812	HG2	GLN	B	214	7.730	15.411	36.350	1.00	0.00
H										
ATOM	8813	HG3	GLN	B	214	8.974	15.150	37.593	1.00	0.00
H										
ATOM	8814	HE21	GLN	B	214	7.385	12.310	39.078	1.00	0.00
H										
ATOM	8815	HE22	GLN	B	214	8.944	13.051	38.742	1.00	0.00
H										
ATOM	8816	N	GLY	B	215	11.716	15.973	36.436	1.00	0.00
N										
ATOM	8817	CA	GLY	B	215	12.942	16.114	37.194	1.00	0.00
C										
ATOM	8818	C	GLY	B	215	12.831	15.450	38.550	1.00	0.00
C										
ATOM	8819	O	GLY	B	215	11.742	15.134	39.011	1.00	0.00
O										
ATOM	8820	H	GLY	B	215	11.044	16.734	36.423	1.00	0.00
H										
ATOM	8821	HA2	GLY	B	215	13.153	17.174	37.334	1.00	0.00
H										
ATOM	8822	HA3	GLY	B	215	13.757	15.653	36.639	1.00	0.00
H										
ATOM	8823	N	VAL	B	216	13.973	15.234	39.191	1.00	0.00
N										
ATOM	8824	CA	VAL	B	216	13.960	14.799	40.570	1.00	0.00
C										
ATOM	8825	C	VAL	B	216	15.133	15.290	41.364	1.00	0.00
C										
ATOM	8826	O	VAL	B	216	16.129	15.736	40.827	1.00	0.00
O										
ATOM	8827	CB	VAL	B	216	13.964	13.314	40.698	1.00	0.00
C										
ATOM	8828	CG1	VAL	B	216	12.595	12.809	40.391	1.00	0.00
C										
ATOM	8829	CG2	VAL	B	216	15.128	12.684	39.845	1.00	0.00
C										
ATOM	8830	H	VAL	B	216	14.857	15.375	38.712	1.00	0.00
H										
ATOM	8831	HA	VAL	B	216	13.052	15.178	41.037	1.00	0.00
H										
ATOM	8832	HB	VAL	B	216	14.167	13.081	41.742	1.00	0.00
H										
ATOM	8833	HG11	VAL	B	216	12.322	13.094	39.376	1.00	0.00
H										

ATOM	8834	HG12	VAL	B	216	12.580	11.724	40.480	1.00	0.00
H										
ATOM	8835	HG13	VAL	B	216	11.883	13.241	41.093	1.00	0.00
H										
ATOM	8836	HG21	VAL	B	216	16.085	13.070	40.195	1.00	0.00
H										
ATOM	8837	HG22	VAL	B	216	15.112	11.601	39.953	1.00	0.00
H										
ATOM	8838	HG23	VAL	B	216	14.993	12.946	38.797	1.00	0.00
H										
ATOM	8839	N	ASN	B	217	14.994	15.192	42.663	1.00	0.00
N										
ATOM	8840	CA	ASN	B	217	16.085	15.436	43.573	1.00	0.00
C										
ATOM	8841	C	ASN	B	217	16.575	14.068	43.950	1.00	0.00
C										
ATOM	8842	O	ASN	B	217	15.866	13.336	44.629	1.00	0.00
O										
ATOM	8843	CB	ASN	B	217	15.573	16.193	44.809	1.00	0.00
C										
ATOM	8844	CG	ASN	B	217	14.400	17.106	44.469	1.00	0.00
C										
ATOM	8845	OD1	ASN	B	217	13.410	16.648	43.844	1.00	0.00
O										
ATOM	8846	ND2	ASN	B	217	14.494	18.386	44.852	1.00	0.00
N										
ATOM	8847	H	ASN	B	217	14.088	14.936	43.041	1.00	0.00
H										
ATOM	8848	HA	ASN	B	217	16.874	16.002	43.079	1.00	0.00
H										
ATOM	8849	HB2	ASN	B	217	16.384	16.797	45.213	1.00	0.00
H										
ATOM	8850	HB3	ASN	B	217	15.251	15.470	45.557	1.00	0.00
H										
ATOM	8851	HD21	ASN	B	217	13.739	19.034	44.649	1.00	0.00
H										
ATOM	8852	HD22	ASN	B	217	15.320	18.709	45.345	1.00	0.00
H										
ATOM	8853	N	ALA	B	218	17.758	13.700	43.477	1.00	0.00
N										
ATOM	8854	CA	ALA	B	218	18.247	12.346	43.697	1.00	0.00
C										
ATOM	8855	C	ALA	B	218	19.743	12.277	43.607	1.00	0.00
C										
ATOM	8856	O	ALA	B	218	20.394	13.085	42.966	1.00	0.00
O										
ATOM	8857	CB	ALA	B	218	17.606	11.357	42.676	1.00	0.00
C										
ATOM	8858	H	ALA	B	218	18.325	14.365	42.960	1.00	0.00
H										
ATOM	8859	HA	ALA	B	218	17.953	12.038	44.699	1.00	0.00
H										
ATOM	8860	HB1	ALA	B	218	17.863	11.664	41.663	1.00	0.00
H										
ATOM	8861	HB2	ALA	B	218	17.985	10.352	42.857	1.00	0.00
H										

ATOM	8862	HB3	ALA	B	218	16.524	11.364	42.794	1.00	0.00
H										
ATOM	8863	N	ARG	B	219	20.286	11.259	44.240	1.00	0.00
N										
ATOM	8864	CA	ARG	B	219	21.658	10.922	44.053	1.00	0.00
C										
ATOM	8865	C	ARG	B	219	21.839	10.266	42.684	1.00	0.00
C										
ATOM	8866	O	ARG	B	219	20.963	9.573	42.199	1.00	0.00
O										
ATOM	8867	CB	ARG	B	219	22.069	9.972	45.143	1.00	0.00
C										
ATOM	8868	CG	ARG	B	219	21.606	10.462	46.516	1.00	0.00
C										
ATOM	8869	CD	ARG	B	219	22.468	9.905	47.547	1.00	0.00
C										
ATOM	8870	NE	ARG	B	219	21.811	8.921	48.349	1.00	0.00
N1+										
ATOM	8871	CZ	ARG	B	219	22.459	8.099	49.147	1.00	0.00
C1+										
ATOM	8872	NH1	ARG	B	219	23.805	8.064	49.185	1.00	0.00
N1+										
ATOM	8873	NH2	ARG	B	219	21.749	7.286	49.899	1.00	0.00
N1+										
ATOM	8874	H	ARG	B	219	19.718	10.704	44.872	1.00	0.00
H										
ATOM	8875	HA	ARG	B	219	22.266	11.824	44.108	1.00	0.00
H										
ATOM	8876	HB2	ARG	B	219	23.155	9.885	45.146	1.00	0.00
H										
ATOM	8877	HB3	ARG	B	219	21.627	8.996	44.947	1.00	0.00
H										
ATOM	8878	HG2	ARG	B	219	20.580	10.141	46.688	1.00	0.00
H										
ATOM	8879	HG3	ARG	B	219	21.657	11.550	46.549	1.00	0.00
H										
ATOM	8880	HD2	ARG	B	219	22.803	10.714	48.194	1.00	0.00
H										
ATOM	8881	HD3	ARG	B	219	23.330	9.444	47.067	1.00	0.00
H										
ATOM	8882	HE2	ARG	B	219	20.800	8.853	48.301	1.00	0.00
H										
ATOM	8883	HE3	ARG	B	219	21.731	9.589	49.102	1.00	0.00
H										
ATOM	8884	HH11	ARG	B	219	24.279	7.420	49.810	1.00	0.00
H										
ATOM	8885	HH12	ARG	B	219	24.346	8.682	48.588	1.00	0.00
H										
ATOM	8886	HH13	ARG	B	219	23.807	7.362	48.459	1.00	0.00
H										
ATOM	8887	HH21	ARG	B	219	22.215	6.638	50.526	1.00	0.00
H										
ATOM	8888	HH22	ARG	B	219	20.735	7.306	49.852	1.00	0.00
H										
ATOM	8889	HH23	ARG	B	219	21.729	7.981	50.631	1.00	0.00
H										

ATOM	8890	N	GLU	B	220	22.998	10.511	42.088	1.00	0.00
N										
ATOM	8891	CA	GLU	B	220	23.470	9.877	40.849	1.00	0.00
C										
ATOM	8892	C	GLU	B	220	24.270	8.647	41.259	1.00	0.00
C										
ATOM	8893	O	GLU	B	220	25.380	8.764	41.777	1.00	0.00
O										
ATOM	8894	CB	GLU	B	220	24.381	10.864	40.149	1.00	0.00
C										
ATOM	8895	CG	GLU	B	220	24.674	10.693	38.637	1.00	0.00
C										
ATOM	8896	CD	GLU	B	220	25.382	11.942	38.036	1.00	0.00
C										
ATOM	8897	OE1	GLU	B	220	26.085	11.803	36.970	1.00	0.00
O										
ATOM	8898	OE2	GLU	B	220	25.224	13.058	38.616	1.00	0.00
O1-										
ATOM	8899	H	GLU	B	220	23.611	11.193	42.524	1.00	0.00
H										
ATOM	8900	HA	GLU	B	220	22.632	9.601	40.210	1.00	0.00
H										
ATOM	8901	HB2	GLU	B	220	25.341	10.828	40.663	1.00	0.00
H										
ATOM	8902	HB3	GLU	B	220	23.938	11.851	40.276	1.00	0.00
H										
ATOM	8903	HG2	GLU	B	220	23.732	10.536	38.112	1.00	0.00
H										
ATOM	8904	HG3	GLU	B	220	25.316	9.825	38.499	1.00	0.00
H										
ATOM	8905	N	ILE	B	221	23.709	7.466	41.013	1.00	0.00
N										
ATOM	8906	CA	ILE	B	221	24.334	6.193	41.370	1.00	0.00
C										
ATOM	8907	C	ILE	B	221	24.561	5.348	40.126	1.00	0.00
C										
ATOM	8908	O	ILE	B	221	23.660	5.224	39.286	1.00	0.00
O										
ATOM	8909	CB	ILE	B	221	23.413	5.413	42.354	1.00	0.00
C										
ATOM	8910	CG1	ILE	B	221	23.042	6.303	43.576	1.00	0.00
C										
ATOM	8911	CG2	ILE	B	221	24.088	4.069	42.742	1.00	0.00
C										
ATOM	8912	CD1	ILE	B	221	24.180	6.724	44.419	1.00	0.00
C										
ATOM	8913	H	ILE	B	221	22.804	7.447	40.555	1.00	0.00
H										
ATOM	8914	HA	ILE	B	221	25.292	6.386	41.852	1.00	0.00
H										
ATOM	8915	HB	ILE	B	221	22.491	5.178	41.825	1.00	0.00
H										
ATOM	8916	HG12	ILE	B	221	22.349	5.743	44.202	1.00	0.00
H										
ATOM	8917	HG13	ILE	B	221	22.551	7.200	43.202	1.00	0.00
H										

ATOM	8918	HG21	ILE	B	221	25.045	4.269	43.222	1.00	0.00
H										
ATOM	8919	HG22	ILE	B	221	23.444	3.524	43.430	1.00	0.00
H										
ATOM	8920	HG23	ILE	B	221	24.250	3.472	41.846	1.00	0.00
H										
ATOM	8921	HD11	ILE	B	221	24.883	7.300	43.819	1.00	0.00
H										
ATOM	8922	HD12	ILE	B	221	23.816	7.339	45.241	1.00	0.00
H										
ATOM	8923	HD13	ILE	B	221	24.681	5.844	44.819	1.00	0.00
H										
ATOM	8924	N	GLU	B	222	25.761	4.783	39.983	1.00	0.00
N										
ATOM	8925	CA	GLU	B	222	26.170	4.126	38.746	1.00	0.00
C										
ATOM	8926	C	GLU	B	222	26.732	2.752	39.041	1.00	0.00
C										
ATOM	8927	O	GLU	B	222	27.402	2.534	40.065	1.00	0.00
O										
ATOM	8928	CB	GLU	B	222	27.182	4.991	38.011	1.00	0.00
C										
ATOM	8929	CG	GLU	B	222	26.792	6.453	37.945	1.00	0.00
C										
ATOM	8930	CD	GLU	B	222	27.595	7.260	36.985	1.00	0.00
C										
ATOM	8931	OE1	GLU	B	222	28.756	6.867	36.717	1.00	0.00
O										
ATOM	8932	OE2	GLU	B	222	27.054	8.315	36.522	1.00	0.00
O1-										
ATOM	8933	H	GLU	B	222	26.411	4.811	40.761	1.00	0.00
H										
ATOM	8934	HA	GLU	B	222	25.292	4.010	38.112	1.00	0.00
H										
ATOM	8935	HB2	GLU	B	222	27.283	4.615	36.994	1.00	0.00
H										
ATOM	8936	HB3	GLU	B	222	28.139	4.912	38.524	1.00	0.00
H										
ATOM	8937	HG2	GLU	B	222	26.914	6.884	38.938	1.00	0.00
H										
ATOM	8938	HG3	GLU	B	222	25.745	6.514	37.649	1.00	0.00
H										
ATOM	8939	N	VAL	B	223	26.417	1.809	38.171	1.00	0.00
N										
ATOM	8940	CA	VAL	B	223	26.837	0.418	38.302	1.00	0.00
C										
ATOM	8941	C	VAL	B	223	27.517	0.042	36.998	1.00	0.00
C										
ATOM	8942	O	VAL	B	223	27.019	0.382	35.927	1.00	0.00
O										
ATOM	8943	CB	VAL	B	223	25.653	-0.554	38.591	1.00	0.00
C										
ATOM	8944	CG1	VAL	B	223	26.098	-1.966	38.516	1.00	0.00
C										
ATOM	8945	CG2	VAL	B	223	25.021	-0.289	39.972	1.00	0.00
C										

ATOM	8946	H	VAL	B	223	25.852	2.066	37.368	1.00	0.00
H										
ATOM	8947	HA	VAL	B	223	27.561	0.343	39.112	1.00	0.00
H										
ATOM	8948	HB	VAL	B	223	24.889	-0.397	37.831	1.00	0.00
H										
ATOM	8949	HG11	VAL	B	223	26.881	-2.139	39.252	1.00	0.00
H										
ATOM	8950	HG12	VAL	B	223	25.254	-2.624	38.721	1.00	0.00
H										
ATOM	8951	HG13	VAL	B	223	26.485	-2.172	37.519	1.00	0.00
H										
ATOM	8952	HG21	VAL	B	223	24.642	0.732	40.008	1.00	0.00
H										
ATOM	8953	HG22	VAL	B	223	24.200	-0.986	40.135	1.00	0.00
H										
ATOM	8954	HG23	VAL	B	223	25.773	-0.425	40.748	1.00	0.00
H										
ATOM	8955	N	ALA	B	224	28.685	-0.616	37.110	1.00	0.00
N										
ATOM	8956	CA	ALA	B	224	29.421	-1.064	35.966	1.00	0.00
C										
ATOM	8957	C	ALA	B	224	29.077	-2.524	35.660	1.00	0.00
C										
ATOM	8958	O	ALA	B	224	28.953	-3.324	36.543	1.00	0.00
O										
ATOM	8959	CB	ALA	B	224	30.898	-0.868	36.177	1.00	0.00
C										
ATOM	8960	H	ALA	B	224	29.057	-0.801	38.036	1.00	0.00
H										
ATOM	8961	HA	ALA	B	224	29.119	-0.460	35.112	1.00	0.00
H										
ATOM	8962	HB1	ALA	B	224	31.219	-1.437	37.048	1.00	0.00
H										
ATOM	8963	HB2	ALA	B	224	31.439	-1.214	35.298	1.00	0.00
H										
ATOM	8964	HB3	ALA	B	224	31.105	0.189	36.338	1.00	0.00
H										
ATOM	8965	N	VAL	B	225	28.867	-2.840	34.411	1.00	0.00
N										
ATOM	8966	CA	VAL	B	225	28.550	-4.180	33.992	1.00	0.00
C										
ATOM	8967	C	VAL	B	225	29.523	-4.575	32.948	1.00	0.00
C										
ATOM	8968	O	VAL	B	225	29.871	-3.756	32.114	1.00	0.00
O										
ATOM	8969	CB	VAL	B	225	27.166	-4.319	33.369	1.00	0.00
C										
ATOM	8970	CG1	VAL	B	225	26.837	-5.850	33.129	1.00	0.00
C										
ATOM	8971	CG2	VAL	B	225	26.100	-3.634	34.246	1.00	0.00
C										
ATOM	8972	H	VAL	B	225	28.930	-2.112	33.707	1.00	0.00
H										
ATOM	8973	HA	VAL	B	225	28.635	-4.856	34.842	1.00	0.00
H										



ATOM	8974	HB	VAL	B	225	27.179	-3.820	32.401	1.00	0.00
H										
ATOM	8975	HG11	VAL	B	225	26.858	-6.380	34.080	1.00	0.00
H										
ATOM	8976	HG12	VAL	B	225	25.847	-5.943	32.684	1.00	0.00
H										
ATOM	8977	HG13	VAL	B	225	27.579	-6.280	32.458	1.00	0.00
H										
ATOM	8978	HG21	VAL	B	225	26.336	-2.575	34.344	1.00	0.00
H										
ATOM	8979	HG22	VAL	B	225	25.121	-3.746	33.782	1.00	0.00
H										
ATOM	8980	HG23	VAL	B	225	26.089	-4.096	35.232	1.00	0.00
H										
ATOM	8981	N	LEU	B	226	29.952	-5.846	33.010	1.00	0.00
N										
ATOM	8982	CA	LEU	B	226	31.003	-6.391	32.169	1.00	0.00
C										
ATOM	8983	C	LEU	B	226	30.665	-7.831	31.734	1.00	0.00
C										
ATOM	8984	O	LEU	B	226	30.218	-8.643	32.549	1.00	0.00
O										
ATOM	8985	CB	LEU	B	226	32.322	-6.413	32.945	1.00	0.00
C										
ATOM	8986	CG	LEU	B	226	33.610	-6.855	32.238	1.00	0.00
C										
ATOM	8987	CD1	LEU	B	226	34.033	-6.026	30.946	1.00	0.00
C										
ATOM	8988	CD2	LEU	B	226	34.753	-6.889	33.232	1.00	0.00
C										
ATOM	8989	H	LEU	B	226	29.515	-6.464	33.686	1.00	0.00
H										
ATOM	8990	HA	LEU	B	226	31.116	-5.766	31.285	1.00	0.00
H										
ATOM	8991	HB2	LEU	B	226	32.180	-7.083	33.791	1.00	0.00
H										
ATOM	8992	HB3	LEU	B	226	32.492	-5.401	33.308	1.00	0.00
H										
ATOM	8993	HG	LEU	B	226	33.450	-7.882	31.911	1.00	0.00
H										
ATOM	8994	HD11	LEU	B	226	34.187	-4.983	31.218	1.00	0.00
H										
ATOM	8995	HD12	LEU	B	226	34.957	-6.435	30.539	1.00	0.00
H										
ATOM	8996	HD13	LEU	B	226	33.245	-6.094	30.197	1.00	0.00
H										
ATOM	8997	HD21	LEU	B	226	34.520	-7.593	34.030	1.00	0.00
H										
ATOM	8998	HD22	LEU	B	226	35.665	-7.203	32.726	1.00	0.00
H										
ATOM	8999	HD23	LEU	B	226	34.896	-5.896	33.655	1.00	0.00
H										
ATOM	9000	N	GLY	B	227	30.860	-8.130	30.444	1.00	0.00
N										
ATOM	9001	CA	GLY	B	227	30.612	-9.473	29.937	1.00	0.00
C										

ATOM	9002	C	GLY	B	227	29.822	-9.421	28.646	1.00	0.00
C										
ATOM	9003	O	GLY	B	227	29.636	-8.340	28.060	1.00	0.00
O										
ATOM	9004	H	GLY	B	227	31.186	-7.409	29.808	1.00	0.00
H										
ATOM	9005	HA2	GLY	B	227	30.048	-10.037	30.679	1.00	0.00
H										
ATOM	9006	HA3	GLY	B	227	31.565	-9.967	29.753	1.00	0.00
H										
ATOM	9007	N	ASN	B	228	29.368	-10.589	28.204	1.00	0.00
N										
ATOM	9008	CA	ASN	B	228	28.629	-10.707	26.970	1.00	0.00
C										
ATOM	9009	C	ASN	B	228	27.328	-11.393	27.306	1.00	0.00
C										
ATOM	9010	O	ASN	B	228	26.302	-10.689	27.554	1.00	0.00
O										
ATOM	9011	CB	ASN	B	228	29.429	-11.486	25.901	1.00	0.00
C										
ATOM	9012	CG	ASN	B	228	30.464	-10.656	25.205	1.00	0.00
C										
ATOM	9013	OD1	ASN	B	228	30.362	-9.418	25.080	1.00	0.00
O										
ATOM	9014	ND2	ASN	B	228	31.485	-11.336	24.720	1.00	0.00
N										
ATOM	9015	H	ASN	B	228	29.547	-11.425	28.752	1.00	0.00
H										
ATOM	9016	HA	ASN	B	228	28.414	-9.709	26.591	1.00	0.00
H										
ATOM	9017	HB2	ASN	B	228	28.731	-11.863	25.155	1.00	0.00
H										
ATOM	9018	HB3	ASN	B	228	29.928	-12.323	26.387	1.00	0.00
H										
ATOM	9019	HD21	ASN	B	228	32.232	-10.852	24.233	1.00	0.00
H										
ATOM	9020	HD22	ASN	B	228	31.524	-12.344	24.834	1.00	0.00
H										
ATOM	9021	N	ASP	B	229	27.368	-12.731	27.362	1.00	0.00
N										
ATOM	9022	CA	ASP	B	229	26.162	-13.551	27.696	1.00	0.00
C										
ATOM	9023	C	ASP	B	229	25.955	-13.807	29.144	1.00	0.00
C										
ATOM	9024	O	ASP	B	229	24.871	-14.082	29.533	1.00	0.00
O										
ATOM	9025	CB	ASP	B	229	26.239	-14.903	27.004	1.00	0.00
C										
ATOM	9026	CG	ASP	B	229	26.305	-14.774	25.516	1.00	0.00
C										
ATOM	9027	OD1	ASP	B	229	25.954	-13.677	25.021	1.00	0.00
O										
ATOM	9028	OD2	ASP	B	229	26.698	-15.758	24.849	1.00	0.00
O1-										
ATOM	9029	H	ASP	B	229	28.246	-13.204	27.172	1.00	0.00
H										

ATOM	9030	HA	ASP	B	229	25.285	-13.029	27.318	1.00	0.00
H										
ATOM	9031	HB2	ASP	B	229	25.355	-15.482	27.267	1.00	0.00
H										
ATOM	9032	HB3	ASP	B	229	27.130	-15.424	27.351	1.00	0.00
H										
ATOM	9033	N	TYR	B	230	26.989	-13.695	29.966	1.00	0.00
N										
ATOM	9034	CA	TYR	B	230	26.867	-13.861	31.424	1.00	0.00
C										
ATOM	9035	C	TYR	B	230	27.568	-12.710	32.107	1.00	0.00
C										
ATOM	9036	O	TYR	B	230	28.604	-12.876	32.735	1.00	0.00
O										
ATOM	9037	CB	TYR	B	230	27.451	-15.192	31.867	1.00	0.00
C										
ATOM	9038	CG	TYR	B	230	26.938	-16.310	31.004	1.00	0.00
C										
ATOM	9039	CD1	TYR	B	230	27.662	-16.765	29.920	1.00	0.00
C										
ATOM	9040	CD2	TYR	B	230	25.707	-16.900	31.266	1.00	0.00
C										
ATOM	9041	CE1	TYR	B	230	27.171	-17.788	29.090	1.00	0.00
C										
ATOM	9042	CE2	TYR	B	230	25.217	-17.953	30.501	1.00	0.00
C										
ATOM	9043	CZ	TYR	B	230	25.925	-18.365	29.387	1.00	0.00
C										
ATOM	9044	OH	TYR	B	230	25.435	-19.395	28.617	1.00	0.00
O										
ATOM	9045	H	TYR	B	230	27.902	-13.487	29.574	1.00	0.00
H										
ATOM	9046	HA	TYR	B	230	25.812	-13.836	31.692	1.00	0.00
H										
ATOM	9047	HB2	TYR	B	230	27.168	-15.380	32.901	1.00	0.00
H										
ATOM	9048	HB3	TYR	B	230	28.536	-15.150	31.790	1.00	0.00
H										
ATOM	9049	HD1	TYR	B	230	28.633	-16.323	29.703	1.00	0.00
H										
ATOM	9050	HD2	TYR	B	230	25.108	-16.527	32.095	1.00	0.00
H										
ATOM	9051	HE1	TYR	B	230	27.747	-18.128	28.231	1.00	0.00
H										
ATOM	9052	HE2	TYR	B	230	24.286	-18.448	30.776	1.00	0.00
H										
ATOM	9053	HH	TYR	B	230	26.065	-20.162	28.650	1.00	0.00
H										
ATOM	9054	N	PRO	B	231	26.981	-11.534	31.991	1.00	0.00
N										
ATOM	9055	CA	PRO	B	231	27.554	-10.378	32.577	1.00	0.00
C										
ATOM	9056	C	PRO	B	231	27.557	-10.347	34.117	1.00	0.00
C										
ATOM	9057	O	PRO	B	231	26.723	-10.969	34.790	1.00	0.00
O										

ATOM	9058	CB	PRO	B	231	26.661	-9.242	32.029	1.00	0.00
C										
ATOM	9059	CG	PRO	B	231	25.385	-9.855	31.829	1.00	0.00
C										
ATOM	9060	CD	PRO	B	231	25.727	-11.219	31.283	1.00	0.00
C										
ATOM	9061	HA	PRO	B	231	28.571	-10.250	32.209	1.00	0.00
H										
ATOM	9062	HB2	PRO	B	231	27.057	-8.861	31.089	1.00	0.00
H										
ATOM	9063	HB3	PRO	B	231	26.588	-8.428	32.749	1.00	0.00
H										
ATOM	9064	HG2	PRO	B	231	24.789	-9.289	31.115	1.00	0.00
H										
ATOM	9065	HG3	PRO	B	231	24.842	-9.938	32.769	1.00	0.00
H										
ATOM	9066	HD2	PRO	B	231	24.949	-11.944	31.517	1.00	0.00
H										
ATOM	9067	HD3	PRO	B	231	25.880	-11.186	30.205	1.00	0.00
H										
ATOM	9068	N	GLU	B	232	28.495	-9.566	34.638	1.00	0.00
N										
ATOM	9069	CA	GLU	B	232	28.568	-9.237	36.063	1.00	0.00
C										
ATOM	9070	C	GLU	B	232	28.516	-7.744	36.294	1.00	0.00
C										
ATOM	9071	O	GLU	B	232	29.004	-6.985	35.484	1.00	0.00
O										
ATOM	9072	CB	GLU	B	232	29.862	-9.802	36.614	1.00	0.00
C										
ATOM	9073	CG	GLU	B	232	29.886	-11.335	36.528	1.00	0.00
C										
ATOM	9074	CD	GLU	B	232	28.924	-12.048	37.491	1.00	0.00
C										
ATOM	9075	OE1	GLU	B	232	28.682	-13.268	37.273	1.00	0.00
O										
ATOM	9076	OE2	GLU	B	232	28.411	-11.380	38.438	1.00	0.00
O1-										
ATOM	9077	H	GLU	B	232	29.197	-9.177	34.017	1.00	0.00
H										
ATOM	9078	HA	GLU	B	232	27.730	-9.705	36.578	1.00	0.00
H										
ATOM	9079	HB2	GLU	B	232	29.963	-9.504	37.657	1.00	0.00
H										
ATOM	9080	HB3	GLU	B	232	30.696	-9.402	36.039	1.00	0.00
H										
ATOM	9081	HG2	GLU	B	232	30.898	-11.671	36.749	1.00	0.00
H										
ATOM	9082	HG3	GLU	B	232	29.622	-11.622	35.511	1.00	0.00
H										
ATOM	9083	N	ALA	B	233	27.899	-7.351	37.400	1.00	0.00
N										
ATOM	9084	CA	ALA	B	233	27.650	-5.942	37.781	1.00	0.00
C										
ATOM	9085	C	ALA	B	233	28.468	-5.652	39.041	1.00	0.00
C										

ATOM	9086	O	ALA	B	233	28.591	-6.517	39.927	1.00	0.00
O										
ATOM	9087	CB	ALA	B	233	26.180	-5.692	38.078	1.00	0.00
C										
ATOM	9088	H	ALA	B	233	27.572	-8.072	38.035	1.00	0.00
H										
ATOM	9089	HA	ALA	B	233	27.975	-5.285	36.976	1.00	0.00
H										
ATOM	9090	HB1	ALA	B	233	25.862	-6.331	38.900	1.00	0.00
H										
ATOM	9091	HB2	ALA	B	233	26.037	-4.648	38.353	1.00	0.00
H										
ATOM	9092	HB3	ALA	B	233	25.587	-5.918	37.193	1.00	0.00
H										
ATOM	9093	N	THR	B	234	29.058	-4.455	39.088	1.00	0.00
N										
ATOM	9094	CA	THR	B	234	29.812	-4.052	40.271	1.00	0.00
C										
ATOM	9095	C	THR	B	234	28.855	-3.638	41.409	1.00	0.00
C										
ATOM	9096	O	THR	B	234	27.639	-3.438	41.194	1.00	0.00
O										
ATOM	9097	CB	THR	B	234	30.764	-2.881	39.972	1.00	0.00
C										
ATOM	9098	OG1	THR	B	234	30.011	-1.750	39.503	1.00	0.00
O										
ATOM	9099	CG2	THR	B	234	31.780	-3.317	38.937	1.00	0.00
C										
ATOM	9100	H	THR	B	234	28.982	-3.823	38.298	1.00	0.00
H										
ATOM	9101	HA	THR	B	234	30.404	-4.901	40.609	1.00	0.00
H										
ATOM	9102	HB	THR	B	234	31.285	-2.605	40.887	1.00	0.00
H										
ATOM	9103	HG21	THR	B	234	31.265	-3.611	38.024	1.00	0.00
H										
ATOM	9104	HG22	THR	B	234	32.456	-2.491	38.722	1.00	0.00
H										
ATOM	9105	HG23	THR	B	234	32.349	-4.162	39.321	1.00	0.00
H										
ATOM	9106	HG1	THR	B	234	29.359	-1.474	40.200	1.00	0.00
H										
ATOM	9107	N	TRP	B	235	29.398	-3.509	42.611	1.00	0.00
N										
ATOM	9108	CA	TRP	B	235	28.719	-2.699	43.595	1.00	0.00
C										
ATOM	9109	C	TRP	B	235	28.580	-1.312	42.999	1.00	0.00
C										
ATOM	9110	O	TRP	B	235	29.417	-0.863	42.189	1.00	0.00
O										
ATOM	9111	CB	TRP	B	235	29.491	-2.658	44.933	1.00	0.00
C										
ATOM	9112	CG	TRP	B	235	29.532	-4.003	45.577	1.00	0.00
C										
ATOM	9113	CD1	TRP	B	235	30.628	-4.801	45.746	1.00	0.00
C										

ATOM	9114	CD2	TRP	B	235	28.424	-4.746	46.070	1.00	0.00
C										
ATOM	9115	NE1	TRP	B	235	30.276	-5.997	46.331	1.00	0.00
N										
ATOM	9116	CE2	TRP	B	235	28.924	-5.985	46.542	1.00	0.00
C										
ATOM	9117	CE3	TRP	B	235	27.057	-4.480	46.185	1.00	0.00
C										
ATOM	9118	CZ2	TRP	B	235	28.111	-6.935	47.116	1.00	0.00
C										
ATOM	9119	CZ3	TRP	B	235	26.238	-5.443	46.736	1.00	0.00
C										
ATOM	9120	CH2	TRP	B	235	26.763	-6.650	47.203	1.00	0.00
C										
ATOM	9121	H	TRP	B	235	30.273	-3.970	42.835	1.00	0.00
H										
ATOM	9122	HA	TRP	B	235	27.726	-3.111	43.771	1.00	0.00
H										
ATOM	9123	HB2	TRP	B	235	28.999	-1.958	45.606	1.00	0.00
H										
ATOM	9124	HB3	TRP	B	235	30.511	-2.324	44.744	1.00	0.00
H										
ATOM	9125	HD1	TRP	B	235	31.642	-4.529	45.457	1.00	0.00
H										
ATOM	9126	HE1	TRP	B	235	30.909	-6.755	46.565	1.00	0.00
H										
ATOM	9127	HE3	TRP	B	235	26.647	-3.530	45.846	1.00	0.00
H										
ATOM	9128	HZ2	TRP	B	235	28.516	-7.875	47.487	1.00	0.00
H										
ATOM	9129	HZ3	TRP	B	235	25.167	-5.260	46.808	1.00	0.00
H										
ATOM	9130	HH2	TRP	B	235	26.093	-7.385	47.647	1.00	0.00
H										
ATOM	9131	N	PRO	B	236	27.541	-0.597	43.394	1.00	0.00
N										
ATOM	9132	CA	PRO	B	236	27.360	0.752	42.847	1.00	0.00
C										
ATOM	9133	C	PRO	B	236	28.377	1.767	43.388	1.00	0.00
C										
ATOM	9134	O	PRO	B	236	28.916	1.594	44.474	1.00	0.00
O										
ATOM	9135	CB	PRO	B	236	25.956	1.124	43.301	1.00	0.00
C										
ATOM	9136	CG	PRO	B	236	25.703	0.297	44.491	1.00	0.00
C										
ATOM	9137	CD	PRO	B	236	26.506	-0.966	44.372	1.00	0.00
C										
ATOM	9138	HA	PRO	B	236	27.404	0.723	41.759	1.00	0.00
H										
ATOM	9139	HB2	PRO	B	236	25.231	0.901	42.520	1.00	0.00
H										
ATOM	9140	HB3	PRO	B	236	25.905	2.182	43.553	1.00	0.00
H										
ATOM	9141	HG2	PRO	B	236	24.643	0.055	44.551	1.00	0.00
H										

ATOM	9142	HG3	PRO	B	236	26.003	0.840	45.386	1.00	0.00
H										
ATOM	9143	HD2	PRO	B	236	26.948	-1.242	45.328	1.00	0.00
H										
ATOM	9144	HD3	PRO	B	236	25.893	-1.788	44.004	1.00	0.00
H										
ATOM	9145	N	GLY	B	237	28.641	2.799	42.600	1.00	0.00
N										
ATOM	9146	CA	GLY	B	237	29.395	3.950	43.048	1.00	0.00
C										
ATOM	9147	C	GLY	B	237	28.526	5.202	42.900	1.00	0.00
C										
ATOM	9148	O	GLY	B	237	27.533	5.218	42.121	1.00	0.00
O										
ATOM	9149	H	GLY	B	237	28.300	2.782	41.644	1.00	0.00
H										
ATOM	9150	HA2	GLY	B	237	30.294	4.056	42.443	1.00	0.00
H										
ATOM	9151	HA3	GLY	B	237	29.673	3.820	44.093	1.00	0.00
H										
ATOM	9152	N	GLU	B	238	28.904	6.262	43.619	1.00	0.00
N										
ATOM	9153	CA	GLU	B	238	28.169	7.486	43.564	1.00	0.00
C										
ATOM	9154	C	GLU	B	238	28.976	8.662	43.023	1.00	0.00
C										
ATOM	9155	O	GLU	B	238	30.122	8.912	43.393	1.00	0.00
O										
ATOM	9156	CB	GLU	B	238	27.619	7.848	44.930	1.00	0.00
C										
ATOM	9157	CG	GLU	B	238	26.839	9.146	44.916	1.00	0.00
C										
ATOM	9158	CD	GLU	B	238	26.153	9.386	46.216	1.00	0.00
C										
ATOM	9159	OE1	GLU	B	238	25.397	10.376	46.285	1.00	0.00
O										
ATOM	9160	OE2	GLU	B	238	26.382	8.591	47.175	1.00	0.00
O1-										
ATOM	9161	H	GLU	B	238	29.724	6.197	44.213	1.00	0.00
H										
ATOM	9162	HA	GLU	B	238	27.321	7.333	42.897	1.00	0.00
H										
ATOM	9163	HB2	GLU	B	238	28.451	7.949	45.625	1.00	0.00
H										
ATOM	9164	HB3	GLU	B	238	26.961	7.048	45.265	1.00	0.00
H										
ATOM	9165	HG2	GLU	B	238	26.091	9.101	44.125	1.00	0.00
H										
ATOM	9166	HG3	GLU	B	238	27.524	9.969	44.720	1.00	0.00
H										
ATOM	9167	N	VAL	B	239	28.334	9.422	42.168	1.00	0.00
N										
ATOM	9168	CA	VAL	B	239	28.943	10.661	41.649	1.00	0.00
C										
ATOM	9169	C	VAL	B	239	28.525	11.680	42.638	1.00	0.00
C										

ATOM	9170	O	VAL B 239	27.390	12.074	42.621	1.00	0.00
O								
ATOM	9171	CB	VAL B 239	28.455	10.986	40.216	1.00	0.00
C								
ATOM	9172	CG1	VAL B 239	29.139	12.295	39.674	1.00	0.00
C								
ATOM	9173	CG2	VAL B 239	28.699	9.766	39.275	1.00	0.00
C								
ATOM	9174	H	VAL B 239	27.405	9.154	41.859	1.00	0.00
H								
ATOM	9175	HA	VAL B 239	30.028	10.567	41.655	1.00	0.00
H								
ATOM	9176	HB	VAL B 239	27.381	11.164	40.261	1.00	0.00
H								
ATOM	9177	HG11	VAL B 239	30.219	12.159	39.654	1.00	0.00
H								
ATOM	9178	HG12	VAL B 239	28.780	12.502	38.667	1.00	0.00
H								
ATOM	9179	HG13	VAL B 239	28.891	13.131	40.326	1.00	0.00
H								
ATOM	9180	HG21	VAL B 239	28.152	8.903	39.651	1.00	0.00
H								
ATOM	9181	HG22	VAL B 239	28.352	10.007	38.271	1.00	0.00
H								
ATOM	9182	HG23	VAL B 239	29.763	9.537	39.246	1.00	0.00
H								
ATOM	9183	N	VAL B 240	29.419	12.037	43.557	1.00	0.00
N								
ATOM	9184	CA	VAL B 240	29.058	12.968	44.622	1.00	0.00
C								
ATOM	9185	C	VAL B 240	29.144	14.417	44.098	1.00	0.00
C								
ATOM	9186	O	VAL B 240	30.099	14.779	43.419	1.00	0.00
O								
ATOM	9187	CB	VAL B 240	29.933	12.782	45.872	1.00	0.00
C								
ATOM	9188	CG1	VAL B 240	29.852	11.346	46.368	1.00	0.00
C								
ATOM	9189	CG2	VAL B 240	31.371	13.154	45.583	1.00	0.00
C								
ATOM	9190	H	VAL B 240	30.360	11.659	43.517	1.00	0.00
H								
ATOM	9191	HA	VAL B 240	28.024	12.773	44.903	1.00	0.00
H								
ATOM	9192	HB	VAL B 240	29.559	13.439	46.656	1.00	0.00
H								
ATOM	9193	HG11	VAL B 240	30.201	10.672	45.587	1.00	0.00
H								
ATOM	9194	HG12	VAL B 240	30.478	11.232	47.252	1.00	0.00
H								
ATOM	9195	HG13	VAL B 240	28.820	11.107	46.620	1.00	0.00
H								
ATOM	9196	HG21	VAL B 240	31.420	14.197	45.272	1.00	0.00
H								
ATOM	9197	HG22	VAL B 240	31.970	13.014	46.482	1.00	0.00
H								



ATOM	9198	HG23	VAL	B	240	31.757	12.520	44.787	1.00	0.00
H										
ATOM	9199	N	LYS	B	241	28.122	15.208	44.398	1.00	0.00
N										
ATOM	9200	CA	LYS	B	241	27.983	16.579	43.921	1.00	0.00
C										
ATOM	9201	C	LYS	B	241	27.070	17.293	44.892	1.00	0.00
C										
ATOM	9202	O	LYS	B	241	26.080	16.741	45.292	1.00	0.00
O										
ATOM	9203	CB	LYS	B	241	27.297	16.599	42.559	1.00	0.00
C										
ATOM	9204	CG	LYS	B	241	28.246	16.487	41.375	1.00	0.00
C										
ATOM	9205	CD	LYS	B	241	27.477	16.352	40.065	1.00	0.00
C										
ATOM	9206	CE	LYS	B	241	28.456	16.347	38.900	1.00	0.00
C										
ATOM	9207	NZ	LYS	B	241	29.092	17.730	38.825	1.00	0.00
N1+										
ATOM	9208	H	LYS	B	241	27.392	14.836	44.997	1.00	0.00
H										
ATOM	9209	HA	LYS	B	241	28.954	17.071	43.871	1.00	0.00
H										
ATOM	9210	HB2	LYS	B	241	26.749	17.535	42.468	1.00	0.00
H										
ATOM	9211	HB3	LYS	B	241	26.600	15.764	42.517	1.00	0.00
H										
ATOM	9212	HG2	LYS	B	241	28.878	15.611	41.508	1.00	0.00
H										
ATOM	9213	HG3	LYS	B	241	28.867	17.380	41.332	1.00	0.00
H										
ATOM	9214	HD2	LYS	B	241	26.790	17.191	39.959	1.00	0.00
H										
ATOM	9215	HD3	LYS	B	241	26.913	15.421	40.069	1.00	0.00
H										
ATOM	9216	HE2	LYS	B	241	27.928	16.131	37.972	1.00	0.00
H										
ATOM	9217	HE3	LYS	B	241	29.224	15.594	39.064	1.00	0.00
H										
ATOM	9218	HZ1	LYS	B	241	29.578	17.927	39.694	1.00	0.00
H										
ATOM	9219	HZ2	LYS	B	241	29.752	17.758	38.054	1.00	0.00
H										
ATOM	9220	HZ3	LYS	B	241	28.369	18.427	38.676	1.00	0.00
H										
ATOM	9221	N	ASP	B	242	27.390	18.527	45.255	1.00	0.00
N										
ATOM	9222	CA	ASP	B	242	26.531	19.267	46.157	1.00	0.00
C										
ATOM	9223	C	ASP	B	242	25.369	19.900	45.362	1.00	0.00
C										
ATOM	9224	O	ASP	B	242	24.325	20.208	45.926	1.00	0.00
O										
ATOM	9225	CB	ASP	B	242	27.323	20.349	46.929	1.00	0.00
C										

ATOM	9226	CG	ASP	B	242	28.109	19.789	48.104	1.00	0.00
C										
ATOM	9227	OD1	ASP	B	242	27.792	18.704	48.601	1.00	0.00
O										
ATOM	9228	OD2	ASP	B	242	29.061	20.466	48.565	1.00	0.00
O1-										
ATOM	9229	H	ASP	B	242	28.238	18.956	44.899	1.00	0.00
H										
ATOM	9230	HA	ASP	B	242	26.111	18.569	46.880	1.00	0.00
H										
ATOM	9231	HB2	ASP	B	242	26.620	21.092	47.304	1.00	0.00
H										
ATOM	9232	HB3	ASP	B	242	28.021	20.825	46.241	1.00	0.00
H										
ATOM	9233	N	VAL	B	243	25.572	20.108	44.070	1.00	0.00
N										
ATOM	9234	CA	VAL	B	243	24.594	20.779	43.217	1.00	0.00
C										
ATOM	9235	C	VAL	B	243	24.531	19.992	41.886	1.00	0.00
C										
ATOM	9236	O	VAL	B	243	25.509	19.920	41.179	1.00	0.00
O										
ATOM	9237	CB	VAL	B	243	24.982	22.288	42.920	1.00	0.00
C										
ATOM	9238	CG1	VAL	B	243	23.836	23.024	42.240	1.00	0.00
C										
ATOM	9239	CG2	VAL	B	243	25.353	23.046	44.176	1.00	0.00
C										
ATOM	9240	H	VAL	B	243	26.442	19.789	43.656	1.00	0.00
H										
ATOM	9241	HA	VAL	B	243	23.618	20.748	43.699	1.00	0.00
H										
ATOM	9242	HB	VAL	B	243	25.839	22.296	42.249	1.00	0.00
H										
ATOM	9243	HG11	VAL	B	243	22.961	23.011	42.887	1.00	0.00
H										
ATOM	9244	HG12	VAL	B	243	24.130	24.055	42.049	1.00	0.00
H										
ATOM	9245	HG13	VAL	B	243	23.599	22.534	41.297	1.00	0.00
H										
ATOM	9246	HG21	VAL	B	243	26.209	22.567	44.649	1.00	0.00
H										
ATOM	9247	HG22	VAL	B	243	25.610	24.073	43.918	1.00	0.00
H										
ATOM	9248	HG23	VAL	B	243	24.509	23.045	44.864	1.00	0.00
H										
ATOM	9249	N	ALA	B	244	23.395	19.356	41.611	1.00	0.00
N										
ATOM	9250	CA	ALA	B	244	23.115	18.737	40.310	1.00	0.00
C										
ATOM	9251	C	ALA	B	244	22.721	19.853	39.351	1.00	0.00
C										
ATOM	9252	O	ALA	B	244	21.906	20.740	39.687	1.00	0.00
O										
ATOM	9253	CB	ALA	B	244	22.003	17.694	40.412	1.00	0.00
C										

ATOM	9254	H	ALA	B	244	22.688	19.296	42.337	1.00	0.00
H										
ATOM	9255	HA	ALA	B	244	24.020	18.256	39.943	1.00	0.00
H										
ATOM	9256	HB1	ALA	B	244	21.092	18.169	40.771	1.00	0.00
H										
ATOM	9257	HB2	ALA	B	244	21.824	17.258	39.430	1.00	0.00
H										
ATOM	9258	HB3	ALA	B	244	22.303	16.912	41.107	1.00	0.00
H										
ATOM	9259	N	PHE	B	245	23.365	19.858	38.188	1.00	0.00
N										
ATOM	9260	CA	PHE	B	245	23.138	20.879	37.163	1.00	0.00
C										
ATOM	9261	C	PHE	B	245	23.804	20.350	35.883	1.00	0.00
C										
ATOM	9262	O	PHE	B	245	24.619	19.426	35.951	1.00	0.00
O										
ATOM	9263	CB	PHE	B	245	23.681	22.284	37.567	1.00	0.00
C										
ATOM	9264	CG	PHE	B	245	25.162	22.462	37.317	1.00	0.00
C										
ATOM	9265	CD1	PHE	B	245	25.694	22.383	36.002	1.00	0.00
C										
ATOM	9266	CD2	PHE	B	245	26.042	22.670	38.382	1.00	0.00
C										
ATOM	9267	CE1	PHE	B	245	27.077	22.504	35.770	1.00	0.00
C										
ATOM	9268	CE2	PHE	B	245	27.421	22.803	38.152	1.00	0.00
C										
ATOM	9269	CZ	PHE	B	245	27.935	22.724	36.853	1.00	0.00
C										
ATOM	9270	H	PHE	B	245	24.041	19.125	38.002	1.00	0.00
H										
ATOM	9271	HA	PHE	B	245	22.066	20.960	36.987	1.00	0.00
H										
ATOM	9272	HC	PHE	B	245	23.557	20.790	34.918	1.00	0.00
H										
ATOM	9273	HB2	PHE	B	245	23.491	22.433	38.629	1.00	0.00
H										
ATOM	9274	HB3	PHE	B	245	23.143	23.038	36.994	1.00	0.00
H										
ATOM	9275	HD1	PHE	B	245	25.021	22.227	35.160	1.00	0.00
H										
ATOM	9276	HD2	PHE	B	245	25.655	22.730	39.398	1.00	0.00
H										
ATOM	9277	HE1	PHE	B	245	27.474	22.428	34.759	1.00	0.00
H										
ATOM	9278	HE2	PHE	B	245	28.095	22.969	38.991	1.00	0.00
H										
ATOM	9279	HZ	PHE	B	245	29.005	22.834	36.685	1.00	0.00
H										
ATOM	9280	N	VAL	B	257	36.386	13.350	38.191	1.00	0.00
N										
ATOM	9281	CA	VAL	B	257	35.057	13.072	38.740	1.00	0.00
C										

ATOM	9282	C	VAL	B	257	35.187	12.776	40.239	1.00	0.00
C										
ATOM	9283	O	VAL	B	257	36.067	11.994	40.662	1.00	0.00
O										
ATOM	9284	CB	VAL	B	257	34.360	11.809	38.140	1.00	0.00
C										
ATOM	9285	CG1	VAL	B	257	32.833	11.899	38.351	1.00	0.00
C										
ATOM	9286	CG2	VAL	B	257	34.697	11.568	36.663	1.00	0.00
C										
ATOM	9287	H1	VAL	B	257	36.985	12.543	38.329	1.00	0.00
H										
ATOM	9288	H2	VAL	B	257	36.308	13.547	37.198	1.00	0.00
H										
ATOM	9289	HA	VAL	B	257	34.417	13.942	38.597	1.00	0.00
H										
ATOM	9290	HB	VAL	B	257	34.715	10.945	38.700	1.00	0.00
H										
ATOM	9291	HG11	VAL	B	257	32.450	12.790	37.855	1.00	0.00
H										
ATOM	9292	HG12	VAL	B	257	32.356	11.015	37.930	1.00	0.00
H										
ATOM	9293	HG13	VAL	B	257	32.616	11.956	39.417	1.00	0.00
H										
ATOM	9294	HG21	VAL	B	257	35.772	11.430	36.554	1.00	0.00
H										
ATOM	9295	HG22	VAL	B	257	34.179	10.676	36.313	1.00	0.00
H										
ATOM	9296	HG23	VAL	B	257	34.379	12.427	36.073	1.00	0.00
H										
ATOM	9297	N	GLN	B	258	34.289	13.351	41.028	1.00	0.00
N										
ATOM	9298	CA	GLN	B	258	34.220	13.039	42.443	1.00	0.00
C										
ATOM	9299	C	GLN	B	258	33.339	11.809	42.663	1.00	0.00
C										
ATOM	9300	O	GLN	B	258	32.113	11.853	42.512	1.00	0.00
O										
ATOM	9301	CB	GLN	B	258	33.691	14.234	43.222	1.00	0.00
C										
ATOM	9302	CG	GLN	B	258	34.229	14.289	44.626	1.00	0.00
C										
ATOM	9303	CD	GLN	B	258	35.602	14.966	44.741	1.00	0.00
C										
ATOM	9304	OE1	GLN	B	258	35.782	16.127	44.369	1.00	0.00
O										
ATOM	9305	NE2	GLN	B	258	36.557	14.246	45.295	1.00	0.00
N										
ATOM	9306	H	GLN	B	258	33.637	14.023	40.634	1.00	0.00
H										
ATOM	9307	HA	GLN	B	258	35.224	12.813	42.797	1.00	0.00
H										
ATOM	9308	HB2	GLN	B	258	32.605	14.169	43.266	1.00	0.00
H										
ATOM	9309	HB3	GLN	B	258	33.979	15.146	42.701	1.00	0.00
H										

ATOM	9310	HG2	GLN	B	258	34.317	13.270	44.999	1.00	0.00
H										
ATOM	9311	HG3	GLN	B	258	33.521	14.842	45.243	1.00	0.00
H										
ATOM	9312	HE21	GLN	B	258	37.488	14.635	45.401	1.00	0.00
H										
ATOM	9313	HE22	GLN	B	258	36.361	13.303	45.615	1.00	0.00
H										
ATOM	9314	N	LEU	B	259	34.000	10.722	43.040	1.00	0.00
N										
ATOM	9315	CA	LEU	B	259	33.412	9.398	43.120	1.00	0.00
C										
ATOM	9316	C	LEU	B	259	33.409	8.940	44.564	1.00	0.00
C										
ATOM	9317	O	LEU	B	259	34.306	9.262	45.315	1.00	0.00
O										
ATOM	9318	CB	LEU	B	259	34.268	8.430	42.306	1.00	0.00
C										
ATOM	9319	CG	LEU	B	259	34.042	8.345	40.783	1.00	0.00
C										
ATOM	9320	CD1	LEU	B	259	33.202	9.480	40.251	1.00	0.00
C										
ATOM	9321	CD2	LEU	B	259	35.377	8.212	40.037	1.00	0.00
C										
ATOM	9322	H	LEU	B	259	34.979	10.823	43.288	1.00	0.00
H										
ATOM	9323	HA	LEU	B	259	32.395	9.416	42.731	1.00	0.00
H										
ATOM	9324	HB2	LEU	B	259	34.099	7.434	42.711	1.00	0.00
H										
ATOM	9325	HB3	LEU	B	259	35.308	8.714	42.461	1.00	0.00
H										
ATOM	9326	HG	LEU	B	259	33.485	7.428	40.598	1.00	0.00
H										
ATOM	9327	HD11	LEU	B	259	33.697	10.427	40.461	1.00	0.00
H										
ATOM	9328	HD12	LEU	B	259	33.077	9.366	39.175	1.00	0.00
H										
ATOM	9329	HD13	LEU	B	259	32.225	9.466	40.733	1.00	0.00
H										
ATOM	9330	HD21	LEU	B	259	35.888	7.309	40.366	1.00	0.00
H										
ATOM	9331	HD22	LEU	B	259	35.190	8.154	38.966	1.00	0.00
H										
ATOM	9332	HD23	LEU	B	259	36.000	9.079	40.250	1.00	0.00
H										
ATOM	9333	N	GLN	B	260	32.389	8.183	44.942	1.00	0.00
N										
ATOM	9334	CA	GLN	B	260	32.298	7.589	46.244	1.00	0.00
C										
ATOM	9335	C	GLN	B	260	31.939	6.131	45.968	1.00	0.00
C										
ATOM	9336	O	GLN	B	260	30.840	5.834	45.472	1.00	0.00
O										
ATOM	9337	CB	GLN	B	260	31.235	8.314	47.054	1.00	0.00
C										

ATOM	9338	CG	GLN	B	260	30.872	7.692	48.385	1.00	0.00
C										
ATOM	9339	CD	GLN	B	260	29.451	8.105	48.854	1.00	0.00
C										
ATOM	9340	OE1	GLN	B	260	29.301	8.925	49.811	1.00	0.00
O										
ATOM	9341	NE2	GLN	B	260	28.406	7.546	48.182	1.00	0.00
N										
ATOM	9342	H	GLN	B	260	31.638	8.016	44.280	1.00	0.00
H										
ATOM	9343	HA	GLN	B	260	33.260	7.648	46.751	1.00	0.00
H										
ATOM	9344	HB2	GLN	B	260	30.329	8.359	46.450	1.00	0.00
H										
ATOM	9345	HB3	GLN	B	260	31.593	9.324	47.245	1.00	0.00
H										
ATOM	9346	HG2	GLN	B	260	31.596	8.014	49.132	1.00	0.00
H										
ATOM	9347	HG3	GLN	B	260	30.909	6.608	48.288	1.00	0.00
H										
ATOM	9348	HE21	GLN	B	260	27.453	7.778	48.443	1.00	0.00
H										
ATOM	9349	HE22	GLN	B	260	28.581	6.898	47.420	1.00	0.00
H										
ATOM	9350	N	ILE	B	261	32.898	5.246	46.249	1.00	0.00
N										
ATOM	9351	CA	ILE	B	261	32.877	3.855	45.837	1.00	0.00
C										
ATOM	9352	C	ILE	B	261	33.383	3.050	47.036	1.00	0.00
C										
ATOM	9353	O	ILE	B	261	34.505	3.246	47.479	1.00	0.00
O										
ATOM	9354	CB	ILE	B	261	33.773	3.584	44.612	1.00	0.00
C										
ATOM	9355	CG1	ILE	B	261	33.215	4.206	43.339	1.00	0.00
C										
ATOM	9356	CG2	ILE	B	261	33.880	2.076	44.326	1.00	0.00
C										
ATOM	9357	CD1	ILE	B	261	34.245	4.274	42.125	1.00	0.00
C										
ATOM	9358	H	ILE	B	261	33.696	5.568	46.787	1.00	0.00
H										
ATOM	9359	HA	ILE	B	261	31.853	3.561	45.609	1.00	0.00
H										
ATOM	9360	HB	ILE	B	261	34.768	3.985	44.800	1.00	0.00
H										
ATOM	9361	HG12	ILE	B	261	32.894	5.221	43.569	1.00	0.00
H										
ATOM	9362	HG13	ILE	B	261	32.355	3.617	43.022	1.00	0.00
H										
ATOM	9363	HG21	ILE	B	261	32.888	1.673	44.127	1.00	0.00
H										
ATOM	9364	HG22	ILE	B	261	34.517	1.916	43.458	1.00	0.00
H										
ATOM	9365	HG23	ILE	B	261	34.310	1.572	45.190	1.00	0.00
H										

ATOM	9366	HD11	ILE	B	261	34.569	3.267	41.867	1.00	0.00
H										
ATOM	9367	HD12	ILE	B	261	33.761	4.731	41.263	1.00	0.00
H										
ATOM	9368	HD13	ILE	B	261	35.108	4.871	42.415	1.00	0.00
H										
ATOM	9369	N	PRO	B	262	32.548	2.171	47.604	1.00	0.00
N										
ATOM	9370	CA	PRO	B	262	31.188	1.939	47.164	1.00	0.00
C										
ATOM	9371	C	PRO	B	262	30.279	3.092	47.586	1.00	0.00
C										
ATOM	9372	O	PRO	B	262	30.631	3.879	48.468	1.00	0.00
O										
ATOM	9373	CB	PRO	B	262	30.823	0.618	47.875	1.00	0.00
C										
ATOM	9374	CG	PRO	B	262	31.605	0.663	49.129	1.00	0.00
C										
ATOM	9375	CD	PRO	B	262	32.907	1.302	48.745	1.00	0.00
C										
ATOM	9376	HA	PRO	B	262	31.156	1.808	46.083	1.00	0.00
H										
ATOM	9377	HB2	PRO	B	262	31.112	-0.240	47.270	1.00	0.00
H										
ATOM	9378	HB3	PRO	B	262	29.756	0.572	48.085	1.00	0.00
H										
ATOM	9379	HG2	PRO	B	262	31.769	-0.342	49.515	1.00	0.00
H										
ATOM	9380	HG3	PRO	B	262	31.090	1.261	49.880	1.00	0.00
H										
ATOM	9381	HD2	PRO	B	262	33.310	1.889	49.569	1.00	0.00
H										
ATOM	9382	HD3	PRO	B	262	33.636	0.550	48.446	1.00	0.00
H										
ATOM	9383	N	ALA	B	263	29.147	3.225	46.907	1.00	0.00
N										
ATOM	9384	CA	ALA	B	263	28.157	4.185	47.300	1.00	0.00
C										
ATOM	9385	C	ALA	B	263	27.707	3.862	48.728	1.00	0.00
C										
ATOM	9386	O	ALA	B	263	27.689	2.697	49.130	1.00	0.00
O										
ATOM	9387	CB	ALA	B	263	26.969	4.167	46.320	1.00	0.00
C										
ATOM	9388	H	ALA	B	263	28.978	2.638	46.096	1.00	0.00
H										
ATOM	9389	HA	ALA	B	263	28.607	5.177	47.289	1.00	0.00
H										
ATOM	9390	HB1	ALA	B	263	26.518	3.176	46.315	1.00	0.00
H										
ATOM	9391	HB2	ALA	B	263	26.229	4.901	46.633	1.00	0.00
H										
ATOM	9392	HB3	ALA	B	263	27.321	4.411	45.319	1.00	0.00
H										
ATOM	9393	N	ASP	B	264	27.389	4.915	49.482	1.00	0.00
N										

ATOM	9394	CA	ASP	B	264	26.821	4.853	50.819	1.00	0.00
C										
ATOM	9395	C	ASP	B	264	25.322	4.590	50.710	1.00	0.00
C										
ATOM	9396	O	ASP	B	264	24.513	5.495	50.795	1.00	0.00
O										
ATOM	9397	CB	ASP	B	264	27.084	6.212	51.495	1.00	0.00
C										
ATOM	9398	CG	ASP	B	264	26.591	6.285	52.933	1.00	0.00
C										
ATOM	9399	OD1	ASP	B	264	26.689	5.280	53.677	1.00	0.00
O										
ATOM	9400	OD2	ASP	B	264	26.134	7.394	53.297	1.00	0.00
O1-										
ATOM	9401	H	ASP	B	264	27.558	5.836	49.090	1.00	0.00
H										
ATOM	9402	HA	ASP	B	264	27.298	4.056	51.388	1.00	0.00
H										
ATOM	9403	HB2	ASP	B	264	26.580	6.986	50.919	1.00	0.00
H										
ATOM	9404	HB3	ASP	B	264	28.157	6.397	51.490	1.00	0.00
H										
ATOM	9405	N	LEU	B	265	24.946	3.346	50.451	1.00	0.00
N										
ATOM	9406	CA	LEU	B	265	23.538	3.011	50.308	1.00	0.00
C										
ATOM	9407	C	LEU	B	265	23.338	1.802	51.146	1.00	0.00
C										
ATOM	9408	O	LEU	B	265	24.289	1.095	51.397	1.00	0.00
O										
ATOM	9409	CB	LEU	B	265	23.191	2.688	48.858	1.00	0.00
C										
ATOM	9410	CG	LEU	B	265	23.315	3.803	47.789	1.00	0.00
C										
ATOM	9411	CD1	LEU	B	265	22.948	3.234	46.420	1.00	0.00
C										
ATOM	9412	CD2	LEU	B	265	22.428	4.935	48.129	1.00	0.00
C										
ATOM	9413	H	LEU	B	265	25.648	2.620	50.351	1.00	0.00
H										
ATOM	9414	HA	LEU	B	265	22.917	3.829	50.671	1.00	0.00
H										
ATOM	9415	HB2	LEU	B	265	22.157	2.348	48.846	1.00	0.00
H										
ATOM	9416	HB3	LEU	B	265	23.845	1.874	48.547	1.00	0.00
H										
ATOM	9417	HG	LEU	B	265	24.345	4.155	47.762	1.00	0.00
H										
ATOM	9418	HD11	LEU	B	265	21.924	2.864	46.443	1.00	0.00
H										
ATOM	9419	HD12	LEU	B	265	23.035	4.016	45.667	1.00	0.00
H										
ATOM	9420	HD13	LEU	B	265	23.624	2.417	46.174	1.00	0.00
H										
ATOM	9421	HD21	LEU	B	265	22.711	5.339	49.100	1.00	0.00
H										



ATOM	9422	HD22	LEU	B	265	22.524	5.712	47.371	1.00	0.00
H										
ATOM	9423	HD23	LEU	B	265	21.396	4.589	48.166	1.00	0.00
H										
ATOM	9424	N	ASP	B	266	22.124	1.522	51.573	1.00	0.00
N										
ATOM	9425	CA	ASP	B	266	21.989	0.266	52.278	1.00	0.00
C										
ATOM	9426	C	ASP	B	266	22.058	-0.940	51.348	1.00	0.00
C										
ATOM	9427	O	ASP	B	266	22.020	-0.831	50.116	1.00	0.00
O										
ATOM	9428	CB	ASP	B	266	20.863	0.260	53.335	1.00	0.00
C										
ATOM	9429	CG	ASP	B	266	19.575	0.736	52.818	1.00	0.00
C										
ATOM	9430	OD1	ASP	B	266	19.270	0.326	51.691	1.00	0.00
O										
ATOM	9431	OD2	ASP	B	266	18.870	1.475	53.551	1.00	0.00
O1-										
ATOM	9432	H	ASP	B	266	21.337	2.144	51.418	1.00	0.00
H										
ATOM	9433	HA	ASP	B	266	22.902	0.196	52.867	1.00	0.00
H										
ATOM	9434	HB2	ASP	B	266	21.162	0.903	54.161	1.00	0.00
H										
ATOM	9435	HB3	ASP	B	266	20.734	-0.759	53.696	1.00	0.00
H										
ATOM	9436	N	GLU	B	267	22.250	-2.092	51.955	1.00	0.00
N										
ATOM	9437	CA	GLU	B	267	22.762	-3.217	51.256	1.00	0.00
C										
ATOM	9438	C	GLU	B	267	21.717	-3.754	50.263	1.00	0.00
C										
ATOM	9439	O	GLU	B	267	22.035	-4.096	49.140	1.00	0.00
O										
ATOM	9440	CB	GLU	B	267	23.230	-4.264	52.258	1.00	0.00
C										
ATOM	9441	CG	GLU	B	267	24.134	-5.319	51.631	1.00	0.00
C										
ATOM	9442	CD	GLU	B	267	25.573	-4.847	51.368	1.00	0.00
C										
ATOM	9443	OE1	GLU	B	267	25.942	-3.694	51.727	1.00	0.00
O										
ATOM	9444	OE2	GLU	B	267	26.347	-5.665	50.805	1.00	0.00
O1-										
ATOM	9445	H	GLU	B	267	22.028	-2.178	52.941	1.00	0.00
H										
ATOM	9446	HA	GLU	B	267	23.629	-2.890	50.684	1.00	0.00
H										
ATOM	9447	HB2	GLU	B	267	22.356	-4.760	52.677	1.00	0.00
H										
ATOM	9448	HB3	GLU	B	267	23.780	-3.763	53.053	1.00	0.00
H										
ATOM	9449	HG2	GLU	B	267	23.696	-5.622	50.681	1.00	0.00
H										

ATOM	9450	HG3	GLU	B	267	24.174	-6.176	52.302	1.00	0.00
H										
ATOM	9451	N	ASP	B	268	20.464	-3.793	50.687	1.00	0.00
N										
ATOM	9452	CA	ASP	B	268	19.401	-4.272	49.825	1.00	0.00
C										
ATOM	9453	C	ASP	B	268	19.280	-3.330	48.630	1.00	0.00
C										
ATOM	9454	O	ASP	B	268	19.028	-3.761	47.530	1.00	0.00
O										
ATOM	9455	CB	ASP	B	268	18.067	-4.439	50.597	1.00	0.00
C										
ATOM	9456	CG	ASP	B	268	17.637	-3.173	51.333	1.00	0.00
C										
ATOM	9457	OD1	ASP	B	268	16.601	-2.563	50.952	1.00	0.00
O										
ATOM	9458	OD2	ASP	B	268	18.331	-2.766	52.284	1.00	0.00
O1-										
ATOM	9459	H	ASP	B	268	20.244	-3.483	51.628	1.00	0.00
H										
ATOM	9460	HA	ASP	B	268	19.693	-5.252	49.449	1.00	0.00
H										
ATOM	9461	HB2	ASP	B	268	18.186	-5.240	51.325	1.00	0.00
H										
ATOM	9462	HB3	ASP	B	268	17.287	-4.708	49.886	1.00	0.00
H										
ATOM	9463	N	VAL	B	269	19.496	-2.040	48.835	1.00	0.00
N										
ATOM	9464	CA	VAL	B	269	19.416	-1.110	47.719	1.00	0.00
C										
ATOM	9465	C	VAL	B	269	20.548	-1.368	46.725	1.00	0.00
C										
ATOM	9466	O	VAL	B	269	20.345	-1.434	45.527	1.00	0.00
O										
ATOM	9467	CB	VAL	B	269	19.420	0.337	48.205	1.00	0.00
C										
ATOM	9468	CG1	VAL	B	269	19.453	1.309	46.998	1.00	0.00
C										
ATOM	9469	CG2	VAL	B	269	18.186	0.581	49.160	1.00	0.00
C										
ATOM	9470	H	VAL	B	269	19.716	-1.702	49.766	1.00	0.00
H										
ATOM	9471	HA	VAL	B	269	18.473	-1.287	47.204	1.00	0.00
H										
ATOM	9472	HB	VAL	B	269	20.328	0.493	48.785	1.00	0.00
H										
ATOM	9473	HG11	VAL	B	269	18.575	1.145	46.376	1.00	0.00
H										
ATOM	9474	HG12	VAL	B	269	19.456	2.336	47.359	1.00	0.00
H										
ATOM	9475	HG13	VAL	B	269	20.352	1.128	46.411	1.00	0.00
H										
ATOM	9476	HG21	VAL	B	269	18.252	-0.088	50.017	1.00	0.00
H										
ATOM	9477	HG22	VAL	B	269	18.192	1.614	49.504	1.00	0.00
H										

ATOM	9478	HG23	VAL	B	269	17.263	0.385	48.617	1.00	0.00
H										
ATOM	9479	N	GLN	B	270	21.742	-1.540	47.235	1.00	0.00
N										
ATOM	9480	CA	GLN	B	270	22.886	-1.850	46.405	1.00	0.00
C										
ATOM	9481	C	GLN	B	270	22.628	-3.104	45.580	1.00	0.00
C										
ATOM	9482	O	GLN	B	270	22.958	-3.129	44.409	1.00	0.00
O										
ATOM	9483	CB	GLN	B	270	24.126	-2.077	47.258	1.00	0.00
C										
ATOM	9484	CG	GLN	B	270	24.506	-0.870	48.047	1.00	0.00
C										
ATOM	9485	CD	GLN	B	270	25.953	-0.858	48.476	1.00	0.00
C										
ATOM	9486	OE1	GLN	B	270	26.855	-1.132	47.676	1.00	0.00
O										
ATOM	9487	NE2	GLN	B	270	26.189	-0.446	49.721	1.00	0.00
N										
ATOM	9488	H	GLN	B	270	21.868	-1.454	48.238	1.00	0.00
H										
ATOM	9489	HA	GLN	B	270	23.070	-1.015	45.730	1.00	0.00
H										
ATOM	9490	HB2	GLN	B	270	24.956	-2.342	46.604	1.00	0.00
H										
ATOM	9491	HB3	GLN	B	270	23.931	-2.897	47.947	1.00	0.00
H										
ATOM	9492	HG2	GLN	B	270	23.883	-0.832	48.939	1.00	0.00
H										
ATOM	9493	HG3	GLN	B	270	24.321	0.013	47.436	1.00	0.00
H										
ATOM	9494	HE21	GLN	B	270	27.141	-0.414	50.073	1.00	0.00
H										
ATOM	9495	HE22	GLN	B	270	25.418	-0.165	50.317	1.00	0.00
H										
ATOM	9496	N	LEU	B	271	22.073	-4.135	46.194	1.00	0.00
N										
ATOM	9497	CA	LEU	B	271	21.816	-5.338	45.479	1.00	0.00
C										
ATOM	9498	C	LEU	B	271	20.778	-5.138	44.392	1.00	0.00
C										
ATOM	9499	O	LEU	B	271	20.998	-5.574	43.287	1.00	0.00
O										
ATOM	9500	CB	LEU	B	271	21.366	-6.438	46.423	1.00	0.00
C										
ATOM	9501	CG	LEU	B	271	22.580	-7.007	47.148	1.00	0.00
C										
ATOM	9502	CD1	LEU	B	271	22.162	-7.798	48.416	1.00	0.00
C										
ATOM	9503	CD2	LEU	B	271	23.441	-7.846	46.165	1.00	0.00
C										
ATOM	9504	H	LEU	B	271	21.830	-4.068	47.177	1.00	0.00
H										
ATOM	9505	HA	LEU	B	271	22.744	-5.656	45.006	1.00	0.00
H										

ATOM	9506	HB2	LEU	B	271	20.878	-7.229	45.854	1.00	0.00
H										
ATOM	9507	HB3	LEU	B	271	20.666	-6.029	47.150	1.00	0.00
H										
ATOM	9508	HG	LEU	B	271	23.188	-6.165	47.475	1.00	0.00
H										
ATOM	9509	HD11	LEU	B	271	21.512	-8.623	48.131	1.00	0.00
H										
ATOM	9510	HD12	LEU	B	271	23.051	-8.190	48.909	1.00	0.00
H										
ATOM	9511	HD13	LEU	B	271	21.631	-7.136	49.098	1.00	0.00
H										
ATOM	9512	HD21	LEU	B	271	23.778	-7.213	45.346	1.00	0.00
H										
ATOM	9513	HD22	LEU	B	271	24.305	-8.248	46.692	1.00	0.00
H										
ATOM	9514	HD23	LEU	B	271	22.844	-8.666	45.768	1.00	0.00
H										
ATOM	9515	N	THR	B	272	19.641	-4.534	44.727	1.00	0.00
N										
ATOM	9516	CA	THR	B	272	18.606	-4.168	43.748	1.00	0.00
C										
ATOM	9517	C	THR	B	272	19.266	-3.432	42.591	1.00	0.00
C										
ATOM	9518	O	THR	B	272	19.046	-3.754	41.423	1.00	0.00
O										
ATOM	9519	CB	THR	B	272	17.495	-3.317	44.404	1.00	0.00
C										
ATOM	9520	OG1	THR	B	272	16.878	-4.075	45.473	1.00	0.00
O										
ATOM	9521	CG2	THR	B	272	16.441	-2.901	43.403	1.00	0.00
C										
ATOM	9522	H	THR	B	272	19.480	-4.315	45.705	1.00	0.00
H										
ATOM	9523	HA	THR	B	272	18.157	-5.083	43.363	1.00	0.00
H										
ATOM	9524	HB	THR	B	272	17.947	-2.421	44.828	1.00	0.00
H										
ATOM	9525	HG21	THR	B	272	15.981	-3.788	42.970	1.00	0.00
H										
ATOM	9526	HG22	THR	B	272	15.680	-2.305	43.904	1.00	0.00
H										
ATOM	9527	HG23	THR	B	272	16.903	-2.310	42.614	1.00	0.00
H										
ATOM	9528	HG1	THR	B	272	17.564	-4.307	46.153	1.00	0.00
H										
ATOM	9529	N	LEU	B	273	20.137	-2.484	42.903	1.00	0.00
N										
ATOM	9530	CA	LEU	B	273	20.794	-1.737	41.834	1.00	0.00
C										
ATOM	9531	C	LEU	B	273	21.625	-2.643	40.913	1.00	0.00
C										
ATOM	9532	O	LEU	B	273	21.565	-2.521	39.672	1.00	0.00
O										
ATOM	9533	CB	LEU	B	273	21.630	-0.594	42.389	1.00	0.00
C										

ATOM	9534	CG	LEU	B	273	20.897	0.666	42.908	1.00	0.00
C										
ATOM	9535	CD1	LEU	B	273	21.940	1.602	43.526	1.00	0.00
C										
ATOM	9536	CD2	LEU	B	273	20.119	1.387	41.834	1.00	0.00
C										
ATOM	9537	H	LEU	B	273	20.346	-2.279	43.875	1.00	0.00
H										
ATOM	9538	HA	LEU	B	273	20.009	-1.293	41.224	1.00	0.00
H										
ATOM	9539	HB2	LEU	B	273	22.303	-0.272	41.596	1.00	0.00
H										
ATOM	9540	HB3	LEU	B	273	22.212	-0.993	43.218	1.00	0.00
H										
ATOM	9541	HG	LEU	B	273	20.203	0.362	43.690	1.00	0.00
H										
ATOM	9542	HD11	LEU	B	273	22.673	1.879	42.769	1.00	0.00
H										
ATOM	9543	HD12	LEU	B	273	21.448	2.498	43.899	1.00	0.00
H										
ATOM	9544	HD13	LEU	B	273	22.442	1.094	44.348	1.00	0.00
H										
ATOM	9545	HD21	LEU	B	273	19.368	0.717	41.419	1.00	0.00
H										
ATOM	9546	HD22	LEU	B	273	19.630	2.260	42.264	1.00	0.00
H										
ATOM	9547	HD23	LEU	B	273	20.799	1.704	41.044	1.00	0.00
H										
ATOM	9548	N	ARG	B	274	22.362	-3.592	41.523	1.00	0.00
N										
ATOM	9549	CA	ARG	B	274	23.203	-4.472	40.731	1.00	0.00
C										
ATOM	9550	C	ARG	B	274	22.366	-5.280	39.806	1.00	0.00
C										
ATOM	9551	O	ARG	B	274	22.732	-5.451	38.628	1.00	0.00
O										
ATOM	9552	CB	ARG	B	274	24.025	-5.403	41.575	1.00	0.00
C										
ATOM	9553	CG	ARG	B	274	25.052	-4.641	42.323	1.00	0.00
C										
ATOM	9554	CD	ARG	B	274	25.802	-5.579	43.289	1.00	0.00
C										
ATOM	9555	NE	ARG	B	274	26.756	-6.421	42.598	1.00	0.00
N1+										
ATOM	9556	CZ	ARG	B	274	27.361	-7.460	43.146	1.00	0.00
C1+										
ATOM	9557	NH1	ARG	B	274	27.083	-7.787	44.379	1.00	0.00
N1+										
ATOM	9558	NH2	ARG	B	274	28.261	-8.171	42.460	1.00	0.00
N1+										
ATOM	9559	H	ARG	B	274	22.330	-3.691	42.532	1.00	0.00
H										
ATOM	9560	HA	ARG	B	274	23.878	-3.859	40.136	1.00	0.00
H										
ATOM	9561	HB2	ARG	B	274	24.514	-6.133	40.933	1.00	0.00
H										

ATOM	9562	HB3	ARG	B	274	23.374	-5.918	42.280	1.00	0.00
H										
ATOM	9563	HG2	ARG	B	274	24.571	-3.847	42.892	1.00	0.00
H										
ATOM	9564	HG3	ARG	B	274	25.761	-4.205	41.620	1.00	0.00
H										
ATOM	9565	HD2	ARG	B	274	25.077	-6.213	43.797	1.00	0.00
H										
ATOM	9566	HD3	ARG	B	274	26.334	-4.975	44.023	1.00	0.00
H										
ATOM	9567	HE2	ARG	B	274	26.972	-6.200	41.631	1.00	0.00
H										
ATOM	9568	HE3	ARG	B	274	26.003	-7.021	42.292	1.00	0.00
H										
ATOM	9569	HH11	ARG	B	274	27.542	-8.583	44.809	1.00	0.00
H										
ATOM	9570	HH12	ARG	B	274	26.406	-7.245	44.907	1.00	0.00
H										
ATOM	9571	HH13	ARG	B	274	27.822	-7.183	44.707	1.00	0.00
H										
ATOM	9572	HH21	ARG	B	274	28.717	-8.966	42.895	1.00	0.00
H										
ATOM	9573	HH22	ARG	B	274	28.487	-7.916	41.504	1.00	0.00
H										
ATOM	9574	HH23	ARG	B	274	27.525	-8.777	42.124	1.00	0.00
H										
ATOM	9575	N	ASN	B	275	21.248	-5.776	40.325	1.00	0.00
N										
ATOM	9576	CA	ASN	B	275	20.366	-6.628	39.494	1.00	0.00
C										
ATOM	9577	C	ASN	B	275	19.695	-5.861	38.376	1.00	0.00
C										
ATOM	9578	O	ASN	B	275	19.634	-6.332	37.257	1.00	0.00
O										
ATOM	9579	CB	ASN	B	275	19.343	-7.363	40.370	1.00	0.00
C										
ATOM	9580	CG	ASN	B	275	19.970	-8.569	41.078	1.00	0.00
C										
ATOM	9581	OD1	ASN	B	275	20.467	-9.462	40.412	1.00	0.00
O										
ATOM	9582	ND2	ASN	B	275	19.956	-8.589	42.416	1.00	0.00
N										
ATOM	9583	H	ASN	B	275	21.000	-5.572	41.288	1.00	0.00
H										
ATOM	9584	HA	ASN	B	275	20.996	-7.386	39.031	1.00	0.00
H										
ATOM	9585	HB2	ASN	B	275	18.524	-7.709	39.742	1.00	0.00
H										
ATOM	9586	HB3	ASN	B	275	18.960	-6.673	41.120	1.00	0.00
H										
ATOM	9587	HD21	ASN	B	275	20.363	-9.373	42.916	1.00	0.00
H										
ATOM	9588	HD22	ASN	B	275	19.539	-7.820	42.931	1.00	0.00
H										
ATOM	9589	N	MET	B	276	19.234	-4.655	38.680	1.00	0.00
N										

ATOM	9590	CA	MET	B	276	18.673	-3.806	37.670	1.00	0.00
C										
ATOM	9591	C	MET	B	276	19.708	-3.408	36.643	1.00	0.00
C										
ATOM	9592	O	MET	B	276	19.365	-3.247	35.482	1.00	0.00
O										
ATOM	9593	CB	MET	B	276	18.103	-2.515	38.267	1.00	0.00
C										
ATOM	9594	CG	MET	B	276	17.133	-2.672	39.383	1.00	0.00
C										
ATOM	9595	SD	MET	B	276	16.462	-1.005	39.705	1.00	0.00
S										
ATOM	9596	CE	MET	B	276	14.847	-1.382	40.457	1.00	0.00
C										
ATOM	9597	H	MET	B	276	19.279	-4.329	39.640	1.00	0.00
H										
ATOM	9598	HA	MET	B	276	17.870	-4.343	37.168	1.00	0.00
H										
ATOM	9599	HB2	MET	B	276	17.602	-1.974	37.466	1.00	0.00
H										
ATOM	9600	HB3	MET	B	276	18.940	-1.924	38.636	1.00	0.00
H										
ATOM	9601	HG2	MET	B	276	17.636	-3.055	40.270	1.00	0.00
H										
ATOM	9602	HG3	MET	B	276	16.333	-3.353	39.096	1.00	0.00
H										
ATOM	9603	HE1	MET	B	276	14.997	-1.964	41.365	1.00	0.00
H										
ATOM	9604	HE2	MET	B	276	14.335	-0.453	40.701	1.00	0.00
H										
ATOM	9605	HE3	MET	B	276	14.244	-1.955	39.754	1.00	0.00
H										
ATOM	9606	N	ALA	B	277	20.968	-3.244	37.047	1.00	0.00
N										
ATOM	9607	CA	ALA	B	277	22.049	-3.024	36.052	1.00	0.00
C										
ATOM	9608	C	ALA	B	277	22.183	-4.155	35.022	1.00	0.00
C										
ATOM	9609	O	ALA	B	277	22.323	-3.914	33.799	1.00	0.00
O										
ATOM	9610	CB	ALA	B	277	23.379	-2.717	36.740	1.00	0.00
C										
ATOM	9611	H	ALA	B	277	21.190	-3.270	38.037	1.00	0.00
H										
ATOM	9612	HA	ALA	B	277	21.776	-2.129	35.494	1.00	0.00
H										
ATOM	9613	HB1	ALA	B	277	23.659	-3.554	37.378	1.00	0.00
H										
ATOM	9614	HB2	ALA	B	277	24.149	-2.561	35.987	1.00	0.00
H										
ATOM	9615	HB3	ALA	B	277	23.275	-1.818	37.345	1.00	0.00
H										
ATOM	9616	N	LEU	B	278	22.084	-5.392	35.464	1.00	0.00
N										
ATOM	9617	CA	LEU	B	278	22.165	-6.544	34.554	1.00	0.00
C										

ATOM	9618	C	LEU	B	278	20.949	-6.547	33.635	1.00	0.00
C										
ATOM	9619	O	LEU	B	278	21.064	-6.747	32.409	1.00	0.00
O										
ATOM	9620	CB	LEU	B	278	22.266	-7.877	35.366	1.00	0.00
C										
ATOM	9621	CG	LEU	B	278	23.483	-7.955	36.318	1.00	0.00
C										
ATOM	9622	CD1	LEU	B	278	23.402	-9.224	37.210	1.00	0.00
C										
ATOM	9623	CD2	LEU	B	278	24.808	-7.859	35.549	1.00	0.00
C										
ATOM	9624	H	LEU	B	278	21.948	-5.554	36.457	1.00	0.00
H										
ATOM	9625	HA	LEU	B	278	23.061	-6.441	33.943	1.00	0.00
H										
ATOM	9626	HB2	LEU	B	278	22.333	-8.703	34.659	1.00	0.00
H										
ATOM	9627	HB3	LEU	B	278	21.360	-7.983	35.962	1.00	0.00
H										
ATOM	9628	HG	LEU	B	278	23.430	-7.092	36.980	1.00	0.00
H										
ATOM	9629	HD11	LEU	B	278	23.391	-10.111	36.579	1.00	0.00
H										
ATOM	9630	HD12	LEU	B	278	24.266	-9.259	37.871	1.00	0.00
H										
ATOM	9631	HD13	LEU	B	278	22.491	-9.192	37.806	1.00	0.00
H										
ATOM	9632	HD21	LEU	B	278	24.849	-6.911	35.014	1.00	0.00
H										
ATOM	9633	HD22	LEU	B	278	25.639	-7.918	36.250	1.00	0.00
H										
ATOM	9634	HD23	LEU	B	278	24.875	-8.681	34.837	1.00	0.00
H										
ATOM	9635	N	GLU	B	279	19.799	-6.227	34.204	1.00	0.00
N										
ATOM	9636	CA	GLU	B	279	18.552	-6.080	33.446	1.00	0.00
C										
ATOM	9637	C	GLU	B	279	18.655	-5.024	32.355	1.00	0.00
C										
ATOM	9638	O	GLU	B	279	18.253	-5.285	31.236	1.00	0.00
O										
ATOM	9639	CB	GLU	B	279	17.380	-5.752	34.384	1.00	0.00
C										
ATOM	9640	CG	GLU	B	279	16.915	-6.986	35.208	1.00	0.00
C										
ATOM	9641	CD	GLU	B	279	16.353	-8.057	34.333	1.00	0.00
C										
ATOM	9642	OE1	GLU	B	279	15.274	-7.825	33.759	1.00	0.00
O										
ATOM	9643	OE2	GLU	B	279	17.023	-9.085	34.148	1.00	0.00
O1-										
ATOM	9644	H	GLU	B	279	19.778	-6.077	35.208	1.00	0.00
H										
ATOM	9645	HA	GLU	B	279	18.338	-7.035	32.967	1.00	0.00
H										



ATOM	9646	HB2	GLU	B	279	16.542	-5.396	33.786	1.00	0.00
H										
ATOM	9647	HB3	GLU	B	279	17.692	-4.969	35.073	1.00	0.00
H										
ATOM	9648	HG2	GLU	B	279	16.150	-6.670	35.915	1.00	0.00
H										
ATOM	9649	HG3	GLU	B	279	17.769	-7.388	35.753	1.00	0.00
H										
ATOM	9650	N	ALA	B	280	19.175	-3.851	32.687	1.00	0.00
N										
ATOM	9651	CA	ALA	B	280	19.408	-2.751	31.715	1.00	0.00
C										
ATOM	9652	C	ALA	B	280	20.329	-3.148	30.585	1.00	0.00
C										
ATOM	9653	O	ALA	B	280	20.044	-2.927	29.414	1.00	0.00
O										
ATOM	9654	CB	ALA	B	280	20.024	-1.539	32.433	1.00	0.00
C										
ATOM	9655	H	ALA	B	280	19.427	-3.696	33.658	1.00	0.00
H										
ATOM	9656	HA	ALA	B	280	18.449	-2.453	31.292	1.00	0.00
H										
ATOM	9657	HB1	ALA	B	280	20.973	-1.827	32.883	1.00	0.00
H										
ATOM	9658	HB2	ALA	B	280	20.191	-0.738	31.714	1.00	0.00
H										
ATOM	9659	HB3	ALA	B	280	19.344	-1.193	33.210	1.00	0.00
H										
ATOM	9660	N	PHE	B	281	21.412	-3.805	30.965	1.00	0.00
N										
ATOM	9661	CA	PHE	B	281	22.352	-4.371	30.051	1.00	0.00
C										
ATOM	9662	C	PHE	B	281	21.625	-5.346	29.102	1.00	0.00
C										
ATOM	9663	O	PHE	B	281	21.798	-5.262	27.894	1.00	0.00
O										
ATOM	9664	CB	PHE	B	281	23.467	-5.044	30.849	1.00	0.00
C										
ATOM	9665	CG	PHE	B	281	24.501	-5.729	30.010	1.00	0.00
C										
ATOM	9666	CD1	PHE	B	281	25.770	-5.149	29.844	1.00	0.00
C										
ATOM	9667	CD2	PHE	B	281	24.234	-6.963	29.402	1.00	0.00
C										
ATOM	9668	CE1	PHE	B	281	26.770	-5.789	29.081	1.00	0.00
C										
ATOM	9669	CE2	PHE	B	281	25.254	-7.613	28.632	1.00	0.00
C										
ATOM	9670	CZ	PHE	B	281	26.520	-6.998	28.491	1.00	0.00
C										
ATOM	9671	H	PHE	B	281	21.584	-3.913	31.959	1.00	0.00
H										
ATOM	9672	HA	PHE	B	281	22.786	-3.568	29.457	1.00	0.00
H										
ATOM	9673	HB2	PHE	B	281	23.015	-5.786	31.506	1.00	0.00
H										

ATOM	9674	HB3	PHE	B	281	23.964	-4.283	31.448	1.00	0.00
H										
ATOM	9675	HD1	PHE	B	281	25.985	-4.190	30.312	1.00	0.00
H										
ATOM	9676	HD2	PHE	B	281	23.255	-7.427	29.514	1.00	0.00
H										
ATOM	9677	HE1	PHE	B	281	27.745	-5.319	28.961	1.00	0.00
H										
ATOM	9678	HE2	PHE	B	281	25.055	-8.574	28.159	1.00	0.00
H										
ATOM	9679	HZ	PHE	B	281	27.299	-7.489	27.910	1.00	0.00
H										
ATOM	9680	N	LYS	B	282	20.775	-6.207	29.649	1.00	0.00
N										
ATOM	9681	CA	LYS	B	282	19.995	-7.120	28.805	1.00	0.00
C										
ATOM	9682	C	LYS	B	282	18.970	-6.387	27.938	1.00	0.00
C										
ATOM	9683	O	LYS	B	282	18.726	-6.785	26.794	1.00	0.00
O										
ATOM	9684	CB	LYS	B	282	19.284	-8.168	29.645	1.00	0.00
C										
ATOM	9685	CG	LYS	B	282	20.232	-9.281	30.088	1.00	0.00
C										
ATOM	9686	CD	LYS	B	282	19.632	-10.121	31.238	1.00	0.00
C										
ATOM	9687	CE	LYS	B	282	20.787	-10.742	32.097	1.00	0.00
C										
ATOM	9688	NZ	LYS	B	282	20.264	-11.752	33.098	1.00	0.00
N1+										
ATOM	9689	H	LYS	B	282	20.664	-6.234	30.657	1.00	0.00
H										
ATOM	9690	HA	LYS	B	282	20.687	-7.636	28.141	1.00	0.00
H										
ATOM	9691	HB2	LYS	B	282	18.479	-8.605	29.056	1.00	0.00
H										
ATOM	9692	HB3	LYS	B	282	18.867	-7.688	30.529	1.00	0.00
H										
ATOM	9693	HG2	LYS	B	282	21.165	-8.835	30.427	1.00	0.00
H										
ATOM	9694	HG3	LYS	B	282	20.429	-9.935	29.240	1.00	0.00
H										
ATOM	9695	HD2	LYS	B	282	19.020	-10.920	30.822	1.00	0.00
H										
ATOM	9696	HD3	LYS	B	282	19.015	-9.483	31.869	1.00	0.00
H										
ATOM	9697	HE2	LYS	B	282	21.294	-9.943	32.635	1.00	0.00
H										
ATOM	9698	HE3	LYS	B	282	21.493	-11.238	31.432	1.00	0.00
H										
ATOM	9699	HZ1	LYS	B	282	19.793	-12.505	32.605	1.00	0.00
H										
ATOM	9700	HZ2	LYS	B	282	21.039	-12.131	33.633	1.00	0.00
H										
ATOM	9701	HZ3	LYS	B	282	19.608	-11.298	33.726	1.00	0.00
H										

ATOM	9702	N	ALA	B	283	18.357	-5.329	28.495	1.00	0.00
N										
ATOM	9703	CA	ALA	B	283	17.160	-4.719	27.871	1.00	0.00
C										
ATOM	9704	C	ALA	B	283	17.584	-4.076	26.544	1.00	0.00
C										
ATOM	9705	O	ALA	B	283	16.802	-3.938	25.603	1.00	0.00
O										
ATOM	9706	CB	ALA	B	283	16.582	-3.698	28.791	1.00	0.00
C										
ATOM	9707	H	ALA	B	283	18.721	-4.941	29.359	1.00	0.00
H										
ATOM	9708	HA	ALA	B	283	16.418	-5.493	27.677	1.00	0.00
H										
ATOM	9709	HB1	ALA	B	283	17.323	-2.924	28.986	1.00	0.00
H										
ATOM	9710	HB2	ALA	B	283	15.702	-3.251	28.330	1.00	0.00
H										
ATOM	9711	HB3	ALA	B	283	16.298	-4.173	29.729	1.00	0.00
H										
ATOM	9712	N	THR	B	284	18.862	-3.664	26.496	1.00	0.00
N										
ATOM	9713	CA	THR	B	284	19.446	-2.997	25.338	1.00	0.00
C										
ATOM	9714	C	THR	B	284	20.384	-3.935	24.574	1.00	0.00
C										
ATOM	9715	O	THR	B	284	21.038	-3.536	23.664	1.00	0.00
O										
ATOM	9716	CB	THR	B	284	20.140	-1.662	25.815	1.00	0.00
C										
ATOM	9717	OG1	THR	B	284	21.056	-1.943	26.901	1.00	0.00
O										
ATOM	9718	CG2	THR	B	284	19.048	-0.649	26.375	1.00	0.00
C										
ATOM	9719	H	THR	B	284	19.451	-3.825	27.307	1.00	0.00
H										
ATOM	9720	HA	THR	B	284	18.632	-2.725	24.668	1.00	0.00
H										
ATOM	9721	HB	THR	B	284	20.677	-1.206	24.985	1.00	0.00
H										
ATOM	9722	HG21	THR	B	284	18.529	-1.104	27.218	1.00	0.00
H										
ATOM	9723	HG22	THR	B	284	19.537	0.268	26.701	1.00	0.00
H										
ATOM	9724	HG23	THR	B	284	18.330	-0.418	25.589	1.00	0.00
H										
ATOM	9725	HG1	THR	B	284	21.751	-2.581	26.591	1.00	0.00
H										
ATOM	9726	N	ASP	B	285	20.428	-5.197	24.972	1.00	0.00
N										
ATOM	9727	CA	ASP	B	285	21.269	-6.192	24.363	1.00	0.00
C										
ATOM	9728	C	ASP	B	285	22.722	-5.793	24.185	1.00	0.00
C										
ATOM	9729	O	ASP	B	285	23.333	-5.968	23.141	1.00	0.00
O										

ATOM	9730	CB	ASP	B	285	20.678	-6.679	23.054	1.00	0.00
C										
ATOM	9731	CG	ASP	B	285	21.153	-8.132	22.729	1.00	0.00
C										
ATOM	9732	OD1	ASP	B	285	21.490	-8.390	21.560	1.00	0.00
O										
ATOM	9733	OD2	ASP	B	285	21.263	-8.970	23.696	1.00	0.00
O1-										
ATOM	9734	H	ASP	B	285	19.837	-5.477	25.748	1.00	0.00
H										
ATOM	9735	HA	ASP	B	285	21.267	-7.048	25.036	1.00	0.00
H										
ATOM	9736	HB2	ASP	B	285	20.994	-6.014	22.252	1.00	0.00
H										
ATOM	9737	HB3	ASP	B	285	19.592	-6.668	23.128	1.00	0.00
H										
ATOM	9738	N	CYS	B	286	23.291	-5.268	25.257	1.00	0.00
N										
ATOM	9739	CA	CYS	B	286	24.672	-4.855	25.248	1.00	0.00
C										
ATOM	9740	C	CYS	B	286	25.625	-6.025	25.003	1.00	0.00
C										
ATOM	9741	O	CYS	B	286	25.266	-7.150	25.170	1.00	0.00
O										
ATOM	9742	CB	CYS	B	286	24.996	-4.286	26.593	1.00	0.00
C										
ATOM	9743	SG	CYS	B	286	24.141	-2.734	26.951	1.00	0.00
S										
ATOM	9744	H	CYS	B	286	22.744	-5.154	26.104	1.00	0.00
H										
ATOM	9745	HA	CYS	B	286	24.822	-4.095	24.483	1.00	0.00
H										
ATOM	9746	HB2	CYS	B	286	26.069	-4.106	26.641	1.00	0.00
H										
ATOM	9747	HB3	CYS	B	286	24.716	-5.016	27.351	1.00	0.00
H										
ATOM	9748	HG	CYS	B	286	22.757	-2.943	26.909	1.00	0.00
H										
ATOM	9749	N	SER	B	287	26.859	-5.691	24.657	1.00	0.00
N										
ATOM	9750	CA	SER	B	287	27.974	-6.593	24.653	1.00	0.00
C										
ATOM	9751	C	SER	B	287	29.129	-5.851	25.260	1.00	0.00
C										
ATOM	9752	O	SER	B	287	29.235	-4.640	25.115	1.00	0.00
O										
ATOM	9753	CB	SER	B	287	28.334	-6.939	23.218	1.00	0.00
C										
ATOM	9754	OG	SER	B	287	27.254	-7.611	22.691	1.00	0.00
O										
ATOM	9755	H	SER	B	287	27.027	-4.731	24.375	1.00	0.00
H										
ATOM	9756	HA	SER	B	287	27.748	-7.492	25.224	1.00	0.00
H										
ATOM	9757	HB2	SER	B	287	29.219	-7.574	23.195	1.00	0.00
H										

ATOM	9758	HB3	SER	B	287	28.525	-6.030	22.649	1.00	0.00
H										
ATOM	9759	HG	SER	B	287	26.453	-7.026	22.723	1.00	0.00
H										
ATOM	9760	N	GLY	B	288	29.983	-6.608	25.914	1.00	0.00
N										
ATOM	9761	CA	GLY	B	288	31.200	-6.127	26.478	1.00	0.00
C										
ATOM	9762	C	GLY	B	288	30.972	-5.381	27.774	1.00	0.00
C										
ATOM	9763	O	GLY	B	288	31.573	-5.708	28.776	1.00	0.00
O										
ATOM	9764	H	GLY	B	288	29.762	-7.593	26.023	1.00	0.00
H										
ATOM	9765	HA2	GLY	B	288	31.676	-5.455	25.765	1.00	0.00
H										
ATOM	9766	HA3	GLY	B	288	31.856	-6.974	26.672	1.00	0.00
H										
ATOM	9767	N	LEU	B	289	30.195	-4.307	27.736	1.00	0.00
N										
ATOM	9768	CA	LEU	B	289	30.014	-3.505	28.916	1.00	0.00
C										
ATOM	9769	C	LEU	B	289	28.864	-2.569	28.822	1.00	0.00
C										
ATOM	9770	O	LEU	B	289	28.485	-2.174	27.719	1.00	0.00
O										
ATOM	9771	CB	LEU	B	289	31.251	-2.648	29.164	1.00	0.00
C										
ATOM	9772	CG	LEU	B	289	31.442	-1.374	28.328	1.00	0.00
C										
ATOM	9773	CD1	LEU	B	289	32.556	-0.616	28.962	1.00	0.00
C										
ATOM	9774	CD2	LEU	B	289	31.719	-1.605	26.766	1.00	0.00
C										
ATOM	9775	H	LEU	B	289	29.727	-4.051	26.872	1.00	0.00
H										
ATOM	9776	HA	LEU	B	289	29.864	-4.164	29.770	1.00	0.00
H										
ATOM	9777	HB2	LEU	B	289	32.120	-3.280	28.989	1.00	0.00
H										
ATOM	9778	HB3	LEU	B	289	31.227	-2.345	30.210	1.00	0.00
H										
ATOM	9779	HG	LEU	B	289	30.537	-0.776	28.421	1.00	0.00
H										
ATOM	9780	HD11	LEU	B	289	33.459	-1.225	28.956	1.00	0.00
H										
ATOM	9781	HD12	LEU	B	289	32.734	0.302	28.404	1.00	0.00
H										
ATOM	9782	HD13	LEU	B	289	32.290	-0.371	29.989	1.00	0.00
H										
ATOM	9783	HD21	LEU	B	289	30.879	-2.138	26.323	1.00	0.00
H										
ATOM	9784	HD22	LEU	B	289	31.839	-0.642	26.272	1.00	0.00
H										
ATOM	9785	HD23	LEU	B	289	32.628	-2.192	26.641	1.00	0.00
H										

ATOM	9786	N	VAL	B	290	28.358	-2.160	29.999	1.00	0.00
N										
ATOM	9787	CA	VAL	B	290	27.554	-0.941	30.080	1.00	0.00
C										
ATOM	9788	C	VAL	B	290	27.731	-0.309	31.457	1.00	0.00
C										
ATOM	9789	O	VAL	B	290	28.139	-0.956	32.384	1.00	0.00
O										
ATOM	9790	CB	VAL	B	290	26.080	-1.266	29.803	1.00	0.00
C										
ATOM	9791	CG1	VAL	B	290	25.373	-1.652	31.068	1.00	0.00
C										
ATOM	9792	CG2	VAL	B	290	25.376	-0.126	29.012	1.00	0.00
C										
ATOM	9793	H	VAL	B	290	28.536	-2.702	30.838	1.00	0.00
H										
ATOM	9794	HA	VAL	B	290	27.905	-0.239	29.325	1.00	0.00
H										
ATOM	9795	HB	VAL	B	290	26.070	-2.144	29.159	1.00	0.00
H										
ATOM	9796	HG11	VAL	B	290	25.423	-0.828	31.778	1.00	0.00
H										
ATOM	9797	HG12	VAL	B	290	24.331	-1.878	30.847	1.00	0.00
H										
ATOM	9798	HG13	VAL	B	290	25.851	-2.531	31.497	1.00	0.00
H										
ATOM	9799	HG21	VAL	B	290	25.880	0.018	28.057	1.00	0.00
H										
ATOM	9800	HG22	VAL	B	290	24.335	-0.395	28.837	1.00	0.00
H										
ATOM	9801	HG23	VAL	B	290	25.420	0.797	29.589	1.00	0.00
H										
ATOM	9802	N	ARG	B	291	27.543	1.007	31.526	1.00	0.00
N										
ATOM	9803	CA	ARG	B	291	27.370	1.706	32.791	1.00	0.00
C										
ATOM	9804	C	ARG	B	291	25.892	2.046	32.838	1.00	0.00
C										
ATOM	9805	O	ARG	B	291	25.350	2.605	31.894	1.00	0.00
O										
ATOM	9806	CB	ARG	B	291	28.199	2.954	32.875	1.00	0.00
C										
ATOM	9807	CG	ARG	B	291	28.418	3.403	34.328	1.00	0.00
C										
ATOM	9808	CD	ARG	B	291	29.157	4.667	34.385	1.00	0.00
C										
ATOM	9809	NE	ARG	B	291	28.314	5.779	33.964	1.00	0.00
N1+										
ATOM	9810	CZ	ARG	B	291	28.779	6.841	33.321	1.00	0.00
C1+										
ATOM	9811	NH1	ARG	B	291	30.071	6.953	33.020	1.00	0.00
N1+										
ATOM	9812	NH2	ARG	B	291	27.944	7.794	32.965	1.00	0.00
N1+										
ATOM	9813	H	ARG	B	291	27.519	1.543	30.664	1.00	0.00
H										

ATOM	9814	HA	ARG	B	291	27.621	1.041	33.616	1.00	0.00
H										
ATOM	9815	HB2	ARG	B	291	27.691	3.751	32.334	1.00	0.00
H										
ATOM	9816	HB3	ARG	B	291	29.168	2.764	32.416	1.00	0.00
H										
ATOM	9817	HG2	ARG	B	291	28.983	2.636	34.855	1.00	0.00
H										
ATOM	9818	HG3	ARG	B	291	27.450	3.535	34.809	1.00	0.00
H										
ATOM	9819	HD2	ARG	B	291	30.022	4.605	33.726	1.00	0.00
H										
ATOM	9820	HD3	ARG	B	291	29.491	4.839	35.407	1.00	0.00
H										
ATOM	9821	HE2	ARG	B	291	27.322	5.738	34.173	1.00	0.00
H										
ATOM	9822	HE3	ARG	B	291	28.146	5.318	33.081	1.00	0.00
H										
ATOM	9823	HH11	ARG	B	291	30.408	7.774	32.527	1.00	0.00
H										
ATOM	9824	HH12	ARG	B	291	30.719	6.218	33.283	1.00	0.00
H										
ATOM	9825	HH13	ARG	B	291	30.237	7.415	33.903	1.00	0.00
H										
ATOM	9826	HH21	ARG	B	291	28.288	8.612	32.472	1.00	0.00
H										
ATOM	9827	HH22	ARG	B	291	26.956	7.711	33.183	1.00	0.00
H										
ATOM	9828	HH23	ARG	B	291	27.788	7.328	32.082	1.00	0.00
H										
ATOM	9829	N	ALA	B	292	25.241	1.547	33.883	1.00	0.00
N										
ATOM	9830	CA	ALA	B	292	23.838	1.836	34.175	1.00	0.00
C										
ATOM	9831	C	ALA	B	292	23.818	2.965	35.202	1.00	0.00
C										
ATOM	9832	O	ALA	B	292	24.427	2.880	36.258	1.00	0.00
O										
ATOM	9833	CB	ALA	B	292	23.154	0.621	34.699	1.00	0.00
C										
ATOM	9834	H	ALA	B	292	25.745	0.931	34.513	1.00	0.00
H										
ATOM	9835	HA	ALA	B	292	23.340	2.167	33.265	1.00	0.00
H										
ATOM	9836	HB1	ALA	B	292	23.645	0.294	35.614	1.00	0.00
H										
ATOM	9837	HB2	ALA	B	292	22.111	0.854	34.911	1.00	0.00
H										
ATOM	9838	HB3	ALA	B	292	23.204	-0.173	33.955	1.00	0.00
H										
ATOM	9839	N	ASP	B	293	23.155	4.036	34.858	1.00	0.00
N										
ATOM	9840	CA	ASP	B	293	23.099	5.233	35.697	1.00	0.00
C										
ATOM	9841	C	ASP	B	293	21.679	5.386	36.240	1.00	0.00
C										

ATOM	9842	O	ASP	B	293	20.724	5.365	35.464	1.00	0.00
O										
ATOM	9843	CB	ASP	B	293	23.479	6.403	34.852	1.00	0.00
C										
ATOM	9844	CG	ASP	B	293	24.912	6.328	34.371	1.00	0.00
C										
ATOM	9845	OD1	ASP	B	293	25.685	5.438	34.745	1.00	0.00
O										
ATOM	9846	OD2	ASP	B	293	25.296	7.149	33.567	1.00	0.00
O1-										
ATOM	9847	H	ASP	B	293	22.658	4.038	33.973	1.00	0.00
H										
ATOM	9848	HA	ASP	B	293	23.800	5.135	36.525	1.00	0.00
H										
ATOM	9849	HB2	ASP	B	293	23.354	7.313	35.438	1.00	0.00
H										
ATOM	9850	HB3	ASP	B	293	22.820	6.437	33.985	1.00	0.00
H										
ATOM	9851	N	PHE	B	294	21.567	5.505	37.558	1.00	0.00
N										
ATOM	9852	CA	PHE	B	294	20.310	5.553	38.261	1.00	0.00
C										
ATOM	9853	C	PHE	B	294	20.142	6.828	39.074	1.00	0.00
C										
ATOM	9854	O	PHE	B	294	21.079	7.504	39.408	1.00	0.00
O										
ATOM	9855	CB	PHE	B	294	20.196	4.411	39.291	1.00	0.00
C										
ATOM	9856	CG	PHE	B	294	20.280	3.043	38.707	1.00	0.00
C										
ATOM	9857	CD1	PHE	B	294	21.509	2.418	38.533	1.00	0.00
C										
ATOM	9858	CD2	PHE	B	294	19.145	2.380	38.339	1.00	0.00
C										
ATOM	9859	CE1	PHE	B	294	21.589	1.132	37.977	1.00	0.00
C										
ATOM	9860	CE2	PHE	B	294	19.204	1.129	37.818	1.00	0.00
C										
ATOM	9861	CZ	PHE	B	294	20.433	0.494	37.637	1.00	0.00
C										
ATOM	9862	H	PHE	B	294	22.420	5.566	38.104	1.00	0.00
H										
ATOM	9863	HA	PHE	B	294	19.493	5.474	37.544	1.00	0.00
H										
ATOM	9864	HB2	PHE	B	294	19.238	4.505	39.800	1.00	0.00
H										
ATOM	9865	HB3	PHE	B	294	21.004	4.523	40.013	1.00	0.00
H										
ATOM	9866	HD1	PHE	B	294	22.422	2.932	38.831	1.00	0.00
H										
ATOM	9867	HD2	PHE	B	294	18.178	2.863	38.466	1.00	0.00
H										
ATOM	9868	HE1	PHE	B	294	22.554	0.653	37.820	1.00	0.00
H										
ATOM	9869	HE2	PHE	B	294	18.285	0.616	37.539	1.00	0.00
H										



ATOM	9870	HZ	PHE	B	294	20.468	-0.513	37.224	1.00	0.00
H										
ATOM	9871	N	PHE	B	295	18.908	7.110	39.402	1.00	0.00
N										
ATOM	9872	CA	PHE	B	295	18.575	8.127	40.381	1.00	0.00
C										
ATOM	9873	C	PHE	B	295	18.095	7.381	41.575	1.00	0.00
C										
ATOM	9874	O	PHE	B	295	17.281	6.445	41.460	1.00	0.00
O										
ATOM	9875	CB	PHE	B	295	17.439	9.033	39.927	1.00	0.00
C										
ATOM	9876	CG	PHE	B	295	17.769	9.899	38.771	1.00	0.00
C										
ATOM	9877	CD1	PHE	B	295	16.941	9.928	37.657	1.00	0.00
C										
ATOM	9878	CD2	PHE	B	295	18.913	10.667	38.773	1.00	0.00
C										
ATOM	9879	CE1	PHE	B	295	17.235	10.733	36.611	1.00	0.00
C										
ATOM	9880	CE2	PHE	B	295	19.203	11.502	37.729	1.00	0.00
C										
ATOM	9881	CZ	PHE	B	295	18.371	11.537	36.646	1.00	0.00
C										
ATOM	9882	H	PHE	B	295	18.155	6.598	38.954	1.00	0.00
H										
ATOM	9883	HA	PHE	B	295	19.456	8.717	40.630	1.00	0.00
H										
ATOM	9884	HB2	PHE	B	295	17.160	9.673	40.763	1.00	0.00
H										
ATOM	9885	HB3	PHE	B	295	16.593	8.406	39.651	1.00	0.00
H										
ATOM	9886	HD1	PHE	B	295	16.052	9.300	37.625	1.00	0.00
H										
ATOM	9887	HD2	PHE	B	295	19.597	10.608	39.618	1.00	0.00
H										
ATOM	9888	HE1	PHE	B	295	16.582	10.753	35.740	1.00	0.00
H										
ATOM	9889	HE2	PHE	B	295	20.090	12.134	37.761	1.00	0.00
H										
ATOM	9890	HZ	PHE	B	295	18.597	12.195	35.808	1.00	0.00
H										
ATOM	9891	N	VAL	B	296	18.599	7.798	42.726	1.00	0.00
N										
ATOM	9892	CA	VAL	B	296	18.160	7.229	43.986	1.00	0.00
C										
ATOM	9893	C	VAL	B	296	17.858	8.396	44.885	1.00	0.00
C										
ATOM	9894	O	VAL	B	296	18.718	9.210	45.182	1.00	0.00
O										
ATOM	9895	CB	VAL	B	296	19.172	6.240	44.615	1.00	0.00
C										
ATOM	9896	CG1	VAL	B	296	18.539	5.538	45.775	1.00	0.00
C										
ATOM	9897	CG2	VAL	B	296	19.620	5.199	43.597	1.00	0.00
C										

ATOM	9898	H	VAL	B	296	19.305	8.528	42.727	1.00	0.00
H										
ATOM	9899	HA	VAL	B	296	17.230	6.692	43.807	1.00	0.00
H										
ATOM	9900	HB	VAL	B	296	20.042	6.794	44.965	1.00	0.00
H										
ATOM	9901	HG11	VAL	B	296	17.663	4.989	45.433	1.00	0.00
H										
ATOM	9902	HG12	VAL	B	296	19.255	4.844	46.214	1.00	0.00
H										
ATOM	9903	HG13	VAL	B	296	18.239	6.271	46.523	1.00	0.00
H										
ATOM	9904	HG21	VAL	B	296	20.096	5.697	42.754	1.00	0.00
H										
ATOM	9905	HG22	VAL	B	296	20.330	4.517	44.063	1.00	0.00
H										
ATOM	9906	HG23	VAL	B	296	18.755	4.638	43.246	1.00	0.00
H										
ATOM	9907	N	THR	B	297	16.589	8.506	45.251	1.00	0.00
N										
ATOM	9908	CA	THR	B	297	16.111	9.625	46.096	1.00	0.00
C										
ATOM	9909	C	THR	B	297	16.504	9.406	47.580	1.00	0.00
C										
ATOM	9910	O	THR	B	297	16.917	8.282	47.997	1.00	0.00
O										
ATOM	9911	CB	THR	B	297	14.600	9.677	46.039	1.00	0.00
C										
ATOM	9912	OG1	THR	B	297	14.082	8.411	46.475	1.00	0.00
O										
ATOM	9913	CG2	THR	B	297	14.100	9.941	44.626	1.00	0.00
C										
ATOM	9914	H	THR	B	297	15.925	7.803	44.943	1.00	0.00
H										
ATOM	9915	HA	THR	B	297	16.528	10.565	45.737	1.00	0.00
H										
ATOM	9916	HB	THR	B	297	14.240	10.463	46.702	1.00	0.00
H										
ATOM	9917	HG21	THR	B	297	14.441	9.145	43.965	1.00	0.00
H										
ATOM	9918	HG22	THR	B	297	13.012	9.971	44.626	1.00	0.00
H										
ATOM	9919	HG23	THR	B	297	14.490	10.896	44.275	1.00	0.00
H										
ATOM	9920	HG1	THR	B	297	14.380	8.235	47.406	1.00	0.00
H										
ATOM	9921	N	GLU	B	298	16.336	10.450	48.391	1.00	0.00
N										
ATOM	9922	CA	GLU	B	298	16.612	10.331	49.828	1.00	0.00
C										
ATOM	9923	C	GLU	B	298	15.878	9.123	50.417	1.00	0.00
C										
ATOM	9924	O	GLU	B	298	16.460	8.413	51.202	1.00	0.00
O										
ATOM	9925	CB	GLU	B	298	16.315	11.642	50.598	1.00	0.00
C										

ATOM C	9926	CG	GLU B 298	14.833	12.049	50.758	1.00	0.00
ATOM C	9927	CD	GLU B 298	14.454	12.442	52.223	1.00	0.00
ATOM O	9928	OE1	GLU B 298	14.079	11.506	53.003	1.00	0.00
ATOM O1-	9929	OE2	GLU B 298	14.516	13.664	52.576	1.00	0.00
ATOM H	9930	H	GLU B 298	16.015	11.335	48.012	1.00	0.00
ATOM H	9931	HA	GLU B 298	17.678	10.137	49.932	1.00	0.00
ATOM H	9932	HB2	GLU B 298	16.822	12.451	50.074	1.00	0.00
ATOM H	9933	HB3	GLU B 298	16.735	11.537	51.597	1.00	0.00
ATOM H	9934	HG2	GLU B 298	14.209	11.210	50.453	1.00	0.00
ATOM H	9935	HG3	GLU B 298	14.637	12.902	50.110	1.00	0.00
ATOM N	9936	N	ASP B 299	14.655	8.824	49.957	1.00	0.00
ATOM C	9937	CA	ASP B 299	13.842	7.681	50.477	1.00	0.00
ATOM C	9938	C	ASP B 299	14.126	6.332	49.779	1.00	0.00
ATOM O	9939	O	ASP B 299	13.316	5.402	49.867	1.00	0.00
ATOM C	9940	CB	ASP B 299	12.323	7.999	50.342	1.00	0.00
ATOM C	9941	CG	ASP B 299	11.632	8.289	51.718	1.00	0.00
ATOM O	9942	OD1	ASP B 299	11.810	7.496	52.704	1.00	0.00
ATOM O1-	9943	OD2	ASP B 299	10.878	9.300	51.802	1.00	0.00
ATOM H	9944	H	ASP B 299	14.262	9.401	49.220	1.00	0.00
ATOM H	9945	HA	ASP B 299	14.067	7.564	51.536	1.00	0.00
ATOM H	9946	HB2	ASP B 299	11.830	7.146	49.879	1.00	0.00
ATOM H	9947	HB3	ASP B 299	12.207	8.874	49.705	1.00	0.00
ATOM N	9948	N	ASN B 300	15.257	6.226	49.087	1.00	0.00
ATOM C	9949	CA	ASN B 300	15.620	5.013	48.356	1.00	0.00
ATOM C	9950	C	ASN B 300	14.649	4.597	47.215	1.00	0.00
ATOM O	9951	O	ASN B 300	14.587	3.424	46.836	1.00	0.00
ATOM C	9952	CB	ASN B 300	15.824	3.830	49.319	1.00	0.00
ATOM C	9953	CG	ASN B 300	16.946	4.052	50.317	1.00	0.00

ATOM	9954	OD1	ASN	B	300	16.777	3.796	51.502	1.00	0.00
O										
ATOM	9955	ND2	ASN	B	300	18.095	4.487	49.845	1.00	0.00
N										
ATOM	9956	H	ASN	B	300	15.892	7.018	49.066	1.00	0.00
H										
ATOM	9957	HA	ASN	B	300	16.585	5.206	47.890	1.00	0.00
H										
ATOM	9958	HB2	ASN	B	300	16.055	2.943	48.731	1.00	0.00
H										
ATOM	9959	HB3	ASN	B	300	14.898	3.670	49.870	1.00	0.00
H										
ATOM	9960	HD21	ASN	B	300	18.874	4.650	50.475	1.00	0.00
H										
ATOM	9961	HD22	ASN	B	300	18.202	4.660	48.850	1.00	0.00
H										
ATOM	9962	N	GLN	B	301	13.917	5.549	46.633	1.00	0.00
N										
ATOM	9963	CA	GLN	B	301	13.242	5.232	45.385	1.00	0.00
C										
ATOM	9964	C	GLN	B	301	14.257	5.210	44.227	1.00	0.00
C										
ATOM	9965	O	GLN	B	301	15.030	6.164	44.018	1.00	0.00
O										
ATOM	9966	CB	GLN	B	301	12.104	6.195	45.080	1.00	0.00
C										
ATOM	9967	CG	GLN	B	301	11.007	5.476	44.286	1.00	0.00
C										
ATOM	9968	CD	GLN	B	301	10.129	4.609	45.208	1.00	0.00
C										
ATOM	9969	OE1	GLN	B	301	10.088	3.375	45.086	1.00	0.00
O										
ATOM	9970	NE2	GLN	B	301	9.448	5.261	46.153	1.00	0.00
N										
ATOM	9971	H	GLN	B	301	13.834	6.470	47.051	1.00	0.00
H										
ATOM	9972	HA	GLN	B	301	12.819	4.233	45.478	1.00	0.00
H										
ATOM	9973	HB2	GLN	B	301	12.485	7.030	44.493	1.00	0.00
H										
ATOM	9974	HB3	GLN	B	301	11.687	6.568	46.014	1.00	0.00
H										
ATOM	9975	HG2	GLN	B	301	11.472	4.838	43.535	1.00	0.00
H										
ATOM	9976	HG3	GLN	B	301	10.380	6.218	43.794	1.00	0.00
H										
ATOM	9977	HE21	GLN	B	301	8.851	4.748	46.793	1.00	0.00
H										
ATOM	9978	HE22	GLN	B	301	9.527	6.270	46.231	1.00	0.00
H										
ATOM	9979	N	ILE	B	302	14.254	4.121	43.490	1.00	0.00
N										
ATOM	9980	CA	ILE	B	302	15.190	3.930	42.382	1.00	0.00
C										
ATOM	9981	C	ILE	B	302	14.496	4.154	41.050	1.00	0.00
C										

ATOM	9982	O	ILE	B	302	13.461	3.554	40.775	1.00	0.00
O										
ATOM	9983	CB	ILE	B	302	15.737	2.476	42.349	1.00	0.00
C										
ATOM	9984	CG1	ILE	B	302	16.440	2.150	43.659	1.00	0.00
C										
ATOM	9985	CG2	ILE	B	302	16.641	2.260	41.087	1.00	0.00
C										
ATOM	9986	CD1	ILE	B	302	16.524	0.687	43.959	1.00	0.00
C										
ATOM	9987	H	ILE	B	302	13.581	3.390	43.696	1.00	0.00
H										
ATOM	9988	HA	ILE	B	302	16.020	4.629	42.482	1.00	0.00
H										
ATOM	9989	HB	ILE	B	302	14.883	1.806	42.259	1.00	0.00
H										
ATOM	9990	HG12	ILE	B	302	15.897	2.635	44.469	1.00	0.00
H										
ATOM	9991	HG13	ILE	B	302	17.453	2.548	43.612	1.00	0.00
H										
ATOM	9992	HG21	ILE	B	302	17.480	2.954	41.118	1.00	0.00
H										
ATOM	9993	HG22	ILE	B	302	17.016	1.238	41.079	1.00	0.00
H										
ATOM	9994	HG23	ILE	B	302	16.056	2.439	40.186	1.00	0.00
H										
ATOM	9995	HD11	ILE	B	302	17.076	0.185	43.166	1.00	0.00
H										
ATOM	9996	HD12	ILE	B	302	17.038	0.540	44.908	1.00	0.00
H										
ATOM	9997	HD13	ILE	B	302	15.520	0.271	44.022	1.00	0.00
H										
ATOM	9998	N	TYR	B	303	15.073	5.023	40.233	1.00	0.00
N										
ATOM	9999	CA	TYR	B	303	14.734	5.056	38.787	1.00	0.00
C										
ATOM	10000	C	TYR	B	303	15.987	4.869	38.009	1.00	0.00
C										
ATOM	10001	O	TYR	B	303	17.031	5.416	38.376	1.00	0.00
O										
ATOM	10002	CB	TYR	B	303	14.110	6.383	38.368	1.00	0.00
C										
ATOM	10003	CG	TYR	B	303	13.069	6.818	39.302	1.00	0.00
C										
ATOM	10004	CD1	TYR	B	303	13.376	7.635	40.377	1.00	0.00
C										
ATOM	10005	CD2	TYR	B	303	11.767	6.396	39.136	1.00	0.00
C										
ATOM	10006	CE1	TYR	B	303	12.394	8.023	41.259	1.00	0.00
C										
ATOM	10007	CE2	TYR	B	303	10.776	6.787	39.987	1.00	0.00
C										
ATOM	10008	CZ	TYR	B	303	11.091	7.576	41.055	1.00	0.00
C										
ATOM	10009	OH	TYR	B	303	10.095	7.930	41.905	1.00	0.00
O										

ATOM	10010	H	TYR	B	303	15.757	5.676	40.601	1.00	0.00
H										
ATOM	10011	HA	TYR	B	303	14.044	4.245	38.560	1.00	0.00
H										
ATOM	10012	HB2	TYR	B	303	13.669	6.268	37.379	1.00	0.00
H										
ATOM	10013	HB3	TYR	B	303	14.890	7.143	38.332	1.00	0.00
H										
ATOM	10014	HD1	TYR	B	303	14.401	7.973	40.525	1.00	0.00
H										
ATOM	10015	HD2	TYR	B	303	11.525	5.735	38.305	1.00	0.00
H										
ATOM	10016	HE1	TYR	B	303	12.632	8.669	42.103	1.00	0.00
H										
ATOM	10017	HE2	TYR	B	303	9.747	6.474	39.817	1.00	0.00
H										
ATOM	10018	HH	TYR	B	303	10.003	8.919	41.914	1.00	0.00
H										
ATOM	10019	N	ILE	B	304	15.893	4.111	36.921	1.00	0.00
N										
ATOM	10020	CA	ILE	B	304	17.001	4.084	35.964	1.00	0.00
C										
ATOM	10021	C	ILE	B	304	16.901	5.318	35.134	1.00	0.00
C										
ATOM	10022	O	ILE	B	304	15.829	5.687	34.664	1.00	0.00
O										
ATOM	10023	CB	ILE	B	304	17.056	2.851	35.052	1.00	0.00
C										
ATOM	10024	CG1	ILE	B	304	18.363	2.889	34.265	1.00	0.00
C										
ATOM	10025	CG2	ILE	B	304	15.748	2.734	34.175	1.00	0.00
C										
ATOM	10026	CD1	ILE	B	304	18.831	1.639	33.860	1.00	0.00
C										
ATOM	10027	H	ILE	B	304	15.060	3.555	36.755	1.00	0.00
H										
ATOM	10028	HA	ILE	B	304	17.933	4.130	36.526	1.00	0.00
H										
ATOM	10029	HB	ILE	B	304	17.093	1.974	35.696	1.00	0.00
H										
ATOM	10030	HG12	ILE	B	304	19.124	3.351	34.892	1.00	0.00
H										
ATOM	10031	HG13	ILE	B	304	18.206	3.498	33.376	1.00	0.00
H										
ATOM	10032	HG21	ILE	B	304	15.647	3.623	33.554	1.00	0.00
H										
ATOM	10033	HG22	ILE	B	304	15.815	1.852	33.539	1.00	0.00
H										
ATOM	10034	HG23	ILE	B	304	14.881	2.647	34.827	1.00	0.00
H										
ATOM	10035	HD11	ILE	B	304	18.090	1.163	33.220	1.00	0.00
H										
ATOM	10036	HD12	ILE	B	304	19.762	1.762	33.308	1.00	0.00
H										
ATOM	10037	HD13	ILE	B	304	19.008	1.016	34.736	1.00	0.00
H										

ATOM	10038	N	ASN	B	305	18.046	5.987	35.013	1.00	0.00
N										
ATOM	10039	CA	ASN	B	305	18.166	7.174	34.213	1.00	0.00
C										
ATOM	10040	C	ASN	B	305	18.611	6.825	32.814	1.00	0.00
C										
ATOM	10041	O	ASN	B	305	17.893	7.052	31.843	1.00	0.00
O										
ATOM	10042	CB	ASN	B	305	19.159	8.124	34.868	1.00	0.00
C										
ATOM	10043	CG	ASN	B	305	19.309	9.417	34.077	1.00	0.00
C										
ATOM	10044	OD1	ASN	B	305	18.422	9.793	33.307	1.00	0.00
O										
ATOM	10045	ND2	ASN	B	305	20.416	10.067	34.246	1.00	0.00
N										
ATOM	10046	H	ASN	B	305	18.865	5.645	35.505	1.00	0.00
H										
ATOM	10047	HA	ASN	B	305	17.194	7.663	34.161	1.00	0.00
H										
ATOM	10048	HB2	ASN	B	305	20.129	7.633	34.929	1.00	0.00
H										
ATOM	10049	HB3	ASN	B	305	18.809	8.363	35.871	1.00	0.00
H										
ATOM	10050	HD21	ASN	B	305	20.575	10.936	33.746	1.00	0.00
H										
ATOM	10051	HD22	ASN	B	305	21.124	9.708	34.878	1.00	0.00
H										
ATOM	10052	N	GLU	B	306	19.805	6.255	32.676	1.00	0.00
N										
ATOM	10053	CA	GLU	B	306	20.225	5.826	31.371	1.00	0.00
C										
ATOM	10054	C	GLU	B	306	21.319	4.824	31.450	1.00	0.00
C										
ATOM	10055	O	GLU	B	306	21.975	4.699	32.475	1.00	0.00
O										
ATOM	10056	CB	GLU	B	306	20.669	7.045	30.567	1.00	0.00
C										
ATOM	10057	CG	GLU	B	306	21.859	7.753	31.167	1.00	0.00
C										
ATOM	10058	CD	GLU	B	306	22.261	9.026	30.362	1.00	0.00
C										
ATOM	10059	OE1	GLU	B	306	21.408	9.756	29.800	1.00	0.00
O										
ATOM	10060	OE2	GLU	B	306	23.485	9.267	30.339	1.00	0.00
O1-										
ATOM	10061	H	GLU	B	306	20.410	6.125	33.480	1.00	0.00
H										
ATOM	10062	HA	GLU	B	306	19.374	5.370	30.866	1.00	0.00
H										
ATOM	10063	HB2	GLU	B	306	19.838	7.747	30.516	1.00	0.00
H										
ATOM	10064	HB3	GLU	B	306	20.931	6.720	29.561	1.00	0.00
H										
ATOM	10065	HG2	GLU	B	306	22.704	7.066	31.180	1.00	0.00
H										

ATOM	10066	HG3	GLU	B	306	21.613	8.047	32.186	1.00	0.00
H										
ATOM	10067	N	THR	B	307	21.505	4.071	30.383	1.00	0.00
N										
ATOM	10068	CA	THR	B	307	22.703	3.263	30.248	1.00	0.00
C										
ATOM	10069	C	THR	B	307	23.672	4.054	29.408	1.00	0.00
C										
ATOM	10070	O	THR	B	307	23.277	4.930	28.666	1.00	0.00
O										
ATOM	10071	CB	THR	B	307	22.431	1.913	29.588	1.00	0.00
C										
ATOM	10072	OG1	THR	B	307	21.625	2.095	28.423	1.00	0.00
O										
ATOM	10073	CG2	THR	B	307	21.730	0.950	30.613	1.00	0.00
C										
ATOM	10074	H	THR	B	307	20.803	4.057	29.649	1.00	0.00
H										
ATOM	10075	HA	THR	B	307	23.136	3.098	31.233	1.00	0.00
H										
ATOM	10076	HB	THR	B	307	23.381	1.473	29.289	1.00	0.00
H										
ATOM	10077	HG21	THR	B	307	20.787	1.389	30.937	1.00	0.00
H										
ATOM	10078	HG22	THR	B	307	21.539	-0.010	30.136	1.00	0.00
H										
ATOM	10079	HG23	THR	B	307	22.378	0.804	31.476	1.00	0.00
H										
ATOM	10080	HG1	THR	B	307	22.100	2.684	27.780	1.00	0.00
H										
ATOM	10081	N	ASN	B	308	24.953	3.800	29.587	1.00	0.00
N										
ATOM	10082	CA	ASN	B	308	25.978	4.490	28.798	1.00	0.00
C										
ATOM	10083	C	ASN	B	308	26.910	3.391	28.223	1.00	0.00
C										
ATOM	10084	O	ASN	B	308	27.682	2.747	28.937	1.00	0.00
O										
ATOM	10085	CB	ASN	B	308	26.706	5.492	29.710	1.00	0.00
C										
ATOM	10086	CG	ASN	B	308	27.728	6.303	28.976	1.00	0.00
C										
ATOM	10087	OD1	ASN	B	308	28.270	5.877	27.946	1.00	0.00
O										
ATOM	10088	ND2	ASN	B	308	28.008	7.485	29.488	1.00	0.00
N										
ATOM	10089	H	ASN	B	308	25.234	3.116	30.282	1.00	0.00
H										
ATOM	10090	HA	ASN	B	308	25.503	5.027	27.978	1.00	0.00
H										
ATOM	10091	HB2	ASN	B	308	27.204	4.941	30.506	1.00	0.00
H										
ATOM	10092	HB3	ASN	B	308	25.970	6.168	30.143	1.00	0.00
H										
ATOM	10093	HD21	ASN	B	308	28.693	8.084	29.038	1.00	0.00
H										



ATOM	10094	HD22	ASN	B	308	27.539	7.796	30.333	1.00	0.00
H										
ATOM	10095	N	ALA	B	309	26.797	3.189	26.927	1.00	0.00
N										
ATOM	10096	CA	ALA	B	309	27.523	2.132	26.212	1.00	0.00
C										
ATOM	10097	C	ALA	B	309	28.988	2.530	26.061	1.00	0.00
C										
ATOM	10098	O	ALA	B	309	29.813	1.676	25.845	1.00	0.00
O										
ATOM	10099	CB	ALA	B	309	26.886	1.923	24.813	1.00	0.00
C										
ATOM	10100	H	ALA	B	309	26.178	3.793	26.396	1.00	0.00
H										
ATOM	10101	HA	ALA	B	309	27.459	1.204	26.779	1.00	0.00
H										
ATOM	10102	HB1	ALA	B	309	26.944	2.851	24.246	1.00	0.00
H										
ATOM	10103	HB2	ALA	B	309	27.424	1.139	24.282	1.00	0.00
H										
ATOM	10104	HB3	ALA	B	309	25.843	1.633	24.929	1.00	0.00
H										
ATOM	10105	N	MET	B	310	29.297	3.826	26.164	1.00	0.00
N										
ATOM	10106	CA	MET	B	310	30.706	4.295	26.091	1.00	0.00
C										
ATOM	10107	C	MET	B	310	31.101	5.256	27.217	1.00	0.00
C										
ATOM	10108	O	MET	B	310	31.274	6.442	27.030	1.00	0.00
O										
ATOM	10109	CB	MET	B	310	30.966	4.905	24.762	1.00	0.00
C										
ATOM	10110	CG	MET	B	310	30.157	4.238	23.684	1.00	0.00
C										
ATOM	10111	SD	MET	B	310	31.212	3.988	22.328	1.00	0.00
S										
ATOM	10112	CE	MET	B	310	31.807	2.306	22.585	1.00	0.00
C										
ATOM	10113	H	MET	B	310	28.554	4.505	26.295	1.00	0.00
H										
ATOM	10114	HA	MET	B	310	31.345	3.417	26.175	1.00	0.00
H										
ATOM	10115	HB2	MET	B	310	32.024	4.802	24.526	1.00	0.00
H										
ATOM	10116	HB3	MET	B	310	30.704	5.961	24.799	1.00	0.00
H										
ATOM	10117	HG2	MET	B	310	29.323	4.876	23.395	1.00	0.00
H										
ATOM	10118	HG3	MET	B	310	29.776	3.282	24.041	1.00	0.00
H										
ATOM	10119	HE1	MET	B	310	30.962	1.619	22.591	1.00	0.00
H										
ATOM	10120	HE2	MET	B	310	32.490	2.035	21.780	1.00	0.00
H										
ATOM	10121	HE3	MET	B	310	32.330	2.248	23.539	1.00	0.00
H										

ATOM	10122	N	PRO	B	311	31.191	4.724	28.409	1.00	0.00
N										
ATOM	10123	CA	PRO	B	311	31.432	5.440	29.591	1.00	0.00
C										
ATOM	10124	C	PRO	B	311	32.867	5.941	29.665	1.00	0.00
C										
ATOM	10125	O	PRO	B	311	33.749	5.476	28.935	1.00	0.00
O										
ATOM	10126	CB	PRO	B	311	31.125	4.405	30.678	1.00	0.00
C										
ATOM	10127	CG	PRO	B	311	31.497	3.092	30.098	1.00	0.00
C										
ATOM	10128	CD	PRO	B	311	30.929	3.296	28.675	1.00	0.00
C										
ATOM	10129	HA	PRO	B	311	30.740	6.278	29.667	1.00	0.00
H										
ATOM	10130	HB2	PRO	B	311	30.066	4.422	30.930	1.00	0.00
H										
ATOM	10131	HB3	PRO	B	311	31.715	4.606	31.571	1.00	0.00
H										
ATOM	10132	HG2	PRO	B	311	31.016	2.264	30.616	1.00	0.00
H										
ATOM	10133	HG3	PRO	B	311	32.575	2.938	30.090	1.00	0.00
H										
ATOM	10134	HD2	PRO	B	311	31.445	2.664	27.954	1.00	0.00
H										
ATOM	10135	HD3	PRO	B	311	29.862	3.083	28.646	1.00	0.00
H										
ATOM	10136	N	GLY	B	312	33.053	6.942	30.519	1.00	0.00
N										
ATOM	10137	CA	GLY	B	312	34.360	7.507	30.787	1.00	0.00
C										
ATOM	10138	C	GLY	B	312	35.178	6.291	31.129	1.00	0.00
C										
ATOM	10139	O	GLY	B	312	34.695	5.379	31.802	1.00	0.00
O										
ATOM	10140	H	GLY	B	312	32.248	7.326	31.003	1.00	0.00
H										
ATOM	10141	HA2	GLY	B	312	34.324	8.204	31.623	1.00	0.00
H										
ATOM	10142	HA3	GLY	B	312	34.757	8.014	29.909	1.00	0.00
H										
ATOM	10143	N	PHE	B	313	36.376	6.246	30.598	1.00	0.00
N										
ATOM	10144	CA	PHE	B	313	37.170	5.030	30.657	1.00	0.00
C										
ATOM	10145	C	PHE	B	313	38.641	5.280	30.985	1.00	0.00
C										
ATOM	10146	O	PHE	B	313	39.497	4.445	30.796	1.00	0.00
O										
ATOM	10147	CB	PHE	B	313	37.031	4.284	29.351	1.00	0.00
C										
ATOM	10148	CG	PHE	B	313	37.183	2.850	29.520	1.00	0.00
C										
ATOM	10149	CD1	PHE	B	313	36.171	2.128	30.165	1.00	0.00
C										

ATOM	10150	CD2	PHE	B	313	38.356	2.214	29.145	1.00	0.00
C										
ATOM	10151	CE1	PHE	B	313	36.325	0.750	30.390	1.00	0.00
C										
ATOM	10152	CE2	PHE	B	313	38.519	0.834	29.358	1.00	0.00
C										
ATOM	10153	CZ	PHE	B	313	37.503	0.112	29.981	1.00	0.00
C										
ATOM	10154	H	PHE	B	313	36.754	7.070	30.140	1.00	0.00
H										
ATOM	10155	HA	PHE	B	313	36.757	4.401	31.444	1.00	0.00
H										
ATOM	10156	HB2	PHE	B	313	37.796	4.639	28.661	1.00	0.00
H										
ATOM	10157	HB3	PHE	B	313	36.045	4.486	28.935	1.00	0.00
H										
ATOM	10158	HD1	PHE	B	313	35.265	2.635	30.492	1.00	0.00
H										
ATOM	10159	HD2	PHE	B	313	39.158	2.788	28.682	1.00	0.00
H										
ATOM	10160	HE1	PHE	B	313	35.535	0.182	30.878	1.00	0.00
H										
ATOM	10161	HE2	PHE	B	313	39.432	0.333	29.039	1.00	0.00
H										
ATOM	10162	HZ	PHE	B	313	37.626	-0.957	30.151	1.00	0.00
H										
ATOM	10163	N	THR	B	314	38.903	6.458	31.498	1.00	0.00
N										
ATOM	10164	CA	THR	B	314	40.177	6.792	32.058	1.00	0.00
C										
ATOM	10165	C	THR	B	314	40.377	5.983	33.330	1.00	0.00
C										
ATOM	10166	O	THR	B	314	39.462	5.350	33.848	1.00	0.00
O										
ATOM	10167	CB	THR	B	314	40.164	8.294	32.383	1.00	0.00
C										
ATOM	10168	OG1	THR	B	314	41.404	8.903	31.989	1.00	0.00
O										
ATOM	10169	CG2	THR	B	314	39.831	8.510	33.794	1.00	0.00
C										
ATOM	10170	H	THR	B	314	38.172	7.162	31.498	1.00	0.00
H										
ATOM	10171	HA	THR	B	314	40.970	6.570	31.345	1.00	0.00
H										
ATOM	10172	HB	THR	B	314	39.374	8.750	31.788	1.00	0.00
H										
ATOM	10173	HG21	THR	B	314	40.573	8.018	34.421	1.00	0.00
H										
ATOM	10174	HG22	THR	B	314	39.827	9.578	34.006	1.00	0.00
H										
ATOM	10175	HG23	THR	B	314	38.847	8.094	34.002	1.00	0.00
H										
ATOM	10176	HG1	THR	B	314	41.535	8.785	31.012	1.00	0.00
H										
ATOM	10177	N	ALA	B	315	41.605	5.966	33.798	1.00	0.00
N										

ATOM	10178	CA	ALA	B	315	41.980	5.177	34.953	1.00	0.00
C										
ATOM	10179	C	ALA	B	315	41.226	5.673	36.223	1.00	0.00
C										
ATOM	10180	O	ALA	B	315	40.909	4.905	37.115	1.00	0.00
O										
ATOM	10181	CB	ALA	B	315	43.504	5.245	35.122	1.00	0.00
C										
ATOM	10182	H	ALA	B	315	42.315	6.525	33.334	1.00	0.00
H										
ATOM	10183	HA	ALA	B	315	41.700	4.141	34.768	1.00	0.00
H										
ATOM	10184	HB1	ALA	B	315	43.808	6.281	35.267	1.00	0.00
H										
ATOM	10185	HB2	ALA	B	315	43.800	4.655	35.988	1.00	0.00
H										
ATOM	10186	HB3	ALA	B	315	43.986	4.848	34.230	1.00	0.00
H										
ATOM	10187	N	PHE	B	316	40.882	6.945	36.238	1.00	0.00
N										
ATOM	10188	CA	PHE	B	316	40.146	7.539	37.309	1.00	0.00
C										
ATOM	10189	C	PHE	B	316	38.636	7.689	37.051	1.00	0.00
C										
ATOM	10190	O	PHE	B	316	37.919	8.306	37.847	1.00	0.00
O										
ATOM	10191	CB	PHE	B	316	40.841	8.866	37.613	1.00	0.00
C										
ATOM	10192	CG	PHE	B	316	42.376	8.719	37.660	1.00	0.00
C										
ATOM	10193	CD1	PHE	B	316	43.206	9.563	36.943	1.00	0.00
C										
ATOM	10194	CD2	PHE	B	316	42.972	7.658	38.386	1.00	0.00
C										
ATOM	10195	CE1	PHE	B	316	44.619	9.401	36.993	1.00	0.00
C										
ATOM	10196	CE2	PHE	B	316	44.376	7.487	38.438	1.00	0.00
C										
ATOM	10197	CZ	PHE	B	316	45.192	8.353	37.749	1.00	0.00
C										
ATOM	10198	H	PHE	B	316	41.152	7.529	35.453	1.00	0.00
H										
ATOM	10199	HA	PHE	B	316	40.267	6.900	38.182	1.00	0.00
H										
ATOM	10200	HB2	PHE	B	316	40.494	9.232	38.578	1.00	0.00
H										
ATOM	10201	HB3	PHE	B	316	40.581	9.585	36.837	1.00	0.00
H										
ATOM	10202	HD1	PHE	B	316	42.775	10.358	36.336	1.00	0.00
H										
ATOM	10203	HD2	PHE	B	316	42.333	6.955	38.918	1.00	0.00
H										
ATOM	10204	HE1	PHE	B	316	45.263	10.089	36.446	1.00	0.00
H										
ATOM	10205	HE2	PHE	B	316	44.808	6.674	39.020	1.00	0.00
H										

ATOM	10206	HZ	PHE	B	316	46.274	8.232	37.785	1.00	0.00
H										
ATOM	10207	N	SER	B	317	38.135	7.081	35.974	1.00	0.00
N										
ATOM	10208	CA	SER	B	317	36.730	7.210	35.645	1.00	0.00
C										
ATOM	10209	C	SER	B	317	35.916	6.211	36.445	1.00	0.00
C										
ATOM	10210	O	SER	B	317	36.413	5.182	36.905	1.00	0.00
O										
ATOM	10211	CB	SER	B	317	36.504	6.995	34.161	1.00	0.00
C										
ATOM	10212	OG	SER	B	317	37.023	8.107	33.421	1.00	0.00
O										
ATOM	10213	H	SER	B	317	38.743	6.524	35.381	1.00	0.00
H										
ATOM	10214	HA	SER	B	317	36.402	8.215	35.905	1.00	0.00
H										
ATOM	10215	HB2	SER	B	317	35.436	6.901	33.968	1.00	0.00
H										
ATOM	10216	HB3	SER	B	317	37.012	6.084	33.847	1.00	0.00
H										
ATOM	10217	HG	SER	B	317	37.997	8.194	33.594	1.00	0.00
H										
ATOM	10218	N	MET	B	318	34.640	6.520	36.565	1.00	0.00
N										
ATOM	10219	CA	MET	B	318	33.743	5.685	37.342	1.00	0.00
C										
ATOM	10220	C	MET	B	318	33.745	4.227	36.947	1.00	0.00
C										
ATOM	10221	O	MET	B	318	33.823	3.403	37.842	1.00	0.00
O										
ATOM	10222	CB	MET	B	318	32.317	6.227	37.284	1.00	0.00
C										
ATOM	10223	CG	MET	B	318	31.310	5.367	38.031	1.00	0.00
C										
ATOM	10224	SD	MET	B	318	31.366	5.401	39.827	1.00	0.00
S										
ATOM	10225	CE	MET	B	318	30.405	6.897	40.128	1.00	0.00
C										
ATOM	10226	H	MET	B	318	34.281	7.352	36.108	1.00	0.00
H										
ATOM	10227	HA	MET	B	318	34.068	5.740	38.380	1.00	0.00
H										
ATOM	10228	HB2	MET	B	318	32.013	6.286	36.240	1.00	0.00
H										
ATOM	10229	HB3	MET	B	318	32.309	7.225	37.721	1.00	0.00
H										
ATOM	10230	HG2	MET	B	318	31.466	4.336	37.719	1.00	0.00
H										
ATOM	10231	HG3	MET	B	318	30.315	5.692	37.729	1.00	0.00
H										
ATOM	10232	HE1	MET	B	318	29.404	6.775	39.715	1.00	0.00
H										
ATOM	10233	HE2	MET	B	318	30.336	7.075	41.200	1.00	0.00
H										

ATOM	10234	HE3	MET	B	318	30.894	7.745	39.650	1.00	0.00
H										
ATOM	10235	N	TYR	B	319	33.607	3.922	35.637	1.00	0.00
N										
ATOM	10236	CA	TYR	B	319	33.433	2.535	35.183	1.00	0.00
C										
ATOM	10237	C	TYR	B	319	34.663	1.730	35.636	1.00	0.00
C										
ATOM	10238	O	TYR	B	319	34.540	0.698	36.250	1.00	0.00
O										
ATOM	10239	CB	TYR	B	319	33.175	2.413	33.627	1.00	0.00
C										
ATOM	10240	CG	TYR	B	319	32.953	0.954	33.194	1.00	0.00
C										
ATOM	10241	CD1	TYR	B	319	31.660	0.439	33.056	1.00	0.00
C										
ATOM	10242	CD2	TYR	B	319	34.013	0.081	33.038	1.00	0.00
C										
ATOM	10243	CE1	TYR	B	319	31.422	-0.914	32.736	1.00	0.00
C										
ATOM	10244	CE2	TYR	B	319	33.776	-1.287	32.703	1.00	0.00
C										
ATOM	10245	CZ	TYR	B	319	32.485	-1.769	32.558	1.00	0.00
C										
ATOM	10246	OH	TYR	B	319	32.267	-3.112	32.296	1.00	0.00
O										
ATOM	10247	H	TYR	B	319	33.624	4.669	34.950	1.00	0.00
H										
ATOM	10248	HA	TYR	B	319	32.563	2.126	35.695	1.00	0.00
H										
ATOM	10249	HB2	TYR	B	319	34.038	2.811	33.095	1.00	0.00
H										
ATOM	10250	HB3	TYR	B	319	32.291	2.995	33.370	1.00	0.00
H										
ATOM	10251	HD1	TYR	B	319	30.810	1.104	33.200	1.00	0.00
H										
ATOM	10252	HD2	TYR	B	319	35.033	0.438	33.171	1.00	0.00
H										
ATOM	10253	HE1	TYR	B	319	30.402	-1.280	32.630	1.00	0.00
H										
ATOM	10254	HE2	TYR	B	319	34.621	-1.960	32.560	1.00	0.00
H										
ATOM	10255	HH	TYR	B	319	31.745	-3.205	31.456	1.00	0.00
H										
ATOM	10256	N	PRO	B	320	35.876	2.178	35.275	1.00	0.00
N										
ATOM	10257	CA	PRO	B	320	37.042	1.429	35.754	1.00	0.00
C										
ATOM	10258	C	PRO	B	320	37.255	1.298	37.255	1.00	0.00
C										
ATOM	10259	O	PRO	B	320	37.685	0.228	37.721	1.00	0.00
O										
ATOM	10260	CB	PRO	B	320	38.186	2.176	35.117	1.00	0.00
C										
ATOM	10261	CG	PRO	B	320	37.548	2.733	33.775	1.00	0.00
C										

ATOM	10262	CD	PRO	B	320	36.266	3.220	34.296	1.00	0.00
C										
ATOM	10263	HA	PRO	B	320	37.006	0.429	35.325	1.00	0.00
H										
ATOM	10264	HB2	PRO	B	320	39.020	1.508	34.906	1.00	0.00
H										
ATOM	10265	HB3	PRO	B	320	38.526	2.990	35.756	1.00	0.00
H										
ATOM	10266	HG2	PRO	B	320	37.413	1.947	33.033	1.00	0.00
H										
ATOM	10267	HG3	PRO	B	320	38.144	3.538	33.346	1.00	0.00
H										
ATOM	10268	HD2	PRO	B	320	36.385	4.187	34.782	1.00	0.00
H										
ATOM	10269	HD3	PRO	B	320	35.528	3.303	33.500	1.00	0.00
H										
ATOM	10270	N	LYS	B	321	37.014	2.380	37.997	1.00	0.00
N										
ATOM	10271	CA	LYS	B	321	37.109	2.354	39.440	1.00	0.00
C										
ATOM	10272	C	LYS	B	321	36.046	1.471	40.095	1.00	0.00
C										
ATOM	10273	O	LYS	B	321	36.297	0.846	41.072	1.00	0.00
O										
ATOM	10274	CB	LYS	B	321	37.011	3.785	39.977	1.00	0.00
C										
ATOM	10275	CG	LYS	B	321	38.213	4.617	39.589	1.00	0.00
C										
ATOM	10276	CD	LYS	B	321	38.870	5.259	40.790	1.00	0.00
C										
ATOM	10277	CE	LYS	B	321	40.403	5.091	40.768	1.00	0.00
C										
ATOM	10278	NZ	LYS	B	321	40.876	4.026	41.713	1.00	0.00
N1+										
ATOM	10279	H	LYS	B	321	36.757	3.247	37.535	1.00	0.00
H										
ATOM	10280	HA	LYS	B	321	38.088	1.959	39.707	1.00	0.00
H										
ATOM	10281	HB2	LYS	B	321	36.943	3.749	41.063	1.00	0.00
H										
ATOM	10282	HB3	LYS	B	321	36.114	4.252	39.572	1.00	0.00
H										
ATOM	10283	HG2	LYS	B	321	37.892	5.400	38.904	1.00	0.00
H										
ATOM	10284	HG3	LYS	B	321	38.939	3.975	39.092	1.00	0.00
H										
ATOM	10285	HD2	LYS	B	321	38.478	4.796	41.694	1.00	0.00
H										
ATOM	10286	HD3	LYS	B	321	38.633	6.322	40.794	1.00	0.00
H										
ATOM	10287	HE2	LYS	B	321	40.862	6.037	41.049	1.00	0.00
H										
ATOM	10288	HE3	LYS	B	321	40.711	4.824	39.758	1.00	0.00
H										
ATOM	10289	HZ1	LYS	B	321	40.460	3.137	41.456	1.00	0.00
H										

ATOM	10290	HZ2	LYS	B	321	41.887	3.954	41.662	1.00	0.00
H										
ATOM	10291	HZ3	LYS	B	321	40.601	4.267	42.660	1.00	0.00
H										
ATOM	10292	N	LEU	B	322	34.844	1.406	39.551	1.00	0.00
N										
ATOM	10293	CA	LEU	B	322	33.883	0.424	40.063	1.00	0.00
C										
ATOM	10294	C	LEU	B	322	34.417	-1.034	39.986	1.00	0.00
C										
ATOM	10295	O	LEU	B	322	34.197	-1.825	40.923	1.00	0.00
O										
ATOM	10296	CB	LEU	B	322	32.572	0.571	39.343	1.00	0.00
C										
ATOM	10297	CG	LEU	B	322	31.757	1.770	39.826	1.00	0.00
C										
ATOM	10298	CD1	LEU	B	322	30.619	2.017	38.907	1.00	0.00
C										
ATOM	10299	CD2	LEU	B	322	31.205	1.530	41.203	1.00	0.00
C										
ATOM	10300	H	LEU	B	322	34.589	2.027	38.789	1.00	0.00
H										
ATOM	10301	HA	LEU	B	322	33.708	0.654	41.113	1.00	0.00
H										
ATOM	10302	HB2	LEU	B	322	31.986	-0.333	39.501	1.00	0.00
H										
ATOM	10303	HB3	LEU	B	322	32.772	0.693	38.279	1.00	0.00
H										
ATOM	10304	HG	LEU	B	322	32.396	2.651	39.847	1.00	0.00
H										
ATOM	10305	HD11	LEU	B	322	29.977	1.137	38.879	1.00	0.00
H										
ATOM	10306	HD12	LEU	B	322	30.046	2.873	39.261	1.00	0.00
H										
ATOM	10307	HD13	LEU	B	322	30.998	2.222	37.907	1.00	0.00
H										
ATOM	10308	HD21	LEU	B	322	32.025	1.364	41.899	1.00	0.00
H										
ATOM	10309	HD22	LEU	B	322	30.630	2.399	41.520	1.00	0.00
H										
ATOM	10310	HD23	LEU	B	322	30.559	0.653	41.187	1.00	0.00
H										
ATOM	10311	N	TRP	B	323	35.152	-1.356	38.915	1.00	0.00
N										
ATOM	10312	CA	TRP	B	323	35.775	-2.665	38.772	1.00	0.00
C										
ATOM	10313	C	TRP	B	323	36.958	-2.848	39.693	1.00	0.00
C										
ATOM	10314	O	TRP	B	323	37.127	-3.942	40.280	1.00	0.00
O										
ATOM	10315	CB	TRP	B	323	36.100	-3.041	37.298	1.00	0.00
C										
ATOM	10316	CG	TRP	B	323	34.874	-3.522	36.657	1.00	0.00
C										
ATOM	10317	CD1	TRP	B	323	34.139	-2.878	35.702	1.00	0.00
C										



ATOM	10318	CD2	TRP	B	323	34.133	-4.702	36.998	1.00	0.00
C										
ATOM	10319	NE1	TRP	B	323	33.020	-3.594	35.418	1.00	0.00
N										
ATOM	10320	CE2	TRP	B	323	32.996	-4.721	36.195	1.00	0.00
C										
ATOM	10321	CE3	TRP	B	323	34.341	-5.762	37.886	1.00	0.00
C										
ATOM	10322	CZ2	TRP	B	323	32.060	-5.750	36.260	1.00	0.00
C										
ATOM	10323	CZ3	TRP	B	323	33.407	-6.774	37.944	1.00	0.00
C										
ATOM	10324	CH2	TRP	B	323	32.272	-6.745	37.155	1.00	0.00
C										
ATOM	10325	H	TRP	B	323	35.279	-0.667	38.180	1.00	0.00
H										
ATOM	10326	HA	TRP	B	323	35.028	-3.386	39.103	1.00	0.00
H										
ATOM	10327	HB2	TRP	B	323	36.856	-3.824	37.277	1.00	0.00
H										
ATOM	10328	HB3	TRP	B	323	36.471	-2.164	36.769	1.00	0.00
H										
ATOM	10329	HD1	TRP	B	323	34.410	-1.931	35.237	1.00	0.00
H										
ATOM	10330	HE1	TRP	B	323	32.313	-3.334	34.737	1.00	0.00
H										
ATOM	10331	HE3	TRP	B	323	35.225	-5.788	38.521	1.00	0.00
H										
ATOM	10332	HZ2	TRP	B	323	31.185	-5.755	35.612	1.00	0.00
H										
ATOM	10333	HZ3	TRP	B	323	33.566	-7.611	38.623	1.00	0.00
H										
ATOM	10334	HH2	TRP	B	323	31.533	-7.539	37.255	1.00	0.00
H										
ATOM	10335	N	GLU	B	324	37.745	-1.795	39.877	1.00	0.00
N										
ATOM	10336	CA	GLU	B	324	38.867	-1.894	40.774	1.00	0.00
C										
ATOM	10337	C	GLU	B	324	38.377	-2.297	42.143	1.00	0.00
C										
ATOM	10338	O	GLU	B	324	38.999	-3.113	42.760	1.00	0.00
O										
ATOM	10339	CB	GLU	B	324	39.663	-0.569	40.890	1.00	0.00
C										
ATOM	10340	CG	GLU	B	324	40.434	-0.245	39.645	1.00	0.00
C										
ATOM	10341	CD	GLU	B	324	41.521	0.807	39.853	1.00	0.00
C										
ATOM	10342	OE1	GLU	B	324	41.640	1.350	40.998	1.00	0.00
O										
ATOM	10343	OE2	GLU	B	324	42.246	1.066	38.845	1.00	0.00
O1-										
ATOM	10344	H	GLU	B	324	37.557	-0.925	39.388	1.00	0.00
H										
ATOM	10345	HA	GLU	B	324	39.537	-2.669	40.405	1.00	0.00
H										

ATOM	10346	HB2	GLU	B	324	40.362	-0.654	41.720	1.00	0.00
H										
ATOM	10347	HB3	GLU	B	324	38.963	0.242	41.087	1.00	0.00
H										
ATOM	10348	HG2	GLU	B	324	39.736	0.125	38.895	1.00	0.00
H										
ATOM	10349	HG3	GLU	B	324	40.904	-1.159	39.284	1.00	0.00
H										
ATOM	10350	N	ASN	B	325	37.253	-1.731	42.578	1.00	0.00
N										
ATOM	10351	CA	ASN	B	325	36.685	-2.023	43.880	1.00	0.00
C										
ATOM	10352	C	ASN	B	325	36.307	-3.508	44.040	1.00	0.00
C										
ATOM	10353	O	ASN	B	325	36.359	-4.030	45.153	1.00	0.00
O										
ATOM	10354	CB	ASN	B	325	35.471	-1.113	44.127	1.00	0.00
C										
ATOM	10355	CG	ASN	B	325	34.803	-1.357	45.482	1.00	0.00
C										
ATOM	10356	OD1	ASN	B	325	35.447	-1.236	46.538	1.00	0.00
O										
ATOM	10357	ND2	ASN	B	325	33.494	-1.655	45.463	1.00	0.00
N										
ATOM	10358	H	ASN	B	325	36.775	-1.069	41.975	1.00	0.00
H										
ATOM	10359	HA	ASN	B	325	37.436	-1.788	44.632	1.00	0.00
H										
ATOM	10360	HB2	ASN	B	325	34.738	-1.293	43.342	1.00	0.00
H										
ATOM	10361	HB3	ASN	B	325	35.801	-0.076	44.085	1.00	0.00
H										
ATOM	10362	HD21	ASN	B	325	33.000	-1.827	46.333	1.00	0.00
H										
ATOM	10363	HD22	ASN	B	325	32.998	-1.709	44.579	1.00	0.00
H										
ATOM	10364	N	MET	B	326	35.931	-4.174	42.947	1.00	0.00
N										
ATOM	10365	CA	MET	B	326	35.697	-5.631	42.944	1.00	0.00
C										
ATOM	10366	C	MET	B	326	37.004	-6.443	42.830	1.00	0.00
C										
ATOM	10367	O	MET	B	326	36.965	-7.689	42.878	1.00	0.00
O										
ATOM	10368	CB	MET	B	326	34.820	-6.105	41.764	1.00	0.00
C										
ATOM	10369	CG	MET	B	326	33.612	-5.299	41.442	1.00	0.00
C										
ATOM	10370	SD	MET	B	326	32.473	-5.259	42.820	1.00	0.00
S										
ATOM	10371	CE	MET	B	326	31.919	-6.990	42.704	1.00	0.00
C										
ATOM	10372	H	MET	B	326	35.801	-3.658	42.083	1.00	0.00
H										
ATOM	10373	HA	MET	B	326	35.201	-5.903	43.874	1.00	0.00
H										

ATOM	10374	HB2	MET	B	326	34.487	-7.117	41.990	1.00	0.00
H										
ATOM	10375	HB3	MET	B	326	35.449	-6.120	40.875	1.00	0.00
H										
ATOM	10376	HG2	MET	B	326	33.111	-5.738	40.580	1.00	0.00
H										
ATOM	10377	HG3	MET	B	326	33.917	-4.281	41.204	1.00	0.00
H										
ATOM	10378	HE1	MET	B	326	32.773	-7.654	42.827	1.00	0.00
H										
ATOM	10379	HE2	MET	B	326	31.188	-7.191	43.486	1.00	0.00
H										
ATOM	10380	HE3	MET	B	326	31.463	-7.161	41.730	1.00	0.00
H										
ATOM	10381	N	GLY	B	327	38.136	-5.765	42.637	1.00	0.00
N										
ATOM	10382	CA	GLY	B	327	39.438	-6.431	42.574	1.00	0.00
C										
ATOM	10383	C	GLY	B	327	39.816	-6.753	41.143	1.00	0.00
C										
ATOM	10384	O	GLY	B	327	40.659	-7.622	40.876	1.00	0.00
O										
ATOM	10385	H	GLY	B	327	38.093	-4.757	42.531	1.00	0.00
H										
ATOM	10386	HA2	GLY	B	327	39.392	-7.356	43.147	1.00	0.00
H										
ATOM	10387	HA3	GLY	B	327	40.194	-5.775	43.003	1.00	0.00
H										
ATOM	10388	N	LEU	B	328	39.175	-6.077	40.203	1.00	0.00
N										
ATOM	10389	CA	LEU	B	328	39.585	-6.172	38.840	1.00	0.00
C										
ATOM	10390	C	LEU	B	328	40.283	-4.890	38.511	1.00	0.00
C										
ATOM	10391	O	LEU	B	328	39.662	-3.866	38.344	1.00	0.00
O										
ATOM	10392	CB	LEU	B	328	38.379	-6.361	37.948	1.00	0.00
C										
ATOM	10393	CG	LEU	B	328	38.739	-6.722	36.520	1.00	0.00
C										
ATOM	10394	CD1	LEU	B	328	39.303	-8.171	36.555	1.00	0.00
C										
ATOM	10395	CD2	LEU	B	328	37.528	-6.525	35.623	1.00	0.00
C										
ATOM	10396	H	LEU	B	328	38.387	-5.488	40.453	1.00	0.00
H										
ATOM	10397	HA	LEU	B	328	40.271	-7.009	38.717	1.00	0.00
H										
ATOM	10398	HB2	LEU	B	328	37.809	-5.433	37.937	1.00	0.00
H										
ATOM	10399	HB3	LEU	B	328	37.765	-7.160	38.362	1.00	0.00
H										
ATOM	10400	HG	LEU	B	328	39.529	-6.053	36.184	1.00	0.00
H										
ATOM	10401	HD11	LEU	B	328	38.544	-8.847	36.946	1.00	0.00
H										

ATOM	10402	HD12	LEU	B	328	39.578	-8.478	35.547	1.00	0.00
H										
ATOM	10403	HD13	LEU	B	328	40.183	-8.203	37.196	1.00	0.00
H										
ATOM	10404	HD21	LEU	B	328	37.212	-5.484	35.664	1.00	0.00
H										
ATOM	10405	HD22	LEU	B	328	37.789	-6.785	34.598	1.00	0.00
H										
ATOM	10406	HD23	LEU	B	328	36.716	-7.165	35.964	1.00	0.00
H										
ATOM	10407	N	SER	B	329	41.598	-4.955	38.444	1.00	0.00
N										
ATOM	10408	CA	SER	B	329	42.398	-3.809	38.135	1.00	0.00
C										
ATOM	10409	C	SER	B	329	42.186	-3.352	36.696	1.00	0.00
C										
ATOM	10410	O	SER	B	329	41.655	-4.074	35.874	1.00	0.00
O										
ATOM	10411	CB	SER	B	329	43.876	-4.184	38.329	1.00	0.00
C										
ATOM	10412	OG	SER	B	329	44.208	-5.116	37.330	1.00	0.00
O										
ATOM	10413	H	SER	B	329	42.057	-5.844	38.617	1.00	0.00
H										
ATOM	10414	HA	SER	B	329	42.141	-2.997	38.813	1.00	0.00
H										
ATOM	10415	HB2	SER	B	329	44.022	-4.626	39.313	1.00	0.00
H										
ATOM	10416	HB3	SER	B	329	44.501	-3.297	38.233	1.00	0.00
H										
ATOM	10417	HG	SER	B	329	44.068	-4.707	36.436	1.00	0.00
H										
ATOM	10418	N	TYR	B	330	42.642	-2.149	36.395	1.00	0.00
N										
ATOM	10419	CA	TYR	B	330	42.466	-1.519	35.096	1.00	0.00
C										
ATOM	10420	C	TYR	B	330	43.172	-2.273	33.974	1.00	0.00
C										
ATOM	10421	O	TYR	B	330	42.572	-2.537	32.958	1.00	0.00
O										
ATOM	10422	CB	TYR	B	330	42.919	-0.050	35.179	1.00	0.00
C										
ATOM	10423	CG	TYR	B	330	42.624	0.831	33.975	1.00	0.00
C										
ATOM	10424	CD1	TYR	B	330	43.639	1.598	33.375	1.00	0.00
C										
ATOM	10425	CD2	TYR	B	330	41.338	0.958	33.470	1.00	0.00
C										
ATOM	10426	CE1	TYR	B	330	43.370	2.449	32.292	1.00	0.00
C										
ATOM	10427	CE2	TYR	B	330	41.067	1.827	32.362	1.00	0.00
C										
ATOM	10428	CZ	TYR	B	330	42.094	2.552	31.787	1.00	0.00
C										
ATOM	10429	OH	TYR	B	330	41.842	3.395	30.712	1.00	0.00
O										

ATOM	10430	H	TYR	B	330	43.144	-1.635	37.112	1.00	0.00
H										
ATOM	10431	HA	TYR	B	330	41.401	-1.521	34.872	1.00	0.00
H										
ATOM	10432	HB2	TYR	B	330	43.997	-0.047	35.333	1.00	0.00
H										
ATOM	10433	HB3	TYR	B	330	42.428	0.397	36.042	1.00	0.00
H										
ATOM	10434	HD1	TYR	B	330	44.656	1.530	33.759	1.00	0.00
H										
ATOM	10435	HD2	TYR	B	330	40.525	0.391	33.920	1.00	0.00
H										
ATOM	10436	HE1	TYR	B	330	44.176	3.032	31.848	1.00	0.00
H										
ATOM	10437	HE2	TYR	B	330	40.054	1.916	31.974	1.00	0.00
H										
ATOM	10438	HH	TYR	B	330	42.388	3.110	29.933	1.00	0.00
H										
ATOM	10439	N	PRO	B	331	44.440	-2.644	34.151	1.00	0.00
N										
ATOM	10440	CA	PRO	B	331	44.944	-3.555	33.128	1.00	0.00
C										
ATOM	10441	C	PRO	B	331	44.109	-4.828	32.939	1.00	0.00
C										
ATOM	10442	O	PRO	B	331	43.927	-5.271	31.840	1.00	0.00
O										
ATOM	10443	CB	PRO	B	331	46.340	-3.922	33.657	1.00	0.00
C										
ATOM	10444	CG	PRO	B	331	46.706	-2.763	34.525	1.00	0.00
C										
ATOM	10445	CD	PRO	B	331	45.469	-2.354	35.173	1.00	0.00
C										
ATOM	10446	HA	PRO	B	331	45.036	-3.030	32.179	1.00	0.00
H										
ATOM	10447	HB2	PRO	B	331	47.048	-4.033	32.838	1.00	0.00
H										
ATOM	10448	HB3	PRO	B	331	46.305	-4.844	34.235	1.00	0.00
H										
ATOM	10449	HG2	PRO	B	331	47.108	-1.949	33.923	1.00	0.00
H										
ATOM	10450	HG3	PRO	B	331	47.444	-3.063	35.268	1.00	0.00
H										
ATOM	10451	HD2	PRO	B	331	45.294	-2.932	36.079	1.00	0.00
H										
ATOM	10452	HD3	PRO	B	331	45.489	-1.293	35.417	1.00	0.00
H										
ATOM	10453	N	GLU	B	332	43.633	-5.435	34.010	1.00	0.00
N										
ATOM	10454	CA	GLU	B	332	42.861	-6.665	33.862	1.00	0.00
C										
ATOM	10455	C	GLU	B	332	41.506	-6.408	33.192	1.00	0.00
C										
ATOM	10456	O	GLU	B	332	41.026	-7.233	32.378	1.00	0.00
O										
ATOM	10457	CB	GLU	B	332	42.625	-7.317	35.224	1.00	0.00
C										

ATOM	10458	CG	GLU	B	332	43.854	-7.871	35.855	1.00	0.00
C										
ATOM	10459	CD	GLU	B	332	43.580	-8.351	37.318	1.00	0.00
C										
ATOM	10460	OE1	GLU	B	332	43.091	-7.578	38.176	1.00	0.00
O										
ATOM	10461	OE2	GLU	B	332	43.880	-9.535	37.598	1.00	0.00
O1-										
ATOM	10462	H	GLU	B	332	43.803	-5.048	34.933	1.00	0.00
H										
ATOM	10463	HA	GLU	B	332	43.429	-7.357	33.241	1.00	0.00
H										
ATOM	10464	HB2	GLU	B	332	41.911	-8.129	35.095	1.00	0.00
H										
ATOM	10465	HB3	GLU	B	332	42.205	-6.568	35.893	1.00	0.00
H										
ATOM	10466	HG2	GLU	B	332	44.622	-7.099	35.874	1.00	0.00
H										
ATOM	10467	HG3	GLU	B	332	44.205	-8.717	35.265	1.00	0.00
H										
ATOM	10468	N	LEU	B	333	40.880	-5.291	33.542	1.00	0.00
N										
ATOM	10469	CA	LEU	B	333	39.633	-4.881	32.872	1.00	0.00
C										
ATOM	10470	C	LEU	B	333	39.836	-4.729	31.326	1.00	0.00
C										
ATOM	10471	O	LEU	B	333	39.022	-5.156	30.518	1.00	0.00
O										
ATOM	10472	CB	LEU	B	333	39.091	-3.578	33.505	1.00	0.00
C										
ATOM	10473	CG	LEU	B	333	37.948	-2.813	32.791	1.00	0.00
C										
ATOM	10474	CD1	LEU	B	333	36.694	-3.685	32.649	1.00	0.00
C										
ATOM	10475	CD2	LEU	B	333	37.592	-1.461	33.441	1.00	0.00
C										
ATOM	10476	H	LEU	B	333	41.266	-4.712	34.281	1.00	0.00
H										
ATOM	10477	HA	LEU	B	333	38.894	-5.664	33.036	1.00	0.00
H										
ATOM	10478	HB2	LEU	B	333	39.932	-2.890	33.588	1.00	0.00
H										
ATOM	10479	HB3	LEU	B	333	38.731	-3.833	34.500	1.00	0.00
H										
ATOM	10480	HG	LEU	B	333	38.297	-2.596	31.782	1.00	0.00
H										
ATOM	10481	HD11	LEU	B	333	36.346	-3.983	33.637	1.00	0.00
H										
ATOM	10482	HD12	LEU	B	333	35.913	-3.118	32.145	1.00	0.00
H										
ATOM	10483	HD13	LEU	B	333	36.933	-4.572	32.065	1.00	0.00
H										
ATOM	10484	HD21	LEU	B	333	38.467	-0.812	33.431	1.00	0.00
H										
ATOM	10485	HD22	LEU	B	333	36.785	-0.991	32.882	1.00	0.00
H										

ATOM	10486	HD23	LEU	B	333	37.274	-1.625	34.469	1.00	0.00
H										
ATOM	10487	N	ILE	B	334	40.963	-4.159	30.922	1.00	0.00
N										
ATOM	10488	CA	ILE	B	334	41.275	-3.964	29.528	1.00	0.00
C										
ATOM	10489	C	ILE	B	334	41.467	-5.313	28.849	1.00	0.00
C										
ATOM	10490	O	ILE	B	334	40.882	-5.597	27.799	1.00	0.00
O										
ATOM	10491	CB	ILE	B	334	42.526	-3.100	29.410	1.00	0.00
C										
ATOM	10492	CG1	ILE	B	334	42.185	-1.665	29.841	1.00	0.00
C										
ATOM	10493	CG2	ILE	B	334	43.151	-3.147	27.949	1.00	0.00
C										
ATOM	10494	CD1	ILE	B	334	43.467	-0.885	30.048	1.00	0.00
C										
ATOM	10495	H	ILE	B	334	41.631	-3.848	31.620	1.00	0.00
H										
ATOM	10496	HA	ILE	B	334	40.445	-3.446	29.051	1.00	0.00
H										
ATOM	10497	HB	ILE	B	334	43.269	-3.490	30.104	1.00	0.00
H										
ATOM	10498	HG12	ILE	B	334	41.619	-1.690	30.772	1.00	0.00
H										
ATOM	10499	HG13	ILE	B	334	41.588	-1.185	29.067	1.00	0.00
H										
ATOM	10500	HG21	ILE	B	334	42.418	-2.783	27.230	1.00	0.00
H										
ATOM	10501	HG22	ILE	B	334	44.038	-2.518	27.913	1.00	0.00
H										
ATOM	10502	HG23	ILE	B	334	43.422	-4.173	27.703	1.00	0.00
H										
ATOM	10503	HD11	ILE	B	334	44.031	-0.861	29.117	1.00	0.00
H										
ATOM	10504	HD12	ILE	B	334	43.227	0.132	30.354	1.00	0.00
H										
ATOM	10505	HD13	ILE	B	334	44.063	-1.366	30.822	1.00	0.00
H										
ATOM	10506	N	THR	B	335	42.252	-6.174	29.466	1.00	0.00
N										
ATOM	10507	CA	THR	B	335	42.343	-7.574	29.007	1.00	0.00
C										
ATOM	10508	C	THR	B	335	41.042	-8.348	28.938	1.00	0.00
C										
ATOM	10509	O	THR	B	335	40.791	-9.063	27.957	1.00	0.00
O										
ATOM	10510	CB	THR	B	335	43.283	-8.345	29.896	1.00	0.00
C										
ATOM	10511	OG1	THR	B	335	44.594	-7.839	29.639	1.00	0.00
O										
ATOM	10512	CG2	THR	B	335	43.190	-9.887	29.553	1.00	0.00
C										
ATOM	10513	H	THR	B	335	42.801	-5.871	30.264	1.00	0.00
H										

ATOM	10514	HA	THR	B	335	42.772	-7.564	28.006	1.00	0.00
H										
ATOM	10515	HB	THR	B	335	43.022	-8.182	30.941	1.00	0.00
H										
ATOM	10516	HG21	THR	B	335	43.464	-10.045	28.511	1.00	0.00
H										
ATOM	10517	HG22	THR	B	335	43.870	-10.444	30.196	1.00	0.00
H										
ATOM	10518	HG23	THR	B	335	42.170	-10.234	29.716	1.00	0.00
H										
ATOM	10519	HG1	THR	B	335	44.622	-6.869	29.851	1.00	0.00
H										
ATOM	10520	N	LYS	B	336	40.207	-8.193	29.962	1.00	0.00
N										
ATOM	10521	CA	LYS	B	336	38.901	-8.831	29.971	1.00	0.00
C										
ATOM	10522	C	LYS	B	336	38.028	-8.340	28.827	1.00	0.00
C										
ATOM	10523	O	LYS	B	336	37.343	-9.132	28.170	1.00	0.00
O										
ATOM	10524	CB	LYS	B	336	38.173	-8.620	31.284	1.00	0.00
C										
ATOM	10525	CG	LYS	B	336	36.751	-9.166	31.329	1.00	0.00
C										
ATOM	10526	CD	LYS	B	336	36.634	-10.651	30.916	1.00	0.00
C										
ATOM	10527	CE	LYS	B	336	37.291	-11.522	31.898	1.00	0.00
C										
ATOM	10528	NZ	LYS	B	336	36.843	-12.949	31.561	1.00	0.00
N1+										
ATOM	10529	H	LYS	B	336	40.487	-7.619	30.751	1.00	0.00
H										
ATOM	10530	HA	LYS	B	336	39.052	-9.902	29.841	1.00	0.00
H										
ATOM	10531	HB2	LYS	B	336	38.130	-7.549	31.477	1.00	0.00
H										
ATOM	10532	HB3	LYS	B	336	38.747	-9.108	32.070	1.00	0.00
H										
ATOM	10533	HG2	LYS	B	336	36.135	-8.574	30.654	1.00	0.00
H										
ATOM	10534	HG3	LYS	B	336	36.377	-9.063	32.346	1.00	0.00
H										
ATOM	10535	HD2	LYS	B	336	37.107	-10.789	29.945	1.00	0.00
H										
ATOM	10536	HD3	LYS	B	336	35.581	-10.921	30.849	1.00	0.00
H										
ATOM	10537	HE2	LYS	B	336	36.981	-11.256	32.907	1.00	0.00
H										
ATOM	10538	HE3	LYS	B	336	38.374	-11.436	31.816	1.00	0.00
H										
ATOM	10539	HZ1	LYS	B	336	37.131	-13.180	30.615	1.00	0.00
H										
ATOM	10540	HZ2	LYS	B	336	37.270	-13.600	32.212	1.00	0.00
H										
ATOM	10541	HZ3	LYS	B	336	35.833	-13.012	31.632	1.00	0.00
H										



ATOM	10542	N	LEU	B	337	38.074	-7.056	28.548	1.00	0.00
N										
ATOM	10543	CA	LEU	B	337	37.279	-6.537	27.429	1.00	0.00
C										
ATOM	10544	C	LEU	B	337	37.784	-7.038	26.041	1.00	0.00
C										
ATOM	10545	O	LEU	B	337	36.974	-7.358	25.172	1.00	0.00
O										
ATOM	10546	CB	LEU	B	337	37.200	-5.035	27.522	1.00	0.00
C										
ATOM	10547	CG	LEU	B	337	36.223	-4.378	28.561	1.00	0.00
C										
ATOM	10548	CD1	LEU	B	337	36.581	-2.867	28.712	1.00	0.00
C										
ATOM	10549	CD2	LEU	B	337	34.811	-4.490	28.113	1.00	0.00
C										
ATOM	10550	H	LEU	B	337	38.653	-6.431	29.100	1.00	0.00
H										
ATOM	10551	HA	LEU	B	337	36.267	-6.917	27.555	1.00	0.00
H										
ATOM	10552	HB2	LEU	B	337	36.909	-4.671	26.538	1.00	0.00
H										
ATOM	10553	HB3	LEU	B	337	38.202	-4.679	27.759	1.00	0.00
H										
ATOM	10554	HG	LEU	B	337	36.336	-4.873	29.524	1.00	0.00
H										
ATOM	10555	HD11	LEU	B	337	36.478	-2.372	27.748	1.00	0.00
H										
ATOM	10556	HD12	LEU	B	337	35.907	-2.405	29.432	1.00	0.00
H										
ATOM	10557	HD13	LEU	B	337	37.608	-2.771	29.062	1.00	0.00
H										
ATOM	10558	HD21	LEU	B	337	34.547	-5.541	28.003	1.00	0.00
H										
ATOM	10559	HD22	LEU	B	337	34.158	-4.027	28.851	1.00	0.00
H										
ATOM	10560	HD23	LEU	B	337	34.693	-3.984	27.156	1.00	0.00
H										
ATOM	10561	N	ILE	B	338	39.100	-7.135	25.858	1.00	0.00
N										
ATOM	10562	CA	ILE	B	338	39.697	-7.773	24.676	1.00	0.00
C										
ATOM	10563	C	ILE	B	338	39.202	-9.200	24.503	1.00	0.00
C										
ATOM	10564	O	ILE	B	338	38.776	-9.612	23.402	1.00	0.00
O										
ATOM	10565	CB	ILE	B	338	41.264	-7.762	24.709	1.00	0.00
C										
ATOM	10566	CG1	ILE	B	338	41.820	-6.329	24.691	1.00	0.00
C										
ATOM	10567	CG2	ILE	B	338	41.862	-8.596	23.565	1.00	0.00
C										
ATOM	10568	CD1	ILE	B	338	43.287	-6.207	25.160	1.00	0.00
C										
ATOM	10569	H	ILE	B	338	39.718	-6.752	26.566	1.00	0.00
H										

ATOM	10570	HA	ILE	B	338	39.381	-7.206	23.801	1.00	0.00
H										
ATOM	10571	HB	ILE	B	338	41.574	-8.222	25.646	1.00	0.00
H										
ATOM	10572	HG12	ILE	B	338	41.201	-5.716	25.345	1.00	0.00
H										
ATOM	10573	HG13	ILE	B	338	41.756	-5.952	23.671	1.00	0.00
H										
ATOM	10574	HG21	ILE	B	338	41.536	-8.188	22.609	1.00	0.00
H										
ATOM	10575	HG22	ILE	B	338	42.949	-8.564	23.622	1.00	0.00
H										
ATOM	10576	HG23	ILE	B	338	41.524	-9.628	23.653	1.00	0.00
H										
ATOM	10577	HD11	ILE	B	338	43.926	-6.804	24.511	1.00	0.00
H										
ATOM	10578	HD12	ILE	B	338	43.596	-5.164	25.115	1.00	0.00
H										
ATOM	10579	HD13	ILE	B	338	43.371	-6.568	26.184	1.00	0.00
H										
ATOM	10580	N	GLU	B	339	39.228	-9.947	25.579	1.00	0.00
N										
ATOM	10581	CA	GLU	B	339	38.810	-11.363	25.571	1.00	0.00
C										
ATOM	10582	C	GLU	B	339	37.329	-11.472	25.163	1.00	0.00
C										
ATOM	10583	O	GLU	B	339	36.929	-12.308	24.368	1.00	0.00
O										
ATOM	10584	CB	GLU	B	339	38.955	-11.935	26.996	1.00	0.00
C										
ATOM	10585	CG	GLU	B	339	39.749	-13.154	27.244	1.00	0.00
C										
ATOM	10586	CD	GLU	B	339	41.179	-13.175	26.704	1.00	0.00
C										
ATOM	10587	OE1	GLU	B	339	41.380	-13.248	25.462	1.00	0.00
O										
ATOM	10588	OE2	GLU	B	339	42.118	-13.226	27.536	1.00	0.00
O1-										
ATOM	10589	H	GLU	B	339	39.549	-9.537	26.451	1.00	0.00
H										
ATOM	10590	HA	GLU	B	339	39.430	-11.930	24.878	1.00	0.00
H										
ATOM	10591	HB2	GLU	B	339	37.947	-12.143	27.351	1.00	0.00
H										
ATOM	10592	HB3	GLU	B	339	39.399	-11.147	27.603	1.00	0.00
H										
ATOM	10593	HG2	GLU	B	339	39.215	-13.990	26.793	1.00	0.00
H										
ATOM	10594	HG3	GLU	B	339	39.802	-13.297	28.322	1.00	0.00
H										
ATOM	10595	N	LEU	B	340	36.501	-10.671	25.795	1.00	0.00
N										
ATOM	10596	CA	LEU	B	340	35.097	-10.587	25.455	1.00	0.00
C										
ATOM	10597	C	LEU	B	340	34.962	-10.284	23.984	1.00	0.00
C										

ATOM	10598	O	LEU	B	340	34.127	-10.885	23.287	1.00	0.00
O										
ATOM	10599	CB	LEU	B	340	34.414	-9.504	26.314	1.00	0.00
C										
ATOM	10600	CG	LEU	B	340	34.219	-9.967	27.765	1.00	0.00
C										
ATOM	10601	CD1	LEU	B	340	33.653	-8.912	28.692	1.00	0.00
C										
ATOM	10602	CD2	LEU	B	340	33.383	-11.258	27.859	1.00	0.00
C										
ATOM	10603	H	LEU	B	340	36.859	-10.092	26.547	1.00	0.00
H										
ATOM	10604	HA	LEU	B	340	34.627	-11.548	25.661	1.00	0.00
H										
ATOM	10605	HB2	LEU	B	340	33.441	-9.274	25.883	1.00	0.00
H										
ATOM	10606	HB3	LEU	B	340	35.033	-8.608	26.310	1.00	0.00
H										
ATOM	10607	HG	LEU	B	340	35.209	-10.213	28.146	1.00	0.00
H										
ATOM	10608	HD11	LEU	B	340	32.677	-8.595	28.328	1.00	0.00
H										
ATOM	10609	HD12	LEU	B	340	33.550	-9.327	29.694	1.00	0.00
H										
ATOM	10610	HD13	LEU	B	340	34.326	-8.056	28.721	1.00	0.00
H										
ATOM	10611	HD21	LEU	B	340	33.886	-12.057	27.315	1.00	0.00
H										
ATOM	10612	HD22	LEU	B	340	33.274	-11.544	28.904	1.00	0.00
H										
ATOM	10613	HD23	LEU	B	340	32.400	-11.086	27.425	1.00	0.00
H										
ATOM	10614	N	ALA	B	341	35.760	-9.330	23.504	1.00	0.00
N										
ATOM	10615	CA	ALA	B	341	35.670	-8.912	22.086	1.00	0.00
C										
ATOM	10616	C	ALA	B	341	35.941	-10.107	21.194	1.00	0.00
C										
ATOM	10617	O	ALA	B	341	35.211	-10.319	20.230	1.00	0.00
O										
ATOM	10618	CB	ALA	B	341	36.608	-7.755	21.762	1.00	0.00
C										
ATOM	10619	H	ALA	B	341	36.437	-8.886	24.117	1.00	0.00
H										
ATOM	10620	HA	ALA	B	341	34.651	-8.579	21.899	1.00	0.00
H										
ATOM	10621	HB1	ALA	B	341	37.636	-8.054	21.960	1.00	0.00
H										
ATOM	10622	HB2	ALA	B	341	36.504	-7.487	20.712	1.00	0.00
H										
ATOM	10623	HB3	ALA	B	341	36.353	-6.897	22.383	1.00	0.00
H										
ATOM	10624	N	LYS	B	342	37.007	-10.869	21.499	1.00	0.00
N										
ATOM	10625	CA	LYS	B	342	37.329	-12.094	20.715	1.00	0.00
C										

ATOM	10626	C	LYS	B	342	36.218	-13.115	20.835	1.00	0.00
C										
ATOM	10627	O	LYS	B	342	35.818	-13.758	19.857	1.00	0.00
O										
ATOM	10628	CB	LYS	B	342	38.634	-12.767	21.169	1.00	0.00
C										
ATOM	10629	CG	LYS	B	342	39.851	-11.917	20.960	1.00	0.00
C										
ATOM	10630	CD	LYS	B	342	41.014	-12.361	21.860	1.00	0.00
C										
ATOM	10631	CE	LYS	B	342	41.491	-13.814	21.523	1.00	0.00
C										
ATOM	10632	NZ	LYS	B	342	41.915	-13.967	20.053	1.00	0.00
N1+										
ATOM	10633	H	LYS	B	342	37.602	-10.605	22.277	1.00	0.00
H										
ATOM	10634	HA	LYS	B	342	37.430	-11.816	19.667	1.00	0.00
H										
ATOM	10635	HB2	LYS	B	342	38.758	-13.691	20.607	1.00	0.00
H										
ATOM	10636	HB3	LYS	B	342	38.552	-12.996	22.230	1.00	0.00
H										
ATOM	10637	HG2	LYS	B	342	39.602	-10.882	21.189	1.00	0.00
H										
ATOM	10638	HG3	LYS	B	342	40.161	-11.994	19.919	1.00	0.00
H										
ATOM	10639	HD2	LYS	B	342	40.687	-12.330	22.898	1.00	0.00
H										
ATOM	10640	HD3	LYS	B	342	41.848	-11.676	21.721	1.00	0.00
H										
ATOM	10641	HE2	LYS	B	342	40.674	-14.506	21.725	1.00	0.00
H										
ATOM	10642	HE3	LYS	B	342	42.340	-14.060	22.159	1.00	0.00
H										
ATOM	10643	HZ1	LYS	B	342	42.681	-13.332	19.854	1.00	0.00
H										
ATOM	10644	HZ2	LYS	B	342	42.214	-14.922	19.885	1.00	0.00
H										
ATOM	10645	HZ3	LYS	B	342	41.129	-13.748	19.450	1.00	0.00
H										
ATOM	10646	N	GLU	B	343	35.703	-13.290	22.022	1.00	0.00
N										
ATOM	10647	CA	GLU	B	343	34.673	-14.292	22.171	1.00	0.00
C										
ATOM	10648	C	GLU	B	343	33.483	-14.010	21.314	1.00	0.00
C										
ATOM	10649	O	GLU	B	343	32.964	-14.895	20.645	1.00	0.00
O										
ATOM	10650	CB	GLU	B	343	34.267	-14.418	23.632	1.00	0.00
C										
ATOM	10651	CG	GLU	B	343	35.339	-15.281	24.401	1.00	0.00
C										
ATOM	10652	CD	GLU	B	343	35.027	-15.409	25.905	1.00	0.00
C										
ATOM	10653	OE1	GLU	B	343	33.874	-15.086	26.338	1.00	0.00
O										

ATOM	10654	OE2	GLU	B	343	35.956	-15.852	26.635	1.00	0.00
O1-										
ATOM	10655	H	GLU	B	343	36.017	-12.740	22.815	1.00	0.00
H										
ATOM	10656	HA	GLU	B	343	35.091	-15.248	21.858	1.00	0.00
H										
ATOM	10657	HB2	GLU	B	343	33.295	-14.904	23.698	1.00	0.00
H										
ATOM	10658	HB3	GLU	B	343	34.210	-13.427	24.080	1.00	0.00
H										
ATOM	10659	HG2	GLU	B	343	36.315	-14.810	24.286	1.00	0.00
H										
ATOM	10660	HG3	GLU	B	343	35.364	-16.278	23.964	1.00	0.00
H										
ATOM	10661	N	ARG	B	344	33.052	-12.757	21.366	1.00	0.00
N										
ATOM	10662	CA	ARG	B	344	31.902	-12.327	20.636	1.00	0.00
C										
ATOM	10663	C	ARG	B	344	32.109	-12.470	19.137	1.00	0.00
C										
ATOM	10664	O	ARG	B	344	31.201	-12.886	18.456	1.00	0.00
O										
ATOM	10665	CB	ARG	B	344	31.568	-10.898	20.963	1.00	0.00
C										
ATOM	10666	CG	ARG	B	344	30.337	-10.405	20.233	1.00	0.00
C										
ATOM	10667	CD	ARG	B	344	29.883	-9.032	20.762	1.00	0.00
C										
ATOM	10668	NE	ARG	B	344	28.928	-8.420	19.850	1.00	0.00
N1+										
ATOM	10669	CZ	ARG	B	344	29.194	-7.404	19.043	1.00	0.00
C1+										
ATOM	10670	NH1	ARG	B	344	30.382	-6.834	19.021	1.00	0.00
N1+										
ATOM	10671	NH2	ARG	B	344	28.254	-6.964	18.262	1.00	0.00
N1+										
ATOM	10672	H	ARG	B	344	33.553	-12.086	21.940	1.00	0.00
H										
ATOM	10673	HA	ARG	B	344	31.059	-12.951	20.927	1.00	0.00
H										
ATOM	10674	HB2	ARG	B	344	32.413	-10.270	20.685	1.00	0.00
H										
ATOM	10675	HB3	ARG	B	344	31.394	-10.818	22.035	1.00	0.00
H										
ATOM	10676	HG2	ARG	B	344	29.531	-11.123	20.373	1.00	0.00
H										
ATOM	10677	HG3	ARG	B	344	30.566	-10.318	19.172	1.00	0.00
H										
ATOM	10678	HD2	ARG	B	344	30.751	-8.382	20.860	1.00	0.00
H										
ATOM	10679	HD3	ARG	B	344	29.415	-9.162	21.736	1.00	0.00
H										
ATOM	10680	HE2	ARG	B	344	27.988	-8.801	19.831	1.00	0.00
H										
ATOM	10681	HE3	ARG	B	344	29.205	-9.068	19.126	1.00	0.00
H										

ATOM	10682	HH11	ARG	B	344	30.561	-6.057	18.393	1.00	0.00
H										
ATOM	10683	HH12	ARG	B	344	31.119	-7.172	19.632	1.00	0.00
H										
ATOM	10684	HH13	ARG	B	344	30.085	-6.187	19.737	1.00	0.00
H										
ATOM	10685	HH21	ARG	B	344	28.437	-6.186	17.636	1.00	0.00
H										
ATOM	10686	HH22	ARG	B	344	27.337	-7.398	18.278	1.00	0.00
H										
ATOM	10687	HH23	ARG	B	344	28.548	-7.611	17.544	1.00	0.00
H										
ATOM	10688	N	HIS	B	345	33.307	-12.117	18.638	1.00	0.00
N										
ATOM	10689	CA	HIS	B	345	33.614	-12.228	17.223	1.00	0.00
C										
ATOM	10690	C	HIS	B	345	33.649	-13.685	16.818	1.00	0.00
C										
ATOM	10691	O	HIS	B	345	33.053	-14.058	15.810	1.00	0.00
O										
ATOM	10692	CB	HIS	B	345	34.932	-11.519	16.872	1.00	0.00
C										
ATOM	10693	CG	HIS	B	345	35.214	-11.498	15.409	1.00	0.00
C										
ATOM	10694	ND1	HIS	B	345	36.218	-12.250	14.833	1.00	0.00
N										
ATOM	10695	CD2	HIS	B	345	34.615	-10.831	14.399	1.00	0.00
C										
ATOM	10696	CE1	HIS	B	345	36.229	-12.034	13.536	1.00	0.00
C										
ATOM	10697	NE2	HIS	B	345	35.250	-11.199	13.246	1.00	0.00
N										
ATOM	10698	H	HIS	B	345	34.017	-11.762	19.269	1.00	0.00
H										
ATOM	10699	HA	HIS	B	345	32.813	-11.744	16.666	1.00	0.00
H										
ATOM	10700	HB2	HIS	B	345	35.748	-12.036	17.375	1.00	0.00
H										
ATOM	10701	HB3	HIS	B	345	34.878	-10.492	17.229	1.00	0.00
H										
ATOM	10702	HD1	HIS	B	345	36.847	-12.871	15.331	1.00	0.00
H										
ATOM	10703	HD2	HIS	B	345	33.784	-10.133	14.486	1.00	0.00
H										
ATOM	10704	HE1	HIS	B	345	36.927	-12.470	12.823	1.00	0.00
H										
ATOM	10705	N	GLN	B	346	34.319	-14.503	17.625	1.00	0.00
N										
ATOM	10706	CA	GLN	B	346	34.436	-15.947	17.371	1.00	0.00
C										
ATOM	10707	C	GLN	B	346	33.032	-16.539	17.321	1.00	0.00
C										
ATOM	10708	O	GLN	B	346	32.691	-17.285	16.407	1.00	0.00
O										
ATOM	10709	CB	GLN	B	346	35.283	-16.663	18.463	1.00	0.00
C										

ATOM	10710	CG	GLN	B	346	36.761	-16.249	18.486	1.00	0.00
C										
ATOM	10711	CD	GLN	B	346	37.544	-16.625	19.769	1.00	0.00
C										
ATOM	10712	OE1	GLN	B	346	37.030	-16.571	20.886	1.00	0.00
O										
ATOM	10713	NE2	GLN	B	346	38.810	-16.957	19.594	1.00	0.00
N										
ATOM	10714	H	GLN	B	346	34.767	-14.116	18.449	1.00	0.00
H										
ATOM	10715	HA	GLN	B	346	34.913	-16.096	16.404	1.00	0.00
H										
ATOM	10716	HB2	GLN	B	346	35.231	-17.736	18.285	1.00	0.00
H										
ATOM	10717	HB3	GLN	B	346	34.849	-16.435	19.436	1.00	0.00
H										
ATOM	10718	HG2	GLN	B	346	36.807	-15.167	18.371	1.00	0.00
H										
ATOM	10719	HG3	GLN	B	346	37.255	-16.726	17.641	1.00	0.00
H										
ATOM	10720	HE21	GLN	B	346	39.382	-17.215	20.392	1.00	0.00
H										
ATOM	10721	HE22	GLN	B	346	39.211	-16.955	18.662	1.00	0.00
H										
ATOM	10722	N	ASP	B	347	32.209	-16.171	18.299	1.00	0.00
N										
ATOM	10723	CA	ASP	B	347	30.869	-16.694	18.412	1.00	0.00
C										
ATOM	10724	C	ASP	B	347	30.009	-16.323	17.227	1.00	0.00
C										
ATOM	10725	O	ASP	B	347	29.335	-17.176	16.686	1.00	0.00
O										
ATOM	10726	CB	ASP	B	347	30.202	-16.259	19.705	1.00	0.00
C										
ATOM	10727	CG	ASP	B	347	30.728	-16.999	20.938	1.00	0.00
C										
ATOM	10728	OD1	ASP	B	347	31.633	-17.865	20.828	1.00	0.00
O										
ATOM	10729	OD2	ASP	B	347	30.228	-16.699	22.047	1.00	0.00
O1-										
ATOM	10730	H	ASP	B	347	32.535	-15.501	18.988	1.00	0.00
H										
ATOM	10731	HA	ASP	B	347	30.944	-17.781	18.433	1.00	0.00
H										
ATOM	10732	HB2	ASP	B	347	29.133	-16.445	19.621	1.00	0.00
H										
ATOM	10733	HB3	ASP	B	347	30.376	-15.193	19.842	1.00	0.00
H										
ATOM	10734	N	LYS	B	348	30.031	-15.071	16.798	1.00	0.00
N										
ATOM	10735	CA	LYS	B	348	29.293	-14.667	15.620	1.00	0.00
C										
ATOM	10736	C	LYS	B	348	29.758	-15.469	14.394	1.00	0.00
C										
ATOM	10737	O	LYS	B	348	28.948	-15.855	13.551	1.00	0.00
O										

ATOM	10738	CB	LYS	B	348	29.445	-13.164	15.322	1.00	0.00
C										
ATOM	10739	CG	LYS	B	348	29.083	-12.137	16.510	1.00	0.00
C										
ATOM	10740	CD	LYS	B	348	27.859	-11.129	16.282	1.00	0.00
C										
ATOM	10741	CE	LYS	B	348	27.794	-10.478	14.838	1.00	0.00
C										
ATOM	10742	NZ	LYS	B	348	26.868	-9.273	14.704	1.00	0.00
N1+										
ATOM	10743	H	LYS	B	348	30.575	-14.381	17.305	1.00	0.00
H										
ATOM	10744	HA	LYS	B	348	28.237	-14.878	15.788	1.00	0.00
H										
ATOM	10745	HB2	LYS	B	348	28.796	-12.930	14.479	1.00	0.00
H										
ATOM	10746	HB3	LYS	B	348	30.482	-12.989	15.042	1.00	0.00
H										
ATOM	10747	HG2	LYS	B	348	29.970	-11.534	16.698	1.00	0.00
H										
ATOM	10748	HG3	LYS	B	348	28.855	-12.731	17.394	1.00	0.00
H										
ATOM	10749	HD2	LYS	B	348	27.942	-10.326	17.012	1.00	0.00
H										
ATOM	10750	HD3	LYS	B	348	26.933	-11.678	16.448	1.00	0.00
H										
ATOM	10751	HE2	LYS	B	348	27.455	-11.242	14.140	1.00	0.00
H										
ATOM	10752	HE3	LYS	B	348	28.800	-10.161	14.567	1.00	0.00
H										
ATOM	10753	HZ1	LYS	B	348	27.174	-8.540	15.336	1.00	0.00
H										
ATOM	10754	HZ2	LYS	B	348	26.896	-8.930	13.749	1.00	0.00
H										
ATOM	10755	HZ3	LYS	B	348	25.920	-9.548	14.938	1.00	0.00
H										
ATOM	10756	N	GLN	B	349	31.061	-15.699	14.262	1.00	0.00
N										
ATOM	10757	CA	GLN	B	349	31.554	-16.412	13.071	1.00	0.00
C										
ATOM	10758	C	GLN	B	349	31.133	-17.864	13.141	1.00	0.00
C										
ATOM	10759	O	GLN	B	349	30.736	-18.404	12.146	1.00	0.00
O										
ATOM	10760	CB	GLN	B	349	33.069	-16.292	12.862	1.00	0.00
C										
ATOM	10761	CG	GLN	B	349	33.555	-14.898	12.470	1.00	0.00
C										
ATOM	10762	CD	GLN	B	349	35.091	-14.820	12.429	1.00	0.00
C										
ATOM	10763	OE1	GLN	B	349	35.804	-15.374	13.319	1.00	0.00
O										
ATOM	10764	NE2	GLN	B	349	35.619	-14.155	11.382	1.00	0.00
N										
ATOM	10765	H	GLN	B	349	31.710	-15.386	14.976	1.00	0.00
H										



ATOM	10766	HA	GLN	B	349	31.067	-15.972	12.201	1.00	0.00
H										
ATOM	10767	HB2	GLN	B	349	33.358	-16.986	12.073	1.00	0.00
H										
ATOM	10768	HB3	GLN	B	349	33.562	-16.574	13.791	1.00	0.00
H										
ATOM	10769	HG2	GLN	B	349	33.184	-14.178	13.198	1.00	0.00
H										
ATOM	10770	HG3	GLN	B	349	33.163	-14.652	11.484	1.00	0.00
H										
ATOM	10771	HE21	GLN	B	349	36.626	-14.066	11.293	1.00	0.00
H										
ATOM	10772	HE22	GLN	B	349	35.009	-13.744	10.682	1.00	0.00
H										
ATOM	10773	N	LYS	B	350	31.172	-18.471	14.329	1.00	0.00
N										
ATOM	10774	CA	LYS	B	350	30.819	-19.912	14.477	1.00	0.00
C										
ATOM	10775	C	LYS	B	350	29.355	-20.136	14.165	1.00	0.00
C										
ATOM	10776	O	LYS	B	350	28.971	-21.147	13.570	1.00	0.00
O										
ATOM	10777	CB	LYS	B	350	31.148	-20.468	15.873	1.00	0.00
C										
ATOM	10778	CG	LYS	B	350	32.608	-20.916	16.028	1.00	0.00
C										
ATOM	10779	CD	LYS	B	350	33.060	-21.065	17.500	1.00	0.00
C										
ATOM	10780	CE	LYS	B	350	34.629	-21.169	17.607	1.00	0.00
C										
ATOM	10781	NZ	LYS	B	350	35.321	-22.441	17.094	1.00	0.00
N1+										
ATOM	10782	H	LYS	B	350	31.447	-17.941	15.149	1.00	0.00
H										
ATOM	10783	HA	LYS	B	350	31.403	-20.474	13.749	1.00	0.00
H										
ATOM	10784	HB2	LYS	B	350	30.504	-21.325	16.063	1.00	0.00
H										
ATOM	10785	HB3	LYS	B	350	30.947	-19.692	16.609	1.00	0.00
H										
ATOM	10786	HG2	LYS	B	350	33.247	-20.179	15.545	1.00	0.00
H										
ATOM	10787	HG3	LYS	B	350	32.726	-21.879	15.533	1.00	0.00
H										
ATOM	10788	HD2	LYS	B	350	32.616	-21.967	17.919	1.00	0.00
H										
ATOM	10789	HD3	LYS	B	350	32.723	-20.198	18.065	1.00	0.00
H										
ATOM	10790	HE2	LYS	B	350	34.885	-21.067	18.660	1.00	0.00
H										
ATOM	10791	HE3	LYS	B	350	35.044	-20.331	17.049	1.00	0.00
H										
ATOM	10792	HZ1	LYS	B	350	35.122	-22.560	16.106	1.00	0.00
H										
ATOM	10793	HZ2	LYS	B	350	36.323	-22.360	17.230	1.00	0.00
H										

ATOM	10794	HZ3	LYS	B	350	34.974	-23.246	17.607	1.00	0.00
H										
ATOM	10795	N	ASN	B	351	28.552	-19.174	14.552	1.00	0.00
N										
ATOM	10796	CA	ASN	B	351	27.142	-19.191	14.221	1.00	0.00
C										
ATOM	10797	C	ASN	B	351	26.840	-19.006	12.720	1.00	0.00
C										
ATOM	10798	O	ASN	B	351	25.890	-19.599	12.180	1.00	0.00
O										
ATOM	10799	CB	ASN	B	351	26.437	-18.103	15.009	1.00	0.00
C										
ATOM	10800	CG	ASN	B	351	25.079	-18.506	15.412	1.00	0.00
C										
ATOM	10801	OD1	ASN	B	351	24.104	-17.804	15.120	1.00	0.00
O										
ATOM	10802	ND2	ASN	B	351	24.972	-19.666	16.068	1.00	0.00
N										
ATOM	10803	H	ASN	B	351	28.925	-18.402	15.095	1.00	0.00
H										
ATOM	10804	HA	ASN	B	351	26.734	-20.152	14.532	1.00	0.00
H										
ATOM	10805	HB2	ASN	B	351	26.370	-17.209	14.391	1.00	0.00
H										
ATOM	10806	HB3	ASN	B	351	27.019	-17.884	15.903	1.00	0.00
H										
ATOM	10807	HD21	ASN	B	351	24.061	-19.996	16.371	1.00	0.00
H										
ATOM	10808	HD22	ASN	B	351	25.802	-20.218	16.263	1.00	0.00
H										
ATOM	10809	N	LYS	B	352	27.630	-18.163	12.060	1.00	0.00
N										
ATOM	10810	CA	LYS	B	352	27.579	-18.026	10.610	1.00	0.00
C										
ATOM	10811	C	LYS	B	352	27.838	-19.390	9.990	1.00	0.00
C										
ATOM	10812	O	LYS	B	352	27.176	-19.771	9.035	1.00	0.00
O										
ATOM	10813	CB	LYS	B	352	28.656	-17.027	10.139	1.00	0.00
C										
ATOM	10814	CG	LYS	B	352	28.780	-16.846	8.615	1.00	0.00
C										
ATOM	10815	CD	LYS	B	352	30.199	-16.300	8.212	1.00	0.00
C										
ATOM	10816	CE	LYS	B	352	30.301	-15.992	6.674	1.00	0.00
C										
ATOM	10817	NZ	LYS	B	352	30.100	-14.478	6.382	1.00	0.00
N1+										
ATOM	10818	H	LYS	B	352	28.289	-17.597	12.584	1.00	0.00
H										
ATOM	10819	HA	LYS	B	352	26.594	-17.670	10.311	1.00	0.00
H										
ATOM	10820	HB2	LYS	B	352	29.618	-17.372	10.514	1.00	0.00
H										
ATOM	10821	HB3	LYS	B	352	28.423	-16.056	10.573	1.00	0.00
H										

ATOM	10822	HG2	LYS	B	352	28.021	-16.141	8.280	1.00	0.00
H										
ATOM	10823	HG3	LYS	B	352	28.620	-17.808	8.130	1.00	0.00
H										
ATOM	10824	HD2	LYS	B	352	30.948	-17.047	8.471	1.00	0.00
H										
ATOM	10825	HD3	LYS	B	352	30.392	-15.384	8.767	1.00	0.00
H										
ATOM	10826	HE2	LYS	B	352	29.534	-16.559	6.148	1.00	0.00
H										
ATOM	10827	HE3	LYS	B	352	31.284	-16.294	6.317	1.00	0.00
H										
ATOM	10828	HZ1	LYS	B	352	30.814	-13.943	6.865	1.00	0.00
H										
ATOM	10829	HZ2	LYS	B	352	30.172	-14.314	5.383	1.00	0.00
H										
ATOM	10830	HZ3	LYS	B	352	29.183	-14.190	6.707	1.00	0.00
H										
ATOM	10831	N	TYR	B	353	28.818	-20.113	10.527	1.00	0.00
N										
ATOM	10832	CA	TYR	B	353	29.141	-21.440	10.032	1.00	0.00
C										
ATOM	10833	C	TYR	B	353	27.982	-22.418	10.246	1.00	0.00
C										
ATOM	10834	O	TYR	B	353	27.668	-23.187	9.345	1.00	0.00
O										
ATOM	10835	CB	TYR	B	353	30.397	-21.988	10.707	1.00	0.00
C										
ATOM	10836	CG	TYR	B	353	30.767	-23.375	10.233	1.00	0.00
C										
ATOM	10837	CD1	TYR	B	353	31.302	-23.569	8.956	1.00	0.00
C										
ATOM	10838	CD2	TYR	B	353	30.582	-24.494	11.046	1.00	0.00
C										
ATOM	10839	CE1	TYR	B	353	31.663	-24.816	8.519	1.00	0.00
C										
ATOM	10840	CE2	TYR	B	353	30.940	-25.765	10.595	1.00	0.00
C										
ATOM	10841	CZ	TYR	B	353	31.477	-25.916	9.331	1.00	0.00
C										
ATOM	10842	OH	TYR	B	353	31.856	-27.169	8.855	1.00	0.00
O										
ATOM	10843	H	TYR	B	353	29.351	-19.729	11.300	1.00	0.00
H										
ATOM	10844	HA	TYR	B	353	29.333	-21.368	8.963	1.00	0.00
H										
ATOM	10845	HB2	TYR	B	353	30.225	-22.024	11.782	1.00	0.00
H										
ATOM	10846	HB3	TYR	B	353	31.226	-21.316	10.493	1.00	0.00
H										
ATOM	10847	HD1	TYR	B	353	31.434	-22.713	8.296	1.00	0.00
H										
ATOM	10848	HD2	TYR	B	353	30.154	-24.375	12.041	1.00	0.00
H										
ATOM	10849	HE1	TYR	B	353	32.098	-24.939	7.528	1.00	0.00
H										

ATOM	10850	HE2	TYR	B	353	30.797	-26.634	11.236	1.00	0.00
H										
ATOM	10851	HH	TYR	B	353	32.828	-27.166	8.653	1.00	0.00
H										
ATOM	10852	N	LYS	B	354	27.368	-22.383	11.434	1.00	0.00
N										
ATOM	10853	CA	LYS	B	354	26.235	-23.262	11.745	1.00	0.00
C										
ATOM	10854	C	LYS	B	354	25.064	-22.996	10.804	1.00	0.00
C										
ATOM	10855	O	LYS	B	354	24.395	-23.936	10.352	1.00	0.00
O										
ATOM	10856	CB	LYS	B	354	25.732	-23.066	13.175	1.00	0.00
C										
ATOM	10857	CG	LYS	B	354	26.712	-23.419	14.314	1.00	0.00
C										
ATOM	10858	CD	LYS	B	354	26.929	-24.924	14.451	1.00	0.00
C										
ATOM	10859	CE	LYS	B	354	27.403	-25.294	15.882	1.00	0.00
C										
ATOM	10860	NZ	LYS	B	354	28.441	-24.328	16.428	1.00	0.00
N1+										
ATOM	10861	H	LYS	B	354	27.694	-21.731	12.140	1.00	0.00
H										
ATOM	10862	HA	LYS	B	354	26.552	-24.297	11.625	1.00	0.00
H										
ATOM	10863	HB2	LYS	B	354	24.846	-23.686	13.300	1.00	0.00
H										
ATOM	10864	HB3	LYS	B	354	25.461	-22.018	13.288	1.00	0.00
H										
ATOM	10865	HG2	LYS	B	354	26.311	-23.037	15.251	1.00	0.00
H										
ATOM	10866	HG3	LYS	B	354	27.671	-22.945	14.110	1.00	0.00
H										
ATOM	10867	HD2	LYS	B	354	27.685	-25.240	13.733	1.00	0.00
H										
ATOM	10868	HD3	LYS	B	354	25.993	-25.438	14.243	1.00	0.00
H										
ATOM	10869	HE2	LYS	B	354	27.837	-26.293	15.857	1.00	0.00
H										
ATOM	10870	HE3	LYS	B	354	26.541	-25.290	16.546	1.00	0.00
H										
ATOM	10871	HZ1	LYS	B	354	28.047	-23.394	16.465	1.00	0.00
H										
ATOM	10872	HZ2	LYS	B	354	28.714	-24.618	17.362	1.00	0.00
H										
ATOM	10873	HZ3	LYS	B	354	29.256	-24.329	15.822	1.00	0.00
H										
ATOM	10874	N	ILE	B	355	24.816	-21.731	10.504	1.00	0.00
N										
ATOM	10875	CA	ILE	B	355	23.708	-21.360	9.644	1.00	0.00
C										
ATOM	10876	C	ILE	B	355	23.973	-21.768	8.185	1.00	0.00
C										
ATOM	10877	O	ILE	B	355	23.157	-22.460	7.570	1.00	0.00
O										

ATOM	10878	CB	ILE	B	355	23.427	-19.863	9.746	1.00	0.00
C										
ATOM	10879	CG1	ILE	B	355	22.780	-19.545	11.115	1.00	0.00
C										
ATOM	10880	CG2	ILE	B	355	22.525	-19.394	8.567	1.00	0.00
C										
ATOM	10881	CD1	ILE	B	355	22.802	-18.066	11.503	1.00	0.00
C										
ATOM	10882	H	ILE	B	355	25.414	-21.005	10.884	1.00	0.00
H										
ATOM	10883	HA	ILE	B	355	22.822	-21.893	9.987	1.00	0.00
H										
ATOM	10884	HB	ILE	B	355	24.375	-19.332	9.684	1.00	0.00
H										
ATOM	10885	HG12	ILE	B	355	23.315	-20.105	11.881	1.00	0.00
H										
ATOM	10886	HG13	ILE	B	355	21.742	-19.873	11.085	1.00	0.00
H										
ATOM	10887	HG21	ILE	B	355	21.579	-19.934	8.596	1.00	0.00
H										
ATOM	10888	HG22	ILE	B	355	22.336	-18.326	8.657	1.00	0.00
H										
ATOM	10889	HG23	ILE	B	355	23.028	-19.596	7.622	1.00	0.00
H										
ATOM	10890	HD11	ILE	B	355	22.260	-17.487	10.757	1.00	0.00
H										
ATOM	10891	HD12	ILE	B	355	22.329	-17.939	12.475	1.00	0.00
H										
ATOM	10892	HD13	ILE	B	355	23.834	-17.720	11.553	1.00	0.00
H										
ATOM	10893	N	ASP	B	356	25.128	-21.349	7.659	1.00	0.00
N										
ATOM	10894	CA	ASP	B	356	25.619	-21.770	6.337	1.00	0.00
C										
ATOM	10895	C	ASP	B	356	25.465	-23.265	6.125	1.00	0.00
C										
ATOM	10896	O	ASP	B	356	25.050	-23.710	5.067	1.00	0.00
O										
ATOM	10897	CB	ASP	B	356	27.120	-21.483	6.182	1.00	0.00
C										
ATOM	10898	CG	ASP	B	356	27.441	-20.002	5.970	1.00	0.00
C										
ATOM	10899	OD1	ASP	B	356	26.519	-19.140	6.052	1.00	0.00
O										
ATOM	10900	OD2	ASP	B	356	28.649	-19.716	5.734	1.00	0.00
O1-										
ATOM	10901	H	ASP	B	356	25.697	-20.706	8.200	1.00	0.00
H										
ATOM	10902	HA	ASP	B	356	25.069	-21.238	5.562	1.00	0.00
H										
ATOM	10903	HB2	ASP	B	356	27.491	-22.042	5.324	1.00	0.00
H										
ATOM	10904	HB3	ASP	B	356	27.630	-21.821	7.083	1.00	0.00
H										
ATOM	10905	N	ARG	B	357	25.852	-24.023	7.137	1.00	0.00
N										

ATOM	10906	CA	ARG	B	357	25.846	-25.454	7.090	1.00	0.00
C										
ATOM	10907	C	ARG	B	357	24.412	-25.964	6.988	1.00	0.00
C										
ATOM	10908	O	ARG	B	357	24.126	-26.840	6.150	1.00	0.00
O										
ATOM	10909	CB	ARG	B	357	26.560	-25.999	8.316	1.00	0.00
C										
ATOM	10910	CG	ARG	B	357	26.702	-27.465	8.353	1.00	0.00
C										
ATOM	10911	CD	ARG	B	357	27.733	-27.895	9.387	1.00	0.00
C										
ATOM	10912	NE	ARG	B	357	27.226	-29.037	10.145	1.00	0.00
N1+										
ATOM	10913	CZ	ARG	B	357	26.735	-28.988	11.390	1.00	0.00
C1+										
ATOM	10914	NH1	ARG	B	357	26.708	-27.858	12.095	1.00	0.00
N1+										
ATOM	10915	NH2	ARG	B	357	26.281	-30.113	11.951	1.00	0.00
N1+										
ATOM	10916	H	ARG	B	357	26.168	-23.569	7.988	1.00	0.00
H										
ATOM	10917	HA	ARG	B	357	26.390	-25.774	6.202	1.00	0.00
H										
ATOM	10918	HB2	ARG	B	357	26.000	-25.691	9.198	1.00	0.00
H										
ATOM	10919	HB3	ARG	B	357	27.557	-25.561	8.348	1.00	0.00
H										
ATOM	10920	HG2	ARG	B	357	27.016	-27.815	7.371	1.00	0.00
H										
ATOM	10921	HG3	ARG	B	357	25.740	-27.908	8.606	1.00	0.00
H										
ATOM	10922	HD2	ARG	B	357	27.930	-27.068	10.067	1.00	0.00
H										
ATOM	10923	HD3	ARG	B	357	28.655	-28.178	8.882	1.00	0.00
H										
ATOM	10924	HE2	ARG	B	357	27.247	-29.943	9.689	1.00	0.00
H										
ATOM	10925	HE3	ARG	B	357	26.301	-28.872	9.775	1.00	0.00
H										
ATOM	10926	HH11	ARG	B	357	26.329	-27.856	13.037	1.00	0.00
H										
ATOM	10927	HH12	ARG	B	357	27.065	-26.998	11.690	1.00	0.00
H										
ATOM	10928	HH13	ARG	B	357	27.625	-28.065	12.464	1.00	0.00
H										
ATOM	10929	HH21	ARG	B	357	25.906	-30.093	12.894	1.00	0.00
H										
ATOM	10930	HH22	ARG	B	357	26.310	-30.986	11.434	1.00	0.00
H										
ATOM	10931	HH23	ARG	B	357	25.360	-29.924	11.581	1.00	0.00
H										
ATOM	10932	N	SER	B	358	23.503	-25.413	7.801	1.00	0.00
N										
ATOM	10933	CA	SER	B	358	22.081	-25.784	7.695	1.00	0.00
C										

ATOM	10934	C	SER	B	358	21.537	-25.442	6.306	1.00	0.00
C										
ATOM	10935	O	SER	B	358	20.851	-26.262	5.704	1.00	0.00
O										
ATOM	10936	CB	SER	B	358	21.221	-25.075	8.727	1.00	0.00
C										
ATOM	10937	OG	SER	B	358	20.786	-23.836	8.201	1.00	0.00
O										
ATOM	10938	H	SER	B	358	23.796	-24.733	8.496	1.00	0.00
H										
ATOM	10939	HA	SER	B	358	21.991	-26.858	7.848	1.00	0.00
H										
ATOM	10940	HB2	SER	B	358	21.805	-24.902	9.630	1.00	0.00
H										
ATOM	10941	HB3	SER	B	358	20.357	-25.692	8.966	1.00	0.00
H										
ATOM	10942	HG	SER	B	358	20.255	-23.994	7.377	1.00	0.00
H										
ATOM	10943	N	HIS	B	359	21.828	-24.230	5.819	1.00	0.00
N										
ATOM	10944	CA	HIS	B	359	21.528	-23.854	4.424	1.00	0.00
C										
ATOM	10945	C	HIS	B	359	21.986	-24.939	3.470	1.00	0.00
C										
ATOM	10946	O	HIS	B	359	21.249	-25.358	2.571	1.00	0.00
O										
ATOM	10947	CB	HIS	B	359	22.202	-22.538	4.017	1.00	0.00
C										
ATOM	10948	CG	HIS	B	359	21.485	-21.315	4.493	1.00	0.00
C										
ATOM	10949	ND1	HIS	B	359	20.110	-21.181	4.434	1.00	0.00
N										
ATOM	10950	CD2	HIS	B	359	21.952	-20.155	5.013	1.00	0.00
C										
ATOM	10951	CE1	HIS	B	359	19.764	-20.006	4.926	1.00	0.00
C										
ATOM	10952	NE2	HIS	B	359	20.861	-19.364	5.282	1.00	0.00
N										
ATOM	10953	H	HIS	B	359	22.269	-23.549	6.428	1.00	0.00
H										
ATOM	10954	HA	HIS	B	359	20.450	-23.736	4.322	1.00	0.00
H										
ATOM	10955	HB2	HIS	B	359	22.255	-22.503	2.930	1.00	0.00
H										
ATOM	10956	HB3	HIS	B	359	23.209	-22.528	4.430	1.00	0.00
H										
ATOM	10957	HD1	HIS	B	359	19.468	-21.878	4.069	1.00	0.00
H										
ATOM	10958	HD2	HIS	B	359	22.996	-19.898	5.186	1.00	0.00
H										
ATOM	10959	HE1	HIS	B	359	18.746	-19.631	5.022	1.00	0.00
H										
ATOM	10960	N	HIS	B	360	23.207	-25.410	3.668	1.00	0.00
N										
ATOM	10961	CA	HIS	B	360	23.703	-26.503	2.851	1.00	0.00
C										

ATOM	10962	C	HIS	B	360	23.089	-27.846	3.242	1.00	0.00
C										
ATOM	10963	O	HIS	B	360	23.093	-28.785	2.430	1.00	0.00
O										
ATOM	10964	CB	HIS	B	360	25.233	-26.538	2.909	1.00	0.00
C										
ATOM	10965	CG	HIS	B	360	25.878	-25.427	2.142	1.00	0.00
C										
ATOM	10966	ND1	HIS	B	360	26.025	-25.462	0.770	1.00	0.00
N										
ATOM	10967	CD2	HIS	B	360	26.393	-24.241	2.545	1.00	0.00
C										
ATOM	10968	CE1	HIS	B	360	26.626	-24.358	0.364	1.00	0.00
C										
ATOM	10969	NE2	HIS	B	360	26.855	-23.596	1.423	1.00	0.00
N										
ATOM	10970	H	HIS	B	360	23.796	-25.007	4.390	1.00	0.00
H										
ATOM	10971	HA	HIS	B	360	23.417	-26.299	1.820	1.00	0.00
H										
ATOM	10972	HC	HIS	B	360	22.048	-27.654	3.498	1.00	0.00
H										
ATOM	10973	HC	HIS	B	360	23.622	-28.191	4.127	1.00	0.00
H										
ATOM	10974	H	HIS	B	360	24.029	-29.008	2.187	1.00	0.00
H										
ATOM	10975	HB2	HIS	B	360	25.573	-27.486	2.497	1.00	0.00
H										
ATOM	10976	HB3	HIS	B	360	25.541	-26.463	3.951	1.00	0.00
H										
ATOM	10977	HG	HIS	B	360	26.851	-25.900	2.265	1.00	0.00
H										
ATOM	10978	HD1	HIS	B	360	25.111	-25.531	0.333	1.00	0.00
H										
ATOM	10979	HD22	HIS	B	360	27.212	-24.408	3.243	1.00	0.00
H										
ATOM	10980	HD23	HIS	B	360	25.621	-23.644	3.027	1.00	0.00
H										
ATOM	10981	HE2	HIS	B	360	27.852	-23.429	1.513	1.00	0.00
H										
ATOM	10982	HE12	HIS	B	360	25.986	-23.827	-0.339	1.00	0.00
H										
ATOM	10983	HE13	HIS	B	360	27.569	-24.608	-0.121	1.00	0.00
H										
TER	10984		HIS	B	360					
HETATM10985	C	*		0	17.239	1.635	0.033	1.00	0.00	
C										
HETATM10986	C	*		0	16.037	1.634	-0.675	1.00	0.00	
C										
HETATM10987	C	*		0	15.389	0.428	-0.945	1.00	0.00	
C										
HETATM10988	C	*		0	15.943	-0.775	-0.508	1.00	0.00	
C										
HETATM10989	C	*		0	17.145	-0.773	0.200	1.00	0.00	
C										



HETATM10990	C	*	0	17.793	0.432	0.470	1.00	0.00
C								
HETATM10991	C	*	0	17.682	-1.938	0.623	1.00	0.00
C								
HETATM10992	N	*	0	17.503	-3.081	-0.110	1.00	0.00
N								
HETATM10993	O	*	0	18.320	-1.972	1.648	1.00	0.00
O								
HETATM10994	N	*	0	18.040	-4.247	0.313	1.00	0.00
N								
HETATM10995	C	*	0	17.377	-5.425	0.095	1.00	0.00
C								
HETATM10996	N	*	0	17.880	-6.517	0.492	1.00	0.00
N								
HETATM10997	S	*	0	15.988	-5.421	-0.649	1.00	0.00
S								
HETATM10998	C	*	0	17.267	-7.606	0.290	1.00	0.00
C								
HETATM10999	C	*	0	17.700	-8.474	-0.712	1.00	0.00
C								
HETATM11000	C	*	0	17.024	-9.674	-0.935	1.00	0.00
C								
HETATM11001	C	*	0	15.916	-10.006	-0.155	1.00	0.00
C								
HETATM11002	C	*	0	15.484	-9.138	0.848	1.00	0.00
C								
HETATM11003	C	*	0	16.159	-7.938	1.070	1.00	0.00
C								
HETATM11004	O	*	0	15.313	-1.946	-0.770	1.00	0.00
O								
HETATM11005	CL	*	0	14.119	-9.547	1.809	1.00	0.00
CL								
HETATM11006	CL	*	0	15.084	-11.485	-0.428	1.00	0.00
CL								
HETATM11007	H	*	0	17.750	2.586	0.246	1.00	0.00
H								
HETATM11008	H	*	0	15.600	2.582	-1.019	1.00	0.00
H								
HETATM11009	H	*	0	14.441	0.427	-1.502	1.00	0.00
H								
HETATM11010	H	*	0	18.741	0.434	1.028	1.00	0.00
H								
HETATM11011	H	*	0	16.968	-3.052	-0.969	1.00	0.00
H								
HETATM11012	H	*	0	18.932	-4.249	0.792	1.00	0.00
H								
HETATM11013	H	*	0	18.805	-6.519	0.988	1.00	0.00
H								
HETATM11014	H	*	0	18.573	-8.213	-1.327	1.00	0.00
H								
HETATM11015	H	*	0	17.365	-10.359	-1.725	1.00	0.00
H								
HETATM11016	H	*	0	15.818	-7.253	1.861	1.00	0.00
H								
HETATM11017	H	*	0	14.455	-1.944	-1.227	1.00	0.00
H								

HETATM11018	MG	MG	A	330	7.753	-10.112	6.473	1.00	29.20
MG2+									
HETATM11019	MG	MG	A	331	11.814	-8.745	7.260	1.00	2.00
MG2+									
HETATM11020	MG	MG	A	332	13.212	-5.494	9.607	1.00	34.93
MG2+									
HETATM11021	PB	ADP	A	310	10.542	-11.686	7.971	1.00	2.00
P1+									
HETATM11022	O1B	ADP	A	310	11.001	-13.028	7.526	1.00	2.00
O1-									
HETATM11023	O2B	ADP	A	310	11.688	-10.845	8.390	1.00	2.00
O1-									
HETATM11024	O3B	ADP	A	310	9.972	-10.942	6.843	1.00	2.26
O1-									
HETATM11025	PA	ADP	A	310	7.989	-11.569	9.465	1.00	2.00
P1+									
HETATM11026	O1A	ADP	A	310	7.881	-11.253	10.914	1.00	2.00
O1-									
HETATM11027	O2A	ADP	A	310	7.583	-10.501	8.533	1.00	2.00
O1-									
HETATM11028	O3A	ADP	A	310	9.490	-11.931	9.086	1.00	2.00
O									
HETATM11029	O5'	ADP	A	310	7.178	-12.934	9.258	1.00	2.00
O									
HETATM11030	C5'	ADP	A	310	7.522	-13.758	8.154	1.00	2.00
C									
HETATM11031	C4'	ADP	A	310	6.182	-14.464	7.836	1.00	2.00
C									
HETATM11032	O4'	ADP	A	310	5.816	-15.268	8.954	1.00	2.26
O									
HETATM11033	C3'	ADP	A	310	4.994	-13.487	7.717	1.00	2.00
C									
HETATM11034	O3'	ADP	A	310	4.898	-12.911	6.390	1.00	2.00
O									
HETATM11035	C2'	ADP	A	310	3.811	-14.397	8.031	1.00	2.01
C									
HETATM11036	O2'	ADP	A	310	3.743	-15.156	6.767	1.00	2.00
O									
HETATM11037	C1'	ADP	A	310	4.366	-15.424	9.045	1.00	2.00
C									
HETATM11038	N9	ADP	A	310	4.020	-15.000	10.407	1.00	2.00
N									
HETATM11039	C8	ADP	A	310	4.677	-14.038	11.127	1.00	2.00
C									
HETATM11040	N7	ADP	A	310	4.187	-13.832	12.318	1.00	2.00
N									
HETATM11041	C5	ADP	A	310	3.125	-14.706	12.391	1.00	2.00
C									
HETATM11042	C6	ADP	A	310	2.190	-14.975	13.398	1.00	2.00
C									
HETATM11043	N6	ADP	A	310	2.199	-14.366	14.564	1.00	2.00
N									
HETATM11044	N1	ADP	A	310	1.264	-15.906	13.144	1.00	2.00
N									
HETATM11045	C2	ADP	A	310	1.265	-16.517	11.966	1.00	2.00
C									

HETATM11046	N3	ADP	A	310	2.100	-16.360	10.935	1.00	2.00
N									
HETATM11047	C4	ADP	A	310	3.007	-15.424	11.221	1.00	2.00
C									
HETATM11048	H5'1	ADP	A	310	8.293	-14.479	8.425	1.00	2.00
H									
HETATM11049	H5'2	ADP	A	310	7.863	-13.161	7.308	1.00	2.00
H									
HETATM11050	H4'	ADP	A	310	6.347	-15.001	6.902	1.00	2.00
H									
HETATM11051	H3'	ADP	A	310	5.068	-12.622	8.375	1.00	2.00
H									
HETATM11052	H3'	ADP	A	310	4.830	-13.635	5.763	1.00	2.00
H									
HETATM11053	H2'	ADP	A	310	2.898	-13.909	8.372	1.00	2.01
H									
HETATM11054	H2'	ADP	A	310	4.614	-15.523	6.602	1.00	2.00
H									
HETATM11055	H1'	ADP	A	310	3.989	-16.427	8.846	1.00	2.00
H									
HETATM11056	H8	ADP	A	310	5.528	-13.496	10.741	1.00	2.00
H									
HETATM11057	H61	ADP	A	310	1.508	-14.602	15.262	1.00	2.00
H									
HETATM11058	H62	ADP	A	310	2.896	-13.662	14.760	1.00	2.00
H									
HETATM11059	H2	ADP	A	310	0.479	-17.243	11.819	1.00	2.00
H									
HETATM11060	C1	POB	A	321	9.638	-8.481	-1.004	1.00	5.47
C									
HETATM11061	O1	POB	A	321	8.670	-7.848	-1.489	1.00	5.29
O									
HETATM11062	O2	POB	A	321	10.702	-8.648	-1.623	1.00	5.30
O1-									
HETATM11063	C2	POB	A	321	9.427	-9.010	0.397	1.00	5.71
C									
HETATM11064	C3	POB	A	321	8.672	-10.316	0.324	1.00	5.46
C									
HETATM11065	C4	POB	A	321	8.208	-10.749	-1.063	1.00	5.53
C									
HETATM11066	O2P	POB	A	321	10.713	-9.291	0.960	1.00	5.77
O									
HETATM11067	P1	POB	A	321	11.350	-8.358	1.985	1.00	5.77
P1+									
HETATM11068	O1P	POB	A	321	11.326	-6.954	1.720	1.00	5.24
O1-									
HETATM11069	O3P	POB	A	321	10.469	-8.481	3.283	1.00	5.73
O									
HETATM11070	P2	POB	A	321	10.393	-9.619	4.362	1.00	6.48
P1+									
HETATM11071	O4P	POB	A	321	9.166	-9.787	5.142	1.00	5.84
O1-									
HETATM11072	O5P	POB	A	321	11.689	-9.368	5.186	1.00	6.53
O1-									
HETATM11073	O6P	POB	A	321	10.602	-10.892	3.508	1.00	6.15
O1-									

HETATM11074	C1'	POB	A	321	12.792	-8.853	2.269	1.00	5.75
C									
HETATM11075	N1'	POB	A	321	13.496	-8.643	3.504	1.00	5.46
N1+									
HETATM11076	C2'	POB	A	321	13.718	-8.643	1.086	1.00	5.41
C									
HETATM11077	H2	POB	A	321	8.876	-8.281	0.992	1.00	5.71
H									
HETATM11078	H31	POB	A	321	7.790	-10.227	0.957	1.00	5.46
H									
HETATM11079	H32	POB	A	321	9.323	-11.098	0.716	1.00	5.46
H									
HETATM11080	H41	POB	A	321	7.553	-9.985	-1.482	1.00	5.53
H									
HETATM11081	H42	POB	A	321	7.664	-11.691	-0.987	1.00	5.53
H									
HETATM11082	H43	POB	A	321	9.074	-10.881	-1.712	1.00	5.53
H									
HETATM11083	H1'	POB	A	321	12.501	-9.889	2.446	1.00	5.75
H									
HETATM11084	H1'1	POB	A	321	13.856	-7.700	3.530	1.00	5.46
H									
HETATM11085	H1'2	POB	A	321	14.262	-9.298	3.571	1.00	5.46
H									
HETATM11086	H1'3	POB	A	321	12.864	-8.783	4.279	1.00	5.46
H									
HETATM11087	H2'1	POB	A	321	13.951	-7.582	0.992	1.00	5.41
H									
HETATM11088	H2'2	POB	A	321	13.230	-8.990	0.176	1.00	5.41
H									
HETATM11089	H2'3	POB	A	321	14.639	-9.205	1.241	1.00	5.41
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