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(30)優先權：2009/11/04 美國 61/280,460
2009/11/20 美國 61/281,716
(71)申請人：建南德克公司 (美國) GENENTECH, INC. (US)
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申請實體審查：無 申請專利範圍項數：34 項 圖式數：28 共 423 頁

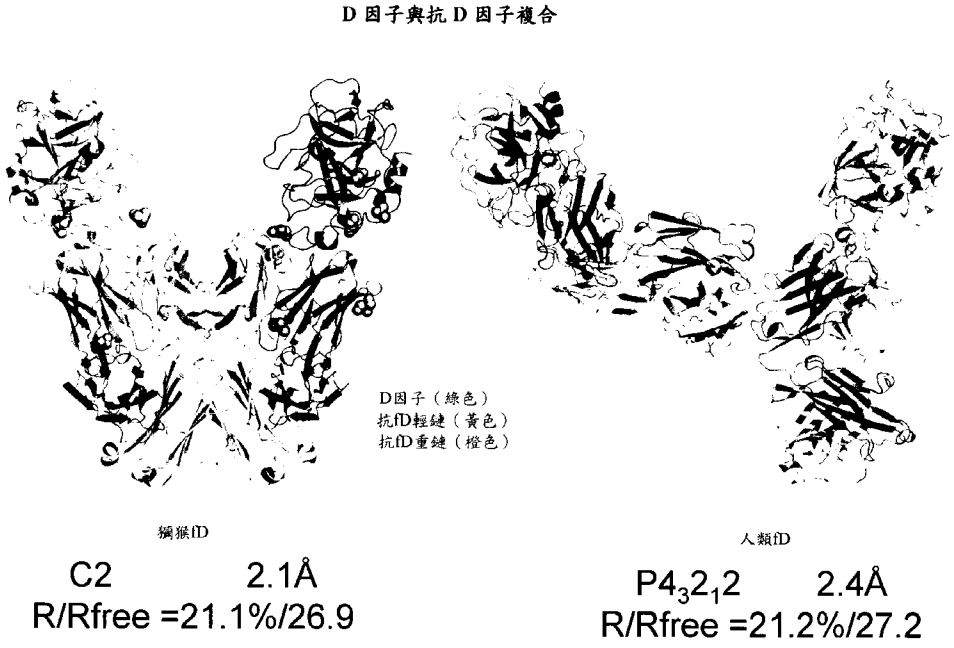
(54)名稱

D因子及抗D因子抗體之共結晶結構

CO-CRYSTAL STRUCTURE OF FACTOR D AND ANTI-FACTOR D ANTIBODY

(57)摘要

本發明係關於D因子及抗D因子抗體或其抗原結合片段之共結晶結構。



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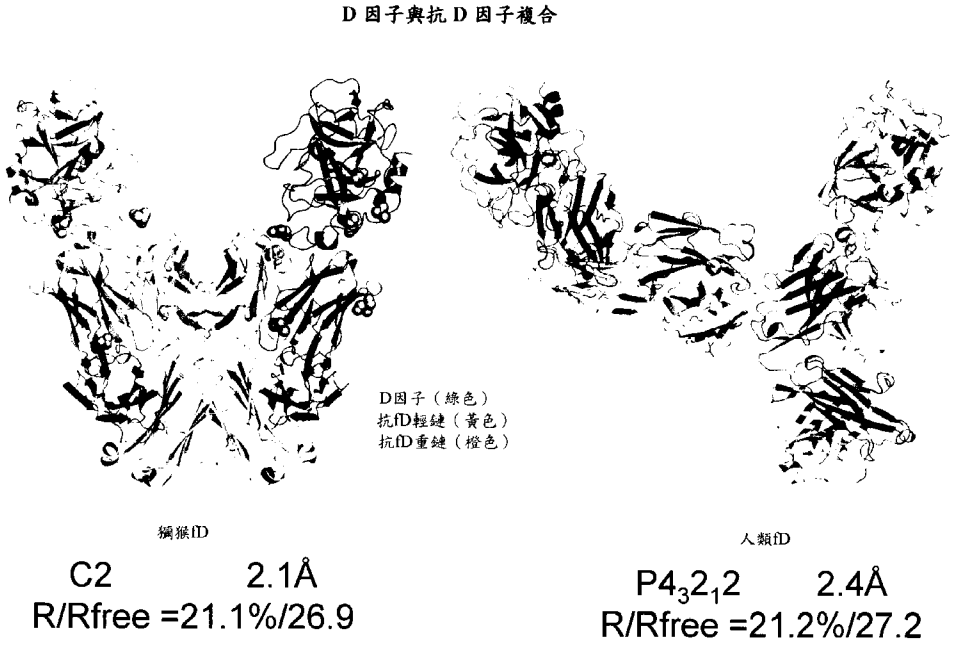
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六、發明說明：

【發明所屬之技術領域】

本發明係關於D因子及抗D因子抗體或其抗原結合片段之共結晶結構。

本案依據35 U.S.C.第119條(e)款主張2009年11月20日申請之美國臨時申請案第61/281,716號及2009年11月4日申請之美國臨時申請案第61/280,460號之優先權及權利，該等申請案之內容以全文引用之方式併入本文中。

【先前技術】

D因子為高度特異性胰凝乳酶(chymotrypsin)樣絲胺酸蛋白酶，其為活化替代補體路徑(alternative complement pathway)之限速酵素。D因子之受質為另一替代路徑絲胺酸蛋白酶：B因子。B因子在經由D因子裂解之後轉化成蛋白水解活性因子Bb並起始替代補體路徑。已在脈絡膜小疣(drusen)中發現增強之替代補體路徑活化。脈絡膜小疣為存在於布魯赫氏膜(Bruch's membrane)上之含補體細胞毒性沈積物，其與年齡相關黃斑部變性(AMD)之形成相關。替代路徑補體活化在AMD中之作用已經由遺傳分析進一步證明，顯示替代補體路徑活化之負調控劑H因子中的突變與形成AMD之風險增加強烈相關。

抗D因子抗體揭示於2008年5月22日公開之美國專利公開案第20080118506號；2009年7月16日公開之美國專利公開案第20090181017號；及2009年10月29日公開之美國專利公開案第20090269338號中。抗D因子抗體可用於預防及治

療與補體活化過度或不受控制相關之疾病及病症且適用於診斷、預防及治療疾病。

【發明內容】

本發明提供人類及獼猴(cynomolgous)D因子與抗D因子抗體片段複合的結晶結構。本發明亦提供關於人類及獼猴D因子上與抗D因子抗體Fab區之輕鏈及重鏈相互作用之殘基的資訊。

在一態樣中，本發明係關於由天然序列D因子多肽或其功能片段或保守胺基酸取代變異體形成之晶體。

在一實施例中，天然序列D因子多肽為人類或獼猴D因子。

在另一實施例中，天然序列D因子多肽為SEQ ID NO: 1之人類D因子。

在另一實施例中，人類D因子之晶體由約等於以下之單位晶胞參數表徵：晶胞尺寸a=132.048；b=132.048；c=180.288；空間群$P4_32_12$，結晶常數：2.4 Å，及R/Rfree=21.2%/27.2。

在另一實施例中，天然序列D因子多肽為SEQ ID NO: 2之獼猴D因子。

在另一實施例中，獼猴D因子之晶體由約等於以下之單位晶胞參數表徵：a=182.205；b=80.673；c=142.575，空間群C2，結晶常數：2.1 Å；及R/Rfree= 21.1%/26.9。

在另一態樣中，本發明係關於具有展示於附錄1A及1B中之結構座標的D因子晶體。

在另一態樣中，本發明係關於包含任何前述晶體之組合物。

在一不同態樣中，本發明係關於包含D因子多肽與抗D因子抗體或該抗體之抗原結合片段複合之可結晶組合物。

在一實施例中，在可結晶組合物中，抗D因子抗體為單株抗體。

在另一實施例中，片段為Fab片段。

在另一實施例中，在可結晶組合物中，D因子多肽為SEQ ID NO: 1之人類D因子。

在另一實施例中，在可結晶組合物中，D因子多肽為SEQ ID NO: 2之獼猴D因子。

在另一實施例中，D因子多肽包含催化三聯體(triad)。

在另一態樣中，本發明係關於包含D因子多肽與抗D因子抗體或其抗原結合片段複合之晶體。

在一實施例中，抗體為單株抗體。

在另一實施例中，片段為Fab片段。

在另一實施例中，D因子多肽為SEQ ID NO: 1之人類D因子。

在另一實施例中，D因子多肽為SEQ ID NO: 2之獼猴D因子。

在另一實施例中，D因子多肽包含催化三聯體。

在另一實施例中，在SEQ ID NO: 1之人類D因子多肽或其抗原結合片段中，胺基酸殘基D131、V132、P134、D165、R166、A167、T168、N170、R171、R172、T173、

D176、G177、I179、E181、R222及K223之一或多者參與與抗D因子抗體之複合。

在另一實施例中，在SEQ ID NO: 1之人類D因子多肽或其抗原結合片段中，所有胺基酸殘基D131、V132、P134、D165、R166、A167、T168、N170、R171、R172、T173、D176、G177、I179、E181、R222及K223皆參與與抗D因子抗體之複合。

在一不同實施例中，在SEQ ID NO: 1之人類D因子多肽或其抗原結合片段中，胺基酸殘基R172與抗D因子抗體或其抗原結合片段之重鏈及輕鏈形成氫鍵。

在一不同態樣中，本發明係關於產生分子複合物之三維圖像的電腦，該分子複合物包含由SEQ ID NO: 1之人類D因子之胺基酸殘基D131、V132、P134、D165、R166、A167、T168、N170、R171、R172、T173、D176、G177、I179、E181、R222及K223的結構座標界定之結合位點，其中該電腦包含：(i)機器可讀資料儲存媒體，其包含以機器可讀資料編碼之資料儲存材料，其中該資料包含SEQ ID NO: 1之人類D因子之胺基酸殘基D131、V132、P134、D165、R166、A167、T168、N170、R171、R172、T173、D176、G177、I179、E181、R222及K223的結構座標，及(ii)將該機器可讀資料處理成該三維圖像之指令。

在一實施例中，電腦進一步包含顯示該等結構座標之顯示器。

在另一態樣中，本發明係關於評估化學實體與分子複合

物締合之潛力的方法，該分子複合物包含由SEQ ID NO: 1之人類D因子之胺基酸殘基D131、V132、P134、D165、R166、A167、T168、N170、R171、R172、T173、D176、G177、I179、E181、R222及K223之結構座標界定的結合位點，該方法包含以下步驟：(i)使用計算手段進行化學實體與分子複合物之此結合位點之間的擬合操作；及(ii)分析擬合操作之結果以量化化學實體與該結合位點之間的締合。

在一實施例中，化學實體為抗體或其抗原結合片段，或該抗體或抗體片段之肽模擬物或小分子模擬物。

在另一實施例中，抗體或其抗原結合片段與一或多個所列殘基形成氫鍵。

在另一實施例中，抗體或其抗原結合片段與SEQ ID NO: 1之人類D因子之胺基酸殘基R172形成氫鍵。

在另一態樣中，本發明係關於可由或已由所主張之方法鑑別之化學實體，諸如抗體、抗體片段、肽及小分子模擬物。

在另一態樣中，本發明係關於確定對應於分子複合物之X射線繞射圖案之至少一部分結構座標的電腦，其中該電腦包含：a)機器可讀資料儲存媒體，其包含以機器可讀資料編碼之資料儲存材料，其中該資料包含圖6及圖7或附錄1A或1B之至少一部分結構座標；b)機器可讀資料儲存媒體，其包含以機器可讀資料編碼之資料儲存材料，其中該資料包含該分子複合物之X射線繞射圖案；c)工作記憶

體，其用於儲存供處理a)及b)之該機器可讀資料的指令；d)中央處理單元，其與該工作記憶體耦聯且與a)及b)之該機器可讀資料耦聯以進行(a)之機器可讀資料之傅立葉變換(Fourier transform)及將(b)之該機器可讀資料處理成結構座標；及e)顯示器，其與該中央處理單元耦聯以顯示該分子複合物之該等結構座標。

【實施方式】

I. 定義

術語「D因子」與「補體D因子」可互換使用且係指天然序列及變異型D因子多肽。

「天然序列」D因子為胺基酸序列與源自自然界之D因子多肽相同之多肽，不論其製備方式。因此，天然序列D因子可自自然界分離或可經由重組及/或合成手段產生。除成熟D因子蛋白(諸如SEQ ID NO: 1之人類D因子蛋白或SEQ ID NO: 2之獼猴D因子蛋白)以外，術語「天然序列D因子」亦特定涵蓋D因子之天然存在前驅體形式(例如非活性前蛋白(preprotein)，其經蛋白水解裂解而產生活性形式)、D因子之天然存在變異體形式(例如替代拼接形式)及天然存在對偶基因變異體、以及胺基酸序列與源自自然界之D因子多肽相同之D因子分子結構構形變異體。此定義特別包括非人類動物(包括高等靈長類動物及非人類哺乳動物)的D因子多肽，包括(但不限於)SEQ ID NO: 2之獼猴D因子多肽。

「D因子變異體」或「補體D因子變異體」意謂如下定

義之活性D因子多肽，其與天然序列D因子多肽，諸如SEQ ID NO: 1之天然序列人類D因子多肽或SEQ ID NO: 2之天然序列獼猴D因子多肽具有至少約80%胺基酸序列一致性。通常，D因子變異體將與SEQ ID NO: 1之成熟人類胺基酸序列或SEQ ID NO: 2之成熟獼猴D因子多肽具有至少約80%胺基酸序列一致性、或至少約85%胺基酸序列一致性、或至少約90%胺基酸序列一致性、或至少約95%胺基酸序列一致性、或至少約98%胺基酸序列一致性、或至少約99%胺基酸序列一致性。最高程度之序列一致性較佳存在於D因子之活性位點內。

D因子之「活性位點」由人類D因子序列中之His-57、Asp-102及Ser-195(胰凝乳酶原(chymotrypsinogen)編號)界定。D因子在一級特異性袋(primary specificity pocket)底部具有Asp189(胰凝乳酶編號)且裂解Arg肽鍵。催化三聯體由His-57、Asp-102及Ser-195組成。相較於其他絲胺酸蛋白酶，Asp-102及His57顯示非典型構形(Narayana等人，*J. Mol. Biol.* 235 (1994), 695-708)。在S1袋底部介於Asp189與Arg218之間觀測到獨特鹽橋，其使環214-218升高並產生深且狹窄之S1袋(Jing等人，*J. Mol. Biol.* 282 (1998) 1061-1081)。此環及活性位點周圍之若干其他殘基經由突變分析證明為D因子酯解活性之關鍵結構決定子(Kim等人，J. Biol. Chem. 270 (1995) 24399-24405)。依據此等結果，提出D因子可能在結合C3b結合因子B之後經歷構形變化，從而導致蛋白水解活性之表現(Volanakis及

Narayana, *Protein Sci.* 5 (1996) 553-564)。

如本文所用，「溶劑可及位置」係指源抗體或抗原結合片段之重鏈及輕鏈可變區中的胺基酸殘基位置，依據抗體或抗原結合片段之結構、總體結構及/或模型化結構，確定該位置為有潛力供溶劑到達及/或與諸如抗體特異性抗原之分子接觸的胺基酸殘基位置。此等位置通常見於CDR中及蛋白質外部。可使用此項技術中已知之多種演算法之任一者來確定如本文定義之抗體或抗原結合片段之溶劑可及位置。較佳地，使用抗體三維模型之座標，較佳利用諸如InsightII程式(Accelrys, San Diego, CA)之電腦程式來確定溶劑可及位置。亦可使用此項技術中已知之演算法來確定溶劑可及位置(例如Lee及Richards (1971) *J. Mol. Biol.* 55, 379及Connolly (1983) *J. Appl. Cryst.* 16, 548)。可使用適於蛋白質模型化之軟體及自抗體獲得之3維結構資訊來確定溶劑可及位置。可用於此等目的之軟體包括SYBYL Biopolymer Module軟體(Tripos Associates)。一般而言且較佳地，當演算法(程式)需要使用者輸入尺寸參數時，則計算中使用之探試「尺寸」設定為半徑約1.4埃(Angstrom)或1.4埃以下。此外，Pacios (1994) *Comput. Chem.* 18(4): 377-386已描述使用用於個人電腦之軟體確定溶劑可及區域及面積的方法。

術語「結合袋」係指分子或分子複合物之區域，由於其形狀而有利於其與另一化學實體締合。術語「袋」包括(但不限於)間隙、通道或位點。結合袋形狀可在化學實體

結合之前大部分預成形，可在化學實體結合其的同時形成，或可藉由針對其之另一化學實體與分子之不同結合袋結合(此又會誘發該結合袋之形狀變化)而形成。

術語「產生三維結構」或「產生三維圖像」係指將結構座標之清單轉化成三維空間中之結構模型或圖像。此可經由市售或公用軟體達成。分子或分子複合物之三維結構模型可因此經由給予結構座標且包含恰當軟體之電腦在電腦螢幕上構建。可顯示或使用三維結構來進行電腦模型化或擬合操作。此外，結構座標自身在無顯示模型情況下可用於進行基於電腦之模型化及擬合操作。

術語「結晶溶液」係指促進結晶之溶液，其包含至少一種試劑，包括緩衝劑、一或多種鹽、沈澱劑、一或多種清潔劑、糖或有機化合物、鑭系元素離子、聚離子化合物及/或穩定劑。

「胺基酸序列一致性百分比(%)」定義為在比對序列且必要時引入空隙以達成最大序列一致性百分比且不將任何保守取代視為序列一致性之一部分之後，候選序列中與參考D因子序列中之胺基酸殘基一致之胺基酸殘基的百分比。出於測定胺基酸序列一致性百分比之目的之比對可以此項技術之技能內之多種方式，例如使用公用電腦軟體(諸如BLAST、BLAST-2、ALIGN或Megalign(DNASTAR)軟體)來達成。熟習此項技術者可確定用於量測比對之適當參數，包括針對所比較之序列全長達成最大比對所需之任何演算法。接著相對於較長序列計算序列一致性，亦即即

使較短序列展示與較長序列之一部分100%序列一致性，但總序列一致性將小於100%。

「核酸序列一致性百分比(%)」定義為在比對序列且必要時引入空隙以達成最大序列一致性百分比之後，候選序列中與參考D因子編碼序列中之核苷酸一致之核苷酸的百分比。出於測定核酸序列一致性百分比之目的之比對可以此項技術之技能內之多種方式，例如使用公用電腦軟體(諸如BLAST、BLAST-2、ALIGN或Megalign(DNASTAR)軟體)來達成。熟習此項技術者可確定用於量測比對之適當參數，包括針對所比較之序列全長達成最大比對所需之任何演算法。接著相對於較長序列計算序列一致性，亦即即使較短序列展示與較長序列之一部分100%序列一致性，但總序列一致性將小於100%。

「分離」之核酸分子為經鑑別且與在該核酸之天然來源中通常與其締合之至少一種污染物核酸分子分離的核酸分子。分離之核酸分子不呈自然界中所見之形式或配置(setting)。分離之核酸分子因此不同於其存在於天然細胞中時之核酸分子。然而，分離之核酸分子包括通常表現經編碼多肽之細胞中所含之核酸分子，其中例如該核酸分子在染色體中的位置與天然細胞不同。

「分離」之D因子多肽編碼核酸分子為經鑑別且與在D因子編碼核酸之天然來源中通常與其締合之至少一種污染物核酸分子分離的核酸分子。分離之D因子多肽編碼核酸分子不呈自然界中所見之形式或配置。分離之D因子多肽

編碼核酸分子因此不同於其存在於天然細胞中時之編碼核酸分子。然而，分離之D因子編碼核酸分子包括通常表現D因子之細胞中所含之D因子編碼核酸分子，其中例如該核酸分子在染色體中的位置與天然細胞不同。

術語「拮抗劑」以最廣泛意義使用，且包括能夠中和、阻斷、部分或完全抑制、消除、降低或干擾D因子之生物活性之任何分子。D因子拮抗劑包括(但不限於)結合D因子且能夠中和、阻斷、部分或完全抑制、消除、降低或干擾D因子活性(諸如D因子能夠參與補體相關眼病病理)的抗D因子抗體及其抗原結合片段、其他結合多肽、肽及非肽小分子。

本文定義之「小分子」具有約600道爾頓(dalton)以下、較佳約1000道爾頓以下之分子量。

在本發明D因子拮抗劑之情形下，「活性」或「生物活性」為拮抗(部分或完全抑制)D因子之生物活性的能力。D因子拮抗劑之較佳生物活性為能夠達成D因子相關疾病或病狀(諸如補體相關眼病)之狀態(例如病理)的可量測改善。可使用相關動物模型在包括結合檢定之活體外或活體內測試中，或在人類臨床試驗中測定活性。

術語「補體相關眼病」以最廣泛意義使用且包括病理涉及補體(包括經典路徑及替代路徑，尤其補體替代路徑)之所有眼病。補體相關眼病包括(不限於)黃斑部變性疾病(macular degenerative disease)，諸如所有階段之年齡相關黃斑部變性(AMD)(包括乾性及濕性(非滲出性及滲出性)形

式)、脈絡膜新血管生成(choroidal neovascularization，CNV)、葡萄膜炎(uveitis)、糖尿病性及其他缺血相關視網膜病變及其他眼內新生血管疾病，諸如糖尿病性黃斑部水腫(diabetic macular edema)、病理性近視、逢希伯-林道疾病(von Hippel-Lindau disease)、眼部組織漿菌病(組織漿菌病)、視網膜中央靜脈阻塞(Central Retinal Vein Occlusion，CRVO)、角膜新血管生成及視網膜新血管生成。補體相關眼病之較佳群組包括年齡相關黃斑部變性(AMD)(包括非滲出性(濕性)及滲出性(乾性或萎縮性)AMD)、脈絡膜新血管生成(CNV)、糖尿病性視網膜病變(DR)及眼內炎(endophthalmitis)。

「治療」為意欲防止病症形成或改變病症病理而進行之介入。因此，「治療」係指治療性措施與預防性或防治性措施。需要治療者包括已患有病症者以及欲預防病症者。在免疫相關疾病之治療中，治療劑可直接改變免疫反應之組分的反應大小，或使疾病對其他治療劑(例如抗生素、抗真菌劑、消炎劑、化學治療劑等)之治療更敏感。

疾病(諸如補體相關眼病)之「病理」包括損害患者健康之所有現象。此包括(不限於)異常或不可控制之細胞生長(嗜中性細胞、嗜伊紅血球、單核細胞、淋巴細胞)、抗體產生、自體抗體產生、補體產生、干擾相鄰細胞之正常功能、細胞激素或其他分泌產物以異常含量釋放、任何發炎或免疫反應之抑制或加劇、發炎細胞(嗜中性細胞、嗜伊紅血球、單核細胞、淋巴細胞)浸潤入細胞空間中等。

如本文所用之術語「哺乳動物」係指歸類為哺乳動物之

任何動物，包括(不限於)人類、高等靈長類動物、家畜及農畜、及動物園動物、運動動物或寵物動物，諸如馬、豬、牛、犬、貓及雪貂等。在本發明之一較佳實施例中，哺乳動物為人類。

與一或多種其他治療劑「組合」投藥包括同時(並行)及依任何順序之連續投藥。

「治療有效量」為達成目標疾病或病狀(諸如補體相關眼病)之狀態(例如病理)之可量測改善所需的「D因子拮抗劑」之量。

術語「控制序列」係指為在特定宿主有機體中表現可操作地連接之編碼序列所必需的DNA序列。適於原核生物之控制序列例如包括啟動子、視情況選用之操縱序列及核糖體結合位點。已知真核細胞利用啟動子、聚腺苷酸化信號及增強子。

核酸當與另一核酸序列呈功能性關係定位時，係經「可操作地連接」。舉例而言，前序列或分泌性前導序列之DNA若以參與多肽分泌的前蛋白形式表現，則可操作地連接至多肽之DNA；啟動子或增強子若影響序列轉錄，則可操作地連接至編碼序列；或核糖體結合位點若經定位以便有助於轉譯，則可操作地連接至編碼序列。一般而言，「可操作地連接」意謂所連接之DNA序列為鄰近的，且在分泌性前導序列之情況下，為鄰近的且同步閱讀。然而，強化子不必為鄰近的。連接係藉由在適宜限制位點處連接來實現。若此等位點不存在，則根據習知操作使用合成寡

核苷酸接附子或連接子。

雜交反應之「嚴格度」可由一般技術者輕易確定且通常為視探針長度、洗滌溫度及鹽濃度而定之經驗計算結果。一般而言，較長探針需要較高溫度用於適當黏接，而較短探針需要較低溫度。當互補股存在於低於其解鏈溫度之環境中時，雜交通常視變性DNA再黏接之能力而定。探針與可雜交序列之間的所要同源性程度越高，可使用之相對溫度越高。因此，由此可見較高相對溫度將傾向於使反應條件更嚴格，而較低溫度並不如此。關於雜交反應之嚴格度之其他詳情及解釋，參見Ausubel等人，*Current Protocols in Molecular Biology*, Wiley Interscience Publishers, (1995)。

如本文定義之「嚴格條件」或「高嚴格度條件」可依據以下來鑑別：(1)對於洗滌而言，使用低離子強度及高溫，例如在50℃下0.015 M氯化鈉/0.0015 M檸檬酸鈉/0.1%十二烷基硫酸鈉；(2)在42℃下在雜交期間使用變性劑，諸如甲醯胺，例如50%(v/v)甲醯胺，以及0.1%牛血清白蛋白/0.1%菲科爾(Ficoll)/0.1%聚乙烯吡咯啶酮/50 mM磷酸鈉緩衝液(pH 6.5)及750 mM氯化鈉、75 mM檸檬酸鈉；或(3)在42℃下使用50%甲醯胺、5×SSC(0.75 M NaCl、0.075 M檸檬酸鈉)、50 mM磷酸鈉(pH 6.8)、0.1%焦磷酸鈉、5×丹哈德溶液(Denhardt's solution)、經音波處理之鮭魚精DNA(50 μg/ml)、0.1% SDS及10%硫酸葡聚糖、以及在42℃下於0.2×SSC(氯化鈉/檸檬酸鈉)中之洗滌液及在55℃下於50%甲醯胺中之洗滌液、隨後在55℃下由含有EDTA之0.1×SSC

組成之高嚴格度洗滌液。

「中等嚴格條件」可如Sambrook等人，*Molecular Cloning: A Laboratory Manual*, New York: Cold Spring Harbor Press, 1989所述來鑑別且包括使用嚴格度小於上述者的洗滌溶液及雜交條件(例如溫度、離子強度及% SDS)。中等嚴格條件之一實例為在37℃下於包含以下之溶液中培育隔夜：20%甲醯胺、5×SSC(150 mM NaCl、15 mM檸檬酸鈉)、50 mM磷酸鈉(pH 7.6)、5×丹哈德溶液、10%硫酸葡聚糖及20 mg/mL變性之剪切鮭魚精DNA，隨後在約37-50℃下於1×SSC中洗滌過濾器。熟習此項技術者將瞭解如何根據需要調整溫度、離子強度等以適應諸如探試長度及其類似者之因素。

術語「經標記之抗原決定基」在用於本文中時係指包含本發明多肽與「標籤多肽」融合的嵌合多肽。標籤多肽具有足夠殘基來提供抗體所針對之抗原決定基，但其足夠短以使其不干擾其所融合之多肽的活性。標籤多肽較佳亦相當獨特以使抗體實質上不與其他抗原決定基交叉反應。適合標籤多肽通常具有至少6個胺基酸殘基且通常介於約8個與50個之間的胺基酸殘基(較佳介於約10個與20個之間的胺基酸殘基)。

術語「抗體」以最廣泛意義使用且特別涵蓋(不限於)單一抗D因子單株抗體(包括促效劑、拮抗劑及中和抗體)及具有多抗原決定基特異性之抗D因子抗體組合物。如本文所用之術語「單株抗體」係指自實質上均質之抗體群體獲

得之抗體，亦即除可以少量存在之可能天然存在之突變以外，構成該群體之個別抗體為相同的。

如本文所用之術語「單株抗體」係指自實質上均質之抗體群體獲得之抗體，亦即除可以少量存在之可能天然存在之突變以外，構成該群體之個別抗體為相同的。單株抗體具有針對單一抗原位點的高度特異性。此外，與通常包括針對不同決定子(抗原決定基)之不同抗體的習知(多株)抗體製劑相比，各單株抗體針對抗原上之單一決定子。修飾語「單株」指示抗體係自實質上均質之抗體群體獲得的特性，且不應解釋為需要經由任何特定方法來產生抗體。舉例而言，欲根據本發明使用之單株抗體可經由首先由Kohler等人，(1975) *Nature* 256:495描述之融合瘤法來製備，或可經由重組DNA法(參見例如美國專利第4,816,567號)來製備。「單株抗體」亦可使用例如Clackson等人，(1991) *Nature* 352:624-628及Marks等人，(1991) *J. Mol. Biol.* 222:581-597中所述之技術自噬菌體抗體庫分離。

本文中之單株抗體特別包括「嵌合」抗體(免疫球蛋白)，其中一部分重鏈及/或輕鏈與源自特定物種或屬於特定抗體類或子類之抗體中之相應序列一致或同源，而鏈之其餘部分與源自其他物種或屬於其他抗體類或子類之抗體之相應序列一致或同源；以及此等抗體之片段，只要其展現所要生物活性即可(美國專利第4,816,567號；及Morrison等人，(1984) *Proc. Natl. Acad. Sci. USA* 81:6851-6855)。

非人類(例如鼠類)抗體之「人類化」形式為含有源自非

人免疫球蛋白之最小序列之嵌合抗體。人類化抗體大部分為人類免疫球蛋白(接受者抗體)，其中接受者之高變區殘基經諸如小鼠、大鼠、兔或非人類靈長類動物之非人類物種(供者抗體)之具有所要特異性、親和力及能力的高變區殘基置換。在一些情況下，人免疫球蛋白之Fv構架區(FR)殘基經相應非人類殘基置換。此外，人類化抗體可包含在接受者抗體或供者抗體中未發現之殘基。此等修飾可進一步改善抗體效能。一般而言，人類化抗體將包含實質上所有至少一個且通常兩個可變域，其中所有或實質上所有高變環對應於非人類免疫球蛋白之高變環，且所有或實質上所有FR區為具有人類免疫球蛋白序列之FR區。人類化抗體亦視情況將包含至少一部分免疫球蛋白恆定區(Fc)，通常包含至少一部分人類免疫球蛋白之恆定區。關於進一步詳情，參見Jones等人，(1986) *Nature* 321:522-525；Riechmann等人，(1988) *Nature* 332:323-329；及Presta (1992) *Curr. Op. Struct. Biol.* 2:593-596。

「物種依賴性抗體」為對第一哺乳動物物種之抗原的結合親和力比其對第二哺乳動物物種之彼抗原同系物的結合親和力強的抗體。通常，物種依賴性抗體「特異性結合」人類抗原(亦即具有不超過約1×10^{-7} M、較佳不超過約1×10^{-8} M且最佳不超過約1×10^{-9} M之結合親和力(K_d)值)，但對第二非人類哺乳動物物種之該抗原同系物之結合親和力為其對人類抗原之結合親和力的至多約1/50、或至多約1/500、或至多約1/1000。物種依賴性抗體可為如上定義之

各類型抗體之任一者，但較佳為人類化或人類抗體。

如本文所用，「抗體突變體」或「抗體變異體」係指物種依賴性抗體之胺基酸序列變異體，其中物種依賴性抗體之一或多個胺基酸殘基已經修飾。此等突變體與物種依賴性抗體之序列一致性或類似性必定小於100%。在一較佳實施例中，抗體突變體將含有與物種依賴性抗體重鏈或輕鏈可變域之胺基酸序列具有至少75%、更佳至少80%、更佳至少85%、更佳至少90%且最佳至少95%一致性或類似性的胺基酸序列。關於此序列之一致性或相似性在本文中定義為在比對序列且必要時引入空隙以達成最大序列一致性百分比之後，候選序列中與物種依賴性抗體殘基一致(亦即相同殘基)或相似(亦即來自基於共同側鏈性質之同一組之胺基酸殘基，參見下文)之胺基酸殘基的百分比。N末端、C末端或內部延伸、缺失或插入可變域外部之抗體序列皆不應解釋為影響序列一致性或相似性。

「分離」之抗體為已鑑別且與其天然環境之組分分離及/或自其天然環境之組分中回收的抗體。其天然環境之污染物組分為會干擾抗體之診斷或治療用途之物質，且可包括酵素、激素及其他蛋白質或非蛋白質溶解物。在較佳實施例中，抗體將純化至(1)大於95重量%且最佳大於99重量%之抗體，如Lowry法所測定；(2)足以獲得N末端或內部胺基酸序列之至少15個殘基的程度，如使用旋杯式定序儀(spinning cup sequenator)所測定；或(3)均質，如使用庫馬斯藍(Coomassie blue)或較佳銀染劑(silver stain)、在還原

或非還原條件下藉由SDS-PAGE所測定。分離之抗體包括原位處於重組細胞內之抗體，因為抗體之天然環境之至少一種組分將不存在。然而，分離之抗體通常將經由至少一個純化步驟來製備。

如本文所使用，「抗體可變域」係指抗體分子之輕鏈及重鏈部分，其包括互補決定區(CDR；亦即CDR1、CDR2及CDR3)及構架區(FR)之胺基酸序列。V_H係指重鏈可變域。V_L係指輕鏈可變域。根據本發明中使用之方法，屬於CDR及FR之胺基酸位置可根據Kabat(Sequences of Proteins of Immunological Interest(National Institutes of Health, Bethesda, Md., 1987及1991))來確定。抗體或其抗原結合片段之胺基酸亦根據Kabat編號。

如本文所用，術語「互補決定區」(CDR；亦即CDR1、CDR2及CDR3)係指為抗原結合必需存在之抗體可變域胺基酸殘基。各可變域通常具有3個鑑別為CDR1、CDR2及CDR3之CDR區。各互補決定區可包含如Kabat所界定之「互補決定區」之胺基酸殘基(亦即約為以下殘基：輕鏈可變域中之24-34(L1)、50-56(L2)及89-97(L3)及重鏈可變域中之31-35(H1)、50-65(H2)及95-102(H3)；Kabat等人，*Sequences of Proteins of Immunological Interest,* 第5版 Public Health Service, National Institutes of Health, Bethesda, MD. (1991))及/或「高變環」之彼等殘基(亦即約為以下殘基：輕鏈可變域中之26-32(L1)、50-52(L2)及91-96(L3)及重鏈可變域中之26-32(H1)、53-55(H2)及96-

101(H3)；Chothia及Lesk (1987) *J. Mol. Biol.* 196:901-917)。在一些情況下，互補決定區可包括根據Kabat所界定之CDR區與高變環兩者之胺基酸。舉例而言，抗體4D5之重鏈CDRH1包括胺基酸26至35。

「構架區」(下文稱為FR)為除CDR殘基以外之彼等可變域殘基。各可變域通常具有4個鑑別為FR1、FR2、FR3及FR4之FR。若根據Kabat來界定CDR，則輕鏈FR殘基位於約殘基1-23(LCFR1)、35-49(LCFR2)、57-88(LCFR3)及98-107(LCFR4)處，且重鏈FR殘基位於重鏈殘基中之約殘基1-30(HCFR1)、36-49(HCFR2)、66-94(HCFR3)及103-113(HCFR4)處。若CDR包含高變環之胺基酸殘基，則輕鏈FR殘基位於輕鏈中約殘基1-25(LCFR1)、33-49(LCFR2)、53-90(LCFR3)及97-107(LCFR4)處，且重鏈FR殘基位於重鏈殘基中約殘基1-25(HCFR1)、33-52(HCFR2)、56-95(HCFR3)及102-113(HCFR4)處。在一些情況下，當CDR包含如Kabat界定之CDR與高變環之胺基酸時，FR殘基將作相應調整。舉例而言，當CDRH1包括胺基酸H26-H35時，重鏈FR1殘基在位置1-25處且FR2殘基在位置36-49處。

如本文所用，「密碼子組」係指一組用於編碼所要變異胺基酸之不同核苷酸三聯體(triplet)序列。可經由例如固相合成法來合成寡核苷酸組，包括代表由密碼子組所提供之核苷酸三聯體之所有可能組合且將編碼所要胺基酸組的序列。密碼子名稱之標準形式為此項技術已知且本文描述

之IUB碼之標準形式。密碼子組通常由3個斜體大寫字母表示，例如*NNK*、*NNS*、*XYZ*、*DVK*及其類似形式。如本文所用之「非隨機密碼子組」係指編碼部分滿足、較佳完全滿足如本文所述之胺基酸選擇標準之選擇胺基酸的密碼子組。合成在某些位置處具有選定核苷酸「簡併性」之寡核苷酸在此項技術中為熟知的，例如TRIM方法(Knappek等人，(1999) *J. Mol. Biol.* 296:57-86；Garrard及Henner (1993) *Gene* 128:103)。此等具有某些密碼子組之寡核苷酸組可使用商業核酸合成儀(可購自例如Applied Biosystems, Foster City, CA)來合成或可購得(例如購自Life Technologies, Rockville, MD)。因此，經合成具有特定密碼子組之寡核苷酸組通常將包括複數個具有不同序列之寡核苷酸，整個序列內之差異係由密碼子組產生。根據本發明使用之寡核苷酸具有允許與可變域核酸模板雜交且亦可(但未必)包括適用於例如選殖目的之限制酶位點的序列。

術語「抗體片段」在本文中以最廣泛意義使用且包括(不限於)Fab、Fab'、$F(ab')_2$、scFv、$(scFv)_2$、dAb及互補決定區(CDR)片段、線性抗體、單鏈抗體分子、微型抗體、微型雙功能抗體及由抗體片段形成之多特異性抗體。

「Fv」片段為含有完整抗原識別及結合位點之抗體片段。此區域由緊密締合之一個重鏈可變域及一個輕鏈可變域之二聚體組成，該締合本質上可為共價的，例如在scFv中。在此構型中，各可變域之三個CDR相互作用以界定V_H-V_L二聚體表面上之抗原結合位點。總而言之，六個

CDR或其子組賦予抗體以抗原結合特異性。然而，甚至單一可變域(或僅包含三個抗原特異性CDR的一半Fv)亦能夠識別且結合抗原，儘管親和力通常低於整個結合位點。

「Fab」片段含有輕鏈之可變域及恆定域及重鏈之可變域及第一恆定域(CH1)。$F(ab')_2$抗體片段包含一對Fab片段，其間通常經由鉸鏈半胱胺酸在接近其羧基末端處共價連接。抗體片段之其他化學偶聯亦為此項技術中已知。

「單鏈Fv」或「sFv」抗體片段包含抗體之V_H及V_L域，其中此等域存在於單一多肽鏈中。Fv多肽通常進一步包含介於V_H與V_L域之間的多肽連接子，其使得scFv能夠形成抗原結合所要之結構。關於scFv之評述，參見Pluckthun, *The Pharmacology of Monoclonal Antibodies*，第113卷，Rosenburg及Moore編，Springer-Verlag, New York，第269-315頁(1994)。

術語「微型雙功能抗體」係指具有兩個抗原結合位點之小抗體片段，該等片段包含連接成同一條多肽鏈(V_H與V_L)之輕鏈可變域(V_L)及重鏈可變域(V_H)。藉由使用過短而無法使同一鏈上兩個域之間配對的連接子，迫使該等域與另一鏈之互補域配對並產生兩個抗原結合位點。微型雙功能抗體更充分描述於例如EP 404,097；WO 93/11161；及Hollinger等人，(1993) *Proc. Natl. Acad. Sci. USA* 90:6444-6448中。

表述「線抗體」係指描述於Zapata等人(1995 *Protein Eng*, 8(10):1057-1062)中之抗體。簡而言之，此等抗體包

含一對串聯Fd區段(V_H-C_H1-V_H-C_H1)，其連同互補輕鏈多肽一起形成一對抗原結合區。線抗體可呈雙特異性或單特異性。

如本文所用，「庫」係指複數個抗體或抗體片段序列(例如本發明多肽)或編碼此等序列之核酸，該等序列在根據本發明方法引入此等序列中之變異胺基酸之組合方面不同。

「噬菌體呈現」為一種使變異多肽以與至少一部分鞘蛋白之融合蛋白形式呈現於噬菌體(例如絲狀噬菌體)粒子表面上的技術。噬菌體呈現之效用在於以下事實：可在龐大的蛋白質隨機變異體庫中快速且有效地分選出以高親和力結合靶抗原之彼等序列。噬菌體呈現肽及蛋白質庫已用於在數百萬種多肽中篩檢出具有特定結合性質之多肽。多價噬菌體呈現方法已用於呈現小隨機肽及小蛋白質(經由與絲狀噬菌體之基因III或基因VIII融合)。Wells及Lowman (1992) *Curr. Opin. Struct. Biol.* 3:355-362及其中引用之參考文獻。在單價噬菌體呈現中，使蛋白質或肽庫與基因III或其一部分融合且在野生型基因III蛋白質存在下低量表現以使噬菌體粒子呈現融合蛋白之一個複本或不呈現。相對於多價噬菌體，親合力影響降低以致分選係基於固有配位體親和力進行，且使用簡化DNA操作之噬菌體質體載體。Lowman及Wells (1991) *Methods: A companion to Methods in Enzymology* 3:205-0216。

「噬菌體質體」為具有細菌複製起點(例如ColE1質體)

及噬菌體之基因間區域之複本的質體載體。噬菌體質體可用於任何已知噬菌體，包括絲狀噬菌體及人字形噬菌體(lambdoid bacteriophage)上。質體通常亦將含有具抗生素抗性之可選擇標記物。選殖入此等載體中之DNA區段可以質體形式增殖。當含有此等載體之細胞具有為產生噬菌體粒子所需之所有基因時，質體之複製模式變為滾環式複製(rolling circle replication)以產生質體DNA之一股之複本且包裝噬菌體粒子。噬菌體質體可形成感染性或非感染性噬菌體粒子。此術語包括含有噬菌體鞘蛋白基因或其片段的噬菌體質體，該噬菌體鞘蛋白基因或其片段與異源多肽基因以基因融合體形式連接以使異源多肽呈現於噬菌體粒子表面上。

術語「噬菌體載體」意謂含有異源基因且能夠複製之噬菌體的雙股複製形式。噬菌體載體具有允許噬菌體複製及噬菌體粒子形成之噬菌體複製起點。噬菌體較佳為絲狀噬菌體，諸如M13、f1、fd、Pf3噬菌體或其衍生物；或人字形噬菌體，諸如λ、21、phi80、phi81、82、424、434等或其衍生物。

術語「肽模擬物」與「模擬肽」可互換使用，且係指在構形上已明確的肽分子，其模擬本文抗D因子抗體之D因子識別區(抗原決定基)之結構及結合性質。本文中之結晶結構使人能夠鑑別及製備此等肽模擬物。

詳細說明

結晶結構及分子模型化

本申請人已使用高解析度X射線結晶學解析D因子/抗D因子抗體複合物之三維結構。此研究首次提供關於抗D因子抗體之D因子結合位點及抗D因子抗體重鏈及輕鏈之參與結合D因子之殘基的資訊。

在一態樣中，本發明係關於包含D因子多肽與抗D因子抗體或此抗體之抗原結合片段複合之可結晶組合物。

本發明提供之可結晶組合物可經過X射線結晶學檢驗。因此，本發明亦涵蓋可結晶組合物之晶體。

本發明另外提供高解析度(例如2.1 Å或2.4 Å解析度，參見圖1)之D因子/抗D因子抗體複合物之三維結構。

X射線結晶學技術係此項技術中已知。D因子/抗D因子抗體複合物之三維結構係由一組如附錄1A及1B中所述之結構座標來界定。術語「結構座標」係指利用與圖案相關之數學方程式所得的笛卡爾(Cartesian)原子座標，該等圖案係利用X射線單色光束繞射呈結晶形式之D因子/抗D因子抗體複合物之細胞外域的原子所獲得。

如圖5、6A及6B中所示，已確定SEQ ID NO: 1之人類D因子之胺基酸殘基D131、V132、P134、D165、R166、A167、T168、N170、R171、R172、T173、D176、G177、I179、E181、R222及K223參與結合抗B因子抗體Fab片段。已進一步發現，對於結合目的而言，人類D因子胺基酸序列中之關鍵殘基為R172，其有潛力與抗D因子抗體重鏈及輕鏈形成6個或6個以上氫鍵。圖6A及6B亦展示抗D因子抗體重鏈及輕鏈中緊密鄰接且可用於與人類D因子分子

相互作用(例如藉由形成氫鍵)的殘基。

一般熟習相關技術者應瞭解多肽複合物之一組結構座標為界定三維形狀之一組相關點。因此，不同座標組有可能界定類似或相同形狀。此外，個別座標之略微變化對總體形狀的影響小。

根據本發明，包含D因子及抗D因子抗體或其抗原結合片段(例如抗D因子單株抗體之Fab片段)之複合物之結構座標可儲存於機器可讀儲存媒體中，其中該機器可為電腦。產生之資料可用於多種目的，諸如藥物發現、發現具有改良性質(諸如對D因子之特異性結合增強)之抗D因子抗體變異體，及其他蛋白質晶體之X射線結晶學分析。為了使用針對D因子/抗D因子抗體複合物所產生之結構座標，有必要將結構座標轉化成三維形狀。此可藉由使用市售軟體而輕易地實現，該市售軟體能夠利用一組結構座標產生分子複合物或其部分之三維圖像。此三維圖像亦屬本發明範疇內。

因此，本發明包括產生分子複合物之三維圖像的電腦，該分子複合物包含由SEQ ID NO: 1之人類D因子之胺基酸殘基D131、V132、P134、D165、R166、A167、T168、N170、R171、R172、T173、D176、G177、I179、E181、R222及K223的結構座標所界定之結合位點，其中該電腦包含：(i)機器可讀資料儲存媒體，其包含以機器可讀資料編碼之資料儲存材料，其中此資料包含SEQ ID NO: 1之人類D因子之胺基酸殘基D131、V132、P134、D165、

R166、A167、T168、N170、R171、R172、T173、D176、G177、I179、E181、R222及K223的結構座標，及(ii)將該機器可讀資料處理成該三維圖像之指令。

在某些實施例中，電腦包含顯示結構座標之顯示器。

在另一態樣中，本發明係關於評估化學實體與分子複合物締合之潛力的方法，該分子複合物包含由SEQ ID NO: 1之人類D因子之胺基酸殘基D131、V132、P134、D165、R166、A167、T168、N170、R171、R172、T173、D176、G177、I179、E181、R222及K223之結構座標所界定的結合位點，該方法包含以下步驟：(i)使用計算手段進行化學實體與分子複合物之該結合位點之間的擬合操作；及(ii)分析擬合操作之結果以量化化學實體與該結合位點之間的締合。化學實體可為例如D因子之促效劑或拮抗劑，包括用於確定D因子與本文抗D因子抗體或此等抗體之抗原結合片段複合之結晶結構及三維構形之抗D因子抗體的促效劑及拮抗劑抗體及變異體。化學實體亦可為促效劑或拮抗劑D因子抗體或抗體片段之肽模擬物。

潛在促效劑或拮抗劑可經合成且與D因子接觸以測定其與D因子相互作用(例如結合D因子)之能力。進一步有可能確定潛在拮抗劑是否中斷D因子/抗D因子抗體相互作用。在實際測試潛在拮抗劑結合D因子之前，可使用本發明提供之分子座標及三維模型經由電腦模型化技術來分析此化合物之結構。若電腦模型化指示強相互作用或結合，則可產生(例如經由合成及/或重組手段)該化合物並測試其結合

D因子之能力。

抗D因子抗體

使用源自哺乳動物物種之D因子抗原來選擇抗D因子抗體。抗原較佳為人類D因子。然而，諸如獼猴或鼠類D因子之其他物種D因子亦可用作靶抗原。各種哺乳動物物種之D因子抗原可自天然來源分離。在其他實施例中，抗原係以重組方式產生或使用此項技術中已知之其他合成方法來製備。

根據本發明方法選擇之抗體對D因子抗原通常將具有足夠強之結合親和力。舉例而言，抗體結合人類D因子之K_d值可為至多約5 nM、較佳至多約2 nM、且更佳至多約500 pM。抗體親和力可經由例如基於表面電漿子共振之檢定(諸如如實例中所述之BIAcore檢定)；酶聯免疫吸附檢定(ELISA)；及競爭檢定(例如RIA競爭檢定)來測定。

此外，可對抗體進行其他生物活性檢定，以便例如評估其作為治療劑之效用。此等檢定在此項技術中為已知的且視抗體之靶抗原及預定用途而定。實例包括HUVEC抑制檢定；腫瘤細胞生長抑制檢定(如例如於WO 89/06692中所述)；抗體依賴性細胞介導之細胞毒性(ADCC)及補體介導之細胞毒性(CDC)檢定(美國專利5,500,362)；及下文描述用於鑑別D因子拮抗劑之活體外及活體內檢定。

為了篩檢結合相關抗原上特定抗原決定基之抗體，可執行常規交叉阻斷檢定，諸如*Antibodies, A Laboratory Manual*, Cold Spring Harbor Laboratory, Ed Harlow及David

Lane (1988)中所述者。或者，可執行抗原決定基定位，例如如Champe等人，(1995) *J. Biol. Chem.* 270:1388-1394中所述者，以確定抗體是否結合相關抗原決定基。

在一較佳實施例中，使用獨特噬菌體呈現方法來選擇抗D因子抗體。該方法包括基於單一構架模板產生合成抗體噬菌體庫、設計可變域內之足夠多樣性、呈現具有多樣化可變域之多肽、選擇對靶D因子抗原具有高親和力之候選抗體、及分離所選抗體。

噬菌體呈現方法之詳情可見於例如WO90/05144；WO90/14424；WO90/14430, WO92/01047, WO93/11236；WO91/05058；WO03/102157；WO91/05058；US 6,291,158；US 6,291,159、US 6,291,160、US 6,291,161；US 5,969,108、US 5,885,793；及US 5,643,768中。

D因子抗體揭示於美國專利公開案第20020081293號、第20080118506號、第20090181017號及第20090269338號中，該等公開案之全部揭示內容以引用之方式特此明確併入本文中。

較佳抗體包括抗體純系#56、#111、#250及#416，其可變重鏈及可變輕鏈胺基酸序列展示於圖10(分別為SEQ ID NO: 5、6、7及8)中。

其他較佳抗D因子抗體為抗D因子Fab 238。人類化抗D因子Fab 238之輕鏈核苷酸序列(SEQ ID NO: 9)展示於圖11(SEQ ID NO: 9)中。該核苷酸序列編碼人類化抗D因子Fab 238之輕鏈，其中起始及終止密碼子以粗體展示且加

下劃線。對應於圖12(SEQ ID NO: 10)中首個胺基酸之密碼子為粗斜體。圖12展示人類化抗D因子Fab 238之輕鏈之胺基酸序列(SEQ ID NO: 10)。該胺基酸序列缺乏由展示於圖11中之SEQ ID NO: 9所編碼之多肽的N-末端信號序列。HVR序列為粗斜體。可變區為未加下劃線之區域，而第一恆定域CL1加下劃線。構架(FR)區及HVR區已展示。圖13展示人類化抗D因子Fab 238之重鏈之核苷酸序列(SEQ ID NO: 18)。該核苷酸序列編碼人類化抗D因子Fab 238之重鏈，其中起始及終止密碼子以粗體展示且加下劃線。對應於圖14(SEQ ID NO: 19)中首個胺基酸之密碼子為粗斜體。圖14展示人類化抗D因子Fab 238之重鏈之胺基酸序列(SEQ ID NO: 19)。該胺基酸序列缺乏由展示於圖13中之SEQ ID NO: 18所編碼之多肽的N末端信號序列。HVR序列為粗斜體。可變區為未加下劃線之區域，而第一恆定域CH1加下劃線。構架(FR)區及HVR區已展示。

另一較佳抗D因子抗體為抗D因子Fab 238-1。圖15展示人類化抗D因子Fab 238-1之輕鏈之核苷酸序列(SEQ ID NO: 28)。該核苷酸序列編碼人類化抗D因子Fab 238-1之輕鏈，其中起始及終止密碼子以粗體展示且加下劃線。對應於圖16(SEQ ID NO: 29)中之首個胺基酸之密碼子為粗斜體。圖16展示人類化抗D因子Fab 238-1之輕鏈之胺基酸序列(SEQ ID NO 29)。該胺基酸序列缺乏由展示於圖15中之SEQ ID NO: 28所編碼之多肽的N末端信號序列。HVR序列為粗斜體。可變區為未加下劃線之區域，而第一恆定域

CL1加下劃線。構架(FR)區及HVR區已展示。圖17展示人類化抗D因子Fab 238-1之重鏈之核苷酸序列(SEQ ID NO: 30)。該核苷酸序列編碼人類化抗D因子Fab 238-1之重鏈，其中起始及終止密碼子以粗體展示及加下劃線。對應於圖18(SEQ ID NO: 31)中之首個胺基酸之密碼子為粗斜體。圖18展示人類化抗D因子Fab 238-1之重鏈之胺基酸序列(SEQ ID NO: 31)。該胺基酸序列缺乏由展示於圖18中之SEQ ID NO: 30所編碼之多肽的N末端信號序列。HVR序列為粗斜體。可變區為未加下劃線之區域，而第一恆定域CH1加下劃線。構架(FR)區及HVR區已展示。

另一較佳抗D因子抗體為抗D因子Fab 238-2，其具有展示於圖19中之輕鏈胺基酸序列(SEQ ID NO: 40)及展示於圖20中之重鏈胺基酸序列(SEQ ID NO: 41)。

較佳模擬物(例如模擬肽)模擬本文較佳抗體或抗體片段之結合及/或生物性質。

D因子抗體及其他D因子拮抗劑之用途

本發明在本文中提供包括抗D因子抗體的D因子拮抗劑及其變異體及其片段(例如抗原結合片段)，其適用於預防及治療補體相關病狀，包括眼病(病理涉及補體(包括經典路徑及替代路徑，尤其補體替代路徑)之所有眼病)，諸如黃斑部變性疾病，諸如所有階段之年齡相關黃斑部變性(AMD)(包括乾性及濕性(非滲出性及滲出性)形式)、脈絡膜新血管生成(CNV)、葡萄膜炎、糖尿病性及其他缺血相關視網膜病變及其他眼內新生血管疾病，諸如糖尿病性黃

斑部水腫、病理性近視、逢希伯-林道疾病、眼部組織漿菌病(組織漿菌病)、視網膜中央静脈阻塞(CRVO)、角膜新血管生成及視網膜新血管生成。一組補體相關眼病包括年齡相關黃斑部變性(AMD)(包括非滲出性(例如中期乾性AMD或地圖狀萎縮(geographic atrophy，GA))及滲出性(例如濕性AMD(脈絡膜新血管生成(CNV)))AMD)、糖尿病性視網膜病變(DR)、眼內炎及葡萄膜炎。在一實例中，補體相關眼病為中期乾性AMD。在一實例中，補體相關眼病為地圖狀萎縮。在一實例中，補體相關眼病為濕性AMD(脈絡膜新血管生成(CNV))。

AMD為年齡相關黃斑部變性，其為60歲以上個體中不可逆視覺功能異常之主要病因。存在兩種類型AMD：非滲出性(乾性)及滲出性(濕性)AMD。乾性或非滲出性形式包括位於中央視網膜(黃斑)下之視網膜色素上皮(RPE)之萎縮性及肥厚性變化以及RPE上之沈積物(脈絡膜小疣)。非滲出性AMD患者可發展至AMD之濕性或滲出性形式，其中稱為脈絡膜新生血管膜(CNVM)之異常血管在視網膜下形成，漏出流體及血液，且最終導致視網膜中及視網膜下之致盲性扁圓形瘢痕。非滲出性AMD更常見，其通常為滲出性AMD之先兆。非滲出性AMD之呈現形式不一：硬脈絡膜小疣、軟脈絡膜小疣、RPE地圖狀萎縮，且可存在色素凝集。補體組分在AMD早期沈積於RPE上且為脈絡膜小疣之主要組分。

可用多種基於細胞之檢定及補體相關疾病或病症之動物

模型評估D因子拮抗劑。

因此，舉例而言，可藉由使用產生轉殖基因動物之標準技術將相關基因之編碼部分引入相關動物基因組中來對重組(轉殖基因)動物模型進行工程改造。可充當轉殖基因操作標靶之動物包括(不限於)小鼠、大鼠、兔、豚鼠、綿羊、山羊、豬及非人類靈長類動物，例如狒狒、黑猩猩及其他猴。此項技術中已知之將轉殖基因引入此等動物中之技術包括原核顯微注射(Hoppe及Wanger，美國專利第4,873,191號)；反轉錄病毒介導之基因轉殖於生殖系中(例如Van der Putten等人，***Proc. Natl. Acad. Sci. USA 82***, 6148-615 [1985])；靶向胚胎幹細胞中之基因(Thompson等人，***Cell* 56**, 313-321 [1989])；胚胎電穿孔(Lo, *Mol. Cell. Biol.* **3**, 1803-1814 [1983])；精子介導之基因轉殖(Lavitrano等人，*Cell* **57**, 717-73 [1989])。欲回顧，參見例如美國專利第4,736,866號。

出於本發明之目的，轉殖基因動物包括僅在其部分細胞中攜帶轉殖基因之動物(「嵌合體動物(mosaic animal)」)。轉殖基因可以單一基因轉殖或以串連體(例如，頭-頭或頭-尾串聯)形式整合。亦可根據例如Lasko等人，*Proc. Natl. Acad. Sci. USA* **89**, 623-636 (1992)之技術將轉殖基因選擇性引入特定類型細胞中。

可經由標準技術監測轉殖基因動物中轉殖基因的表現。舉例而言，南方墨點(Southern blot)分析或PCR擴增可用於驗證轉殖基因之整合。接著可使用諸如原位雜交、北方墨

點(Northern blot)分析、PCR或免疫細胞化學對mRNA表現量進行分析。

動物之免疫疾病病理徵象可經由例如用於測定滲入特定組織中之免疫細胞之組織學檢查來進一步檢查。亦可進行阻斷實驗，其中轉殖基因動物經候選D因子拮抗劑處理以測定對補體及補體活化(包括經典及替代路徑)或T細胞增殖之影響程度。在此等實驗中，向動物投與結合本發明多肽之阻斷抗體並監測相關生物效應。

或者，可構建「基因剔除」動物，該動物之胚細胞中已引入編碼D因子的缺陷基因或變異基因，該缺陷基因或變異基因係由編碼D因子多肽之內源基因與編碼相同多肽之變異基因組DNA之間同源重組所產生。舉例而言，可根據已建立之技術使用編碼D因子之cDNA來選殖編碼D因子之基因組DNA。編碼D因子之基因組DNA之一部分可缺失或置換為另一種基因，諸如編碼可用於監測整合之可選擇標記物之基因。通常，載體中包括未變異之側接DNA(在5'端與3'端)之數千個鹼基[關於同源重組載體之描述，參見例如Thomas及Capecchi, *Cell*, **51**:503 (1987)]。將載體引入胚胎幹細胞株(例如藉由電穿孔)中並選擇其中所引入之DNA已與內源性DNA同源重組的細胞[參見例如Li等人，*Cell*, **69**:915 (1992)]。接著將所選細胞注射入動物(例如小鼠或大鼠)胚胞中以形成聚集嵌合體[參見例如Bradley, *Teratocarcinomas and Embryonic Stem Cells: A Practical Approach*, E. J. Robertson編(IRL, Oxford, 1987), 第113-

152頁]。接著可將嵌合體胚胎植入適合假孕雌性寄養動物中且該胚胎最終產生「基因剔除」動物。生殖細胞中含有同源重組DNA之子代可經由標準技術鑑別且用於繁殖動物，其中動物所有細胞皆含有同源重組DNA。可表徵基因剔除動物，例如根據其抵禦某些病理學病狀之能力及根據其由於缺乏D因子多肽而形成的病理學病狀進行表徵。

因此，可研究潛在D因子拮抗劑於剔除鼠類D因子基因之小鼠中的生物活性。

年齡相關黃斑部變性(AMD)之動物模型由Ccl-2或Ccr-2基因中具有剔除式突變(null mutation)之小鼠組成。此等小鼠顯現AMD之主要特徵，包括脂褐質累積於視網膜色素上皮(RPE)中及位於視網膜色素上皮(RPE)下之脈絡膜小疣、感光體萎縮及脈絡膜新血管生成(CNV)。此等特徵在6月齡以後顯現。可針對脈絡膜小疣之形成、感光體萎縮及脈絡膜新血管生成來測試候選D因子拮抗劑。

醫藥組合物

多肽或抗體或其抗體片段(例如抗原結合片段)或其抗體變異體之治療調配物可藉由將具有所需純度之多肽與此項技術中常用之可選「醫藥學上可接受」載劑、賦形劑或穩定劑(皆稱為「賦形劑」)混合而製備成凍乾調配物或水溶液以供儲存。例如緩衝劑、穩定劑、防腐劑、等張劑、非離子清潔劑、抗氧化劑及其他各種添加劑。(參見Remington's Pharmaceutical Sciences, 第16版，A. Osol編(1980))。此等添加劑在所用劑量及濃度下對接受者而言必

須無毒。

緩衝劑有助於維持pH值在接近生理條件之範圍內。其較佳以約2 mM至約50 mM範圍內之濃度存在。適用於本發明之緩衝劑包括有機酸與無機酸及其鹽，諸如檸檬酸鹽緩衝劑(例如檸檬酸一鈉-檸檬酸二鈉混合物、檸檬酸-檸檬酸三鈉混合物、檸檬酸-檸檬酸一鈉混合物等)、丁二酸鹽緩衝劑(例如丁二酸-丁二酸一鈉混合物、丁二酸-氫氧化鈉混合物、丁二酸-丁二酸二鈉混合物等)、酒石酸鹽緩衝劑(例如酒石酸-酒石酸鈉混合物、酒石酸-酒石酸鉀混合物、酒石酸-氫氧化鈉混合物等)、反丁烯二酸鹽緩衝劑(例如反丁烯二酸-反丁烯二酸一鈉混合物等)、反丁烯二酸鹽緩衝劑(例如反丁烯二酸-反丁烯二酸一鈉混合物、反丁烯二酸-反丁烯二酸二鈉混合物、反丁烯二酸一鈉-反丁烯二酸二鈉混合物等)、葡糖酸鹽緩衝劑(例如葡糖酸-葡糖酸鈉混合物、葡糖酸-氫氧化鈉混合物、葡糖酸-葡糖酸鉀混合物等)、草酸鹽緩衝劑(例如草酸-草酸鈉混合物、草酸-氫氧化鈉混合物、草酸-草酸鉀混合物等)、乳酸鹽緩衝劑(例如乳酸-乳酸鈉混合物、乳酸-氫氧化鈉混合物、乳酸-乳酸鉀混合物等)及乙酸鹽緩衝劑(例如乙酸-乙酸鈉混合物、乙酸-氫氧化鈉混合物等)。另外，可提及磷酸鹽緩衝劑、組胺酸緩衝劑及三甲胺鹽，諸如Tris。

可添加防腐劑以阻止微生物生長且其添加量可在0.2%-1% (w/v)範圍內。供本發明使用之適合防腐劑包括苯酚、苄醇、間甲酚、對羥基苯甲酸甲酯、對羥基苯甲酸丙酯、

氯化十八基二甲基苄基銨、鹵化苯甲烴銨(benzalconium halide)(例如氯化苯甲烴銨、溴化苯甲烴銨及碘化苯甲烴銨)、氯化六烴季銨(hexamethonium chloride)、對羥基苯甲酸烷酯(諸如對羥基苯甲酸甲酯或對羥基苯甲酸丙酯)、兒茶酚、間苯二酚、環己醇及3-戊醇。

可添加有時稱為「穩定劑」之等張劑以確保本發明液體組合物之等張性且其包括多羥基糖醇，較佳三羥基或三羥基以上之糖醇，諸如甘油、赤藻糖醇、阿拉伯糖醇、木糖醇、山梨糖醇及甘露糖醇。

穩定劑係指一大類賦形劑，在功能上，其範圍可為增積劑至使治療劑溶解或有助於防止變性或黏附容器壁之添加劑。典型穩定劑可為多羥基糖醇(上文列舉)；胺基酸，諸如精胺酸、離胺酸、甘胺酸、麩醯胺酸、天冬醯胺、組胺酸、丙胺酸、鳥胺酸、L-白胺酸、2-苯丙胺酸、麩胺酸、蘇胺酸等；有機糖或糖醇，諸如乳糖、海藻糖、水蘇糖(stachyose)、甘露糖醇、山梨糖醇、木糖醇、核糖醇、肌醇(myoinisitol)、半乳糖醇、甘油及其類似物，包括環醇(cyclitol)，諸如纖維醇(inositol)；聚乙二醇；胺基酸聚合物；含硫還原劑，諸如脲、麩胱甘肽、硫辛酸(thioctic acid)、氫硫乙酸鈉、硫代甘油(thioglycerol)、α-單硫代甘油及硫代硫酸鈉；低分子量多肽(亦即< 10個殘基)；蛋白質，諸如人類血清白蛋白、牛血清白蛋白、明膠或免疫球蛋白；親水性聚合物，諸如聚乙烯吡咯啶酮；單醣，諸如木糖、甘露糖、果糖、葡萄糖；雙醣，諸如乳糖、麥芽

糖、蔗糖；及三醣，諸如棉子糖；多醣，諸如葡聚糖。穩定劑的含量可在每重量份活性蛋白質0.1至10,000重量之範圍內。

可添加非離子界面活性劑或清潔劑(亦稱為「濕潤劑」)以助於使治療劑溶解以及保護治療蛋白質以免攪拌誘發之聚集，其亦允許調配物暴露於承受應力之剪切表面而不導致蛋白質變性。適合非離子界面活性劑包括聚山梨醇酯(20、80等)、泊洛沙姆(polyoxamer)(184、188等)、Pluronic.RTM.多元醇、聚氧乙烯脫水山梨糖醇單醚(Tween.RTM.-20、Tween.R.TM.-80等)。非離子界面活性劑的含量可在約0.05 mg/ml至約1.0 mg/ml、較佳約0.07 mg/ml至約0.2 mg/ml之範圍內。

其他各種賦形劑包括增積劑(例如澱粉)、螯合劑(例如EDTA)、抗氧化劑(例如抗壞血酸、甲硫胺酸、維生素E)及共溶劑。本文調配物亦可含有一種以上為治療特定適應症所需的活性化合物，較佳為具有不會對彼此產生不利影響之互補活性的活性化合物。舉例而言，可能需要進一步提供免疫抑制劑。此等分子宜以有效達成預定目的之量存在於組合中。亦可將活性成分截留於經由例如凝聚(coascervation)技術或經由界面聚合(interfacial polymerization)所製備的微膠囊(例如分別為羥甲基纖維素或明膠微膠囊及聚(甲基丙烯酸甲酯)微膠囊)，截留於膠態藥物傳遞系統(例如脂質體、白蛋白微球體、微乳液、奈米粒子及奈米膠囊)或截留於巨乳液中。此等技術揭示於

Remington's Pharmaceutical Sciences，第16版，A. Osal編(1980)中。

欲用於活體內投藥之調配物必須無菌。此可輕易實現，例如經由無菌過濾膜過濾來實現。可製備持續釋放製劑。持續釋放製劑之適合實例包括含有抗體或其抗體變異體或片段(例如抗原結合片段)之固體疏水性聚合物的半透性基質，該等基質呈成形物件形式，例如膜或微膠囊。持續釋放基質之實例包括聚酯、水凝膠(例如聚(甲基丙烯酸2-羥乙酯)或聚(乙烯醇))、聚乳酸交酯(美國專利第3,773,919號)、L-麩胺酸與乙基-L-麩胺酸酯之共聚物、不可降解之乙烯-乙酸乙烯酯、可降解之乳酸-乙醇酸共聚物(諸如LUPRON DEPOT™)(由乳酸-乙醇酸共聚物與乙酸亮丙立德(leuprolide acetate)構成之可注射微球體)及聚-D-(-)-3-羥丁酸。儘管聚合物(諸如乙烯-乙酸乙烯酯及乳酸-乙醇酸)使分子釋放能夠逾100天，但某些水凝膠釋放蛋白質的時段較短。當囊封之抗體長時間保留在體內時，其可能由於在37℃下暴露於水分中而變性或聚集，從而導致生物活性之喪失及免疫原性之可能變化。可視所涉及之機制而定來設計合理策略以達成穩定化。舉例而言，若發現聚集機制為經由硫基-二硫化物互換而形成分子間S--S鍵，則穩定化可藉由修飾硫氫基殘基、自酸性溶液凍乾、控制水分含量、使用適當添加劑及開發特定聚合基質組合物來達成。

可經由本發明方法鑑別之用於預防或治療眼睛疾病或病狀之化合物通常藉由眼睛、眼內及/或玻璃體內

(intravitreal)注射及/或近鞏膜注射(juxtascleral injection)及/或結膜下注射(subtenon injection)及/或脈絡膜上注射(superchoroidal injection)及/或以滴眼劑及/或軟膏形式局部投藥來投與。此等本發明化合物可經由多種方法傳遞，例如以允許化合物緩慢釋入玻璃體中之裝置及/或儲槽形式在玻璃體內傳遞，包括諸如Intraocular Drug Delivery, Jaffe, Jaffe, Ashton及Pearson編, Taylor & Francis(2006年3月)之參考文獻中所述者。在一實例中，裝置可呈長期釋放化合物之小型泵(minpump)及/或基質及/或被動擴散系統及/或囊封細胞(encapsulated cell)的形式(Intraocular Drug Delivery, Jaffe, Jaffe, Ashton及Pearson編，Taylor & Francis(2006年3月))。亦可使用其他投藥方法，包括(但不限於)局部、非經腸、皮下、腹膜內、肺內、鼻內及病灶內投藥。非經腸輸注包括肌肉內、靜脈內、動脈內、腹膜內或皮下投藥。

用於眼睛、眼內或玻璃體內投藥之調配物可經由此項技術中已知之方法及使用此項技術中已知之成分來製備。有效治療主要需要適當穿透眼睛。與眼睛前部之疾病(其中藥物可局部傳遞)不同，視網膜疾病需要更具位點特異性之方法。滴眼劑及軟膏很少穿透眼睛後部，且血眼障壁阻礙全身投與之藥物透入眼組織中。因此，用於藥物傳遞以治療視網膜疾病(諸如AMD及CNV)之精選方法通常為直接玻璃體內注射。玻璃體內注射通常每隔一段時間重複進行，此視患者病狀及所傳遞藥物之性質及半衰期而定。對

於眼內(例如玻璃體內)穿透，較小尺寸之分子通常較佳。

治療補體相關眼病(諸如AMD或CNV)之功效可經由常用於評估眼內疾病之各種終點來量度。舉例而言，可評估視力喪失。可藉由(但不限於)例如以下方式來評估視力喪失：量測最佳矯正視力(BCVA)自基線至所要時間點之平均變化(例如其中BCVA係基於測試距離為4公尺的糖尿病性視網膜病變早期治療研究(Early Treatment Diabetic Retinopathy Study，ETDRS)視力圖及評估)、在預定時間點量測視力相較於基線損失少於15個字母之個體的比例、在預定時間點量測視力相較於基線增加大於或等於15個字母之個體的比例、在預定時間點量測視力Snellen等效值為20/2000或比20/2000差之個體的比例、量測NEI視覺功能問卷(NEI Visual Functioning Questionnaire)、在預定時間點量測CNV之尺寸及CNV之滲漏量(例如經由螢光素血管攝影術(fluorescein angiography))等。可進行例如眼睛評估，包括(但不限於)例如進行眼部檢查、量測眼內壓、評估視力、量測裂隙燈壓力、評估眼內發炎等。

有效治療特定病症或病狀之治療性多肽、抗體或其抗體變異體或其片段(例如抗原結合片段)之量將視該病症或病狀之性質而定且可經由標準臨床技術確定。在可能的情況下，需要在對人類測試之前，首先在活體外、接著在適用動物模型系統中測定本發明醫藥組合物之劑量-反應曲線。

在一實施例中，治療性多肽、抗體或其抗體變異體或其

片段(例如抗原結合片段)之水溶液係藉由皮下注射投與。在另一實施例中，治療性多肽、抗體或其抗體變異體或其片段(例如抗原結合片段)之水溶液係藉由玻璃體內注射投與。各劑量可在每公斤體重約0.5微克至約50微克、或更佳每公斤體重約3微克至約30微克範圍內。

皮下投藥之給藥時程可為一月一次至每日一次不等，此視許多臨床因素而定，包括疾病類型、疾病嚴重性及個體對治療劑之敏感性。

以下實例僅出於說明目的提供，且不意欲以任何方式限制本發明範疇。

本說明書中引用之所有專利及參考文獻皆以全文引用之方式特此明確併入本文中。

實例1

測定D因子及抗D因子抗體之共結晶結構

人類D因子與獼猴D因子均在中國倉鼠卵巢(CHO)細胞中表現。藉由使CHO細胞上清液通過抗D因子親和管柱來進行純化。蛋白質用0.1 M酸及4% v/v 1.5 M Tris(pH 8.6)溶離且於含有10 mM Hepes(pH值7.2)及140 mM NaCl之緩衝液中透析。抗D因子Fab以凍乾調配物形式提供且用水復原。得到50 mg/mL蛋白質含於40 mM鹽酸組胺酸、20 mM氯化鈉、180 mM蔗糖、0.04% (w/v)聚山梨醇酯20中的溶液(pH 5.4)。

人類D因子蛋白質與抗D因子Fab以1:1比率混合並用經20 mM hepes(pH 7.2)及200 mM NaCl預平衡之Superdex 200管

柱純化。彙集含有複合物之高峰溶離份(peak fraction)，濃縮至30 mg/mL並用於結晶試驗中。使用沉滴式(sitting drop)氣相擴散法使晶體在4℃下生長。將含有0.1 M TrisCl(pH值8.5)、0.2 M磷酸銨、50% MPD及0.01 M氯化六氨鈷(III)之結晶緩衝液與蛋白質溶液等體積混合。6天後，晶體出現且屬於空間群$P4_32_12$。將晶體於液氮中急驟冷凍。在SSRL同步加速器輻射源(SSRL Synchrotron Source)用光束線9-2收集2.4 Å資料集。

根據上述相同方案來純化獼猴D因子/抗D因子Fab複合物。用於結構測定之晶體在19℃下根據以下條件生長：0.1 M MES(pH 6.5)、25% PEG 550 MME、0.01 M硫酸鋅及3% 6-胺基己酸，使用沉滴式氣相擴散法，其含有等體積之蛋白質溶液(20 mg/mL)及母液。1天後，晶體出現且屬於空間群C2，其中人類D因子:Fab複合物之晶胞尺寸為a=132.048；b=132.048；c=180.288 Å，且獼猴D因子:Fab複合物之晶胞尺寸為a=182.205；b=80.673；c=142.575 Å。晶體浸於含有10%甘油之人工母液中且於液氮中急驟冷凍。在SSRL同步加速器輻射源、用光束線9-2收集2.1 Å資料集。

實例2

製備非催化活性D因子蛋白質

將全長D因子cDNA選殖入pRK表現載體中。使用QuickChange XL定點突變誘發套組、根據製造商說明書(Stratagene (Agilent), Santa Clara, CA)將作為催化三聯體

之一部分之殘基S208(來自起始甲硫胺酸S195，使用胰蛋白酶編號)突變成丙胺酸。蛋白質在CHO細胞中表現且藉由使上清液多次通過偶聯有26 mg/mL抗D因子抗體之Affi-Gel 10(Bio-Rad)並在pH值3.0下溶離來純化。蛋白質使用二級10/10 MonoS pH值6.0管柱來進一步純化，用Amicon Ultra-10 kD離心過濾器(Millipore, Billerica, MA)來濃縮且於PBS中透析。使用MALDI質譜、以N末端定序來驗證蛋白質序列。

實例3

流體相替代路徑C3轉化酶檢定中抗D因子抗體阻斷B因子裂解

檢定緩衝液為0.1%明膠佛羅拿(veronal)緩衝液/10 mM $MgCl_2$，各組分最終濃度為0.125 μM D因子、0.5 μM B因子、0.5 μM C3b及 5 μM Fab抗體(抗D因子、8E2、對照人類Fab)。將10 μl D因子(0.5 μM)與10 μl Fab(20 μM)混合15分鐘。將10 μl B因子(2 μM)及10 μl C3b(2 μM)添加至D因子-Fab混合物中並在37℃下培育30分鐘。添加40 μl拉梅里緩衝液(Lammeli's buffer)以終止反應。將樣品煮沸5分鐘並在125 mV下、在Novex 4-20% Tris-甘胺酸聚丙烯醯胺凝膠上電泳1.5小時(SeeBlue2 MW標記物)。凝膠用SimplyBlue SafeStain染色1小時，用再蒸餾水洗滌隔夜並在塞璐芬(Cellophane)之間乾燥。如圖21中所示，B因子裂解被抗D因子抗體而非8E2阻斷。結果顯示，在流體相替代路徑C3轉化酶檢定中，抗D因子抗體阻斷B因子裂解。

實例4

D因子(S208A)以772 nM之親和力結合前轉化酶(Bioacore分析)

在Biacore 3000上進行結合分析。根據製造商推薦將C3b與CM5晶片進行胺偶聯。用N-羥基丁二醯亞胺及N-乙基-N'-(二甲基胺基丙基)-碳化二亞胺活化CM5晶片，流速5 μl/min，30 μl。使C3b(50 μg/mL)以5 μl/min流動20 μl以達成最終7300 RU。使用GE Healthcare之AKTA使B因子、D因子、抗D因子抗體及8E2 Fab片段蛋白質及抗體在檢定緩衝液:佛羅拿緩衝液/1 mM $NiCl_2$/0.05%界面活性劑P-20中進行緩衝液交換。結合檢定使用「共注射(Coinject)」程式。依次注射1 μM B因子(流速30 μl/min，90 μl)、1 μM B因子與D因子稀釋液之共注射混合物(流速30 μl/min，90 μl)，接著使其在檢定緩衝液中解離5分鐘。晶片用含於50 mM乙酸鈉(pH值5.0)中之3 M NaCl洗滌3次，每次1分鐘來再生，並用緩衝液洗滌5分鐘。如圖22及23中所示，因子(S208A)以772 nM的親和力結合C3bB前轉化酶，如該Biacore分析所測定。

實例5

抗D因子抗體阻斷D因子結合

在Biacore 3000上進行結合分析。根據製造商推薦將C3b與CM5晶片進行胺偶聯。用N-羥基丁二醯亞胺及N-乙基-N'-(二甲基胺基丙基)-碳化二亞胺活化CM5晶片，流速5 μl/min，30 μl。使C3b(50 μg/mL)以5 μl/min流動20 μl以達

成最終6020 RU。使用GE Healthcare之AKTA使B因子、D因子、抗D因子抗體及8E2 Fab片段蛋白質及抗體在檢定緩衝液:佛羅拿緩衝液/1 mM $NiCl_2$/0.05%界面活性劑P-20中進行緩衝液交換。結合檢定使用「共注射」程式。依次注射1 μM B因子(流速30 μl/min，90 μl)、1 μM B因子、1 μM D因子及Fab抗體稀釋液之共注射混合物(流速30 μl/min，90 μl)，接著使其在檢定緩衝液中解離5分鐘。晶片用含於50 mM乙酸鈉(pH值5.0)中之3 M NaCl洗滌3次，每次1分鐘來再生，並用緩衝液洗滌5分鐘。如圖24及25中所示，抗D因子抗體阻斷D因子(S208A)與C3bB前轉化酶結合。

實例5

抗D因子抗體不影響催化裂解

小受質由與抗D因子抗體結合之D因子有效裂解，從而證實D因子活性位點無重要構形變化。使用DTNB(愛耳門試劑(Ellman's reagent)(5,5'-二硫基雙-(2-硝基苯甲酸))在檢定緩衝液50 mM HEPES pH 7.5/220 mM NaCl中量測D因子對硫酯苯甲基受質Z-Lys-SBzl之水解。製備3.2 mM Z-lys-SBzl於DMSO(二甲亞碸)中、320 nM D因子蛋白質(Genentech)、3.2 μM抗體及8 mM DTNB於檢定緩衝液中、及200 mM DIFP(氟磷酸二異丙酯)於異丙醇中的儲備溶液。檢定體積為200 μl，檢定緩衝液中最終濃度為2 mM DTNB、800 nM Z-Lys-SBzl、80 nM D因子、800 μM抗體或20 mM DIFP。在Spectramax Plus 384分光光度計中在450 nm下量測水解速率1.5小時，每15秒進行讀數且使用

SoftMax Pro v5.2軟體計算Vmax。

圖26及27顯示抗D因子抗體不影響催化裂解。

圖28為描述抗D因子抗體如何抑制B因子活化之假想模型。抗D因子抗體在空間上抑制D因子與B因子之對接(docking)，從而阻止B因子活化及活性C3轉化酶形成。

【圖式簡單說明】

圖1：人類及獼猴D因子(均以綠色表示)與抗D因子Fab片段(橙色：重鏈，黃色：輕鏈)複合之結晶結構；

圖2：人類及獼猴D因子(以綠色表示)與抗D因子抗體Fab片段(橙色：重鏈，黃色：輕鏈)複合之結晶結構。疊加係基於fD(兩個各別分子來自各不對稱單元)。此說明2個獼猴複合物彼此有多麼類似及2個人類複合物彼此有多麼類似；

圖3：所有4個D因子:Fab複合物(兩次獼猴(藍色)及兩次人類(綠色))之疊加。除一個區域之外，所有結構皆極其類似。右圖標記中之圓圈為有略微發散之獼猴及人類D因子結構；

圖4：(a)4個D因子:Fab複合物(兩次獼猴(藍色)及兩次人類(綠色))之疊加。所有結構之結合界面皆一致。形成活性位點之一部分之組胺酸(右圖中之圓圈)處於不同構形(人類典型，獼猴非活性)；

圖5：與抗D因子抗體分子上之殘基相互作用之D因子(人類)殘基的簡要清單；

圖6A及6B：與抗D因子Fab之輕鏈及重鏈相互作用之D因

子殘基。紅色指示與人類D因子上之關鍵殘基ARG-172形成多個氫鍵之Fab重鏈(H)及輕鏈(L)殘基。3個星號(「***」)指示OH形成氫鍵；

該等圖展示D因子(標記為A鏈)之每一原子與Fab(輕鏈及重鏈標記為L鏈及H鏈)之任何原子的距離小於4.5 Å。舉例而言：

Asp 131A OD2 ... TYR 54H CE1 ... 3.34

... TYR 54H CZ ... 3.49

... TYR 54H OH ... 2.78 ***

意謂D因子中Asp 131之OD2原子與Fab片段之3個原子很近。此等3個原子為

重鏈中Tyr 54之CE1原子(距離3.34)

Tyr 54之CZ原子

及彼酪胺酸之羥基，D因子之Asp 131與該羥基形成氫鍵。

圖7A：人類D因子上之關鍵殘基ARG-172有潛力與抗體上之重鏈及輕鏈殘基形成6個或6個以上氫鍵；

圖7B：抗D因子Fab遠距離結合催化三聯體；

圖8：人類D因子之胺基酸及核苷酸序列(SEQ ID NO: 1及3)；

圖9：獼猴D因子之胺基酸及核苷酸序列(SEQ ID NO: 2及4)；

圖10描述各人類化抗體純系#56、#111、#250及#416(分別為SEQ ID NO: 5、6、7及8)之可變重鏈及可變輕鏈之胺

基酸序列；

圖11展示人類化抗D因子Fab 238之輕鏈之核苷酸序列(SEQ ID NO: 9)。該核苷酸序列編碼人類化抗D因子Fab 238之輕鏈，其中起始及終止密碼子以粗體展示且加下劃線。對應於圖12(SEQ ID NO: 10)中首個胺基酸之密碼子為粗斜體；

圖12展示人類化抗D因子Fab 238之輕鏈之胺基酸序列(SEQ ID NO: 10)。該胺基酸序列缺乏由展示於圖11中之SEQ ID NO: 9所編碼之多肽的N末端信號序列。HVR序列為粗斜體。可變區為未加下劃線之區域，而第一恆定域CL1加下劃線。構架(FR)區及HVR區已展示；

圖13展示人類化抗D因子Fab 238之重鏈之核苷酸序列(SEQ ID NO: 18)。該核苷酸序列編碼人類化抗D因子Fab 238之重鏈，其中起始及終止密碼子以粗體展示且加下劃線。對應於圖14(SEQ ID NO: 19)中首個胺基酸之密碼子為粗斜體；

圖14展示人類化抗D因子Fab 238之重鏈之胺基酸序列(SEQ ID NO: 19)。該胺基酸序列缺乏由展示於圖13中之SEQ ID NO: 18所編碼之多肽的N末端信號序列。HVR序列為粗斜體。可變區為未加下劃線之區域，而第一恆定域CH1加下劃線。構架(FR)區及HVR區已展示；

圖15展示人類化抗D因子Fab 238-1之輕鏈之核苷酸序列(SEQ ID NO: 28)。該核苷酸序列編碼人類化抗D因子Fab 238-1之輕鏈，其中起始及終止密碼子以粗體展示且加下

劃線。對應於圖16(SEQ ID NO: 29)中之首個胺基酸之密碼子為粗斜體；

圖16展示人類化抗D因子Fab 238-1之輕鏈之胺基酸序列(SEQ ID NO 29)。該胺基酸序列缺乏由展示於圖15中之SEQ ID NO: 28所編碼之多肽的N末端信號序列。HVR序列為粗斜體。可變區為未加下劃線之區域，而第一恆定域CL1加下劃線。構架(FR)區及HVR區已展示；

圖17展示人類化抗D因子Fab 238-1之重鏈之核苷酸序列(SEQ ID NO: 30)。該核苷酸序列編碼人類化抗D因子Fab 238-1之重鏈，其中起始及終止密碼子以粗體展示且加下劃線。對應於圖18(SEQ ID NO: 31)中之首個胺基酸之密碼子為粗斜體；

圖18展示人類化抗D因子Fab 238-1之重鏈之胺基酸序列(SEQ ID NO: 31)。該胺基酸序列缺乏由展示於圖18中之SEQ ID NO: 30所編碼之多肽的N末端信號序列。HVR序列為粗斜體。可變區為未加下劃線之區域，而第一恆定域CH1加下劃線。構架(FR)區及HVR區已展示；

圖19展示抗D因子Fab 238-2之輕鏈之胺基酸序列(SEQ ID NO: 40)；

圖20展示抗D因子Fab 238-2之重鏈之胺基酸序列(SEQ ID NO: 41)；

圖21：B因子裂解係由抗D因子抗體而非由8E2來阻斷(流體相檢定)；

圖22、23：D因子(S208A)以772 nM之親和力結合C3bB

前轉化酶(Biacore分析)；

圖24、25：抗D因子抗體阻斷D因子結合；

圖26、27：抗D因子抗體不影響催化裂解；及

圖28：描述抗D因子抗體如何抑制B因子活化之假想模型。

序　列　表

<110> 美商建南德克公司

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<140> 099137982
<141> 2010-11-04

<150> 61/280,460 ; 61/281,716
<151> 2009-11-04 ; 2009-11-20

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Glu Ala His Ala Arg Pro Tyr Met Ala Ser Val Gln Leu Asn Gly Ala
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His Leu Cys Gly Gly Val Leu Val Ala Glu Gln Trp Val Leu Ser Ala
    50                  55                  60

Ala His Cys Leu Glu Asp Ala Ala Asp Gly Lys Val Gln Val Leu Leu
65                  70                  75                  80

Gly Ala His Ser Leu Ser Gln Pro Glu Pro Ser Lys Arg Leu Tyr Asp
                85                  90                  95

Val Leu Arg Ala Val Pro His Pro Asp Ser Gln Pro Asp Thr Ile Asp
            100                 105                 110

His Asp Leu Leu Leu Leu Gln Leu Ser Glu Lys Ala Thr Leu Gly Pro
        115                 120                 125

Ala Val Arg Pro Leu Pro Trp Gln Arg Val Asp Arg Asp Val Ala Pro
    130                 135                 140

Gly Thr Leu Cys Asp Val Ala Gly Trp Gly Ile Val Asn His Ala Gly
145                 150                 155                 160

Arg Arg Pro Asp Ser Leu Gln His Val Leu Leu Pro Val Leu Asp Arg
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Ala Thr Cys Asn Arg Arg Thr His His Asp Gly Ala Ile Thr Glu Arg
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Leu Met Cys Ala Glu Ser Asn Arg Arg Asp Ser Cys Lys Gly Asp Ser
195 200 205

Gly Gly Pro Leu Val Cys Gly Gly Val Leu Glu Gly Val Val Thr Ser
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35 40 45

His Leu Cys Gly Gly Val Leu Val Ala Glu Gln Trp Val Leu Ser Ala
50 55 60

Ala His Cys Leu Glu Asp Ala Ala Asp Gly Lys Val Gln Val Leu Leu
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Gly Ala His Ser Leu Ser Gln Pro Glu Pro Ser Lys Arg Leu Tyr Asp
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Val Leu Arg Ala Val Pro His Pro Asp Ser Arg Pro Asp Thr Ile Asp
100 105 110

His Asp Leu Leu Leu Leu Gln Leu Ser Glu Lys Ala Thr Leu Gly Pro
115 120 125

Ala Val Arg Pro Leu Pro Trp Gln Arg Val Asp Arg Asp Val Glu Pro
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Gly Thr Leu Cys Asp Val Ala Gly Trp Gly Ile Val Ser His Ala Gly
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Arg Arg Pro Asp Arg Leu Gln His Val Leu Leu Pro Val Leu Asp Arg
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Gly Gly Pro Leu Val Cys Gly Gly Val Leu Glu Gly Val Val Thr Ser

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Met Asn Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu Ile
35 40 45

Ser Gly Gly Asn Thr Leu Arg Pro Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

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Asp Arg Val Thr Ile Thr Cys Ile Thr Ser Thr Asp Ile Asp Asp Asp
20 25 30

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35 40 45

Ser Gly Gly Asn Thr Leu Arg Pro Gly Val Pro Ser Arg Phe Ser Gly
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Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
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Asp Arg Val Thr Ile Thr Cys Ile Thr Ser Thr Asp Ile Asp Asp Asp
20 25 30

Met Asn Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu Ile
35 40 45

Ser His Gly Asn Thr Leu Arg Pro Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
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Asp Arg Val Thr Ile Thr Cys Ile Thr Ser Thr Asp Ile Asp Asp Asp
20 25 30

Met Asn Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu Ile
35 40 45

Ser Asp Gly Asn Thr Ile Arg Pro Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
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Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
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Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln
35 40 45

Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser
50 55 60

Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu
65 70 75 80

Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser
85 90 95

Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
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gtgaaggttt cctgcaaggc ttctggatac accttcacta actatggaat gaactgggtg 180

cgccaagccc ctggacaagg gcttgagtgg atgggatgga ttaacaccta cactggagag 240

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Gly Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala Asp Asp Phe
50 55 60

Lys Gly Arg Phe Val Phe Ser Leu Asp Thr Ser Val Ser Thr Ala Tyr
65 70 75 80

Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Glu Arg Glu Gly Gly Val Asn Asn Trp Gly Gln Gly Thr Leu Val Thr
100 105 110

Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro
115 120 125

Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val
130 135 140

Lys Asp Tyr Pro Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala
145 150 155 160

Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly
165 170 175

Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly
180 185 190

Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys
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Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr
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Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys Glu Arg
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<223> /註釋=「人工序列之描述：合成肽」

<400> 24
Gly Tyr Thr Phe Thr Asn Tyr Gly Met Asn
1 5 10

<210> 25
<211> 17
<212> PRT
<213> 人工序列

<220>
<221> source
<223> /註釋=「人工序列之描述：合成肽」

<400> 25
Trp Ile Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala Asp Asp Phe Lys
1 5 10 15

Gly

<210> 26
<211> 6
<212> PRT
<213> 人工序列

<220>
<221> source
<223> /註釋=「人工序列之描述：合成肽」

<400> 26
Glu Gly Gly Val Asn Asn
1 5

<210> 27
<211> 108
<212> PRT
<213> 人工序列

<220>
<221> source
<223> /註釋=「人工序列之描述：合成多肽」

<400> 27
Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys
1 5 10 15

Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr

20 25 30

Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
35 40 45

Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
50 55 60

Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
65 70 75 80

Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
85 90 95

Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr
100 105

<210> 28
<211> 714
<212> DNA
<213> 人工序列

<220>
<221> source
<223> /註釋=「人工序列之描述：合成聚核苷酸」

<400> 28
atgaagaaga atattgcgtt cctacttgcc tctatgtttg tcttttctat agctacaaac 60

gcgtatgctg atatccaggt gacccagtct ccatcctccc tgtctgcatc tgtaggagac 120

cgcgtcacca tcacttgcat taccagcact gatattgatg atgatatgaa ctggtatcag 180

cagaaaccag ggaaagttcc taagctcctg atctctggag gcaatactct tcgtcctggg 240

gtcccatctc ggttcagtgg cagtggatct gggacagatt tcactctcac catcagcagc 300

ctgcagcctg aagatgttgc aacttattac tgtttgcaaa gtgattcttt gccgtacacg 360

tttggccagg gtaccaaggt ggagatcaaa cgaactgtgg ctgcaccatc tgtcttcatc 420

ttcccgccat ctgatgagca gttgaaatct ggaactgctt ctgttgtgtg cctgctgaat 480

aacttctatc ccagagaggc caaagtacag tggaaggtgg ataacgccct ccaatcgggt 540

aactcccagg agagtgtcac agagcaggac agcaaggaca gcacctacag cctcagcagc 600

accctgacgc tgagcaaagc agactacgag aaacacaaag tctacgcctg cgaagtcacc 660

catcagggcc tgagctcgcc cgtcacaaag agcttcaaca ggggagagtg ttaa 714

<210> 29
<211> 214
<212> PRT
<213> 人工序列

<220>
<221> source
<223> /註釋=「人工序列之描述：合成多肽」

<400> 29
Asp Ile Gln Val Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Ile Thr Ser Thr Asp Ile Asp Asp Asp

20 25 30

Met Asn Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu Ile
35 40 45

Ser Gly Gly Asn Thr Leu Arg Pro Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Leu Gln Ser Asp Ser Leu Pro Tyr
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
100 105 110

Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
115 120 125

Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
130 135 140

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
145 150 155 160

Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
165 170 175

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
180 185 190

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
195 200 205

Phe Asn Arg Gly Glu Cys
210

<210> 30
<211> 741
<212> DNA
<213> 人工序列

<220>
<221> source
<223> /註釋=「人工序列之描述：合成聚核苷酸」

<400> 30
atgaaaaaga atatcgcatt tcttcttgca tctatgttcg ttttttctat tgctacaaac 60

gcgtacgctg aagtccagct ggtgcaatct gggcctgagt tgaagaagcc tggggcctca 120

gtgaaggttt cctgcaaggc ttctggatac accttcacta actatggaat gaactgggtg 180

cgccaagccc ctggacaagg gcttgagtgg atgggatgga ttaacaccta cactggagag 240

acaacatatg ctgatgactt caagggacgg tttgtcttct ccttggacac ctctgtcagc 300

acggcatatc tgcagatcag cagcctcaag gctgaggaca ctgccgtgta ttactgtgag 360

cgcgaggggg gggttaataa ctggggccaa gggaccctgg tcaccgtctc ctcagcctcc 420

accaagggcc catcggtctt ccccctggca ccctcctcca agagcacctc tgggggcaca 480

gcggccctgg gctgcctggt caaggactac ttccccgaac cggtgacggt gtcgtggaac 540

tcaggcgccc tgaccagcgg cgtgcacacc ttcccggctg tcctacagtc ctcaggactc 600

tactccctca gcagcgtggt gaccgtgccc tccagcagct tgggcaccca gacctacatc 660

tgcaacgtga atcacaagcc cagcaacacc aaggtggaca agaaagttga gcccaaatct 720

tgtgacaaaa ctcacacata a 741

<210> 31
<211> 223
<212> PRT
<213> 人工序列

<220>
<221> source
<223> /註釋=「人工序列之描述：合成多肽」

<400> 31

Glu	Val	Gln	Leu	Val	Gln	Ser	Gly	Pro	Glu	Leu	Lys	Lys	Pro	Gly	Ala
1				5				10					15		
Ser	Val	Lys	Val	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Thr	Phe	Thr	Asn	Tyr
			20					25					30		
Gly	Met	Asn	Trp	Val	Arg	Gln	Ala	Pro	Gly	Gln	Gly	Leu	Glu	Trp	Met
		35					40					45			
Gly	Trp	Ile	Asn	Thr	Tyr	Thr	Gly	Glu	Thr	Thr	Tyr	Ala	Asp	Asp	Phe
	50					55					60				
Lys	Gly	Arg	Phe	Val	Phe	Ser	Leu	Asp	Thr	Ser	Val	Ser	Thr	Ala	Tyr
65					70					75					80
Leu	Gln	Ile	Ser	Ser	Leu	Lys	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
				85					90					95	
Glu	Arg	Glu	Gly	Gly	Val	Asn	Asn	Trp	Gly	Gln	Gly	Thr	Leu	Val	Thr
			100					105					110		
Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe	Pro	Leu	Ala	Pro
		115					120					125			
Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala	Ala	Leu	Gly	Cys	Leu	Val
	130					135					140				
Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp	Asn	Ser	Gly	Ala
145					150					155					160
Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu	Gln	Ser	Ser	Gly
				165					170					175	
Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	Gly
			180					185					190		
Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His	Lys	Pro	Ser	Asn	Thr	Lys
		195					200					205			

Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr
210 215 220

<210> 32
<211> 25
<212> PRT
<213> 人工序列

<220>
<221> source
<223> /註釋=「人工序列之描述：合成肽」

<400> 32
Glu Val Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser
20 25

<210> 33
<211> 10
<212> PRT
<213> 人工序列

<220>
<221> source
<223> /註釋=「人工序列之描述：合成肽」

<400> 33
Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
1 5 10

<210> 34
<211> 11
<212> PRT
<213> 人工序列

<220>
<221> source
<223> /註釋=「人工序列之描述：合成肽」

<400> 34
Ile Thr Ser Thr Asp Ile Asp Asp Asp Met Asn
1 5 10

<210> 35
<211> 7
<212> PRT
<213> 人工序列

<220>
<221> source
<223> /註釋=「人工序列之描述：合成肽」

<400> 35
Gly Gly Asn Thr Leu Arg Pro
1 5

<210> 36
<211> 9
<212> PRT
<213> 人工序列

<220>

<221> source
<223> /註釋=「人工序列之描述：合成肽」

<400> 36
Leu Gln Ser Asp Ser Leu Pro Tyr Thr
1 5

<210> 37
<211> 107
<212> PRT
<213> 人工序列

<220>
<221> source
<223> /註釋=「人工序列之描述：合成多肽」

<400> 37
Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu
1 5 10 15

Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe
20 25 30

Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln
35 40 45

Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser
50 55 60

Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu
65 70 75 80

Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser
85 90 95

Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
100 105

<210> 38
<211> 32
<212> PRT
<213> 人工序列

<220>
<221> source
<223> /註釋=「人工序列之描述：合成多肽」

<400> 38
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
1 5 10 15

Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Val Ala Thr Tyr Tyr Cys
20 25 30

<210> 39
<211> 108
<212> PRT
<213> 人工序列

<220>
<221> source
<223> /註釋=「人工序列之描述：合成多肽」

<400> 39
Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys
1 5 10 15

Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr
20 25 30

Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
35 40 45

Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
50 55 60

Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
65 70 75 80

Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
85 90 95

Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr
100 105

<210> 40
<211> 107
<212> PRT
<213> 人工序列

<220>
<221> source
<223> /註釋=「人工序列之描述：合成多肽」

<400> 40
Asp Ile Gln Val Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Ile Thr Ser Thr Asp Ile Asp Asp Asp
20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu Ile
35 40 45

Ser Gly Gly Asn Thr Leu Arg Pro Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Leu Gln Ser Asp Ser Leu Pro Tyr
85 90 95

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105

<210> 41
<211> 115
<212> PRT
<213> 人工序列

<220>
<221> source
<223> /註釋=「人工序列之描述：合成多肽」

<400> 41
Gln Val Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala Asp Asp Phe
50 55 60

Lys Gly Arg Phe Val Phe Ser Leu Asp Thr Ser Val Ser Thr Ala Tyr
65 70 75 80

Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Glu Arg Glu Gly Gly Val Asn Asn Trp Gly Gln Gly Thr Leu Val Thr
100 105 110

Val Ser Ser
115

<210> 42
<211> 4
<212> PRT
<213> 智人

<400> 42
Asp Arg Ala Thr
1

<210> 43
<211> 4
<212> PRT
<213> 智人

<400> 43
Asn Arg Arg Thr
1

<210> 44
<211> 115
<212> PRT
<213> 人工序列

<220>
<221> source
<223> /註釋=「人工序列之描述：合成多肽」

<400> 44
Gln Val Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
20 25 30

Gly Met Asn Trp Val Lys Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala Asp Asp Phe
50 55 60

Lys Gly Arg Phe Val Phe Ser Leu Asp Thr Ser Val Ser Thr Ala Tyr
65 70 75 80

Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala Thr Tyr Tyr Cys
85 90 95

Glu Arg Glu Gly Gly Val Asp Asn Trp Gly Gln Gly Thr Leu Val Thr
100 105 110

Val Ser Ser
115

<210> 45
<211> 115
<212> PRT
<213> 人工序列

<220>
<221> source
<223> /註釋=「人工序列之描述：合成多肽」

<400> 45
Gln Val Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala Asp Asp Phe
50 55 60

Lys Gly Arg Phe Val Phe Ser Leu Asp Thr Ser Val Ser Thr Ala Tyr
65 70 75 80

Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Glu Arg Glu Gly Gly Val Asn Asn Trp Gly Gln Gly Thr Leu Val Thr
100 105 110

Val Ser Ser
115

<210> 46
<211> 115
<212> PRT
<213> 人工序列

<220>

<221> source
<223> /註釋=「人工序列之描述：合成多肽」

<400> 46
Gln Val Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
20 25 30

Gly Leu Asn Trp Val Arg Gln Ala Pro Gly Cys Gly Leu Glu Trp Met
35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala Asp Asp Phe
50 55 60

Lys Gly Arg Phe Val Phe Ser Leu Asp Thr Ser Val Ser Thr Ala Tyr
65 70 75 80

Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Glu Arg Glu Gly Gly Val Asn Asn Trp Gly Gln Gly Thr Leu Val Thr
100 105 110

Val Ser Ser
115

<210> 47
<211> 115
<212> PRT
<213> 人工序列

<220>
<221> source
<223> /註釋=「人工序列之描述：合成多肽」

<400> 47
Gln Val Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala Asp Asp Phe
50 55 60

Lys Gly Arg Phe Val Phe Ser Leu Asp Thr Ser Val Ser Thr Ala Tyr
65 70 75 80

Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Glu Arg Glu Gly Gly Val Asn Asn Trp Gly Gln Gly Thr Leu Val Thr
100 105 110

Val Ser Ser
115

<210> 48
<211> 214
<212> PRT
<213> 人工序列

<220>
<221> source
<223> /註釋=「人工序列之描述：合成多肽」

<400> 48
Asp Ile Gln Val Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Ile Thr Ser Thr Asp Ile Asp Asp Asp
20 25 30

Met Asn Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu Ile
35 40 45

Ser Gly Gly Asn Thr Leu Arg Pro Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Leu Gln Ser Asp Ser Leu Pro Tyr
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
100 105 110

Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
115 120 125

Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
130 135 140

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
145 150 155 160

Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
165 170 175

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
180 185 190

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
195 200 205

Phe Asn Arg Gly Glu Cys
210

<210> 49
<211> 23
<212> PRT

<213> 人工序列

<220>
<221> source
<223> /註釋=「人工序列之描述：合成肽」

<400> 49
Asp Ile Gln Val Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys
20

<210> 50
<211> 15
<212> PRT
<213> 人工序列

<220>
<221> source
<223> /註釋=「人工序列之描述：合成肽」

<400> 50
Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu Ile Ser
1 5 10 15

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發明專利說明書

（本說明書格式、順序及粗體字，請勿任意更動，※記號部分請勿填寫）

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※ 申請日：99. 11. 4　　※IPC 分類：C07K; G01N

C07K16/18 (2006.01)
C40B60/02 (2006.01)

一、發明名稱：（中文/英文）

D因子及抗D因子抗體之共結晶結構

CO-CRYSTAL STRUCTURE OF FACTOR D AND ANTI-FACTOR D ANTIBODY

二、中文發明摘要：

本發明係關於D因子及抗D因子抗體或其抗原結合片段之共結晶結構。

三、英文發明摘要：

The present invention is directed towards the co-crystal structure of Factor D and an anti-Factor D antibody or an antigen binding fragment thereof.

七、申請專利範圍：

1. 一種晶體，其由天然序列D因子多肽或其功能片段或保守胺基酸取代型變異體形成。
2. 如請求項1之晶體，其中該天然序列D因子多肽為人類或獼猴D因子。
3. 如請求項2之晶體，其中該天然序列D因子多肽為SEQ ID NO: 1之人類D因子。
4. 如請求項3之晶體，其特徵在於約等於以下之單位晶胞參數：晶胞尺寸a=132.048，b=132.048；c=180.288，空間群$P4_32_12$，結晶常數：2.4 Å，及R/Rfree=21.2%/27.2。
5. 如請求項2之晶體，其中該天然序列D因子多肽為SEQ ID NO: 2之獼猴D因子。
6. 如請求項5之晶體，其特徵在於約等於以下之單位晶胞參數：a=182.205；b=80.673；c=142.575；空間群C2，結晶常數：2.1 Å；及R/Rfree=21.1%/26.9。
7. 一種組合物，其包含如請求項1、請求項4或請求項6之晶體。
8. 一種可結晶組合物，其包含D因子多肽與抗D因子抗體或該抗體之抗原結合片段之複合物。
9. 如請求項8之可結晶組合物，其中該抗D因子抗體為單株抗體。
10. 如請求項9之可結晶組合物，其中該片段為Fab片段。
11. 如請求項9之可結晶組合物，其中該D因子多肽為SEQ ID NO: 1之人類D因子。

12. 如請求項11之可結晶組合物，其具有附錄1A中所述之結構座標。

13. 如請求項9之可結晶組合物，其中該D因子多肽為SEQ ID NO: 2之獼猴D因子。

14. 如請求項13之可結晶組合物，其具有附錄1B中所述之結構座標。

15. 如請求項8之可結晶組合物，其中該D因子多肽包含催化三聯體。

16. 一種晶體，其包含D因子多肽與抗D因子抗體或其抗原結合片段之複合物。

17. 如請求項16之晶體，其中該抗體為單株抗體。

18. 如請求項17之晶體，其中該片段為Fab片段。

19. 如請求項17之晶體，其中該D因子多肽為SEQ ID NO: 1之人類D因子。

20. 如請求項19之晶體，其具有附錄1A之結構座標。

21. 如請求項17之晶體，其中該D因子多肽為SEQ ID NO: 2之獼猴D因子。

22. 如請求項21之晶體，其具有附錄1B之結構座標。

23. 如請求項16之晶體，其中該D因子多肽包含催化三聯體。

24. 如請求項19之晶體，其中在SEQ ID NO: 1之該人類D因子多肽或其抗原結合片段中，胺基酸殘基D131、V132、P134、D165、R166、A167、T168、N170、R171、R172、T173、D176、G177、I179、E181、R222及K223

中之一或多者參與與該抗D因子抗體之複合。

25. 如請求項24之晶體，其中在SEQ ID NO: 1之該人類D因子多肽或其抗原結合片段中，所有胺基酸殘基D131、V132、P134、D165、R166、A167、T168、N170、R171、R172、T173、D176、G177、I179、E181、R222及K223皆參與與該抗D因子抗體之複合。

26. 如請求項19之晶體，其中在SEQ ID NO: 1之該人類D因子多肽或其抗原結合片段中，胺基酸殘基R172與該抗D因子抗體或其抗原結合片段之重鏈及輕鏈形成氫鍵。

27. 一種產生分子複合物之三維圖像之電腦，該分子複合物包含由SEQ ID NO: 1之人類D因子之胺基酸殘基D131、V132、P134、D165、R166、A167、T168、N170、R171、R172、T173、D176、G177、I179、E181、R222及K223的結構座標所界定之結合位點，其中該電腦包含：(i)機器可讀資料儲存媒體，其包含以機器可讀資料編碼之資料儲存材料，其中該資料包含SEQ ID NO: 1之人類D因子之胺基酸殘基D131、V132、P134、D165、R166、A167、T168、N170、R171、R172、T173、D176、G177、I179、E181、R222及K223的該等結構座標，及(ii)將該機器可讀資料處理成該三維圖像之指令。

28. 如請求項27之電腦，其進一步包含顯示該等結構座標之顯示器。

29. 一種評估化學實體與分子複合物締合之潛力的方法，該分子複合物包含由SEQ ID NO: 1之人類D因子之胺基酸

殘基D131、V132、P134、D165、R166、A167、T168、N170、R171、R172、T173、D176、G177、I179、E181、R222及K223之結構座標所界定的結合位點，該方法包含以下步驟：(i)使用計算手段進行該化學實體與該分子複合物之該結合位點之間的擬合操作；及(ii)分析該擬合操作之結果，以量化該化學實體與該結合位點之間的該締合性。

30. 如請求項29之方法，其中該化學實體為抗體或其抗原結合片段，或該抗體或抗體片段之肽或小分子模擬物。

31. 如請求項30之方法，其中該抗體或其抗原結合片段與一或多個該等殘基形成氫鍵。

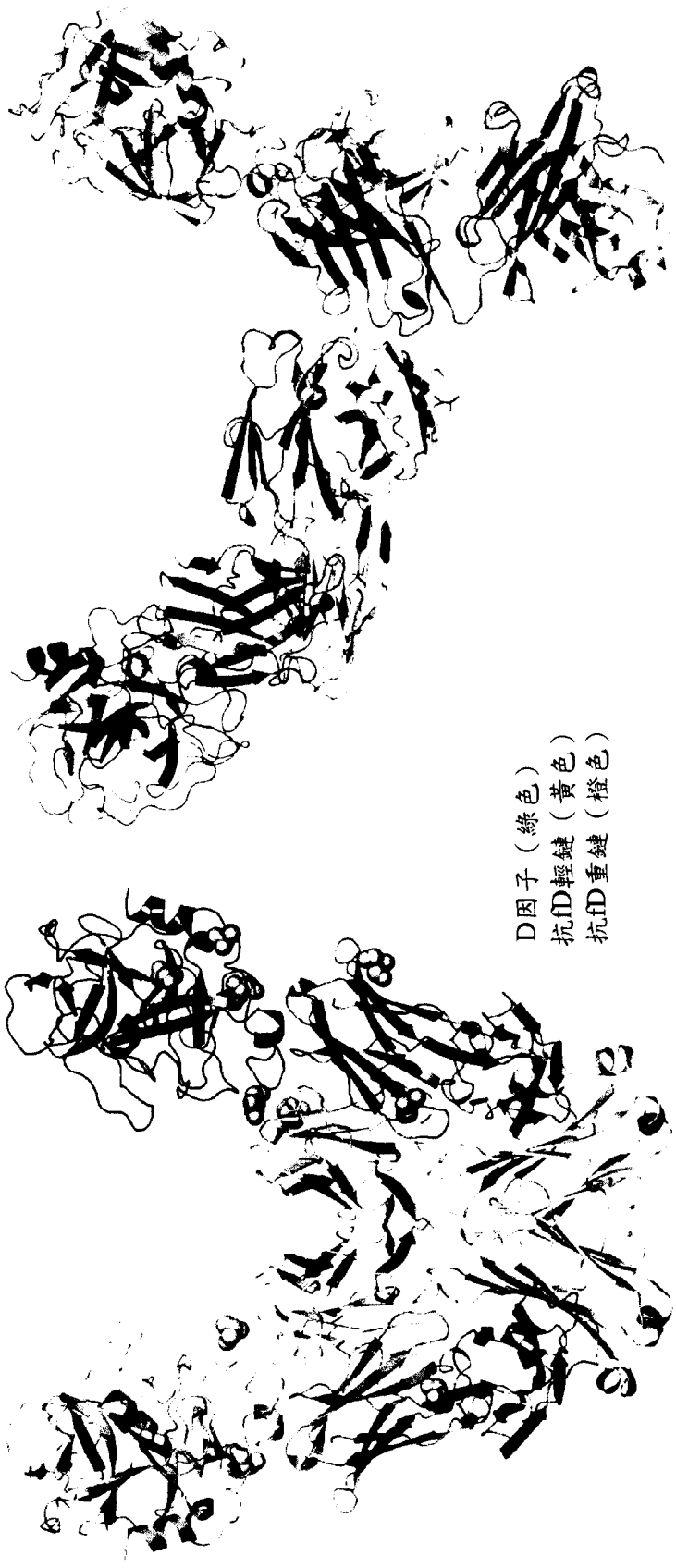
32. 如請求項31之方法，其中該抗體或其抗原結合片段與SEQ ID NO: 1之人類D因子之胺基酸殘基R172形成氫鍵。

33. 一種化學實體，其可經由如請求項29至32中之任一方法鑑別。

34. 一種確定對應於分子複合物之X射線繞射圖案之至少一部分結構座標的電腦，其中該電腦包含：a)機器可讀資料儲存媒體，其包含以機器可讀資料編碼之資料儲存材料，其中該資料包含圖6及圖7或附錄1a或附錄1b之結構座標之至少一部分；b)機器可讀資料儲存媒體，其包含以機器可讀資料編碼之資料儲存材料，其中該資料包含該分子複合物之X射線繞射圖案；c)工作記憶體，其用於儲存供處理a)及b)之該機器可讀資料的指令；d)中央

處理單元，其與該工作記憶體耦聯且與a)及b)之該機器可讀資料耦聯，以進行(a)之該機器可讀資料之傅立葉變換(Fourier transform)及將(b)之該機器可讀資料處理成結構座標；及e)顯示器，其與該中央處理單元耦聯，以顯示該分子複合物之該等結構座標。

八、圖式：



D因子與抗D因子複合

圖1

圖2



圖3

圖4

與抗 D 因子 Fab 上之殘基相互作用之 D 因子(人類)上殘基的簡要清單

D131
V132
P134
D165
R166
A167
T168
N170
R171
R172
T173
D176
G177
I179
E181
R222
K223

圖5

與抗 D 因子 Fab 之輕鏈及重鏈形成相互作用之 D 因子上殘基

源原子	靶原子	距離	角度
Asp 131A CB	Tyr 54H CZ	4.45	
	Tyr 54H OH	3.16	
Asp 131A CG	Tyr 54H CE1	4.50	
	Tyr 54H CZ	4.42	
	Tyr 54H OH	3.41	
Asp 131A OD2	Tyr 54H CE1	3.34	
	Tyr 54H CZ	3.49	
	Tyr 54H OH	2.78	***
Val 132A O	Tyr 54H OH	4.41	*
Pro 134A CB	Thr 55H CG2	4.40	
Pro 134A CG	Tyr 54H CE2	3.65	
	Tyr 54H CD2	4.11	
	Thr 55H CG2	4.04	
	Tyr 54H CZ	4.49	
Pro 134A CD	Tyr 54H CE2	3.91	
	Tyr 54H OH	4.42	
Asp 165A CB	Tyr 54H CB	4.35	
	Tyr 54H CG	4.02	
	Tyr 54H CE2	4.35	
	Tyr 54H CD2	3.92	
	Thr 55H CG2	3.71	
Asp 165A CG	Asn 52H CG	4.11	
	Asn 52H OD1	4.00	
	Tyr 54H CB	4.28	
	Tyr 54H CG	4.48	
	Thr 55H CG2	3.58	
	Asn 52H ND2	3.37	
Asp 165A OD1	Asn 52H CG	4.22	
	Asn 52H OD1	4.46	*
	Thr 55H CG2	3.86	
	Asn 52H ND2	3.19	***
Asp 165A OD2	Asn 52H CG	3.36	
	Asn 52H OD1	3.06	***
	Tyr 54H CB	3.44	
	Tyr 54H CG	3.98	
	Tyr 54H CD2	4.44	
	Thr 55H CG2	3.84	
	Asn 52H ND2	2.86	***
Arg 166A N	Tyr 54H CD1	4.27	
Arg 166A CB	Tyr 54H CD1	4.44	
Arg 166A CG	Asn 31H CG	4.39	
	Asn 31H OD1	4.02	
	Asn 31H O	4.50	
Arg 166A CD	Asn 31H CG	3.83	
	Asn 31H OD1	3.35	
	Asn 31H ND2	4.23	
Arg 166A NE	Asn 31H OD1	4.49	*
Arg 166A NH1	Tyr 54H CE1	4.11	
	Asn 31H OD1	4.32	*
Arg 166A C	Asn 31H O	3.98	
Arg 166A O	Asn 31H O	3.64	*
Ala 167A N	Tyr 54H CB	4.47	
	Thr 30H O	4.05	*
	Asn 31H C	4.42	
	Asn 31H O	3.88	*
Ala 167A CA	Thr 30H O	4.09	
	Asn 31H C	3.90	
	Asn 31H O	3.35	
	Tyr 32H N	4.39	
Ala 167A CB	Asn 52H CG	3.92	
	Asn 52H OD1	3.40	
	Tyr 54H CB	3.91	
	Asn 52H ND2	4.09	
	Thr 53H N	4.45	
	Thr 30H O	3.59	
	Thr 53H OG1	4.06	
	Tyr 54H N	4.19	
	Asn 31H C	4.16	
	Asn 31H O	4.04	
	Tyr 32H N	4.27	
	Tyr 32H C	4.22	
	Gly 33H N	4.03	
	Tyr 32H CA	4.44	
Ala 167A C	Trp 50H CH2	4.14	
	Asn 31H O	4.27	
Ala 167A O	Trp 50H CH2	4.03	
	Asn 31H O	4.18	*
Thr 168A N	Asn 52H ND2	3.70	*
	Trp 50H CH2	4.18	
Thr 168A CA	Asn 52H ND2	4.18	
	Trp 50H CH2	4.16	
	Trp 50H CZ2	4.42	
Thr 168A CB	Asn 52H ND2	3.98	
Thr 168A OG1	Asn 52H CG	4.05	
	Asn 52H ND2	2.75	***
	Trp 50H CZ2	4.21	
Asn 170A CB	Asn 31H C	4.46	
	Asn 31H O	3.27	
Asn 170A CG	Asn 31H O	3.68	
Asn 170A ND2	Asn 31H CA	4.39	
	Asn 31H C	4.07	
	Asn 31H O	3.13	***
	Asn 31H CB	4.16	
Asn 170A C	Glu 99H O	4.39	
Asn 170A O	Glu 99H C	4.38	
	Glu 99H O	3.82	*
	Gly 100H N	4.21	*
	Gly 100H CA	3.65	
Arg 171A CA	Glu 99H CG	4.10	
	Glu 99H O	4.37	
	Glu 99H CD	4.42	
	Glu 99H OE2	3.74	
Arg 171A CB	Tyr 96L OH	3.89	
	Glu 99H CG	4.30	
	Glu 99H OE2	3.85	
Arg 171A CG	Trp 50H CZ3	3.69	
	Trp 50H CH2	3.63	
	Trp 50H CZ2	4.46	
	Tyr 96L OH	4.40	
	Glu 99H CG	4.26	
Arg 171A CD	Trp 50H CE2	4.37	
	Trp 50H CD2	4.31	
	Trp 50H CE3	3.83	
	Trp 50H CZ3	3.36	
	Trp 50H CH2	3.47	
	Trp 50H CZ2	3.99	
	Leu 94L CD2	4.36	
	Tyr 96L OH	3.69	
Arg 171A NE	Leu 94L CD1	4.35	
	Leu 94L CG	4.20	
	Leu 94L CD2	4.01	
	Tyr 96L CZ	4.39	
	Tyr 96L OH	3.47	*
Arg 171A CZ	Leu 94L CD1	3.82	
	Leu 94L CG	3.83	
	Leu 94L CD2	4.14	
Arg 171A NH1	Leu 94L CD1	4.25	
	Leu 94L CG	3.96	
	Leu 94L CD2	4.48	
Arg 171A NH2	Leu 94L CD1	3.45	
	Trp 50H CZ2	4.26	
	Leu 94L CG	3.99	
Arg 171A C	Glu 99H OE2	3.73	
Arg 172A N	Tyr 96L OH	4.15	*
	Glu 99H CG	4.42	
	Glu 99H CD	3.90	
	Glu 99H OE2	2.82	***
	Gly 100H N	4.29	*
	Gly 100H CA	4.48	
Arg 172A CA	Glu 99H OE2	3.73	
Arg 172A CB	Glu 99H OE2	3.53	
Arg 172A CG	Tyr 96L CZ	4.49	
	Tyr 96L OH	4.02	
	Glu 99H CD	4.46	
	Glu 99H OE2	3.43	
	Ser 91L CB	3.94	
	Ser 91L OG	3.51	
Arg 172A CD	Tyr 96L CE2	4.48	
	Glu 99H OE2	3.91	
	Asn 34L CG	4.06	
	Asn 34L OD1	3.52	
	Asn 34L ND2	4.04	
	Ser 91L CB	3.76	
	Ser 91L OG	3.49	
Arg 172A NE	Tyr 96L CE2	4.14	
	Glu 99H CD	3.68	
	Glu 99H OE1	3.31	*
	Glu 99H OE2	3.32	*
	Asn 34L OD1	4.39	*

圖6A

與抗 D 因子 Fab 之輕鏈及重鏈形成相互作用之 D 因子上殘基

源原子		靶原子		距離	角度
Arg	172A CZ	... Leu	89L CD2	... 4.37	
		.. Glu	99H CD	... 4.35	
		... Glu	99H OE1	... 3.61	
		... Glu	99H OE2	.. 4.31	
		... Asn	34L OD1	... 4.37	
		... Tyr	36L OH	... 3.42	
		... Glu	97H OE2	... 4.10	
Arg	172A NH1	... Leu	89L CD2	... 3.77	
		... Asn	34L CG	... 3.66	
		.. Asn	34L OD1	... 3.46 *	
		.. Asn	34L ND2	... 4.15 *	
		... Tyr	36L CZ	... 3.78	
		... Tyr	36L CE2	... 4.09	
		... Tyr	36L OH	... 2.81 ***	
		... Leu	46L CD2	... 4.09	
		... Glu	97H OE2	... 4.31 *	
		... Asn	34L CB	... 4.17	
		... Leu	46L CD1	... 3.95	
Arg	172A NH2	... Asn	35H ND2	... 4.16 *	
		... Glu	97H OE1	... 3.47 *	
		... Glu	99H CD	... 4.08	
		... Glu	99H OE1	... 3.09 ***	
		... Glu	99H OE2	... 4.41 *	
		... Glu	97H CD	... 3.45	
		... Tyr	36L OH	... 3.17 ***	
		... Glu	97H OE2	... 3.02 ***	
		... Asn	109H OD1	... 3.67 *	
Thr	173A N	... Tyr	96L OH	... 4.27 *	
Thr	173A CA	... Ser	91L O	... 4.06	
Thr	173A CB	... Tyr	96L OH	... 4.43	
		... Ser	91L O	... 3.30	
Thr	173A OG1	... Tyr	96L CE1	... 3.69	
		... Tyr	96L CZ	... 3.83	
		... Tyr	96L OH	... 3.32 *	
		... Ser	91L CA	... 4.30	
		... Ser	91L C	... 3.60	
		... Ser	91L O	... 2.52 ***	
		... Ser	91L CB	... 3.91	
		... Ser	91L OG	... 3.93 *	
Thr	173A CG2	... Ser	91L C	... 4.23	
		... Asp	92L CA	... 4.35	
		... Asp	92L C	... 4.02	
		... Asp	32L CG	... 4.28	
		... Asp	32L OD1	... 4.39	
		... Asp	32L OD2	... 4.24	
		... Ser	91L O	... 3.09	
		... Asp	92L O	... 3.60	

源原子		靶原子		距離	角度
Asp	176A CA	... Gly	101H N	... 4.46	
Asp	176A CG	... Gly	101H N	... 4.01	
		... Arg	55L NH2	... 4.09	
Asp	176A OD1	... Gly	100H N	... 4.30 *	
		... Gly	100H CA	... 3.37	
		... Gly	100H C	... 3.76	
		... Gly	101H N	... 3.11 ***	
		... Gly	101H CA	.. 4.13	
		... Gly	101H O	... 4.25 *	
		... Arg	55L NH2	... 4.13 *	
Asp	176A OD2	... Arg	55L NH1	... 4.38 *	
		... Arg	55L CZ	... 4.13	
		... Arg	55L NH2	... 3.23 ***	
Asp	176A C	... Gly	101H N	... 3.82	
		... Gly	101H CA	... 4.37	
Asp	176A O	... Gly	101H N	... 3.49 *	
		... Gly	101H CA	... 3.67	
Gly	177A N	... Tyr	32H CE1	... 4.29	
		... Gly	101H N	... 4.28 *	
Gly	177A CA	... Tyr	32H CE1	... 3.51	
		... Tyr	32H CZ	... 3.71	
		... Tyr	32H OH	... 3.32	
		... Gly	101H N	... 4.41	
Gly	177A C	... Tyr	32H CZ	... 4.48	
		... Tyr	32H OH	... 3.74	
Gly	177A O	... Tyr	32H CZ	... 4.20	
		... Tyr	32H OH	... 3.25 ***	
Ile	179A O	... Asn	31H ND2	... 4.25 *	
Glu	181A CG	... Asn	31H OD1	... 4.20	
Glu	181A OE1	... Thr	28H CG2	... 4.47	
		... Thr	28H OG1	... 3.85 *	
Glu	181A OE2	... Thr	28H CG2	... 4.38	
Arg	222A CZ	... Asp	92L OD2	... 4.40	
		... Asp	92L O	... 4.13	
Arg	222A NH1	... Ser	93L CB	... 4.45	
		... Asp	92L C	... 4.47	
		... Asp	92L O	... 3.31 *	
Arg	222A NH2	... Asp	92L OD2	... 3.33 *	
		... Asp	92L CG	... 3.89	
		... Asp	92L OD1	... 3.84 *	
		... Asp	92L O	... 4.01 *	
Lys	223A CG	... Asp	32L OD2	... 4.48	
Lys	223A CD	... Asp	30L OD2	... 3.76	
		... Asp	92L OD1	... 4.48	
		... Asp	32L CG	... 4.24	
		... Asp	32L OD2	... 3.12	

源原子		靶原子		距離	角度
Lys	223A CE	... Asp	92L OD2	... 4.48	
		... Asp	30L CG	... 4.38	
		... Asp	30L OD2	... 3.30	
		... Asp	92L CA	... 4.20	
		... Asp	92L CB	... 4.45	
		... Asp	92L CG	... 3.74	
		... Asp	92L OD1	... 2.94	
		... Asp	92L C	... 4.40	
		... Asp	32L CG	... 4.29	
		... Asp	32L OD2	... 3.13	
		... Asp	92L O	... 3.73	
Lys	223A NZ	... Asp	30L CG	... 3.51	
		... Asp	30L OD2	... 2.72 ***	
		... Asp	92L CA	... 4.07	
		... Asp	92L CB	... 4.08	
		... Asp	92L CG	... 3.60	
		... Asp	92L OD1	... 2.60 ***	
		... Asp	32L CB	... 4.16	
		... Asp	32L CG	... 3.61	
		... Asp	32L OD2	... 2.46 ***	
		... Asp	92L O	... 4.46 *	
		... Ile	29L CA	... 4.25	
		... Ile	29L C	... 3.55	
		... Ile	29L O	... 3.16 ***	
		... Asp	30L N	... 4.06 *	
		... Asp	30L CA	... 4.36	
		... Asp	30L CB	... 3.52	

圖6B

D因子(人類)上之關鍵殘基R172有潛力與抗體上之重鏈及輕鏈殘基形成6個或6個以上氫鍵

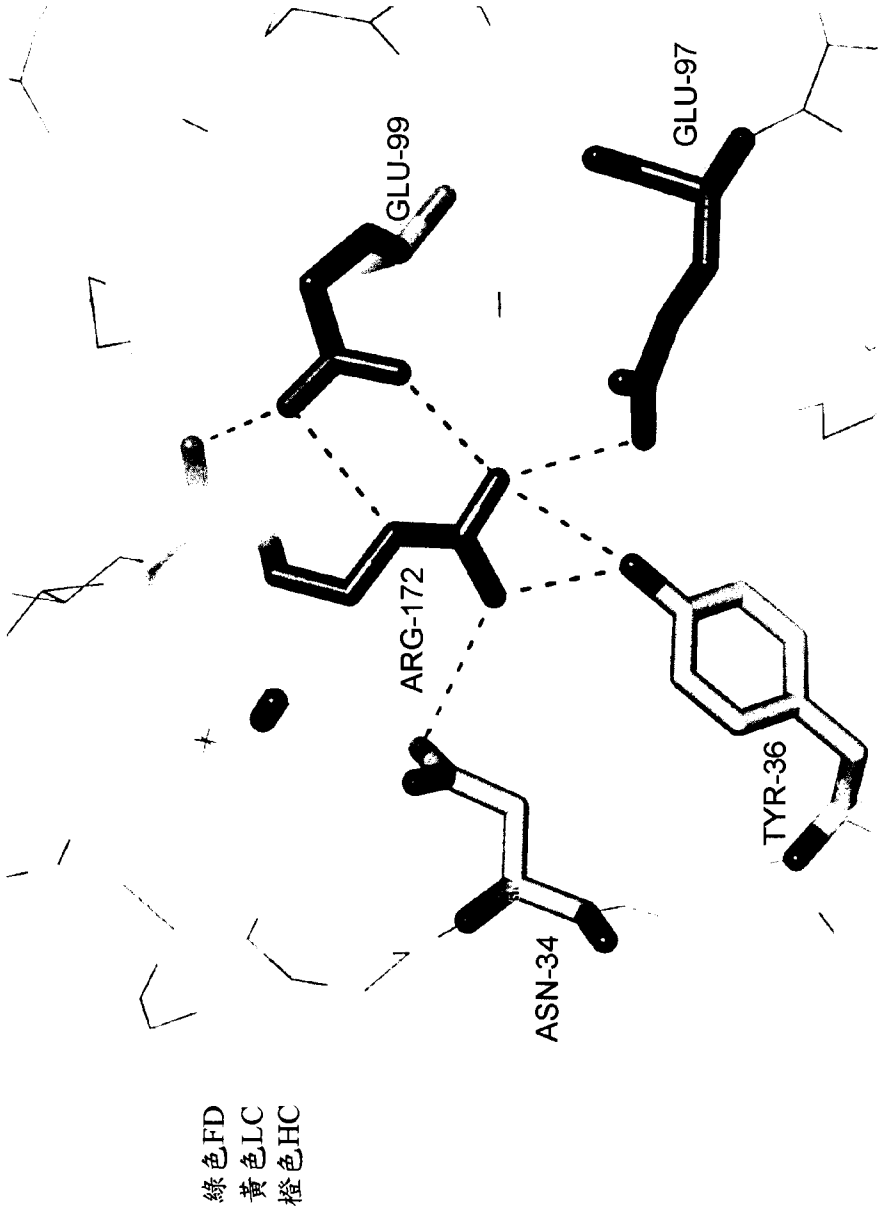


圖7A

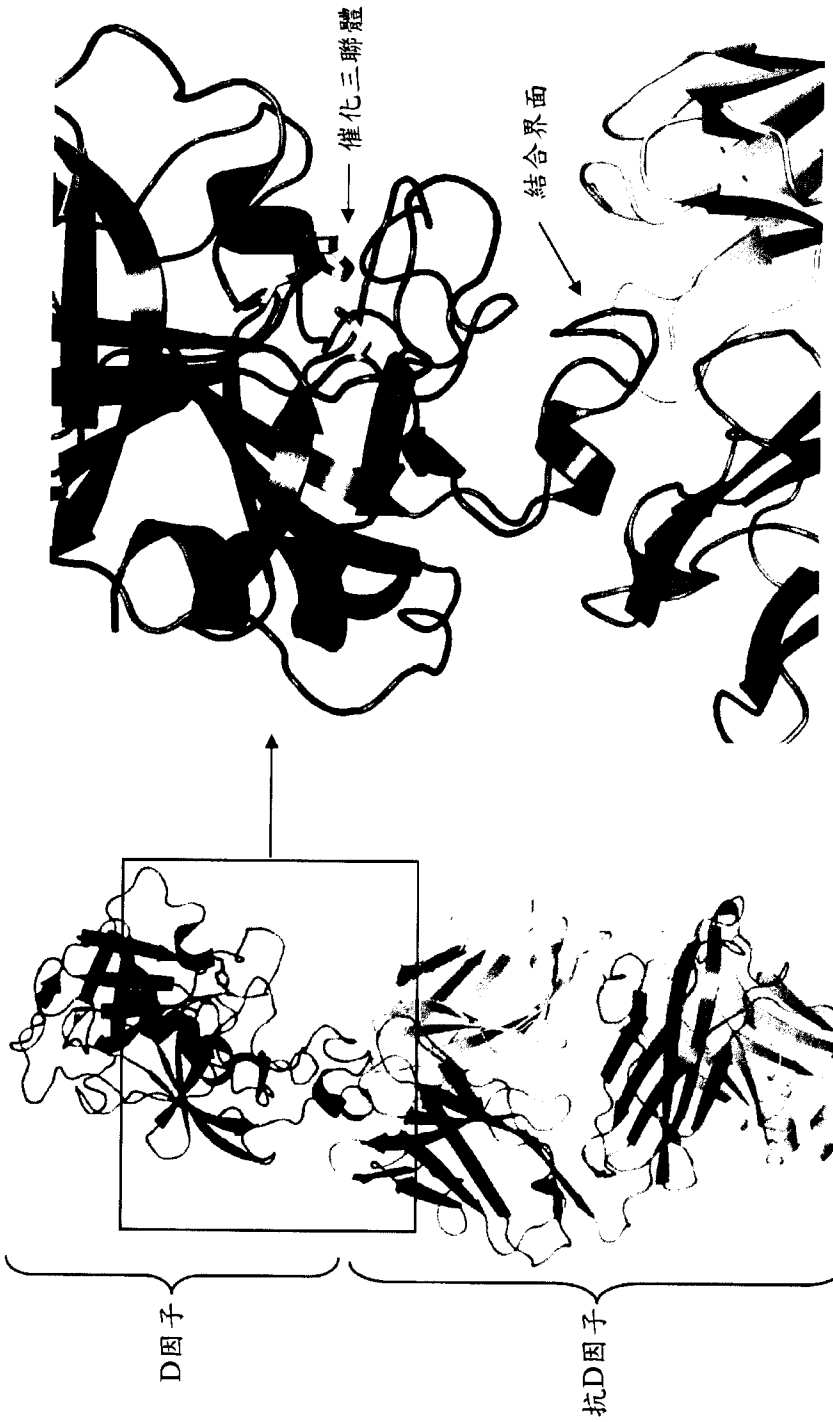


圖 7B

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  1 mhswerlavl vllgaaacaa pprgrilggr eaeaharpym asvqlngahl cggvlvaeqw
 61 vlsaahcled aadgkvqvll gahslsqpep skrlydvlra vphpdsqpdt idhdllllql
121 sekatlgpav rplpwqrvdr dvapgtlcdv agwgivnhag rrpdslqhvl lpvldratcn
181 rrthhdgait erlmcaesnr rdsckgdsgg plvcggvleg vvtsgsrvcg nrkkpgiytr
241 vasyaawids vla (SEQ ID NO: 1)
```

```
  1 gtgtctcagc cacagcggct tcaccatgca cagctgggag cgcctggcag ttctggtcct
 61 cctaggagcg gccgcctgcg cggcgccgcc ccgtggtcgg atcctgggcg gcagagaggc
121 cgaggcgcac gcgcggccct acatggcgtc ggtgcagctg aacggcgcgc acctgtgcgg
181 cggcgtcctg gtggcggagc agtgggtgct gagcgcggcg cactgcctgg aggacgcggc
241 cgacgggaag gtgcaggttc tcctgggcgc gcactccctg tcgcagccgg agccctccaa
301 gcgcctgtac gacgtgctcc gcgcagtgcc ccacccggac agccagcccg acaccatcga
361 ccacgacctc ctgctgctac agctgtcgga gaaggccaca ctgggccctg ctgtgcgccc
421 cctgccctgg cagcgcgtgg accgcgacgt ggcaccggga actctctgcg acgtggccgg
481 ctggggcata gtcaaccacg cgggccgccg cccggacagc ctgcagcacg tgctcttgcc
541 agtgctggac cgcgccacct gcaaccggcg cacgcaccac gacggcgcca tcaccgagcg
601 cttgatgtgc gcggagagca atcgccggga cagctgcaag ggtgactccg ggggcccgct
661 ggtgtgcggg ggcgtgctcg agggcgtggt cacctcgggc tcgcgcgttt gcggcaaccg
721 caagaagccc gggatctaca cccgcgtggc gagctatgcg gcctggatcg acagcgtcct
781 ggcctagggt gccggggcct gaaggtcagg gtcacccaag caacaaagtc ccgagcaatg
841 aagtcatcca ctcctgcatc tggttggtct ttattgagca cctactatat gcagaagggg
901 aggccgaggt gggaggatca ttggatctca ggagttcgag atcagcatgg gccacgtagc
961 gcgactccat ctctacaaat aaataaaaaa ttagctgggc aattggcggg catggaggtg
1021 ggtgcttgta gttccagcta ctcaggaggc tgaggtggga ggatgacttg aacgcaggag
1081 gctgaggctg cagtgagttg tgattgcacc actgccctcc agcctgggca acagagtgaa
1141 accttgtctc tctctacaaa aaaaaaaaaa aaa (SEQ ID NO: 3)
```

圖8

獼猴D因子多肽：

MHSWERLAVLVLLGVAACAAQPRGRILGGREAEAHARPYMASVQVNGEHLCGGVLVAEQW
VLSAAHCLEDAADGKVQVLLGAHSLSQPEPSKRLYDVLRAVPHPDSRPDTIDHDLLLLQL
SEKATLGPAVRPLPWQRVDRDVEPGTLCDVAGWGIVSHAGRRPDRLQHVLLPVLDRATCN
RRTHHDGAITQRMMCAESNRRDSCKGDSGGPLVCGGVLEGVVTSGSRVCGNRKKPGIYTR
VASYAAWIDSVLA

獼猴D因子核苷酸：

ATGCACAGCTGGGAGCGCCTGGCAGTTCTGGTCCTCCTGGGAGTGGCCGCCTGCGCGGCGCAG
CCCCGCGGTCGGATCCTGGGCGGCAGAGAGGCCGAGGCCCACGCGCGGCCCTACATGGCGTC
GGTGCAGGTGAACGGCGAGCACCTGTGCGGCGGCGTCCTGGTGGCCGAGCAGTGGGTGCTGA
GCGCGGCGCACTGCCTGGAGGACGCGGCCGACGGGAAGGTGCAGGTTCTCCTGGGCGCGCAC
TCCCTGTCGCAGCCGGAGCCCTCCAAGCGCCTGTACGACGTGCTCCGCGCAGTGCCGCACCCG
GACAGCCGGCCCGACACCATCGACCACGACCTCCTCCTGCTGCAGCTGTCCGAGAAGGCCAC
GCTGGGCCCTGCTGTGCGCCCCCTGCCCTGGCAGCGCGTGGATCGCGACGTGGAGCCGGGCAC
TCTCTGCGACGTGGCCGGCTGGGGCATAGTCAGCCACGCGGGCCGCCGCCCGGACCGCCTGC
AGCACGTGCTCTTGCCAGTGCTGGACCGCGCCACCTGCAACCGGCGCACGCACCACGACGG
CGCCATCACCCAGCGTATGATGTGCGCGGAGAGCAACCGCCGGGACAGCTGCAAAGGCGACT
CCGGGGGCCCGCTGGTGTGCGGGGGCGTGCTCGAGGGCGTGGTCACCTCGGGCTCGCGAGTTT
GCGGCAACCGCAAGAAGCCCGGGATCTACACGCGCGTGGCGAGCTATGCGGCCTGGATCGAC
AGCGTCCTGGCCTAGTCTAGAGTCGACCTGCAGAAGCTTGGCCGCCATGGCCC

圖9

#56 VK
DIQVTQSPSSLSASVRDRVTITCitsididdmnWYQQKPGKVPKLLISggntlrpGVPSRFSGSGSGTD
FTLTISSLQPEDVATYYCiqsdnlpytFGQGTKLEIK

#56 VH
QVQLVQSGPELKKPGASVKVSCKASgytftnygmnWVKQAPGQGLEwmgwintytgeptyaddfkGRFVF
SLDTSVSTAYLQISSLKAEDTATYYCERegqydnWGQGTLVTVSS

#111 VK
DIQVTQSPSSLSASVGDRVTITCitsididdmnWYQQKPGKVPKLLISggntlrpGVPSRFSGSGSGTD
FTLTISSLQPEDVATYYCiqsdslpytFGQGTKLEIK

#111 VH
QVQLVQSGPELKKPGASVKVSCKASgytftnygmnWVRQAPGQGLEwmgwintytgeptyaddfkGRFVF
SLDTSVSTAYLQISSLKAEDTAVYYCERegqynnWGQGTLVTVSS

#250 VK
DIQVTQSPSSLSASVGDRVTITCitsididdmnWYQQKPGKVPKLLIShgntlrpGVPSRFSGSGSGTD
FTLTISSLQPEDVATYYCiqsdslpytFGQGTKLEIK

#250 VH
QVQLVQSGPELKKPGASVKVSCKASgytftnyqlnWVRQAPGQGLEwmgwintytgeptyaddfkGRFVFS
LDTSVSTAYLQISSLKAEDTAVYYCERegqynnWGQGTLVTVSS

#416 VK
DIQVTQSPSSLSASVGDRVTITCitsididdmnWYQQKPGKVPKLLISdgntlrpGVPSRFSGSGSGTD
FTLTISSLQPEDVATYYCiqsdslpytFGQGTKLEIK

#416 VH
QVQLVQSGPELKKPGASVKVSCKASgytftsygmnWVRQAPGQGLEwmgwintytgeptyaddfkGRFVF
SLDTSVSTAYLQISSLKAEDTAVYYCERegqynnWGQGTLVTVSS

圖10

ATGAAGAAGAATATTGCGTTCCTACTTGCCTCTATGTTTGTCTTTTCTATAGCTACAAACGCGTATGCTGAT
ATCCAGGTGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACCGCGTCACCATCACTTGCATTACC
AGCACTGATATTGATGATGATATGAACTGGTATCAGCAGAAACCAGGGAAAGTTCCTAAGCTCCTGATCTCT
GGAGGCAATACTCTTCGTCCTGGGGTCCCATCTCGGTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTC
ACCATCAGCAGCCTGCAGCCTGAAGATGTTGCAACTTATTACTGTTTGCAAAGTGATTCTTTGCCGTACACG
TTTGGCCAGGGTACCAAGGTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCCATCT
GATGAGCAGTTGAAATCTGGAACTGCTTCTGTTGTGTGCCTGCTGAATAACTTCTATCCCAGAGAGGCCAAA
GTACAGTGGAAGGTGGATAACGCCCTCCAATCGGGTAACTCCCAGGAGAGTGTCACAGAGCAGGACAGCAAG
GACAGCACCTACAGCCTCAGCAGCACCCTGACGCTGAGCAAAGCAGACTACGAGAAACACAAAGTCTACGCC
TGCGAAGTCACCCATCAGGGCCTGAGCTCGCCCGTCACAAAGAGCTTCAACAGGGGAGAGTGTTAA

(SEQ ID NO: 9)

圖11

DIQVTQSPSSLSASVGDRVTITC*ITSTDIDDDMN*WYQQKPGKVPKLLIS*GGNTLRP*GVPSRFSGSGSGTDFT
LTISSLQPEDVATYYC*LQSDSLPYT*FGQGTKVEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREA
KVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

FR1-LC: DIQVTQSPSSLSASVGDRVTITC (SEQ ID NO: 11)
FR2-LC: WYQQKPGKVPKLLIS (SEQ ID NO: 12)
FR3-LC: GVPSRFSGSGSGTDFTLTISSLQPEDVATYYC (SEQ ID NO: 13)
FR4-LC: FGQGTKVEIK (SEQ ID NO: 14)
HVR1-LC: *ITSTDIDDDMN* (SEQ ID NO: 15)
HVR2-LC: *GGNTLRP* (SEQ ID NO: 16)
HVR3-LC: *LQSDSLPYT* (SEQ ID NO: 17)
CL1:
RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTL
TLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC (SEQ ID NO: 10)

圖12

ATGAAAAAGAATATCGCATTTCTTCTTGCATCTATGTTCGTTTTTTCTATTGCTACAAACGCGTACGCTCAG
GTCCAGCTGGTGCAATCTGGGCCTGAGTTGAAGAAGCCTGGGGCCTCAGTGAAGGTTTCCTGCAAGGCTTCT
GGATACACCTTCACTAACTATGGAATGAACTGGGTGCGCCAAGCCCCTGGACAAGGGCTTGAGTGGATGGGA
TGGATTAACACCTACACTGGAGAGACAACATATGCTGATGACTTCAAGGGACGGTTTGTCTTCTCCTTGGAC
ACCTCTGTCAGCACGGCATATCTGCAGATCAGCAGCCTCAAGGCTGAGGACACTGCCGTGTATTACTGTGAG
CGCGAGGGGGGGGTTAATAACTGGGGCCAAGGGACCCTGGTCACCGTCTCCTCAGCCTCCACCAAGGGCCCA
TCGGTCTTCCCCCTGGCACCCTCCTCCAAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAG
GACTACTTCCCCGAACCGGTGACGGTGTCGTGGAACTCAGGCGCCCTGACCAGCGGCGTGCACACCTTCCCG
GCTGTCCTACAGTCCTCAGGACTCTACTCCCTCAGCAGCGTGGTGACCGTGCCCTCCAGCAGCTTGGGCACC
CAGACCTACATCTGCAACGTGAATCACAAGCCCAGCAACACCAAGGTGGACAAGAAAGTTGAGCCCAAATCT
TGTGACAAAACTCACACATAA

圖13

QVQLVQSGPELKKPGASVKVSCKAS*GYTFTNYGMN*WVRQAPGQGLEWMG*WINTYTGETTYADDFKG*RFVFSL
DTSVSTAYLQISSLKAEDTAVYYCER*EGGVNN*WGQGTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLV
KDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPK
SCDKTHT (SEQ ID NO: 19)

FR1-HC: QVQLVQSGPELKKPGASVKVSCKAS (SEQ ID NO: 20)
FR2-HC: WVRQAPGQGLEWMG (SEQ ID NO: 21)
FR3-HC: RFVFSLDTSVSTAYLQISSLKAEDTAVYYCER (SEQ ID NO: 22)
FR4-HC: WGQGTLVTVSS (SEQ ID NO: 23)
HVR1-HC: *GYTFTNYGMN* (SEQ ID NO: 24)
HVR2-HC: *WINTYTGETTYADDFKG* (SEQ ID NO: 25)
HVR3-HC: *EGGVNN* (SEQ ID NO: 26)
CH1:
ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVP
SSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHT (SEQ ID NO: 27)

圖14

ATGAAGAAGAATATTGCGTTCCTACTTGCCTCTATGTTTGTCTTTTCTATAGCTACAAACGCGTATGCTGAT
ATCCAGGTGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACCGCGTCACCATCACTTGCATTACC
AGCACTGATATTGATGATGATATGAACTGGTATCAGCAGAAACCAGGGAAAGTTCCTAAGCTCCTGATCTCT
GGAGGCAATACTCTTCGTCCTGGGGTCCCATCTCGGTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTC
ACCATCAGCAGCCTGCAGCCTGAAGATGTTGCAACTTATTACTGTTTGCAAAGTGATTCTTTGCCGTACACG
TTTGGCCAGGGTACCAAGGTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCCATCT
GATGAGCAGTTGAAATCTGGAACTGCTTCTGTTGTGTGCCTGCTGAATAACTTCTATCCCAGAGAGGCCAAA
GTACAGTGGAAGGTGGATAACGCCCTCCAATCGGGTAACTCCCAGGAGAGTGTCACAGAGCAGGACAGCAAG
GACAGCACCTACAGCCTCAGCAGCACCCTGACGCTGAGCAAAGCAGACTACGAGAAACACAAAGTCTACGCC
TGCGAAGTCACCCATCAGGGCCTGAGCTCGCCCGTCACAAAGAGCTTCAACAGGGGAGAGTGTTAA

圖15

DIQVTQSPSSLSASVGDRVTITC*ITSTDIDDDMN*WYQQKPGKVPKLLIS*GGNTLRP*GVPSRFSGSGSGTDFT
LTISSLQPEDVATYYC*LQSDSLPYT*FGQGTKVEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREA
KVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC
(SEQ ID NO: 29)

FR1-LC: DIQVTQSPSSLSASVGDRVTITC (SEQ ID NO: 30)
FR2-LC: WYQQKPGKVPKLLIS (SEQ ID NO: 31)
FR3-LC: GVPSRFSGSGSGTDFTLTISSLQPEDVATYYC (SEQ ID NO: 32)
FR4-LC: FGQGTKVEIK (SEQ ID NO: 33)
HVR1-LC: *ITSTDIDDDMN* (SEQ ID NO: 34)
HVR2-LC: *GGNTLRP* (SEQ ID NO: 35)
HVR3-LC: *LQSDSLPYT* (SEQ ID NO: 36)
CL1:
RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTL
TLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC (SEQ ID NO: 37)

圖16

ATGAAAAAGAATATCGCATTTCTTCTTGCATCTATGTTCGTTTTTTCTATTGCTACAAACGCGTACGCTGAA
GTCCAGCTGGTGCAATCTGGGCCTGAGTTGAAGAAGCCTGGGGCCTCAGTGAAGGTTTCCTGCAAGGCTTCT
GGATACACCTTCACTAACTATGGAATGAACTGGGTGCGCCAAGCCCCTGGACAAGGGCTTGAGTGGATGGGA
TGGATTAACACCTACACTGGAGAGACAACATATGCTGATGACTTCAAGGGACGGTTTGTCTTCTCCTTGGAC
ACCTCTGTCAGCACGGCATATCTGCAGATCAGCAGCCTCAAGGCTGAGGACACTGCCGTGTATTACTGTGAG
CGCGAGGGGGGGGTTAATAACTGGGGCCAAGGGACCCTGGTCACCGTCTCCTCAGCCTCCACCAAGGGCCCA
TCGGTCTTCCCCCTGGCACCCTCCTCCAAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAG
GACTACTTCCCCGAACCGGTGACGGTGTCGTGGAACTCAGGCGCCCTGACCAGCGGCGTGCACACCTTCCCG
GCTGTCCTACAGTCCTCAGGACTCTACTCCCTCAGCAGCGTGGTGACCGTGCCCTCCAGCAGCTTGGGCACC
CAGACCTACATCTGCAACGTGAATCACAAGCCCAGCAACACCAAGGTGGACAAGAAAGTTGAGCCCAAATCT
TGTGACAAAACTCACACATAA

圖17

EVQLVQSGPELKKPGASVKVSCKAS*GYTFTNYGMN*WVRQAPGQGLEWMG*WINTYTGETTYADDFKG*RFVFSL
DTSVSTAYLQISSLKAEDTAVYYCER*EGGVNN*WGQGTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLV
KDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPK
SCDKTHT (SEQ ID NO: 31)

FR1-HC: EVQLVQSGPELKKPGASVKVSCKAS (SEQ ID NO: 32)
FR2-HC: WVRQAPGQGLEWMG (SEQ ID NO: 33)
FR3-HC: RFVFSLDTSVSTAYLQISSLKAEDTAVYYCER (SEQ ID NO: 34)
FR4-HC: WGQGTLVTVSS (SEQ ID NO: 35)
HVR1-HC: *GYTFTNYGMN* (SEQ ID NO: 36)
HVR2-HC: *WINTYTGETTYADDFKG* (SEQ ID NO: 37)
HVR3-HC: *EGGVNN* (SEQ ID NO: 38)
CH1:
ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVP
SSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHT (SEQ ID NO: 39)

圖18

Asp Ile Gln Val Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val

Gly Asp Arg Val Thr Ile Thr Cys Ile Thr Ser Thr Asp Ile Asp

Asp Asp Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys

Leu Leu Ile Ser Gly Gly Asn Thr Leu Arg Pro Gly Val Pro Ser

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile

Ser Ser Leu Gln Pro Glu Asp Val Ala Thr Tyr Tyr Cys Leu Gln

Ser Asp Ser Leu Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu

Ile Lys

圖19

Gln Val Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr

Asn Tyr Gly Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu

Glu Trp Met Gly Trp Ile Asn Thr Tyr Thr Gly Glu Thr Thr Tyr

Ala Asp Asp Phe Lys Gly Arg Phe Val Phe Ser Leu Asp Thr Ser

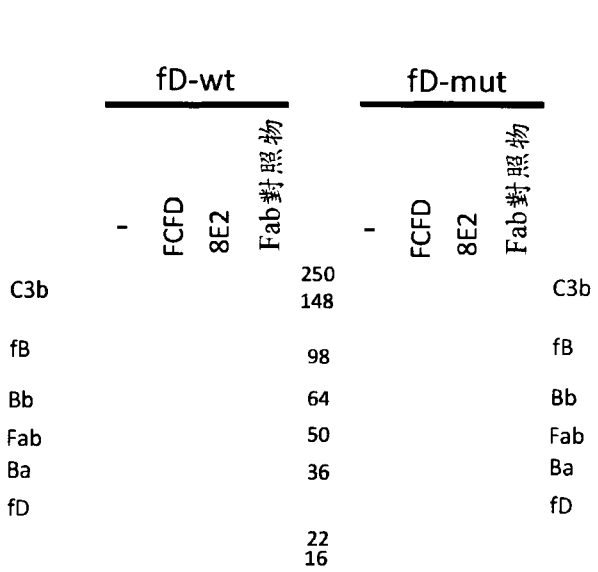
Val Ser Thr Ala Tyr Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp

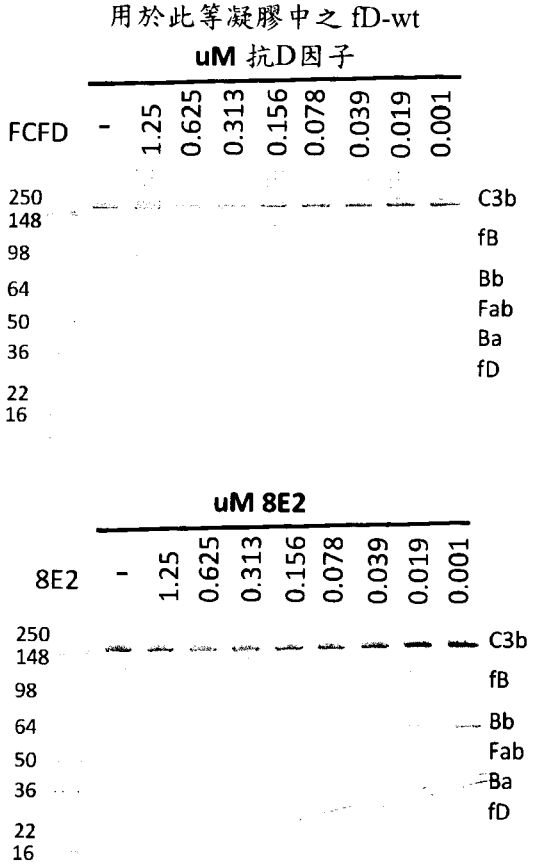
Thr Ala Val Tyr Tyr Cys Glu Arg Glu Gly Gly Val Asn Asn Trp

Gly Gln Gly Thr Leu Val Thr Val Ser Ser

圖20

抗 D 因子(FCFD)抑制 fD 對 fB 之裂解
fD-mut 呈非活性





最終濃度
fD-wt= 125 nM
fD-mut= 125 nM
fB= 500 nM
C3b 500 nM
FCFD= 1.25 uM
8E2= 1.25 uM
抗第二型穿膜絲胺酸蛋白酶（Anti-hepsin）hIgG= 1.25 uM

圖21

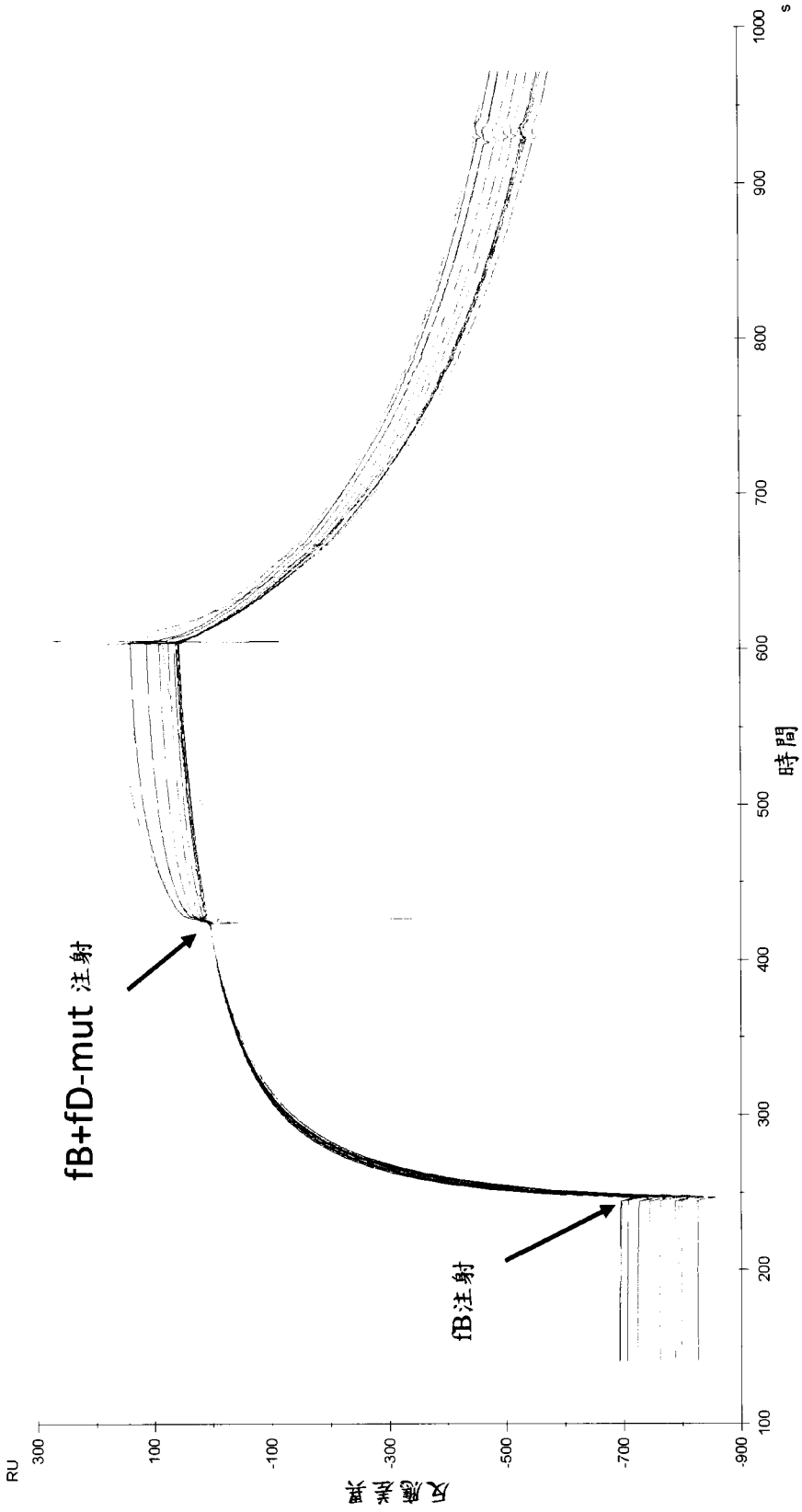
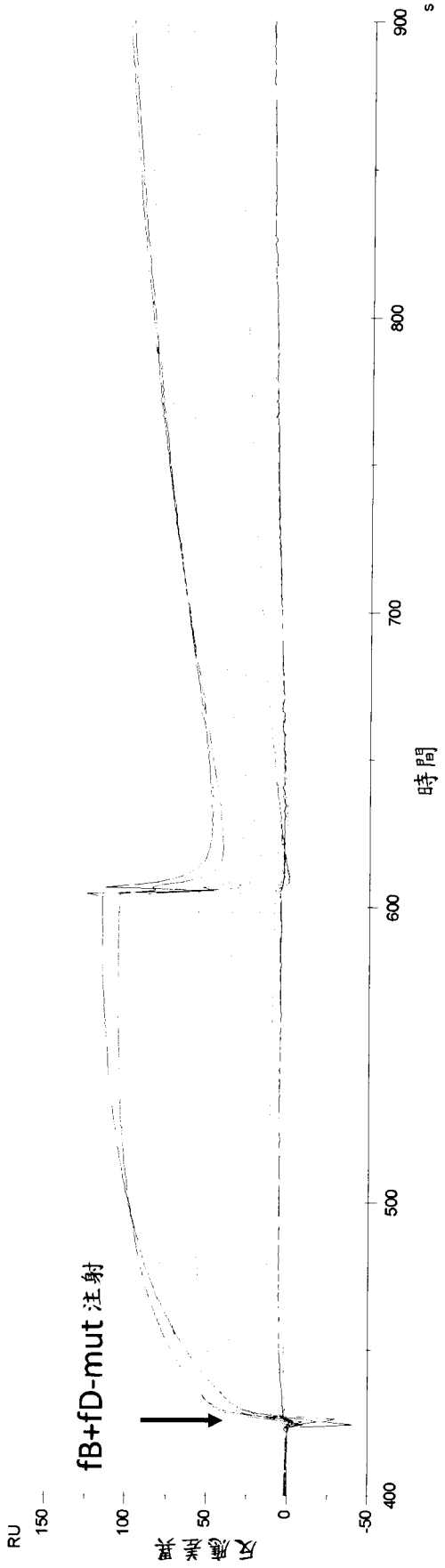

D 因子對 C3bB 之結合(Biacore 分析)
fB+fD-mut 注射
fB注射
反應差異
RU
300
100
-100
-300
-500
-700
-900
100
200
300
400
500
600
700
800
900
1000
s
時間

圖22


自 fD-mut 扣除 fB 結合
fB+fD-mut 注射
反應差異
RU
150
100
50
0
-50
400
500
600
700
800
900
s
時間

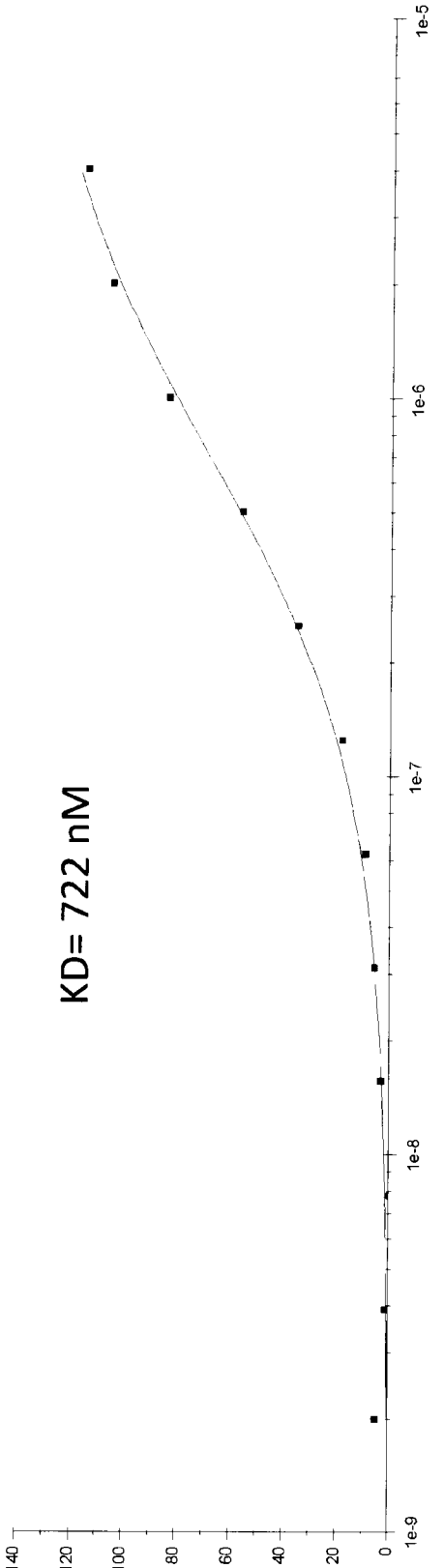

KD= 722 nM
140
120
100
80
60
40
20
0
1e-9
1e-8
1e-7
1e-6
1e-5

圖23

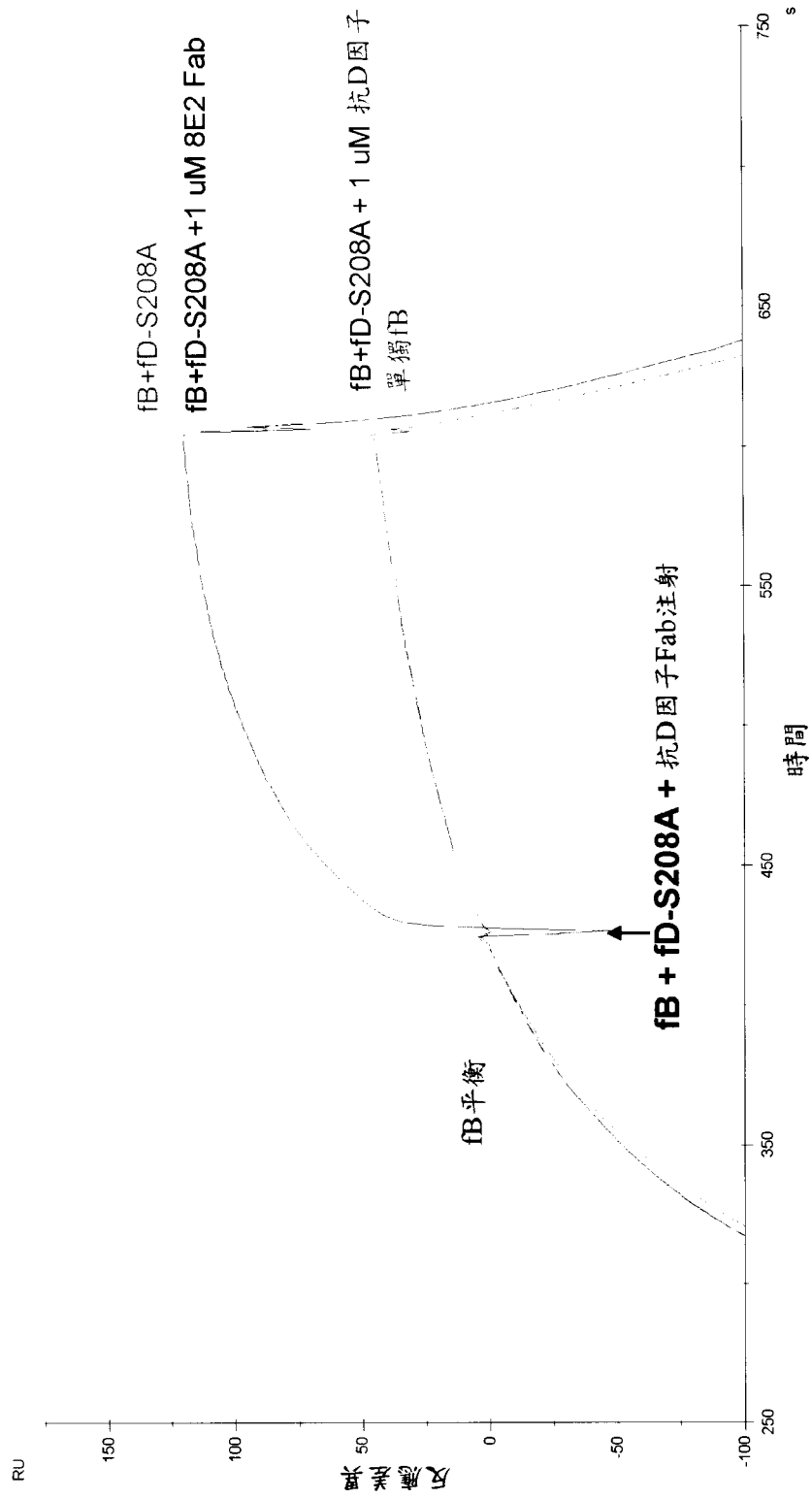

抗 D 因子(FCFD)阻斷 fB 結合 fD-mut
1 μM fB+1 μM fD(S208A)(PUR232122)+滴定之 8E2 Fab
fB+fD-S208A
fB+fD-S208A +1 uM 8E2 Fab
fB+fD-S208A + 1 uM 抗D因子
單獨fB
fB平衡
fB + fD-S208A + 抗D因子Fab注射
反應差異
RU
150
100
50
0
-50
-100
250
350
450
550
650
750
s
時間

圖24

抗 D 因子(FCFD)阻斷 fB 結合 fD-mut

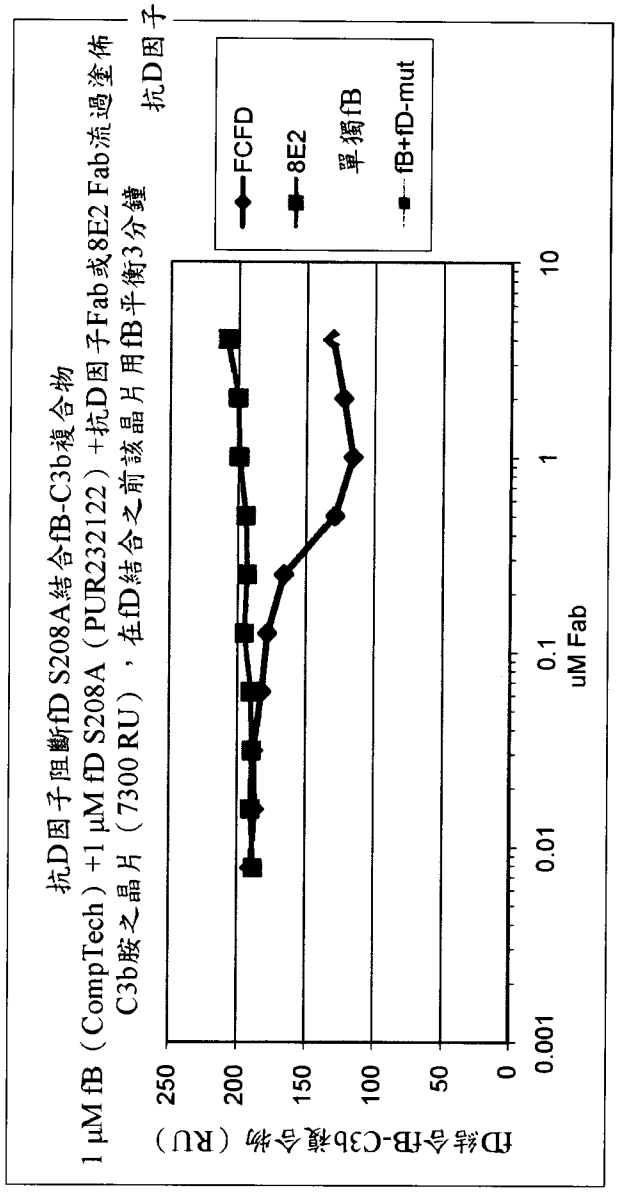


圖 25

抗 D 因子(FCFD)不阻斷小受質之蛋白水解
FCFD 增強絲胺酸蛋白酶受質 Z-Lys-SBzl fD 裂解

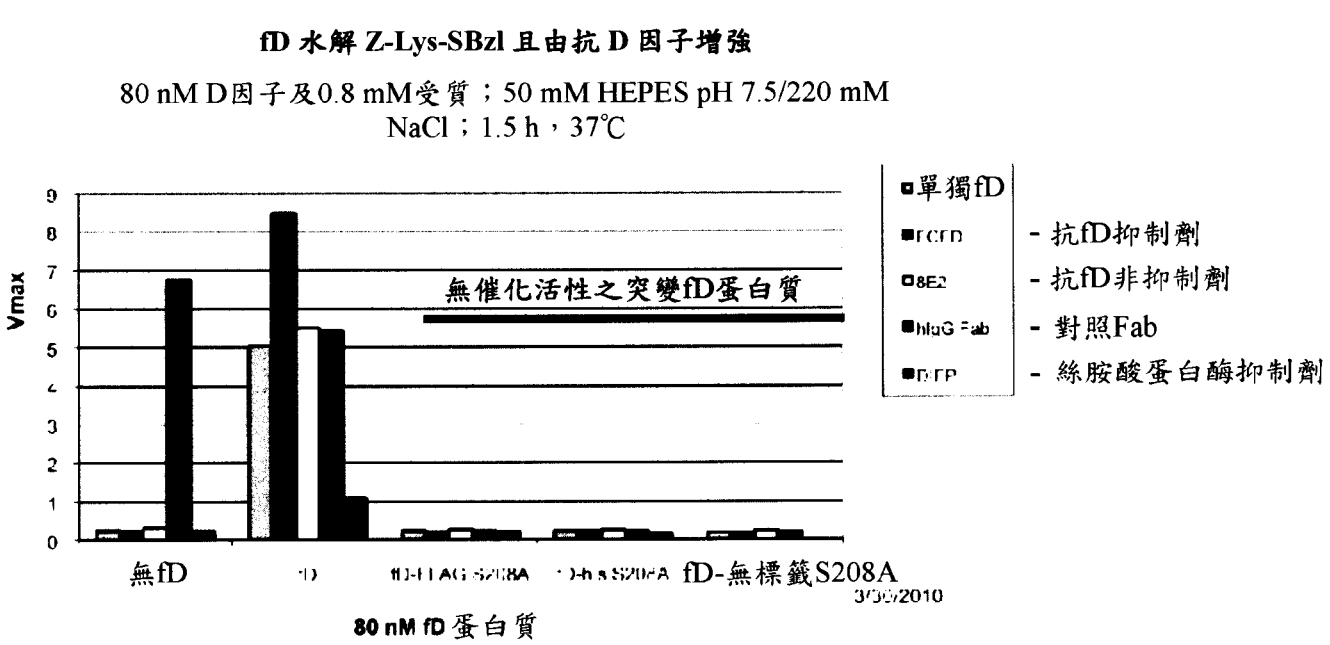
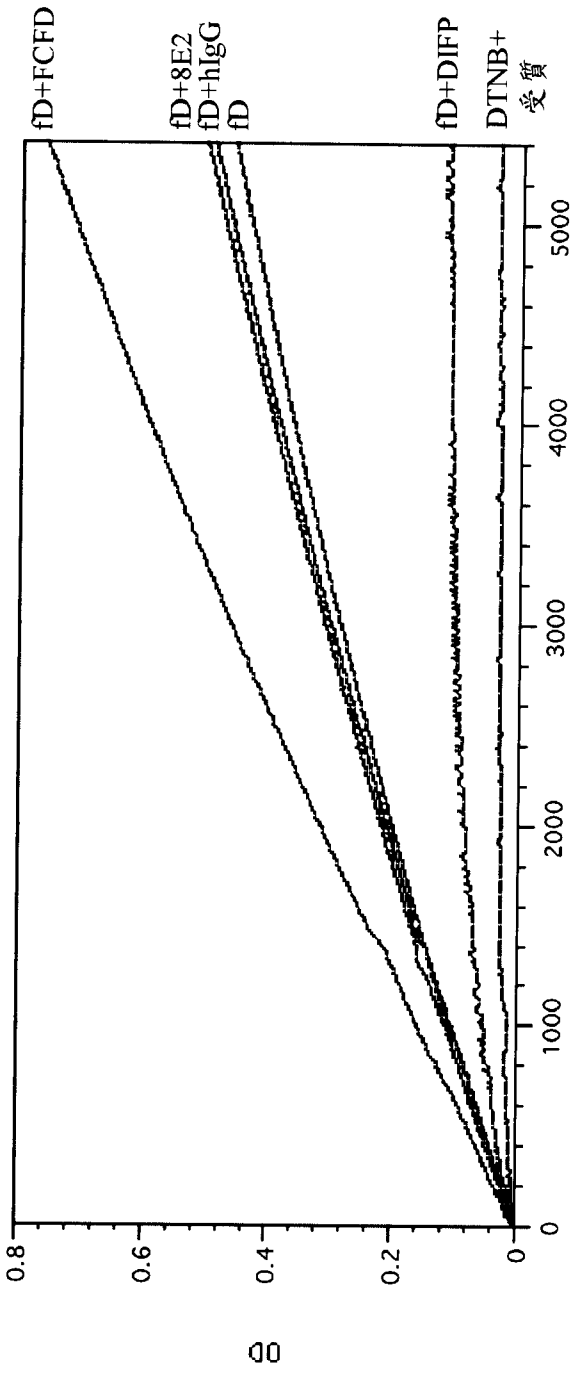


圖26

抗 D 因子(FCFD)不阻斷小受質之蛋白水解

fD 及 fD+抗 D 因子(FCFD)裂解 Z-Lys-BSzl



孔	B3	B4	B5	B6	B7	B8
Vmax	0.279	5.043	8.485	1.071	5.427	5.507
R^2	0.764	0.995	0.997	0.842	0.996	0.996

DTNB+ 受質　fD　fD+FCFD　fD+DIFP　fD+hIgG　fD+8E2

圖27

D 因子介導之替代路徑 C3 轉化酶形成：被抗 fD Fab 阻斷

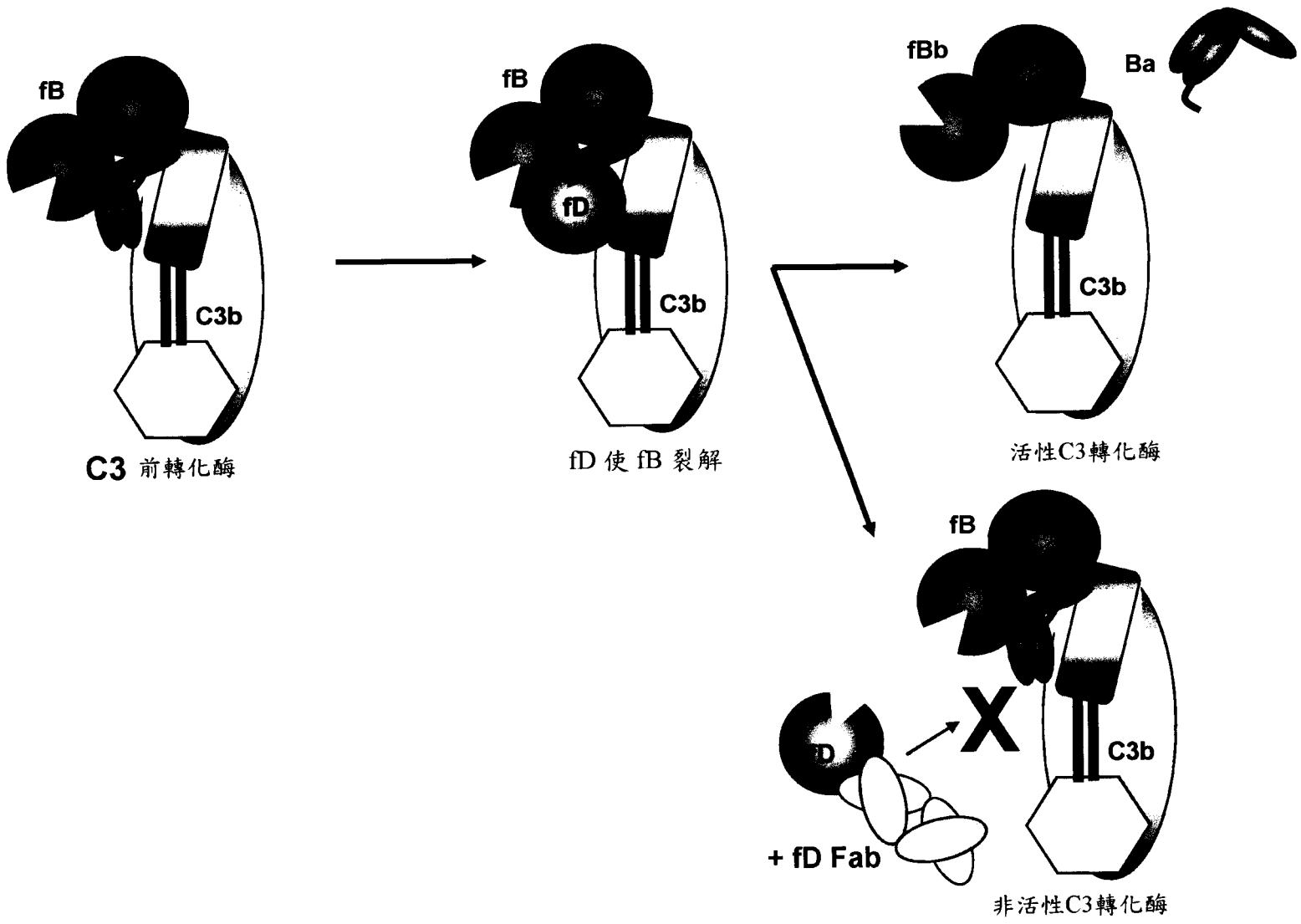


圖28

附錄1A

附錄1A.txt

附錄1A：人類D因子:抗D因子Fab之結構座標

```
REMARK   3 REFINEMENT.
REMARK   3   PROGRAM     : REFMAC 5.2.0019
REMARK   3   AUTHORS     : MURSHUDOV,VAGIN,DODSON
REMARK   3
REMARK   3    REFINEMENT TARGET : MAXIMUM LIKELIHOOD
REMARK   3
REMARK   3  DATA USED IN REFINEMENT.
REMARK   3   RESOLUTION RANGE HIGH (ANGSTROMS) :   2.42
REMARK   3   RESOLUTION RANGE LOW  (ANGSTROMS) :  20.00
REMARK   3   DATA CUTOFF            (SIGMA(F)) : NONE
REMARK   3   COMPLETENESS FOR RANGE        (%) :  98.65
REMARK   3   NUMBER OF REFLECTIONS             :   57310
REMARK   3
REMARK   3  FIT TO DATA USED IN REFINEMENT.
REMARK   3   CROSS-VALIDATION METHOD          : THROUGHOUT
REMARK   3   FREE R VALUE TEST SET SELECTION  : RANDOM
REMARK   3   R VALUE     (WORKING + TEST SET) : 0.21584
REMARK   3   R VALUE           (WORKING SET) : 0.21286
REMARK   3   FREE R VALUE                     :  0.27248
REMARK   3   FREE R VALUE TEST SET SIZE   (%) :  5.1
REMARK   3   FREE R VALUE TEST SET COUNT      :  3064
REMARK   3
REMARK   3  FIT IN THE HIGHEST RESOLUTION BIN.
REMARK   3   TOTAL NUMBER OF BINS USED           :     25
REMARK   3   BIN RESOLUTION RANGE HIGH           :   2.420
REMARK   3   BIN RESOLUTION RANGE LOW            :   2.469
REMARK   3   REFLECTION IN BIN     (WORKING SET) :    3329
REMARK   3   BIN COMPLETENESS (WORKING+TEST) (%) :   99.35
REMARK   3   BIN R VALUE           (WORKING SET) :   0.298
REMARK   3   BIN FREE R VALUE SET COUNT          :     174
REMARK   3   BIN FREE R VALUE                    :   0.413
REMARK   3
REMARK   3  NUMBER OF NON-HYDROGEN ATOMS USED IN REFINEMENT.
REMARK   3   ALL ATOMS                :    10273
REMARK   3
REMARK   3  B VALUES.
REMARK   3   FROM WILSON PLOT           (A**2) : NULL
REMARK   3   MEAN B VALUE      (OVERALL, A**2) :  38.909
REMARK   3   OVERALL ANISOTROPIC B VALUE.
REMARK   3    B11 (A**2) :    -2.06
REMARK   3    B22 (A**2) :    -2.06
REMARK   3    B33 (A**2) :     4.11
REMARK   3    B12 (A**2) :     0.00
REMARK   3    B13 (A**2) :     0.00
REMARK   3    B23 (A**2) :     0.00
REMARK   3
REMARK   3  ESTIMATED OVERALL COORDINATE ERROR.
REMARK   3   ESU BASED ON R VALUE                                (A):   0.419
REMARK   3   ESU BASED ON FREE R VALUE                           (A):   0.285
REMARK   3   ESU BASED ON MAXIMUM LIKELIHOOD                     (A):   0.220
REMARK   3   ESU FOR B VALUES BASED ON MAXIMUM LIKELIHOOD (A**2):  18.683
REMARK   3
REMARK   3 CORRELATION COEFFICIENTS.
REMARK   3   CORRELATION COEFFICIENT FO-FC      :   0.944
REMARK   3   CORRELATION COEFFICIENT FO-FC FREE :   0.914
REMARK   3
REMARK   3  RMS DEVIATIONS FROM IDEAL VALUES        COUNT    RMS    WEIGHT
REMARK   3   BOND LENGTHS REFINED ATOMS        (A): 10161 ; 0.012 ; 0.022
REMARK   3   BOND LENGTHS OTHERS               (A):  6784 ; 0.002 ; 0.020
REMARK   3   BOND ANGLES REFINED ATOMS   (DEGREES): 13846 ; 1.421 ; 1.959
REMARK   3   BOND ANGLES OTHERS          (DEGREES): 16591 ; 0.940 ; 3.004
REMARK   3   TORSION ANGLES, PERIOD 1    (DEGREES):  1311 ; 9.697 ; 5.000
REMARK   3   TORSION ANGLES, PERIOD 2    (DEGREES):   402 ;37.347 ;24.279
REMARK   3   TORSION ANGLES, PERIOD 3    (DEGREES):  1626 ;17.488 ;15.000
REMARK   3   TORSION ANGLES, PERIOD 4    (DEGREES):    54 ;16.500 ;15.000
REMARK   3   CHIRAL-CENTER RESTRAINTS       (A**3):  1574 ; 0.079 ; 0.200
REMARK   3   GENERAL PLANES REFINED ATOMS      (A): 11375 ; 0.005 ; 0.020
REMARK   3   GENERAL PLANES OTHERS             (A):  1933 ; 0.002 ; 0.020
REMARK   3   NON-BONDED CONTACTS REFINED ATOMS (A):  1764 ; 0.201 ; 0.200
REMARK   3   NON-BONDED CONTACTS OTHERS        (A):  7017 ; 0.201 ; 0.200
REMARK   3   NON-BONDED TORSION REFINED ATOMS  (A):  4720 ; 0.173 ; 0.200
REMARK   3   NON-BONDED TORSION OTHERS         (A):  5711 ; 0.086 ; 0.200
REMARK   3   H-BOND (X...Y) REFINED ATOMS      (A):   423 ; 0.175 ; 0.200
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REMARK   3   H-BOND (X...Y) OTHERS             (A):     3 ; 0.207 ; 0.200
REMARK   3   SYMMETRY VDW REFINED ATOMS        (A):    29 ; 0.218 ; 0.200
REMARK   3   SYMMETRY VDW OTHERS               (A):    88 ; 0.259 ; 0.200
REMARK   3   SYMMETRY H-BOND REFINED ATOMS     (A):    12 ; 0.284 ; 0.200
REMARK   3
REMARK   3  ISOTROPIC THERMAL FACTOR RESTRAINTS.     COUNT   RMS     WEIGHT
REMARK   3   MAIN-CHAIN BOND REFINED ATOMS  (A**2):  8380 ; 3.169 ; 2.500
REMARK   3   MAIN-CHAIN BOND OTHER ATOMS    (A**2):  2669 ; 0.624 ; 2.500
REMARK   3   MAIN-CHAIN ANGLE REFINED ATOMS (A**2): 10576 ; 4.155 ; 5.000
REMARK   3   SIDE-CHAIN BOND REFINED ATOMS  (A**2):  4199 ; 3.191 ; 2.500
REMARK   3   SIDE-CHAIN ANGLE REFINED ATOMS (A**2):  3270 ; 4.451 ; 5.000
REMARK   3
REMARK   3  NCS RESTRAINTS STATISTICS
REMARK   3   NUMBER OF DIFFERENT NCS GROUPS :   3
REMARK   3
REMARK   3  NCS GROUP NUMBER                 :   1
REMARK   3     CHAIN NAMES                   : A B
REMARK   3     NUMBER OF COMPONENTS NCS GROUP :    1
REMARK   3       COMPONENT C  SSSEQI  TO  C   SSSEQI   CODE
REMARK   3           1     A     16       A     243      3
REMARK   3           1     B     16       B     243      3
REMARK   3                   GROUP CHAIN          COUNT   RMS     WEIGHT
REMARK   3   TIGHT POSITIONAL   1    A    (A):    1331 ;  0.05 ;  0.05
REMARK   3   LOOSE POSITIONAL   1    A    (A):    1573 ;  0.32 ;  5.00
REMARK   3   TIGHT THERMAL      1    A (A**2):    1331 ;  0.13 ;  0.50
REMARK   3   LOOSE THERMAL      1    A (A**2):    1573 ;  2.90 ; 10.00
REMARK   3
REMARK   3  NCS GROUP NUMBER                 :   2
REMARK   3     CHAIN NAMES                   : L D
REMARK   3     NUMBER OF COMPONENTS NCS GROUP :    2
REMARK   3       COMPONENT C  SSSEQI  TO  C   SSSEQI   CODE
REMARK   3           1     L      1       L     109      3
REMARK   3           1     D      1       D     109      3
REMARK   3           2     L    110       L     214      3
REMARK   3           2     D    110       D     214      3
REMARK   3                   GROUP CHAIN          COUNT   RMS     WEIGHT
REMARK   3   TIGHT POSITIONAL   2    L    (A):    1250 ;  0.04 ;  0.05
REMARK   3   LOOSE POSITIONAL   2    L    (A):    1480 ;  0.46 ;  5.00
REMARK   3   TIGHT THERMAL      2    L (A**2):    1250 ;  0.16 ;  0.50
REMARK   3   LOOSE THERMAL      2    L (A**2):    1480 ;  3.01 ; 10.00
REMARK   3
REMARK   3  NCS GROUP NUMBER                 :   3
REMARK   3     CHAIN NAMES                   : H E
REMARK   3     NUMBER OF COMPONENTS NCS GROUP :    2
REMARK   3       COMPONENT C  SSSEQI  TO  C   SSSEQI   CODE
REMARK   3           1     H      1       H     120      3
REMARK   3           1     E      1       E     120      3
REMARK   3           2     H    121       H     224      3
REMARK   3           2     E    121       E     224      3
REMARK   3                   GROUP CHAIN          COUNT   RMS     WEIGHT
REMARK   3   TIGHT POSITIONAL   3    H    (A):    1262 ;  0.07 ;  0.05
REMARK   3   LOOSE POSITIONAL   3    H    (A):    1444 ;  0.52 ;  5.00
REMARK   3   TIGHT THERMAL      3    H (A**2):    1262 ;  0.14 ;  0.50
REMARK   3   LOOSE THERMAL      3    H (A**2):    1444 ;  2.53 ; 10.00
REMARK   3
REMARK   3
REMARK   3  TLS DETAILS
REMARK   3   NUMBER OF TLS GROUPS  :    1
REMARK   3   ATOM RECORD CONTAINS RESIDUAL B FACTORS ONLY
REMARK   3
REMARK   3   TLS GROUP :      1
REMARK   3    NUMBER OF COMPONENTS GROUP :   10
REMARK   3    COMPONENTS        C SSSEQI   TO  C SSSEQI
REMARK   3    RESIDUE RANGE :   A    16        A   243
REMARK   3    RESIDUE RANGE :   L     1        L   109
REMARK   3    RESIDUE RANGE :   L   110        L   214
REMARK   3    RESIDUE RANGE :   H     1        H   120
REMARK   3    RESIDUE RANGE :   H   121        H   224
REMARK   3    RESIDUE RANGE :   B    16        B   243
REMARK   3    RESIDUE RANGE :   D     1        D   109
REMARK   3    RESIDUE RANGE :   D   110        D   214
REMARK   3    RESIDUE RANGE :   E     1        E   120
REMARK   3    RESIDUE RANGE :   E   121        E   224
REMARK   3    ORIGIN FOR THE GROUP (A): -29.9532   3.2516 -32.8996
REMARK   3    T TENSOR
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REMARK   3      T11:  -0.0677 T22:  -0.0717
REMARK   3      T33:  -0.0051 T12:   0.0211
REMARK   3      T13:   0.0318 T23:   0.0562
REMARK   3    L TENSOR
REMARK   3      L11:   0.0559 L22:   0.1507
REMARK   3      L33:   0.2071 L12:  -0.0360
REMARK   3      L13:  -0.0974 L23:   0.1319
REMARK   3    S TENSOR
REMARK   3      S11:  -0.0182 S12:  -0.0019 S13:   0.0558
REMARK   3      S21:  -0.0609 S22:  -0.0301 S23:   0.0813
REMARK   3      S31:  -0.0569 S32:  -0.1069 S33:   0.0484
REMARK   3
REMARK   3
REMARK   3  BULK SOLVENT MODELLING.
REMARK   3   METHOD USED :  MASK
REMARK   3   PARAMETERS FOR MASK CALCULATION
REMARK   3   VDW PROBE RADIUS   :   1.40
REMARK   3   ION PROBE RADIUS   :   0.80
REMARK   3   SHRINKAGE RADIUS   :   0.80
REMARK   3
REMARK   3  OTHER REFINEMENT REMARKS:
REMARK   3  HYDROGENS HAVE BEEN ADDED IN THE RIDING POSITIONS
REMARK   3
SSBOND   1 CYS A   41    CYS A   57
SSBOND   2 CYS A  138    CYS A  204
SSBOND   3 CYS A  169    CYS A  185
SSBOND   4 CYS A  194    CYS A  219
SSBOND   5 CYS L   23    CYS L   88
SSBOND   6 CYS L  134    CYS L  194
SSBOND   7 CYS H   22    CYS H   96
SSBOND   8 CYS H  148    CYS H  204
SSBOND   9 CYS B   41    CYS B   57
SSBOND  10 CYS B  138    CYS B  204
SSBOND  11 CYS B  169    CYS B  185
SSBOND  12 CYS B  194    CYS B  219
SSBOND  13 CYS E   22    CYS E   96
SSBOND  14 CYS E  148    CYS E  204
SSBOND  15 CYS D   23    CYS D   88
SSBOND  16 CYS D  134    CYS D  194
SSBOND  17 CYS L  214    CYS H  224
CISPEP   1 ALA A   61    ALA A   62                    0.00
CISPEP   2 SER L    7    PRO L    8                    0.00
CISPEP   3 LEU L   94    PRO L   95                    0.00
CISPEP   4 TYR L  140    PRO L  141                    0.00
CISPEP   5 GLU H   99    GLY H  100                    0.00
CISPEP   6 PHE H  154    PRO H  155                    0.00
CISPEP   7 GLU H  156    PRO H  157                    0.00
CISPEP   8 ARG B  151    ARG B  152                    0.00
CISPEP   9 GLU E   99    GLY E  100                    0.00
CISPEP  10 PHE E  154    PRO E  155                    0.00
CISPEP  11 GLU E  156    PRO E  157                    0.00
CISPEP  12 SER D    7    PRO D    8                    0.00
CISPEP  13 LEU D   94    PRO D   95                    0.00
CISPEP  14 TYR D  140    PRO D  141                    0.00
LINK         C   GLY H 101                 N   VAL H 108                 TRANS
LINK         C   GLY E 101                 N   VAL E 108                 TRANS
CRYST1  132.048  132.048  180.288  90.00  90.00  90.00 P 43 21 2
SCALE1      0.007573  0.000000  0.000000        0.00000
SCALE2      0.000000  0.007573  0.000000        0.00000
SCALE3      0.000000  0.000000  0.005547        0.00000
ATOM      1  N   ILE A  16     -35.933  24.398   8.493  1.00 36.83      A    N
ATOM      2  CA  ILE A  16     -36.360  23.498   7.363  1.00 41.06      A    C
ATOM      4  CB  ILE A  16     -37.627  22.666   7.743  1.00 34.42      A    C
ATOM      6  CG1 ILE A  16     -37.370  21.869   9.023  1.00 32.96      A    C
ATOM      9  CD1 ILE A  16     -36.159  20.919   8.948  1.00 27.50      A    C
ATOM     13  CG2 ILE A  16     -38.055  21.731   6.587  1.00 32.42      A    C
ATOM     17  C   ILE A  16     -36.638  24.279   6.067  1.00 41.65      A    C
ATOM     18  O   ILE A  16     -37.532  25.114   6.024  1.00 40.98      A    O
ATOM     22  N   LEU A  17     -35.864  23.993   5.023  1.00 43.46      A    N
ATOM     23  CA  LEU A  17     -35.991  24.686   3.739  1.00 43.61      A    C
ATOM     25  CB  LEU A  17     -34.611  25.096   3.210  1.00 42.45      A    C
ATOM     28  CG  LEU A  17     -34.473  25.839   1.879  1.00 42.83      A    C
ATOM     30  CD1 LEU A  17     -33.414  26.949   2.005  1.00 45.73      A    C
ATOM     34  CD2 LEU A  17     -34.102  24.909   0.733  1.00 37.92      A    C
ATOM     38  C   LEU A  17     -36.686  23.786   2.736  1.00 43.19      A    C
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ATOM	39	O	LEU	A	17	-36.436	22.586	2.693	1.00	39.42	A	O
ATOM	41	N	GLY	A	18	-37.579	24.376	1.941	1.00	43.33	A	N
ATOM	42	CA	GLY	A	18	-38.346	23.633	0.963	1.00	44.58	A	C
ATOM	45	C	GLY	A	18	-39.255	22.603	1.602	1.00	46.38	A	C
ATOM	46	O	GLY	A	18	-39.563	21.580	1.004	1.00	46.62	A	O
ATOM	48	N	GLY	A	19	-39.690	22.881	2.821	1.00	49.02	A	N
ATOM	49	CA	GLY	A	19	-40.616	22.016	3.517	1.00	52.22	A	C
ATOM	52	C	GLY	A	19	-41.939	22.738	3.649	1.00	55.09	A	C
ATOM	53	O	GLY	A	19	-42.236	23.661	2.880	1.00	52.71	A	O
ATOM	55	N	ARG	A	20	-42.724	22.321	4.635	1.00	55.28	A	N
ATOM	56	CA	ARG	A	20	-44.012	22.941	4.907	1.00	58.38	A	C
ATOM	58	CB	ARG	A	20	-45.077	22.319	4.017	1.00	63.11	A	C
ATOM	61	CG	ARG	A	20	-45.396	20.887	4.354	1.00	64.33	A	C
ATOM	64	CD	ARG	A	20	-45.978	20.194	3.154	1.00	68.28	A	C
ATOM	67	NE	ARG	A	20	-46.607	18.929	3.511	1.00	72.11	A	N
ATOM	69	CZ	ARG	A	20	-47.381	18.221	2.696	1.00	74.91	A	C
ATOM	70	NH1	ARG	A	20	-47.629	18.649	1.458	1.00	76.67	A	N
ATOM	73	NH2	ARG	A	20	-47.911	17.077	3.118	1.00	74.61	A	N
ATOM	76	C	ARG	A	20	-44.379	22.749	6.364	1.00	55.89	A	C
ATOM	77	O	ARG	A	20	-43.754	21.946	7.051	1.00	54.18	A	O
ATOM	79	N	GLU	A	21	-45.389	23.485	6.824	1.00	53.26	A	N
ATOM	80	CA	GLU	A	21	-45.786	23.456	8.231	1.00	51.44	A	C
ATOM	82	CB	GLU	A	21	-46.968	24.386	8.502	1.00	50.34	A	C
ATOM	85	CG	GLU	A	21	-47.146	24.710	9.982	1.00	49.81	A	C
ATOM	88	CD	GLU	A	21	-48.394	25.525	10.277	1.00	49.85	A	C
ATOM	89	OE1	GLU	A	21	-48.805	26.356	9.427	1.00	46.48	A	O
ATOM	90	OE2	GLU	A	21	-48.955	25.335	11.377	1.00	44.76	A	O
ATOM	91	C	GLU	A	21	-46.172	22.062	8.690	1.00	48.95	A	C
ATOM	92	O	GLU	A	21	-46.926	21.348	8.014	1.00	48.12	A	O
ATOM	94	N	ALA	A	22	-45.676	21.686	9.859	1.00	47.00	A	N
ATOM	95	CA	ALA	A	22	-46.043	20.423	10.461	1.00	47.91	A	C
ATOM	97	CB	ALA	A	22	-45.055	20.055	11.535	1.00	44.41	A	C
ATOM	101	C	ALA	A	22	-47.472	20.504	11.025	1.00	50.30	A	C
ATOM	102	O	ALA	A	22	-47.977	21.595	11.336	1.00	46.54	A	O
ATOM	104	N	GLU	A	23	-48.132	19.352	11.121	1.00	52.50	A	N
ATOM	105	CA	GLU	A	23	-49.432	19.266	11.787	1.00	51.01	A	C
ATOM	107	CB	GLU	A	23	-50.137	17.939	11.493	1.00	54.61	A	C
ATOM	110	CG	GLU	A	23	-51.582	17.847	12.059	1.00	57.03	A	C
ATOM	113	CD	GLU	A	23	-52.046	16.406	12.309	1.00	58.09	A	C
ATOM	114	OE1	GLU	A	23	-51.696	15.515	11.499	1.00	60.27	A	O
ATOM	115	OE2	GLU	A	23	-52.758	16.167	13.313	1.00	55.07	A	O
ATOM	116	C	GLU	A	23	-49.185	19.419	13.281	1.00	49.17	A	C
ATOM	117	O	GLU	A	23	-48.361	18.709	13.858	1.00	49.61	A	O
ATOM	119	N	ALA	A	24	-49.890	20.358	13.895	1.00	49.19	A	N
ATOM	120	CA	ALA	A	24	-49.694	20.695	15.300	1.00	46.33	A	C
ATOM	122	CB	ALA	A	24	-50.772	21.641	15.766	1.00	39.76	A	C
ATOM	126	C	ALA	A	24	-49.652	19.477	16.198	1.00	46.69	A	C
ATOM	127	O	ALA	A	24	-50.564	18.660	16.192	1.00	50.29	A	O
ATOM	129	N	HIS	A	25	-48.558	19.345	16.938	1.00	49.73	A	N
ATOM	130	CA	HIS	A	25	-48.395	18.314	17.966	1.00	48.10	A	C
ATOM	132	CB	HIS	A	25	-49.397	18.567	19.099	1.00	43.11	A	C
ATOM	135	CG	HIS	A	25	-49.495	20.008	19.511	1.00	37.95	A	C
ATOM	136	ND1	HIS	A	25	-50.596	20.786	19.225	1.00	34.73	A	N
ATOM	138	CE1	HIS	A	25	-50.405	22.007	19.694	1.00	36.64	A	C
ATOM	140	NE2	HIS	A	25	-49.218	22.050	20.275	1.00	34.83	A	N
ATOM	142	CD2	HIS	A	25	-48.627	20.816	20.171	1.00	32.01	A	C
ATOM	144	C	HIS	A	25	-48.464	16.859	17.453	1.00	47.71	A	C
ATOM	145	O	HIS	A	25	-48.643	15.936	18.235	1.00	46.96	A	O
ATOM	147	N	ALA	A	26	-48.298	16.670	16.143	1.00	49.94	A	N
ATOM	148	CA	ALA	A	26	-48.220	15.344	15.525	1.00	49.10	A	C
ATOM	150	CB	ALA	A	26	-48.396	15.463	14.006	1.00	45.29	A	C
ATOM	154	C	ALA	A	26	-46.883	14.661	15.855	1.00	48.93	A	C
ATOM	155	O	ALA	A	26	-46.753	13.450	15.710	1.00	46.39	A	O
ATOM	157	N	ARG	A	27	-45.894	15.458	16.274	1.00	50.65	A	N
ATOM	158	CA	ARG	A	27	-44.578	14.957	16.700	1.00	48.98	A	C
ATOM	160	CB	ARG	A	27	-43.462	15.571	15.856	1.00	45.34	A	C
ATOM	163	CG	ARG	A	27	-43.455	15.075	14.440	1.00	42.94	A	C
ATOM	166	CD	ARG	A	27	-42.647	15.958	13.495	1.00	46.79	A	C
ATOM	169	NE	ARG	A	27	-42.858	15.535	12.101	1.00	48.58	A	N
ATOM	171	CZ	ARG	A	27	-43.946	15.803	11.381	1.00	48.45	A	C
ATOM	172	NH1	ARG	A	27	-44.941	16.518	11.889	1.00	53.38	A	N
ATOM	175	NH2	ARG	A	27	-44.044	15.367	10.141	1.00	49.31	A	N
ATOM	178	C	ARG	A	27	-44.387	15.319	18.159	1.00	46.44	A	C
ATOM	179	O	ARG	A	27	-43.764	16.322	18.473	1.00	45.92	A	O
ATOM	181	N	PRO	A	28	-44.975	14.528	19.060	1.00	46.69	A	N

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ATOM	182	CA	PRO	A	28	-44.983	14.892	20.481	1.00	47.13	A	C
ATOM	184	CB	PRO	A	28	-45.903	13.831	21.113	1.00	43.80	A	C
ATOM	187	CG	PRO	A	28	-45.864	12.701	20.182	1.00	45.08	A	C
ATOM	190	CD	PRO	A	28	-45.705	13.277	18.813	1.00	42.33	A	C
ATOM	193	C	PRO	A	28	-43.599	14.902	21.130	1.00	47.05	A	C
ATOM	194	O	PRO	A	28	-43.431	15.489	22.202	1.00	43.54	A	O
ATOM	195	N	TYR	A	29	-42.632	14.259	20.467	1.00	46.51	A	N
ATOM	196	CA	TYR	A	29	-41.254	14.208	20.917	1.00	43.60	A	C
ATOM	198	CB	TYR	A	29	-40.548	13.034	20.252	1.00	41.11	A	C
ATOM	201	CG	TYR	A	29	-40.682	13.000	18.747	1.00	41.48	A	C
ATOM	202	CD1	TYR	A	29	-39.857	13.789	17.923	1.00	40.62	A	C
ATOM	204	CE1	TYR	A	29	-39.991	13.762	16.537	1.00	38.60	A	C
ATOM	206	CZ	TYR	A	29	-40.946	12.948	15.964	1.00	39.38	A	C
ATOM	207	OH	TYR	A	29	-41.085	12.894	14.602	1.00	40.04	A	O
ATOM	209	CE2	TYR	A	29	-41.769	12.169	16.754	1.00	40.97	A	C
ATOM	211	CD2	TYR	A	29	-41.631	12.192	18.139	1.00	39.73	A	C
ATOM	213	C	TYR	A	29	-40.465	15.485	20.643	1.00	45.20	A	C
ATOM	214	O	TYR	A	29	-39.355	15.625	21.154	1.00	45.79	A	O
ATOM	216	N	MET	A	30	-41.017	16.406	19.847	1.00	42.74	A	N
ATOM	217	CA	MET	A	30	-40.245	17.547	19.373	1.00	42.90	A	C
ATOM	219	CB	MET	A	30	-40.876	18.150	18.119	1.00	41.27	A	C
ATOM	222	CG	MET	A	30	-39.958	19.151	17.415	1.00	40.22	A	C
ATOM	225	SD	MET	A	30	-38.685	18.384	16.382	1.00	40.38	A	S
ATOM	226	CE	MET	A	30	-37.448	19.673	16.488	1.00	34.09	A	C
ATOM	230	C	MET	A	30	-40.047	18.618	20.438	1.00	43.81	A	C
ATOM	231	O	MET	A	30	-41.000	19.091	21.039	1.00	51.68	A	O
ATOM	233	N	ALA	A	31	-38.794	19.003	20.647	1.00	42.74	A	N
ATOM	234	CA	ALA	A	31	-38.432	19.985	21.647	1.00	39.26	A	C
ATOM	236	CB	ALA	A	31	-37.511	19.362	22.647	1.00	37.15	A	C
ATOM	240	C	ALA	A	31	-37.763	21.207	21.012	1.00	38.04	A	C
ATOM	241	O	ALA	A	31	-37.117	21.118	19.972	1.00	40.16	A	O
ATOM	243	N	SER	A	32	-37.949	22.358	21.650	1.00	39.48	A	N
ATOM	244	CA	SER	A	32	-37.194	23.562	21.330	1.00	40.05	A	C
ATOM	246	CB	SER	A	32	-38.120	24.764	21.159	1.00	31.57	A	C
ATOM	249	OG	SER	A	32	-37.381	25.934	20.862	1.00	29.36	A	O
ATOM	251	C	SER	A	32	-36.193	23.823	22.443	1.00	41.43	A	C
ATOM	252	O	SER	A	32	-36.576	24.152	23.561	1.00	43.00	A	O
ATOM	254	N	VAL	A	33	-34.910	23.660	22.138	1.00	43.35	A	N
ATOM	255	CA	VAL	A	33	-33.866	24.015	23.076	1.00	42.77	A	C
ATOM	257	CB	VAL	A	33	-32.538	23.246	22.786	1.00	35.75	A	C
ATOM	259	CG1	VAL	A	33	-31.435	23.711	23.718	1.00	31.25	A	C
ATOM	263	CG2	VAL	A	33	-32.744	21.747	22.890	1.00	28.01	A	C
ATOM	267	C	VAL	A	33	-33.690	25.525	22.960	1.00	44.24	A	C
ATOM	268	O	VAL	A	33	-33.426	26.039	21.880	1.00	39.38	A	O
ATOM	270	N	GLN	A	34	-33.873	26.235	24.069	1.00	48.29	A	N
ATOM	271	CA	GLN	A	34	-33.866	27.707	24.052	1.00	48.04	A	C
ATOM	273	CB	GLN	A	34	-35.238	28.210	24.471	1.00	46.22	A	C
ATOM	276	CG	GLN	A	34	-36.205	28.036	23.344	1.00	47.69	A	C
ATOM	279	CD	GLN	A	34	-37.624	28.395	23.668	1.00	45.26	A	C
ATOM	280	OE1	GLN	A	34	-37.929	29.018	24.697	1.00	49.92	A	O
ATOM	281	NE2	GLN	A	34	-38.514	28.029	22.759	1.00	39.72	A	N
ATOM	284	C	GLN	A	34	-32.763	28.342	24.884	1.00	44.83	A	C
ATOM	285	O	GLN	A	34	-32.353	27.790	25.880	1.00	41.00	A	O
ATOM	287	N	LEU	A	35	-32.280	29.497	24.437	1.00	48.27	A	N
ATOM	288	CA	LEU	A	35	-31.318	30.321	25.184	1.00	48.03	A	C
ATOM	290	CB	LEU	A	35	-29.988	30.434	24.440	1.00	47.03	A	C
ATOM	293	CG	LEU	A	35	-28.845	31.167	25.163	1.00	43.76	A	C
ATOM	295	CD1	LEU	A	35	-28.311	30.330	26.316	1.00	37.77	A	C
ATOM	299	CD2	LEU	A	35	-27.748	31.540	24.206	1.00	41.57	A	C
ATOM	303	C	LEU	A	35	-31.935	31.714	25.381	1.00	51.07	A	C
ATOM	304	O	LEU	A	35	-32.126	32.459	24.413	1.00	48.89	A	O
ATOM	306	N	ASN	A	36	-32.258	32.039	26.633	1.00	52.49	A	N
ATOM	307	CA	ASN	A	36	-32.900	33.303	26.975	1.00	52.72	A	C
ATOM	309	CB	ASN	A	36	-31.951	34.493	26.733	1.00	54.20	A	C
ATOM	312	CG	ASN	A	36	-30.717	34.449	27.628	1.00	54.49	A	C
ATOM	313	OD1	ASN	A	36	-30.816	34.123	28.815	1.00	56.03	A	O
ATOM	314	ND2	ASN	A	36	-29.550	34.764	27.061	1.00	50.10	A	N
ATOM	317	C	ASN	A	36	-34.222	33.492	26.231	1.00	53.80	A	C
ATOM	318	O	ASN	A	36	-34.469	34.542	25.634	1.00	52.37	A	O
ATOM	320	N	GLY	A	37	-35.062	32.457	26.272	1.00	54.17	A	N
ATOM	321	CA	GLY	A	37	-36.386	32.496	25.659	1.00	52.62	A	C
ATOM	324	C	GLY	A	37	-36.444	32.645	24.146	1.00	52.32	A	C
ATOM	325	O	GLY	A	37	-37.482	33.006	23.602	1.00	54.37	A	O
ATOM	327	N	ALA	A	38	-35.338	32.352	23.469	1.00	51.70	A	N
ATOM	328	CA	ALA	A	38	-35.270	32.380	22.008	1.00	50.80	A	C

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ATOM	330	CB	ALA	A	38	-34.264	33.422	21.506	1.00	47.75	A	C
ATOM	334	C	ALA	A	38	-34.872	30.994	21.533	1.00	50.65	A	C
ATOM	335	O	ALA	A	38	-33.970	30.366	22.121	1.00	49.42	A	O
ATOM	337	N	HIS	A	39	-35.543	30.511	20.484	1.00	47.04	A	N
ATOM	338	CA	HIS	A	39	-35.213	29.201	19.908	1.00	45.21	A	C
ATOM	340	CB	HIS	A	39	-36.096	28.844	18.708	1.00	40.19	A	C
ATOM	343	CG	HIS	A	39	-35.717	27.549	18.055	1.00	37.56	A	C
ATOM	344	ND1	HIS	A	39	-34.868	27.478	16.967	1.00	34.45	A	N
ATOM	346	CE1	HIS	A	39	-34.692	26.219	16.631	1.00	28.52	A	C
ATOM	348	NE2	HIS	A	39	-35.408	25.467	17.446	1.00	29.74	A	N
ATOM	350	CD2	HIS	A	39	-36.044	26.275	18.356	1.00	31.74	A	C
ATOM	352	C	HIS	A	39	-33.764	29.164	19.468	1.00	41.95	A	C
ATOM	353	O	HIS	A	39	-33.334	29.995	18.693	1.00	42.12	A	O
ATOM	355	N	LEU	A	40	-33.032	28.180	19.970	1.00	41.52	A	N
ATOM	356	CA	LEU	A	40	-31.635	28.003	19.630	1.00	42.84	A	C
ATOM	358	CB	LEU	A	40	-30.805	27.935	20.909	1.00	42.42	A	C
ATOM	361	CG	LEU	A	40	-29.307	27.740	20.722	1.00	43.96	A	C
ATOM	363	CD1	LEU	A	40	-28.681	28.890	19.904	1.00	37.84	A	C
ATOM	367	CD2	LEU	A	40	-28.670	27.569	22.097	1.00	44.98	A	C
ATOM	371	C	LEU	A	40	-31.429	26.751	18.788	1.00	40.59	A	C
ATOM	372	O	LEU	A	40	-30.793	26.808	17.750	1.00	37.72	A	O
ATOM	374	N	CYS	A	41	-31.991	25.634	19.241	1.00	40.38	A	N
ATOM	375	CA	CYS	A	41	-31.834	24.350	18.583	1.00	41.71	A	C
ATOM	377	CB	CYS	A	41	-30.610	23.612	19.159	1.00	41.82	A	C
ATOM	380	SG	CYS	A	41	-29.063	24.158	18.427	1.00	42.74	A	S
ATOM	382	C	CYS	A	41	-33.051	23.440	18.713	1.00	39.02	A	C
ATOM	383	O	CYS	A	41	-33.859	23.579	19.629	1.00	35.68	A	O
ATOM	385	N	GLY	A	42	-33.131	22.484	17.793	1.00	36.94	A	N
ATOM	386	CA	GLY	A	42	-34.081	21.408	17.863	1.00	36.45	A	C
ATOM	389	C	GLY	A	42	-33.619	20.395	18.887	1.00	36.38	A	C
ATOM	390	O	GLY	A	42	-32.480	20.446	19.340	1.00	36.71	A	O
ATOM	392	N	GLY	A	43	-34.513	19.483	19.255	1.00	33.20	A	N
ATOM	393	CA	GLY	A	43	-34.254	18.499	20.285	1.00	36.09	A	C
ATOM	396	C	GLY	A	43	-35.287	17.396	20.213	1.00	36.63	A	C
ATOM	397	O	GLY	A	43	-36.344	17.551	19.610	1.00	32.97	A	O
ATOM	399	N	VAL	A	44	-34.976	16.259	20.806	1.00	40.42	A	N
ATOM	400	CA	VAL	A	44	-35.892	15.105	20.750	1.00	42.72	A	C
ATOM	402	CB	VAL	A	44	-35.495	14.068	19.606	1.00	39.04	A	C
ATOM	404	CG1	VAL	A	44	-34.023	13.962	19.453	1.00	39.48	A	C
ATOM	408	CG2	VAL	A	44	-36.132	12.711	19.815	1.00	35.34	A	C
ATOM	412	C	VAL	A	44	-36.000	14.499	22.145	1.00	43.25	A	C
ATOM	413	O	VAL	A	44	-35.018	14.038	22.722	1.00	45.23	A	O
ATOM	415	N	LEU	A	45	-37.198	14.575	22.707	1.00	44.58	A	N
ATOM	416	CA	LEU	A	45	-37.507	13.898	23.958	1.00	44.82	A	C
ATOM	418	CB	LEU	A	45	-38.933	14.236	24.415	1.00	43.69	A	C
ATOM	421	CG	LEU	A	45	-39.359	13.737	25.802	1.00	42.46	A	C
ATOM	423	CD1	LEU	A	45	-38.580	14.472	26.878	1.00	38.40	A	C
ATOM	427	CD2	LEU	A	45	-40.877	13.878	26.008	1.00	37.65	A	C
ATOM	431	C	LEU	A	45	-37.357	12.408	23.719	1.00	44.01	A	C
ATOM	432	O	LEU	A	45	-38.074	11.851	22.887	1.00	43.59	A	O
ATOM	434	N	VAL	A	46	-36.385	11.803	24.410	1.00	45.83	A	N
ATOM	435	CA	VAL	A	46	-36.062	10.365	24.303	1.00	47.83	A	C
ATOM	437	CB	VAL	A	46	-34.574	10.140	23.945	1.00	43.57	A	C
ATOM	439	CG1	VAL	A	46	-34.271	10.678	22.546	1.00	38.95	A	C
ATOM	443	CG2	VAL	A	46	-33.643	10.783	25.007	1.00	39.82	A	C
ATOM	447	C	VAL	A	46	-36.377	9.585	25.602	1.00	51.60	A	C
ATOM	448	O	VAL	A	46	-36.467	8.349	25.584	1.00	51.26	A	O
ATOM	450	N	ALA	A	47	-36.515	10.310	26.715	1.00	52.53	A	N
ATOM	451	CA	ALA	A	47	-36.984	9.750	27.976	1.00	52.07	A	C
ATOM	453	CB	ALA	A	47	-35.829	9.361	28.868	1.00	50.19	A	C
ATOM	457	C	ALA	A	47	-37.822	10.790	28.678	1.00	55.24	A	C
ATOM	458	O	ALA	A	47	-37.864	11.958	28.276	1.00	53.14	A	O
ATOM	460	N	GLU	A	48	-38.448	10.359	29.765	1.00	58.81	A	N
ATOM	461	CA	GLU	A	48	-39.405	11.181	30.496	1.00	57.62	A	C
ATOM	463	CB	GLU	A	48	-39.915	10.423	31.730	1.00	63.17	A	C
ATOM	466	CG	GLU	A	48	-41.418	10.444	31.916	1.00	64.56	A	C
ATOM	469	CD	GLU	A	48	-41.871	9.512	33.030	1.00	66.08	A	C
ATOM	470	OE1	GLU	A	48	-42.875	9.827	33.700	1.00	73.81	A	O
ATOM	471	OE2	GLU	A	48	-41.217	8.472	33.247	1.00	67.99	A	O
ATOM	472	C	GLU	A	48	-38.813	12.516	30.922	1.00	53.49	A	C
ATOM	473	O	GLU	A	48	-39.501	13.528	30.867	1.00	49.44	A	O
ATOM	475	N	GLN	A	49	-37.550	12.526	31.353	1.00	53.31	A	N
ATOM	476	CA	GLN	A	49	-36.901	13.786	31.748	1.00	53.35	A	C
ATOM	478	CB	GLN	A	49	-36.767	13.858	33.280	1.00	55.68	A	C
ATOM	481	CG	GLN	A	49	-35.428	13.614	33.919	1.00	57.60	A	C

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ATOM	484	CD	GLN	A	49	-35.511	13.710	35.437	1.00	56.94	A	C
ATOM	485	OE1	GLN	A	49	-35.835	14.759	35.983	1.00	52.76	A	O
ATOM	486	NE2	GLN	A	49	-35.201	12.612	36.119	1.00	60.22	A	N
ATOM	489	C	GLN	A	49	-35.584	14.104	31.007	1.00	49.48	A	C
ATOM	490	O	GLN	A	49	-34.787	14.937	31.457	1.00	44.39	A	O
ATOM	492	N	TRP	A	50	-35.413	13.500	29.831	1.00	49.60	A	N
ATOM	493	CA	TRP	A	50	-34.195	13.651	29.029	1.00	49.30	A	C
ATOM	495	CB	TRP	A	50	-33.371	12.351	29.065	1.00	49.11	A	C
ATOM	498	CG	TRP	A	50	-32.660	12.136	30.351	1.00	49.20	A	C
ATOM	499	CD1	TRP	A	50	-33.038	11.314	31.374	1.00	49.40	A	C
ATOM	501	NE1	TRP	A	50	-32.119	11.387	32.401	1.00	48.77	A	N
ATOM	503	CE2	TRP	A	50	-31.134	12.269	32.051	1.00	47.80	A	C
ATOM	504	CD2	TRP	A	50	-31.442	12.761	30.766	1.00	48.84	A	C
ATOM	505	CE3	TRP	A	50	-30.577	13.686	30.174	1.00	49.75	A	C
ATOM	507	CZ3	TRP	A	50	-29.451	14.089	30.873	1.00	49.05	A	C
ATOM	509	CH2	TRP	A	50	-29.171	13.582	32.144	1.00	48.58	A	C
ATOM	511	CZ2	TRP	A	50	-29.999	12.675	32.750	1.00	49.34	A	C
ATOM	513	C	TRP	A	50	-34.481	13.991	27.572	1.00	44.84	A	C
ATOM	514	O	TRP	A	50	-35.190	13.254	26.886	1.00	42.47	A	O
ATOM	516	N	VAL	A	51	-33.885	15.081	27.104	1.00	44.57	A	N
ATOM	517	CA	VAL	A	51	-33.982	15.521	25.711	1.00	45.11	A	C
ATOM	519	CB	VAL	A	51	-34.472	16.996	25.667	1.00	42.88	A	C
ATOM	521	CG1	VAL	A	51	-34.414	17.571	24.281	1.00	43.18	A	C
ATOM	525	CG2	VAL	A	51	-35.875	17.090	26.199	1.00	40.11	A	C
ATOM	529	C	VAL	A	51	-32.629	15.398	24.994	1.00	42.35	A	C
ATOM	530	O	VAL	A	51	-31.612	15.848	25.505	1.00	44.80	A	O
ATOM	532	N	LEU	A	52	-32.616	14.788	23.816	1.00	40.60	A	N
ATOM	533	CA	LEU	A	52	-31.397	14.687	23.013	1.00	39.36	A	C
ATOM	535	CB	LEU	A	52	-31.346	13.344	22.296	1.00	39.00	A	C
ATOM	538	CG	LEU	A	52	-30.082	12.972	21.517	1.00	36.01	A	C
ATOM	540	CD1	LEU	A	52	-28.846	12.953	22.385	1.00	34.75	A	C
ATOM	544	CD2	LEU	A	52	-30.323	11.631	20.891	1.00	32.80	A	C
ATOM	548	C	LEU	A	52	-31.312	15.836	22.000	1.00	39.33	A	C
ATOM	549	O	LEU	A	52	-32.291	16.176	21.350	1.00	38.01	A	O
ATOM	551	N	SER	A	53	-30.124	16.436	21.906	1.00	39.08	A	N
ATOM	552	CA	SER	A	53	-29.854	17.548	21.014	1.00	36.57	A	C
ATOM	554	CB	SER	A	53	-30.136	18.880	21.724	1.00	42.58	A	C
ATOM	557	OG	SER	A	53	-30.121	19.979	20.818	1.00	42.01	A	O
ATOM	559	C	SER	A	53	-28.411	17.468	20.550	1.00	32.71	A	C
ATOM	560	O	SER	A	53	-27.778	16.409	20.629	1.00	29.49	A	O
ATOM	562	N	ALA	A	54	-27.890	18.566	20.020	1.00	36.03	A	N
ATOM	563	CA	ALA	A	54	-26.501	18.608	19.525	1.00	36.03	A	C
ATOM	565	CB	ALA	A	54	-26.465	19.224	18.150	1.00	23.83	A	C
ATOM	569	C	ALA	A	54	-25.579	19.376	20.501	1.00	36.47	A	C
ATOM	570	O	ALA	A	54	-25.979	20.355	21.098	1.00	36.17	A	O
ATOM	572	N	ALA	A	55	-24.349	18.914	20.666	1.00	40.15	A	N
ATOM	573	CA	ALA	A	55	-23.430	19.495	21.658	1.00	42.40	A	C
ATOM	575	CB	ALA	A	55	-22.210	18.587	21.855	1.00	38.47	A	C
ATOM	579	C	ALA	A	55	-23.008	20.941	21.340	1.00	44.10	A	C
ATOM	580	O	ALA	A	55	-23.022	21.783	22.228	1.00	47.54	A	O
ATOM	582	N	HIS	A	56	-22.686	21.235	20.082	1.00	47.14	A	N
ATOM	583	CA	HIS	A	56	-22.329	22.599	19.680	1.00	52.44	A	C
ATOM	585	CB	HIS	A	56	-21.739	22.620	18.265	1.00	56.26	A	C
ATOM	588	CG	HIS	A	56	-22.682	22.152	17.195	1.00	64.58	A	C
ATOM	589	ND1	HIS	A	56	-23.882	22.773	16.911	1.00	64.70	A	N
ATOM	591	CE1	HIS	A	56	-24.481	22.145	15.915	1.00	62.33	A	C
ATOM	593	NE2	HIS	A	56	-23.714	21.141	15.536	1.00	65.65	A	N
ATOM	595	CD2	HIS	A	56	-22.573	21.137	16.306	1.00	68.69	A	C
ATOM	597	C	HIS	A	56	-23.463	23.639	19.773	1.00	51.31	A	C
ATOM	598	O	HIS	A	56	-23.229	24.818	19.575	1.00	46.76	A	O
ATOM	600	N	CYS	A	57	-24.678	23.195	20.061	1.00	52.43	A	N
ATOM	601	CA	CYS	A	57	-25.786	24.099	20.347	1.00	57.44	A	C
ATOM	603	CB	CYS	A	57	-27.092	23.303	20.510	1.00	53.60	A	C
ATOM	606	SG	CYS	A	57	-27.729	22.698	18.903	1.00	51.73	A	S
ATOM	608	C	CYS	A	57	-25.517	24.960	21.574	1.00	59.55	A	C
ATOM	609	O	CYS	A	57	-25.983	26.091	21.647	1.00	59.26	A	O
ATOM	611	N	LEU	A	58	-24.730	24.426	22.506	1.00	63.27	A	N
ATOM	612	CA	LEU	A	58	-24.419	25.097	23.767	1.00	66.56	A	C
ATOM	614	CB	LEU	A	58	-24.371	24.046	24.882	1.00	63.41	A	C
ATOM	617	CG	LEU	A	58	-25.622	23.868	25.744	1.00	61.68	A	C
ATOM	619	CD1	LEU	A	58	-26.933	23.957	24.958	1.00	59.97	A	C
ATOM	623	CD2	LEU	A	58	-25.499	22.554	26.476	1.00	63.41	A	C
ATOM	627	C	LEU	A	58	-23.104	25.894	23.779	1.00	70.10	A	C
ATOM	628	O	LEU	A	58	-22.776	26.512	24.784	1.00	69.58	A	O
ATOM	630	N	GLU	A	59	-22.366	25.901	22.672	1.00	75.37	A	N

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ATOM	631	CA	GLU	A	59	-20.968	26.350	22.701	1.00	79.91	A	C
ATOM	633	CB	GLU	A	59	-20.252	25.991	21.398	1.00	80.87	A	C
ATOM	636	CG	GLU	A	59	-19.586	24.613	21.476	1.00	81.90	A	C
ATOM	639	CD	GLU	A	59	-19.022	24.146	20.147	1.00	84.53	A	C
ATOM	640	OE1	GLU	A	59	-18.605	25.003	19.333	1.00	88.67	A	O
ATOM	641	OE2	GLU	A	59	-18.980	22.914	19.922	1.00	86.47	A	O
ATOM	642	C	GLU	A	59	-20.728	27.820	23.089	1.00	84.65	A	C
ATOM	643	O	GLU	A	59	-19.875	28.099	23.937	1.00	86.61	A	O
ATOM	645	N	ASP	A	60	-21.464	28.749	22.484	1.00	87.58	A	N
ATOM	646	CA	ASP	A	60	-21.329	30.179	22.811	1.00	87.99	A	C
ATOM	648	CB	ASP	A	60	-21.093	31.005	21.528	1.00	91.03	A	C
ATOM	651	CG	ASP	A	60	-19.714	30.764	20.896	1.00	94.18	A	C
ATOM	652	OD1	ASP	A	60	-19.504	31.217	19.744	1.00	94.34	A	O
ATOM	653	OD2	ASP	A	60	-18.841	30.137	21.541	1.00	94.84	A	O
ATOM	654	C	ASP	A	60	-22.564	30.702	23.548	1.00	87.56	A	C
ATOM	655	O	ASP	A	60	-23.137	31.729	23.186	1.00	86.58	A	O
ATOM	657	N	ALA	A	61	-22.968	29.993	24.591	1.00	87.90	A	N
ATOM	658	CA	ALA	A	61	-24.199	30.307	25.264	1.00	89.04	A	C
ATOM	660	CB	ALA	A	61	-25.108	29.071	25.196	1.00	85.74	A	C
ATOM	664	C	ALA	A	61	-24.124	30.767	26.718	1.00	91.59	A	C
ATOM	665	O	ALA	A	61	-24.587	31.866	27.045	1.00	90.91	A	O
ATOM	667	N	ALA	A	62	-23.444	30.002	27.568	1.00	93.98	A	N
ATOM	668	CA	ALA	A	62	-22.219	30.314	28.269	1.00	94.24	A	C
ATOM	670	CB	ALA	A	62	-21.244	31.136	27.417	1.00	97.50	A	C
ATOM	674	C	ALA	A	62	-22.748	31.089	29.499	1.00	93.42	A	C
ATOM	675	O	ALA	A	62	-22.978	30.506	30.563	1.00	92.45	A	O
ATOM	677	N	ASP	A	63	-23.003	32.382	29.326	1.00	93.69	A	N
ATOM	678	CA	ASP	A	63	-23.594	33.214	30.369	1.00	93.16	A	C
ATOM	680	CB	ASP	A	63	-22.784	34.512	30.509	1.00	94.65	A	C
ATOM	683	CG	ASP	A	63	-23.049	35.240	31.820	1.00	95.79	A	C
ATOM	684	OD1	ASP	A	63	-23.532	34.610	32.792	1.00	96.26	A	O
ATOM	685	OD2	ASP	A	63	-22.756	36.453	31.879	1.00	97.27	A	O
ATOM	686	C	ASP	A	63	-25.046	33.505	29.989	1.00	93.25	A	C
ATOM	687	O	ASP	A	63	-25.410	34.651	29.709	1.00	94.38	A	O
ATOM	689	N	GLY	A	64	-25.867	32.453	29.971	1.00	89.98	A	N
ATOM	690	CA	GLY	A	64	-27.250	32.554	29.506	1.00	85.69	A	C
ATOM	693	C	GLY	A	64	-28.150	31.467	30.053	1.00	81.18	A	C
ATOM	694	O	GLY	A	64	-27.683	30.416	30.480	1.00	81.14	A	O
ATOM	696	N	LYS	A	65	-29.449	31.735	30.025	1.00	77.40	A	N
ATOM	697	CA	LYS	A	65	-30.466	30.848	30.578	1.00	77.00	A	C
ATOM	699	CB	LYS	A	65	-31.673	31.693	31.011	1.00	74.84	A	C
ATOM	702	CG	LYS	A	65	-32.872	30.935	31.541	1.00	73.81	A	C
ATOM	705	CD	LYS	A	65	-32.679	30.481	32.971	1.00	73.55	A	C
ATOM	708	CE	LYS	A	65	-34.000	30.031	33.567	1.00	73.70	A	C
ATOM	711	NZ	LYS	A	65	-33.809	29.240	34.796	1.00	73.80	A	N
ATOM	715	C	LYS	A	65	-30.884	29.825	29.523	1.00	75.89	A	C
ATOM	716	O	LYS	A	65	-31.497	30.186	28.519	1.00	76.73	A	O
ATOM	718	N	VAL	A	66	-30.557	28.555	29.747	1.00	73.08	A	N
ATOM	719	CA	VAL	A	66	-30.919	27.494	28.809	1.00	70.42	A	C
ATOM	721	CB	VAL	A	66	-29.768	26.497	28.601	1.00	69.04	A	C
ATOM	723	CG1	VAL	A	66	-30.226	25.340	27.717	1.00	67.62	A	C
ATOM	727	CG2	VAL	A	66	-28.557	27.202	27.996	1.00	68.13	A	C
ATOM	731	C	VAL	A	66	-32.163	26.733	29.277	1.00	68.79	A	C
ATOM	732	O	VAL	A	66	-32.217	26.264	30.416	1.00	69.32	A	O
ATOM	734	N	GLN	A	67	-33.152	26.615	28.387	1.00	64.55	A	N
ATOM	735	CA	GLN	A	67	-34.418	25.935	28.688	1.00	60.73	A	C
ATOM	737	CB	GLN	A	67	-35.502	26.975	29.001	1.00	59.49	A	C
ATOM	740	CG	GLN	A	67	-35.207	27.831	30.240	1.00	57.87	A	C
ATOM	743	CD	GLN	A	67	-36.147	28.996	30.392	1.00	55.49	A	C
ATOM	744	OE1	GLN	A	67	-36.255	29.831	29.505	1.00	55.41	A	O
ATOM	745	NE2	GLN	A	67	-36.820	29.073	31.528	1.00	51.83	A	N
ATOM	748	C	GLN	A	67	-34.861	25.034	27.524	1.00	57.44	A	C
ATOM	749	O	GLN	A	67	-34.425	25.221	26.392	1.00	55.07	A	O
ATOM	751	N	VAL	A	68	-35.713	24.049	27.818	1.00	54.50	A	N
ATOM	752	CA	VAL	A	68	-36.329	23.209	26.788	1.00	50.89	A	C
ATOM	754	CB	VAL	A	68	-35.982	21.728	26.947	1.00	46.32	A	C
ATOM	756	CG1	VAL	A	68	-36.662	20.904	25.860	1.00	39.26	A	C
ATOM	760	CG2	VAL	A	68	-34.469	21.528	26.926	1.00	41.90	A	C
ATOM	764	C	VAL	A	68	-37.850	23.348	26.820	1.00	47.97	A	C
ATOM	765	O	VAL	A	68	-38.471	23.187	27.863	1.00	46.91	A	O
ATOM	767	N	LEU	A	69	-38.428	23.629	25.657	1.00	44.63	A	N
ATOM	768	CA	LEU	A	69	-39.850	23.848	25.495	1.00	43.86	A	C
ATOM	770	CB	LEU	A	69	-40.068	25.101	24.646	1.00	38.62	A	C
ATOM	773	CG	LEU	A	69	-41.466	25.362	24.093	1.00	40.29	A	C
ATOM	775	CD1	LEU	A	69	-42.458	25.781	25.204	1.00	34.14	A	C

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ATOM	779	CD2	LEU	A	69	-41.354	26.401	23.024	1.00	37.23	A	C
ATOM	783	C	LEU	A	69	-40.504	22.640	24.825	1.00	44.47	A	C
ATOM	784	O	LEU	A	69	-40.247	22.354	23.646	1.00	40.25	A	O
ATOM	786	N	LEU	A	70	-41.354	21.937	25.583	1.00	44.62	A	N
ATOM	787	CA	LEU	A	70	-42.091	20.776	25.067	1.00	44.08	A	C
ATOM	789	CB	LEU	A	70	-41.995	19.618	26.062	1.00	38.78	A	C
ATOM	792	CG	LEU	A	70	-40.567	19.132	26.319	1.00	34.71	A	C
ATOM	794	CD1	LEU	A	70	-40.536	17.996	27.315	1.00	29.91	A	C
ATOM	798	CD2	LEU	A	70	-39.882	18.717	25.034	1.00	31.31	A	C
ATOM	802	C	LEU	A	70	-43.555	21.082	24.721	1.00	44.42	A	C
ATOM	803	O	LEU	A	70	-44.108	22.096	25.137	1.00	43.92	A	O
ATOM	805	N	GLY	A	71	-44.165	20.198	23.937	1.00	45.02	A	N
ATOM	806	CA	GLY	A	71	-45.559	20.324	23.528	1.00	43.62	A	C
ATOM	809	C	GLY	A	71	-45.862	21.520	22.648	1.00	47.34	A	C
ATOM	810	O	GLY	A	71	-47.022	21.903	22.489	1.00	52.44	A	O
ATOM	812	N	ALA	A	72	-44.831	22.108	22.049	1.00	49.11	A	N
ATOM	813	CA	ALA	A	72	-44.988	23.336	21.272	1.00	45.52	A	C
ATOM	815	CB	ALA	A	72	-43.758	24.230	21.420	1.00	39.29	A	C
ATOM	819	C	ALA	A	72	-45.272	23.073	19.805	1.00	43.41	A	C
ATOM	820	O	ALA	A	72	-44.832	22.078	19.220	1.00	43.05	A	O
ATOM	822	N	HIS	A	73	-46.059	23.966	19.233	1.00	42.28	A	N
ATOM	823	CA	HIS	A	73	-46.167	24.066	17.804	1.00	44.42	A	C
ATOM	825	CB	HIS	A	73	-47.577	23.747	17.308	1.00	39.78	A	C
ATOM	828	CG	HIS	A	73	-47.652	23.711	15.827	1.00	37.63	A	C
ATOM	829	ND1	HIS	A	73	-46.907	22.820	15.083	1.00	30.51	A	N
ATOM	831	CE1	HIS	A	73	-47.115	23.050	13.800	1.00	34.73	A	C
ATOM	833	NE2	HIS	A	73	-47.951	24.072	13.687	1.00	36.61	A	N
ATOM	835	CD2	HIS	A	73	-48.290	24.513	14.943	1.00	33.73	A	C
ATOM	837	C	HIS	A	73	-45.713	25.463	17.361	1.00	44.62	A	C
ATOM	838	O	HIS	A	73	-44.775	25.598	16.586	1.00	41.55	A	O
ATOM	840	N	SER	A	74	-46.375	26.484	17.885	1.00	44.17	A	N
ATOM	841	CA	SER	A	74	-45.973	27.865	17.705	1.00	42.74	A	C
ATOM	843	CB	SER	A	74	-47.220	28.768	17.730	1.00	35.44	A	C
ATOM	846	OG	SER	A	74	-46.881	30.124	17.890	1.00	28.22	A	O
ATOM	848	C	SER	A	74	-45.022	28.236	18.834	1.00	43.01	A	C
ATOM	849	O	SER	A	74	-45.258	27.867	19.989	1.00	43.03	A	O
ATOM	851	N	LEU	A	75	-43.967	28.978	18.507	1.00	44.74	A	N
ATOM	852	CA	LEU	A	75	-43.016	29.469	19.507	1.00	44.88	A	C
ATOM	854	CB	LEU	A	75	-41.698	29.850	18.849	1.00	38.49	A	C
ATOM	857	CG	LEU	A	75	-40.810	28.738	18.253	1.00	37.58	A	C
ATOM	859	CD1	LEU	A	75	-39.622	29.364	17.525	1.00	28.33	A	C
ATOM	863	CD2	LEU	A	75	-40.317	27.775	19.307	1.00	35.54	A	C
ATOM	867	C	LEU	A	75	-43.541	30.657	20.333	1.00	46.25	A	C
ATOM	868	O	LEU	A	75	-43.256	30.756	21.518	1.00	47.28	A	O
ATOM	870	N	SER	A	76	-44.303	31.544	19.707	1.00	46.88	A	N
ATOM	871	CA	SER	A	76	-44.769	32.785	20.351	1.00	47.46	A	C
ATOM	873	CB	SER	A	76	-44.858	33.901	19.299	1.00	42.75	A	C
ATOM	876	OG	SER	A	76	-45.734	33.533	18.244	1.00	37.58	A	O
ATOM	878	C	SER	A	76	-46.133	32.642	21.033	1.00	48.96	A	C
ATOM	879	O	SER	A	76	-46.403	33.232	22.066	1.00	45.90	A	O
ATOM	881	N	GLN	A	77	-46.985	31.838	20.435	1.00	52.47	A	N
ATOM	882	CA	GLN	A	77	-48.370	31.829	20.775	1.00	52.99	A	C
ATOM	884	CB	GLN	A	77	-49.161	31.545	19.496	1.00	50.44	A	C
ATOM	887	CG	GLN	A	77	-50.307	32.494	19.247	1.00	52.43	A	C
ATOM	890	CD	GLN	A	77	-49.938	33.977	19.110	1.00	43.39	A	C
ATOM	891	OE1	GLN	A	77	-50.817	34.803	19.197	1.00	46.93	A	O
ATOM	892	NE2	GLN	A	77	-48.685	34.303	18.866	1.00	38.22	A	N
ATOM	895	C	GLN	A	77	-48.641	30.820	21.895	1.00	53.68	A	C
ATOM	896	O	GLN	A	77	-48.027	29.762	21.954	1.00	50.24	A	O
ATOM	898	N	PRO	A	78	-49.518	31.178	22.832	1.00	56.35	A	N
ATOM	899	CA	PRO	A	78	-49.900	30.237	23.878	1.00	56.68	A	C
ATOM	901	CB	PRO	A	78	-50.726	31.081	24.845	1.00	58.93	A	C
ATOM	904	CG	PRO	A	78	-51.064	32.332	24.124	1.00	58.68	A	C
ATOM	907	CD	PRO	A	78	-50.127	32.506	23.002	1.00	59.14	A	C
ATOM	910	C	PRO	A	78	-50.705	29.030	23.377	1.00	55.02	A	C
ATOM	911	O	PRO	A	78	-51.595	29.157	22.534	1.00	49.94	A	O
ATOM	912	N	GLU	A	79	-50.353	27.868	23.913	1.00	54.95	A	N
ATOM	913	CA	GLU	A	79	-50.984	26.604	23.590	1.00	54.27	A	C
ATOM	915	CB	GLU	A	79	-50.142	25.814	22.568	1.00	51.71	A	C
ATOM	918	CG	GLU	A	79	-49.681	26.625	21.332	1.00	50.40	A	C
ATOM	921	CD	GLU	A	79	-48.786	25.855	20.352	1.00	45.25	A	C
ATOM	922	OE1	GLU	A	79	-47.922	25.065	20.766	1.00	38.25	A	O
ATOM	923	OE2	GLU	A	79	-48.936	26.056	19.139	1.00	40.53	A	O
ATOM	924	C	GLU	A	79	-51.096	25.824	24.909	1.00	56.29	A	C
ATOM	925	O	GLU	A	79	-50.222	25.951	25.774	1.00	55.03	A	O

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ATOM    927  N   PRO A  80     -52.183  25.043  25.087  1.00 56.19      A    N
ATOM    928  CA  PRO A  80     -52.372  24.243  26.301  1.00 55.24      A    C
ATOM    930  CB  PRO A  80     -53.652  23.449  26.006  1.00 54.28      A    C
ATOM    933  CG  PRO A  80     -54.334  24.168  24.959  1.00 54.93      A    C
ATOM    936  CD  PRO A  80     -53.322  24.919  24.169  1.00 54.25      A    C
ATOM    939  C   PRO A  80     -51.229  23.278  26.633  1.00 54.96      A    C
ATOM    940  O   PRO A  80     -50.820  23.190  27.786  1.00 53.15      A    O
ATOM    941  N   SER A  81     -50.737  22.563  25.623  1.00 55.26      A    N
ATOM    942  CA  SER A  81     -49.655  21.592  25.780  1.00 51.82      A    C
ATOM    944  CB  SER A  81     -49.595  20.664  24.553  1.00 50.54      A    C
ATOM    947  OG  SER A  81     -49.942  21.340  23.352  1.00 49.55      A    O
ATOM    949  C   SER A  81     -48.285  22.233  26.029  1.00 50.14      A    C
ATOM    950  O   SER A  81     -47.405  21.582  26.612  1.00 47.88      A    O
ATOM    952  N   LYS A  82     -48.109  23.485  25.585  1.00 48.50      A    N
ATOM    953  CA  LYS A  82     -46.808  24.188  25.684  1.00 48.16      A    C
ATOM    955  CB  LYS A  82     -46.830  25.562  25.012  1.00 41.35      A    C
ATOM    958  CG  LYS A  82     -46.465  25.548  23.568  1.00 42.18      A    C
ATOM    961  CD  LYS A  82     -46.548  26.940  22.955  1.00 46.02      A    C
ATOM    964  CE  LYS A  82     -45.411  27.833  23.426  1.00 41.99      A    C
ATOM    967  NZ  LYS A  82     -45.307  29.063  22.614  1.00 39.02      A    N
ATOM    971  C   LYS A  82     -46.350  24.394  27.110  1.00 50.36      A    C
ATOM    972  O   LYS A  82     -47.001  25.103  27.882  1.00 56.38      A    O
ATOM    974  N   ARG A  83     -45.215  23.800  27.454  1.00 51.83      A    N
ATOM    975  CA  ARG A  83     -44.576  24.071  28.729  1.00 51.29      A    C
ATOM    977  CB  ARG A  83     -44.894  22.946  29.713  1.00 51.99      A    C
ATOM    980  CG  ARG A  83     -44.110  23.062  30.975  1.00 52.47      A    C
ATOM    983  CD  ARG A  83     -44.618  22.197  32.099  1.00 57.04      A    C
ATOM    986  NE  ARG A  83     -43.841  22.508  33.301  1.00 59.95      A    N
ATOM    988  CZ  ARG A  83     -43.696  21.721  34.361  1.00 60.16      A    C
ATOM    989  NH1 ARG A  83     -44.275  20.527  34.417  1.00 59.71      A    N
ATOM    992  NH2 ARG A  83     -42.944  22.143  35.371  1.00 60.89      A    N
ATOM    995  C   ARG A  83     -43.050  24.262  28.589  1.00 50.71      A    C
ATOM    996  O   ARG A  83     -42.356  23.425  28.013  1.00 46.65      A    O
ATOM    998  N   LEU A  84     -42.547  25.355  29.159  1.00 49.98      A    N
ATOM    999  CA  LEU A  84     -41.115  25.680  29.170  1.00 51.00      A    C
ATOM   1001  CB  LEU A  84     -40.915  27.201  29.114  1.00 45.27      A    C
ATOM   1004  CG  LEU A  84     -39.498  27.686  28.816  1.00 46.86      A    C
ATOM   1006  CD1 LEU A  84     -38.976  27.174  27.436  1.00 39.33      A    C
ATOM   1010  CD2 LEU A  84     -39.410  29.225  28.915  1.00 46.81      A    C
ATOM   1014  C   LEU A  84     -40.435  25.127  30.430  1.00 52.69      A    C
ATOM   1015  O   LEU A  84     -40.804  25.503  31.545  1.00 53.06      A    O
ATOM   1017  N   TYR A  85     -39.450  24.240  30.244  1.00 52.45      A    N
ATOM   1018  CA  TYR A  85     -38.778  23.546  31.347  1.00 53.03      A    C
ATOM   1020  CB  TYR A  85     -38.645  22.061  31.060  1.00 50.16      A    C
ATOM   1023  CG  TYR A  85     -39.917  21.261  31.096  1.00 49.10      A    C
ATOM   1024  CD1 TYR A  85     -40.335  20.643  32.272  1.00 50.34      A    C
ATOM   1026  CE1 TYR A  85     -41.489  19.874  32.309  1.00 51.02      A    C
ATOM   1028  CZ  TYR A  85     -42.237  19.715  31.156  1.00 51.94      A    C
ATOM   1029  OH  TYR A  85     -43.390  18.961  31.185  1.00 50.54      A    O
ATOM   1031  CE2 TYR A  85     -41.834  20.321  29.968  1.00 49.59      A    C
ATOM   1033  CD2 TYR A  85     -40.677  21.080  29.946  1.00 47.22      A    C
ATOM   1035  C   TYR A  85     -37.373  24.063  31.531  1.00 55.04      A    C
ATOM   1036  O   TYR A  85     -36.676  24.288  30.557  1.00 57.40      A    O
ATOM   1038  N   ASP A  86     -36.954  24.230  32.782  1.00 57.37      A    N
ATOM   1039  CA  ASP A  86     -35.567  24.578  33.087  1.00 58.20      A    C
ATOM   1041  CB  ASP A  86     -35.454  25.240  34.472  1.00 59.98      A    C
ATOM   1044  CG  ASP A  86     -35.954  26.685  34.486  1.00 60.45      A    C
ATOM   1045  OD1 ASP A  86     -36.590  27.123  33.511  1.00 64.49      A    O
ATOM   1046  OD2 ASP A  86     -35.702  27.397  35.471  1.00 56.83      A    O
ATOM   1047  C   ASP A  86     -34.702  23.312  33.012  1.00 56.50      A    C
ATOM   1048  O   ASP A  86     -35.213  22.186  33.055  1.00 52.17      A    O
ATOM   1050  N   VAL A  87     -33.393  23.496  32.896  1.00 54.74      A    N
ATOM   1051  CA  VAL A  87     -32.490  22.358  32.733  1.00 58.06      A    C
ATOM   1053  CB  VAL A  87     -31.546  22.519  31.529  1.00 53.55      A    C
ATOM   1055  CG1 VAL A  87     -30.516  21.393  31.521  1.00 47.35      A    C
ATOM   1059  CG2 VAL A  87     -32.354  22.540  30.231  1.00 52.14      A    C
ATOM   1063  C   VAL A  87     -31.662  22.104  33.987  1.00 59.51      A    C
ATOM   1064  O   VAL A  87     -30.884  22.961  34.425  1.00 59.01      A    O
ATOM   1066  N   LEU A  88     -31.838  20.906  34.541  1.00 61.78      A    N
ATOM   1067  CA  LEU A  88     -31.117  20.460  35.733  1.00 61.60      A    C
ATOM   1069  CB  LEU A  88     -31.877  19.298  36.382  1.00 62.05      A    C
ATOM   1072  CG  LEU A  88     -31.498  18.852  37.794  1.00 65.32      A    C
ATOM   1074  CD1 LEU A  88     -30.978  20.006  38.662  1.00 67.56      A    C
ATOM   1078  CD2 LEU A  88     -32.701  18.183  38.441  1.00 61.41      A    C
ATOM   1082  C   LEU A  88     -29.680  20.041  35.434  1.00 60.99      A    C
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ATOM   1083  O   LEU A  88     -28.799  20.251  36.257  1.00 61.07      A    O
ATOM   1085  N   ARG A  89     -29.442  19.476  34.250  1.00 62.49      A    N
ATOM   1086  CA  ARG A  89     -28.119  18.958  33.886  1.00 61.65      A    C
ATOM   1088  CB  ARG A  89     -27.936  17.562  34.496  1.00 65.13      A    C
ATOM   1091  CG  ARG A  89     -26.589  17.331  35.170  1.00 65.72      A    C
ATOM   1094  CD  ARG A  89     -26.562  15.956  35.847  1.00 66.04      A    C
ATOM   1097  NE  ARG A  89     -25.785  14.958  35.096  1.00 64.91      A    N
ATOM   1099  CZ  ARG A  89     -26.120  13.673  34.957  1.00 63.00      A    C
ATOM   1100  NH1 ARG A  89     -27.244  13.187  35.485  1.00 61.74      A    N
ATOM   1103  NH2 ARG A  89     -25.333  12.865  34.259  1.00 63.34      A    N
ATOM   1106  C   ARG A  89     -27.912  18.900  32.363  1.00 58.80      A    C
ATOM   1107  O   ARG A  89     -28.788  18.448  31.625  1.00 56.35      A    O
ATOM   1109  N   ALA A  90     -26.747  19.366  31.912  1.00 57.44      A    N
ATOM   1110  CA  ALA A  90     -26.350  19.318  30.504  1.00 55.33      A    C
ATOM   1112  CB  ALA A  90     -25.982  20.711  30.018  1.00 52.30      A    C
ATOM   1116  C   ALA A  90     -25.163  18.369  30.338  1.00 52.63      A    C
ATOM   1117  O   ALA A  90     -24.048  18.664  30.786  1.00 49.28      A    O
ATOM   1119  N   VAL A  91     -25.413  17.225  29.700  1.00 52.92      A    N
ATOM   1120  CA  VAL A  91     -24.392  16.191  29.503  1.00 51.45      A    C
ATOM   1122  CB  VAL A  91     -24.874  14.848  30.073  1.00 48.97      A    C
ATOM   1124  CG1 VAL A  91     -23.701  13.834  30.151  1.00 46.78      A    C
ATOM   1128  CG2 VAL A  91     -25.511  15.060  31.421  1.00 44.51      A    C
ATOM   1132  C   VAL A  91     -24.028  16.020  28.024  1.00 48.39      A    C
ATOM   1133  O   VAL A  91     -24.635  15.211  27.323  1.00 48.05      A    O
ATOM   1135  N   PRO A  92     -23.032  16.777  27.552  1.00 46.74      A    N
ATOM   1136  CA  PRO A  92     -22.539  16.583  26.185  1.00 48.60      A    C
ATOM   1138  CB  PRO A  92     -21.602  17.778  25.963  1.00 45.28      A    C
ATOM   1141  CG  PRO A  92     -21.208  18.242  27.323  1.00 47.04      A    C
ATOM   1144  CD  PRO A  92     -22.288  17.820  28.285  1.00 46.34      A    C
ATOM   1147  C   PRO A  92     -21.772  15.265  26.081  1.00 50.44      A    C
ATOM   1148  O   PRO A  92     -21.228  14.788  27.082  1.00 53.21      A    O
ATOM   1149  N   HIS A  93     -21.720  14.672  24.894  1.00 48.09      A    N
ATOM   1150  CA  HIS A  93     -20.878  13.511  24.721  1.00 47.01      A    C
ATOM   1152  CB  HIS A  93     -20.876  13.014  23.285  1.00 40.04      A    C
ATOM   1155  CG  HIS A  93     -20.197  11.696  23.140  1.00 36.35      A    C
ATOM   1156  ND1 HIS A  93     -18.825  11.571  23.108  1.00 34.84      A    N
ATOM   1158  CE1 HIS A  93     -18.505  10.295  23.014  1.00 35.27      A    C
ATOM   1160  NE2 HIS A  93     -19.621   9.585  23.014  1.00 32.37      A    N
ATOM   1162  CD2 HIS A  93     -20.693  10.441  23.085  1.00 32.60      A    C
ATOM   1164  C   HIS A  93     -19.461  13.886  25.173  1.00 47.46      A    C
ATOM   1165  O   HIS A  93     -18.985  14.980  24.852  1.00 45.31      A    O
ATOM   1167  N   PRO A  94     -18.796  12.998  25.943  1.00 51.60      A    N
ATOM   1168  CA  PRO A  94     -17.458  13.312  26.478  1.00 51.57      A    C
ATOM   1170  CB  PRO A  94     -17.083  12.047  27.259  1.00 53.26      A    C
ATOM   1173  CG  PRO A  94     -18.399  11.389  27.573  1.00 53.10      A    C
ATOM   1176  CD  PRO A  94     -19.271  11.677  26.404  1.00 51.99      A    C
ATOM   1179  C   PRO A  94     -16.380  13.657  25.446  1.00 50.93      A    C
ATOM   1180  O   PRO A  94     -15.507  14.477  25.729  1.00 52.14      A    O
ATOM   1181  N   ASP A  95     -16.455  13.069  24.263  1.00 48.49      A    N
ATOM   1182  CA  ASP A  95     -15.435  13.302  23.247  1.00 50.21      A    C
ATOM   1184  CB  ASP A  95     -15.045  11.972  22.567  1.00 46.31      A    C
ATOM   1187  CG  ASP A  95     -14.766  10.842  23.575  1.00 42.25      A    C
ATOM   1188  OD1 ASP A  95     -14.303  11.114  24.711  1.00 39.48      A    O
ATOM   1189  OD2 ASP A  95     -15.032   9.670  23.234  1.00 41.62      A    O
ATOM   1190  C   ASP A  95     -15.832  14.394  22.239  1.00 50.82      A    C
ATOM   1191  O   ASP A  95     -15.048  14.682  21.327  1.00 50.65      A    O
ATOM   1193  N   SER A  96     -17.012  15.004  22.417  1.00 49.86      A    N
ATOM   1194  CA  SER A  96     -17.427  16.150  21.603  1.00 53.39      A    C
ATOM   1196  CB  SER A  96     -18.913  16.462  21.797  1.00 48.70      A    C
ATOM   1199  OG  SER A  96     -19.199  16.994  23.071  1.00 43.71      A    O
ATOM   1201  C   SER A  96     -16.610  17.384  21.955  1.00 55.21      A    C
ATOM   1202  O   SER A  96     -16.148  17.517  23.079  1.00 49.99      A    O
ATOM   1204  N   GLN A  97     -16.457  18.293  20.996  1.00 60.71      A    N
ATOM   1205  CA  GLN A  97     -15.715  19.528  21.236  1.00 63.82      A    C
ATOM   1207  CB  GLN A  97     -14.278  19.234  21.696  1.00 63.50      A    C
ATOM   1210  CG  GLN A  97     -13.409  18.550  20.692  1.00 64.48      A    C
ATOM   1213  CD  GLN A  97     -12.206  17.961  21.363  1.00 64.66      A    C
ATOM   1214  OE1 GLN A  97     -11.264  18.672  21.702  1.00 68.20      A    O
ATOM   1215  NE2 GLN A  97     -12.242  16.661  21.593  1.00 62.84      A    N
ATOM   1218  C   GLN A  97     -15.785  20.486  20.029  1.00 64.82      A    C
ATOM   1219  O   GLN A  97     -16.191  20.076  18.940  1.00 66.33      A    O
ATOM   1221  N   PRO A  98     -15.450  21.775  20.251  1.00 65.47      A    N
ATOM   1222  CA  PRO A  98     -15.643  22.885  19.314  1.00 66.88      A    C
ATOM   1224  CB  PRO A  98     -14.855  24.014  19.974  1.00 66.08      A    C
ATOM   1227  CG  PRO A  98     -15.040  23.752  21.411  1.00 64.43      A    C
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ATOM	1230	CD	PRO	A	98	-14.910	22.277	21.533	1.00	63.33	A C
ATOM	1233	C	PRO	A	98	-15.210	22.740	17.858	1.00	68.94	A C
ATOM	1234	O	PRO	A	98	-15.904	23.279	16.979	1.00	69.94	A O
ATOM	1235	N	ASP	A	99	-14.095	22.056	17.599	1.00	67.24	A N
ATOM	1236	CA	ASP	A	99	-13.512	22.050	16.256	1.00	67.21	A C
ATOM	1238	CB	ASP	A	99	-12.071	22.553	16.335	1.00	69.13	A C
ATOM	1241	CG	ASP	A	99	-11.989	23.989	16.853	1.00	71.08	A C
ATOM	1242	OD1	ASP	A	99	-12.087	24.915	16.024	1.00	71.97	A O
ATOM	1243	OD2	ASP	A	99	-11.870	24.200	18.082	1.00	71.41	A O
ATOM	1244	C	ASP	A	99	-13.620	20.686	15.570	1.00	65.98	A C
ATOM	1245	O	ASP	A	99	-12.728	20.260	14.832	1.00	64.85	A O
ATOM	1247	N	THR	A	100	-14.744	20.020	15.810	1.00	63.79	A N
ATOM	1248	CA	THR	A	100	-15.025	18.719	15.231	1.00	61.72	A C
ATOM	1250	CB	THR	A	100	-14.310	17.602	16.052	1.00	61.83	A C
ATOM	1252	OG1	THR	A	100	-14.781	16.312	15.644	1.00	63.00	A O
ATOM	1254	CG2	THR	A	100	-14.543	17.764	17.539	1.00	58.82	A C
ATOM	1258	C	THR	A	100	-16.519	18.460	15.202	1.00	58.86	A C
ATOM	1259	O	THR	A	100	-17.205	18.735	16.182	1.00	60.59	A O
ATOM	1261	N	ILE	A	101	-17.022	17.948	14.077	1.00	57.50	A N
ATOM	1262	CA	ILE	A	101	-18.430	17.538	13.984	1.00	57.02	A C
ATOM	1264	CB	ILE	A	101	-18.925	17.525	12.514	1.00	60.93	A C
ATOM	1266	CG1	ILE	A	101	-18.406	16.316	11.732	1.00	58.89	A C
ATOM	1269	CD1	ILE	A	101	-18.912	16.299	10.279	1.00	58.06	A C
ATOM	1273	CG2	ILE	A	101	-18.502	18.820	11.819	1.00	68.53	A C
ATOM	1277	C	ILE	A	101	-18.666	16.177	14.655	1.00	54.01	A C
ATOM	1278	O	ILE	A	101	-19.791	15.709	14.754	1.00	55.00	A O
ATOM	1280	N	ASP	A	102	-17.591	15.553	15.121	1.00	53.57	A N
ATOM	1281	CA	ASP	A	102	-17.660	14.237	15.754	1.00	50.75	A C
ATOM	1283	CB	ASP	A	102	-16.272	13.641	16.006	1.00	48.38	A C
ATOM	1286	CG	ASP	A	102	-15.548	13.258	14.754	1.00	48.28	A C
ATOM	1287	OD1	ASP	A	102	-16.192	12.891	13.743	1.00	45.67	A O
ATOM	1288	OD2	ASP	A	102	-14.304	13.304	14.810	1.00	49.61	A O
ATOM	1289	C	ASP	A	102	-18.305	14.269	17.117	1.00	48.07	A C
ATOM	1290	O	ASP	A	102	-18.057	15.177	17.912	1.00	45.92	A O
ATOM	1292	N	HIS	A	103	-19.090	13.229	17.393	1.00	45.69	A N
ATOM	1293	CA	HIS	A	103	-19.711	13.005	18.700	1.00	44.33	A C
ATOM	1295	CB	HIS	A	103	-18.666	12.749	19.794	1.00	38.79	A C
ATOM	1298	CG	HIS	A	103	-17.506	11.915	19.341	1.00	41.56	A C
ATOM	1299	ND1	HIS	A	103	-17.663	10.686	18.742	1.00	37.73	A N
ATOM	1301	CE1	HIS	A	103	-16.477	10.193	18.440	1.00	37.00	A C
ATOM	1303	NE2	HIS	A	103	-15.555	11.057	18.824	1.00	38.87	A N
ATOM	1305	CD2	HIS	A	103	-16.172	12.146	19.386	1.00	38.48	A C
ATOM	1307	C	HIS	A	103	-20.614	14.142	19.125	1.00	43.13	A C
ATOM	1308	O	HIS	A	103	-20.715	14.447	20.315	1.00	40.05	A O
ATOM	1310	N	ASP	A	104	-21.319	14.725	18.161	1.00	44.47	A N
ATOM	1311	CA	ASP	A	104	-22.037	15.982	18.375	1.00	42.56	A C
ATOM	1313	CB	ASP	A	104	-22.089	16.747	17.057	1.00	38.91	A C
ATOM	1316	CG	ASP	A	104	-22.582	18.136	17.215	1.00	36.89	A C
ATOM	1317	OD1	ASP	A	104	-22.577	18.681	18.339	1.00	41.50	A O
ATOM	1318	OD2	ASP	A	104	-22.977	18.698	16.196	1.00	34.86	A O
ATOM	1319	C	ASP	A	104	-23.430	15.738	18.942	1.00	42.65	A C
ATOM	1320	O	ASP	A	104	-24.429	16.114	18.344	1.00	41.82	A O
ATOM	1322	N	LEU	A	105	-23.459	15.104	20.110	1.00	42.25	A N
ATOM	1323	CA	LEU	A	105	-24.674	14.760	20.804	1.00	43.97	A C
ATOM	1325	CB	LEU	A	105	-24.851	13.233	20.871	1.00	41.45	A C
ATOM	1328	CG	LEU	A	105	-25.261	12.560	19.555	1.00	36.84	A C
ATOM	1330	CD1	LEU	A	105	-25.461	11.050	19.730	1.00	35.78	A C
ATOM	1334	CD2	LEU	A	105	-26.525	13.233	18.983	1.00	28.50	A C
ATOM	1338	C	LEU	A	105	-24.657	15.375	22.194	1.00	45.41	A C
ATOM	1339	O	LEU	A	105	-23.610	15.503	22.807	1.00	47.08	A O
ATOM	1341	N	LEU	A	106	-25.831	15.787	22.665	1.00	48.88	A N
ATOM	1342	CA	LEU	A	106	-25.983	16.396	23.993	1.00	48.41	A C
ATOM	1344	CB	LEU	A	106	-25.943	17.925	23.897	1.00	47.38	A C
ATOM	1347	CG	LEU	A	106	-26.502	18.786	25.040	1.00	45.25	A C
ATOM	1349	CD1	LEU	A	106	-26.838	20.172	24.532	1.00	43.77	A C
ATOM	1353	CD2	LEU	A	106	-25.554	18.846	26.224	1.00	37.10	A C
ATOM	1357	C	LEU	A	106	-27.288	15.910	24.616	1.00	47.50	A C
ATOM	1358	O	LEU	A	106	-28.341	15.970	23.992	1.00	42.37	A O
ATOM	1360	N	LEU	A	107	-27.199	15.423	25.848	1.00	48.53	A N
ATOM	1361	CA	LEU	A	107	-28.371	14.980	26.593	1.00	50.23	A C
ATOM	1363	CB	LEU	A	107	-28.121	13.604	27.202	1.00	44.46	A C
ATOM	1366	CG	LEU	A	107	-28.846	12.393	26.609	1.00	42.22	A C
ATOM	1368	CD1	LEU	A	107	-27.865	11.380	26.021	1.00	38.30	A C
ATOM	1372	CD2	LEU	A	107	-29.947	12.779	25.626	1.00	36.02	A C
ATOM	1376	C	LEU	A	107	-28.747	16.000	27.683	1.00	49.80	A C

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ATOM	1377	O	LEU	A	107	-27.947	16.286	28.552	1.00	50.91	A	O
ATOM	1379	N	LEU	A	108	-29.959	16.551	27.618	1.00	51.07	A	N
ATOM	1380	CA	LEU	A	108	-30.424	17.538	28.605	1.00	51.31	A	C
ATOM	1382	CB	LEU	A	108	-31.114	18.729	27.930	1.00	49.10	A	C
ATOM	1385	CG	LEU	A	108	-30.339	19.782	27.123	1.00	50.36	A	C
ATOM	1387	CD1	LEU	A	108	-29.133	20.300	27.873	1.00	49.79	A	C
ATOM	1391	CD2	LEU	A	108	-29.916	19.224	25.783	1.00	56.15	A	C
ATOM	1395	C	LEU	A	108	-31.392	16.897	29.613	1.00	51.75	A	C
ATOM	1396	O	LEU	A	108	-32.364	16.254	29.227	1.00	47.73	A	O
ATOM	1398	N	GLN	A	109	-31.119	17.070	30.903	1.00	54.09	A	N
ATOM	1399	CA	GLN	A	109	-32.020	16.593	31.942	1.00	55.67	A	C
ATOM	1401	CB	GLN	A	109	-31.251	16.115	33.163	1.00	54.72	A	C
ATOM	1404	CG	GLN	A	109	-32.126	15.346	34.143	1.00	53.89	A	C
ATOM	1407	CD	GLN	A	109	-31.391	14.955	35.398	1.00	54.26	A	C
ATOM	1408	OE1	GLN	A	109	-30.578	15.723	35.924	1.00	55.12	A	O
ATOM	1409	NE2	GLN	A	109	-31.676	13.755	35.896	1.00	50.54	A	N
ATOM	1412	C	GLN	A	109	-32.960	17.715	32.351	1.00	57.09	A	C
ATOM	1413	O	GLN	A	109	-32.516	18.769	32.798	1.00	55.13	A	O
ATOM	1415	N	LEU	A	110	-34.261	17.479	32.227	1.00	59.10	A	N
ATOM	1416	CA	LEU	A	110	-35.246	18.507	32.566	1.00	61.11	A	C
ATOM	1418	CB	LEU	A	110	-36.612	18.196	31.944	1.00	58.48	A	C
ATOM	1421	CG	LEU	A	110	-36.657	17.967	30.430	1.00	53.45	A	C
ATOM	1423	CD1	LEU	A	110	-38.055	17.522	30.040	1.00	51.44	A	C
ATOM	1427	CD2	LEU	A	110	-36.223	19.200	29.656	1.00	44.58	A	C
ATOM	1431	C	LEU	A	110	-35.375	18.667	34.083	1.00	63.27	A	C
ATOM	1432	O	LEU	A	110	-34.950	17.791	34.851	1.00	62.43	A	O
ATOM	1434	N	SER	A	111	-35.956	19.796	34.493	1.00	64.47	A	N
ATOM	1435	CA	SER	A	111	-36.090	20.162	35.916	1.00	63.43	A	C
ATOM	1437	CB	SER	A	111	-36.803	21.513	36.064	1.00	62.75	A	C
ATOM	1440	OG	SER	A	111	-38.073	21.496	35.434	1.00	60.81	A	O
ATOM	1442	C	SER	A	111	-36.821	19.089	36.717	1.00	62.50	A	C
ATOM	1443	O	SER	A	111	-36.526	18.877	37.885	1.00	63.11	A	O
ATOM	1445	N	GLU	A	112	-37.776	18.434	36.064	1.00	61.33	A	N
ATOM	1446	CA	GLU	A	112	-38.462	17.258	36.582	1.00	62.10	A	C
ATOM	1448	CB	GLU	A	112	-39.701	17.670	37.389	1.00	65.45	A	C
ATOM	1451	CG	GLU	A	112	-40.651	18.649	36.667	1.00	65.19	A	C
ATOM	1454	CD	GLU	A	112	-42.020	18.740	37.329	1.00	65.68	A	C
ATOM	1455	OE1	GLU	A	112	-42.264	19.742	38.020	1.00	65.89	A	O
ATOM	1456	OE2	GLU	A	112	-42.851	17.815	37.170	1.00	64.67	A	O
ATOM	1457	C	GLU	A	112	-38.882	16.406	35.397	1.00	58.55	A	C
ATOM	1458	O	GLU	A	112	-38.713	16.814	34.255	1.00	55.38	A	O
ATOM	1460	N	LYS	A	113	-39.453	15.238	35.653	1.00	59.56	A	N
ATOM	1461	CA	LYS	A	113	-40.011	14.446	34.568	1.00	61.29	A	C
ATOM	1463	CB	LYS	A	113	-40.621	13.126	35.069	1.00	64.67	A	C
ATOM	1466	CG	LYS	A	113	-41.792	13.270	36.058	1.00	70.78	A	C
ATOM	1469	CD	LYS	A	113	-42.799	12.102	35.938	1.00	69.24	A	C
ATOM	1472	CE	LYS	A	113	-43.946	12.236	36.923	1.00	68.35	A	C
ATOM	1475	NZ	LYS	A	113	-44.749	13.459	36.646	1.00	71.97	A	N
ATOM	1479	C	LYS	A	113	-41.014	15.297	33.779	1.00	61.27	A	C
ATOM	1480	O	LYS	A	113	-41.679	16.174	34.330	1.00	61.20	A	O
ATOM	1482	N	ALA	A	114	-41.082	15.057	32.473	1.00	61.55	A	N
ATOM	1483	CA	ALA	A	114	-41.948	15.818	31.588	1.00	59.70	A	C
ATOM	1485	CB	ALA	A	114	-41.507	15.640	30.124	1.00	60.17	A	C
ATOM	1489	C	ALA	A	114	-43.380	15.359	31.769	1.00	57.41	A	C
ATOM	1490	O	ALA	A	114	-43.640	14.167	31.819	1.00	57.49	A	O
ATOM	1492	N	THR	A	115	-44.300	16.313	31.869	1.00	56.47	A	N
ATOM	1493	CA	THR	A	115	-45.721	16.013	31.906	1.00	57.10	A	C
ATOM	1495	CB	THR	A	115	-46.565	17.245	32.281	1.00	51.25	A	C
ATOM	1497	OG1	THR	A	115	-45.964	17.909	33.395	1.00	47.12	A	O
ATOM	1499	CG2	THR	A	115	-47.978	16.828	32.642	1.00	48.71	A	C
ATOM	1503	C	THR	A	115	-46.136	15.462	30.536	1.00	59.04	A	C
ATOM	1504	O	THR	A	115	-46.222	16.198	29.542	1.00	58.19	A	O
ATOM	1506	N	LEU	A	116	-46.373	14.152	30.499	1.00	58.77	A	N
ATOM	1507	CA	LEU	A	116	-46.709	13.460	29.266	1.00	57.56	A	C
ATOM	1509	CB	LEU	A	116	-46.307	11.982	29.345	1.00	55.60	A	C
ATOM	1512	CG	LEU	A	116	-44.819	11.729	29.658	1.00	54.47	A	C
ATOM	1514	CD1	LEU	A	116	-44.496	10.248	29.704	1.00	53.55	A	C
ATOM	1518	CD2	LEU	A	116	-43.887	12.430	28.669	1.00	55.55	A	C
ATOM	1522	C	LEU	A	116	-48.184	13.647	28.941	1.00	56.26	A	C
ATOM	1523	O	LEU	A	116	-48.984	13.983	29.811	1.00	57.31	A	O
ATOM	1525	N	GLY	A	117	-48.526	13.466	27.669	1.00	57.80	A	N
ATOM	1526	CA	GLY	A	117	-49.882	13.720	27.179	1.00	58.66	A	C
ATOM	1529	C	GLY	A	117	-49.952	13.417	25.701	1.00	60.57	A	C
ATOM	1530	O	GLY	A	117	-49.035	12.787	25.169	1.00	62.21	A	O
ATOM	1532	N	PRO	A	118	-51.037	13.841	25.025	1.00	60.43	A	N

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ATOM   1533  CA  PRO A 118     -51.149  13.603  23.578  1.00 60.56      A    C
ATOM   1535  CB  PRO A 118     -52.591  14.038  23.249  1.00 61.74      A    C
ATOM   1538  CG  PRO A 118     -52.999  14.930  24.344  1.00 62.45      A    C
ATOM   1541  CD  PRO A 118     -52.224  14.519  25.569  1.00 61.71      A    C
ATOM   1544  C   PRO A 118     -50.122  14.372  22.732  1.00 59.24      A    C
ATOM   1545  O   PRO A 118     -49.739  13.899  21.660  1.00 55.41      A    O
ATOM   1546  N   ALA A 119     -49.683  15.530  23.236  1.00 60.29      A    N
ATOM   1547  CA  ALA A 119     -48.747  16.425  22.545  1.00 57.02      A    C
ATOM   1549  CB  ALA A 119     -49.257  17.846  22.657  1.00 52.94      A    C
ATOM   1553  C   ALA A 119     -47.303  16.369  23.061  1.00 54.79      A    C
ATOM   1554  O   ALA A 119     -46.443  17.063  22.523  1.00 57.26      A    O
ATOM   1556  N   VAL A 120     -47.040  15.567  24.093  1.00 52.53      A    N
ATOM   1557  CA  VAL A 120     -45.704  15.456  24.690  1.00 54.80      A    C
ATOM   1559  CB  VAL A 120     -45.545  16.342  25.961  1.00 48.73      A    C
ATOM   1561  CG1 VAL A 120     -44.154  16.209  26.543  1.00 42.03      A    C
ATOM   1565  CG2 VAL A 120     -45.844  17.814  25.653  1.00 40.56      A    C
ATOM   1569  C   VAL A 120     -45.391  13.996  25.039  1.00 57.52      A    C
ATOM   1570  O   VAL A 120     -46.034  13.414  25.903  1.00 59.64      A    O
ATOM   1572  N   ARG A 121     -44.379  13.426  24.383  1.00 61.52      A    N
ATOM   1573  CA  ARG A 121     -44.082  11.989  24.471  1.00 62.26      A    C
ATOM   1575  CB  ARG A 121     -45.138  11.187  23.685  1.00 66.21      A    C
ATOM   1578  CG  ARG A 121     -44.864   9.681  23.609  1.00 69.04      A    C
ATOM   1581  CD  ARG A 121     -45.949   8.917  22.841  1.00 72.08      A    C
ATOM   1584  NE  ARG A 121     -46.104   7.529  23.305  1.00 74.39      A    N
ATOM   1586  CZ  ARG A 121     -47.041   6.675  22.874  1.00 76.63      A    C
ATOM   1587  NH1 ARG A 121     -47.924   7.051  21.948  1.00 79.00      A    N
ATOM   1590  NH2 ARG A 121     -47.093   5.432  23.369  1.00 75.83      A    N
ATOM   1593  C   ARG A 121     -42.676  11.646  23.937  1.00 60.65      A    C
ATOM   1594  O   ARG A 121     -42.285  12.142  22.896  1.00 59.40      A    O
ATOM   1596  N   PRO A 122     -41.908  10.804  24.656  1.00 60.04      A    N
ATOM   1597  CA  PRO A 122     -40.622  10.333  24.116  1.00 57.74      A    C
ATOM   1599  CB  PRO A 122     -40.052   9.454  25.233  1.00 57.79      A    C
ATOM   1602  CG  PRO A 122     -41.139   9.263  26.226  1.00 60.27      A    C
ATOM   1605  CD  PRO A 122     -42.157  10.323  26.029  1.00 60.02      A    C
ATOM   1608  C   PRO A 122     -40.685   9.554  22.784  1.00 55.16      A    C
ATOM   1609  O   PRO A 122     -41.685   8.901  22.482  1.00 53.39      A    O
ATOM   1610  N   LEU A 123     -39.609   9.652  22.006  1.00 53.22      A    N
ATOM   1611  CA  LEU A 123     -39.451   8.912  20.745  1.00 55.04      A    C
ATOM   1613  CB  LEU A 123     -38.957   9.843  19.623  1.00 55.08      A    C
ATOM   1616  CG  LEU A 123     -38.636   9.292  18.217  1.00 52.47      A    C
ATOM   1618  CD1 LEU A 123     -37.967  10.359  17.363  1.00 48.36      A    C
ATOM   1622  CD2 LEU A 123     -39.870   8.734  17.504  1.00 50.77      A    C
ATOM   1626  C   LEU A 123     -38.460   7.757  20.939  1.00 54.62      A    C
ATOM   1627  O   LEU A 123     -37.383   7.941  21.515  1.00 56.24      A    O
ATOM   1629  N   PRO A 124     -38.835   6.556  20.483  1.00 53.12      A    N
ATOM   1630  CA  PRO A 124     -37.894   5.449  20.430  1.00 53.52      A    C
ATOM   1632  CB  PRO A 124     -38.722   4.301  19.829  1.00 55.20      A    C
ATOM   1635  CG  PRO A 124     -40.119   4.693  19.972  1.00 57.41      A    C
ATOM   1638  CD  PRO A 124     -40.172   6.174  20.007  1.00 55.78      A    C
ATOM   1641  C   PRO A 124     -36.735   5.770  19.492  1.00 50.75      A    C
ATOM   1642  O   PRO A 124     -36.953   6.320  18.414  1.00 45.27      A    O
ATOM   1643  N   TRP A 125     -35.522   5.414  19.883  1.00 49.34      A    N
ATOM   1644  CA  TRP A 125     -34.367   5.701  19.048  1.00 49.97      A    C
ATOM   1646  CB  TRP A 125     -33.424   6.687  19.759  1.00 45.53      A    C
ATOM   1649  CG  TRP A 125     -32.992   6.244  21.122  1.00 46.06      A    C
ATOM   1650  CD1 TRP A 125     -33.628   6.475  22.319  1.00 45.03      A    C
ATOM   1652  NE1 TRP A 125     -32.910   5.910  23.352  1.00 43.44      A    N
ATOM   1654  CE2 TRP A 125     -31.813   5.275  22.825  1.00 45.17      A    C
ATOM   1655  CD2 TRP A 125     -31.831   5.475  21.428  1.00 45.03      A    C
ATOM   1656  CE3 TRP A 125     -30.798   4.941  20.654  1.00 44.01      A    C
ATOM   1658  CZ3 TRP A 125     -29.803   4.235  21.275  1.00 44.32      A    C
ATOM   1660  CH2 TRP A 125     -29.806   4.052  22.667  1.00 44.85      A    C
ATOM   1662  CZ2 TRP A 125     -30.799   4.565  23.456  1.00 45.17      A    C
ATOM   1664  C   TRP A 125     -33.693   4.402  18.614  1.00 48.38      A    C
ATOM   1665  O   TRP A 125     -33.809   3.386  19.278  1.00 51.66      A    O
ATOM   1667  N   GLN A 126     -33.029   4.434  17.470  1.00 48.01      A    N
ATOM   1668  CA  GLN A 126     -32.471   3.223  16.870  1.00 50.83      A    C
ATOM   1670  CB  GLN A 126     -32.067   3.472  15.407  1.00 43.96      A    C
ATOM   1673  CG  GLN A 126     -31.632   2.226  14.643  1.00 45.69      A    C
ATOM   1676  CD  GLN A 126     -32.710   1.132  14.581  1.00 44.47      A    C
ATOM   1677  OE1 GLN A 126     -32.695   0.199  15.370  1.00 43.95      A    O
ATOM   1678  NE2 GLN A 126     -33.636   1.253  13.641  1.00 45.14      A    N
ATOM   1681  C   GLN A 126     -31.294   2.657  17.687  1.00 50.87      A    C
ATOM   1682  O   GLN A 126     -30.306   3.341  17.950  1.00 47.87      A    O
ATOM   1684  N   ARG A 127     -31.425   1.396  18.079  1.00 54.20      A    N
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ATOM   1685  CA  ARG A 127     -30.458   0.737  18.943  1.00 56.29      A    C
ATOM   1687  CB  ARG A 127     -31.210  -0.075  19.996  1.00 59.81      A    C
ATOM   1690  CG  ARG A 127     -30.376  -0.441  21.206  1.00 61.36      A    C
ATOM   1693  CD  ARG A 127     -31.242  -1.083  22.264  1.00 59.55      A    C
ATOM   1696  NE  ARG A 127     -32.100  -0.089  22.892  1.00 59.79      A    N
ATOM   1698  CZ  ARG A 127     -31.709   0.742  23.854  1.00 60.46      A    C
ATOM   1699  NH1 ARG A 127     -30.460   0.703  24.313  1.00 57.51      A    N
ATOM   1702  NH2 ARG A 127     -32.577   1.614  24.368  1.00 59.33      A    N
ATOM   1705  C   ARG A 127     -29.508  -0.153  18.144  1.00 56.00      A    C
ATOM   1706  O   ARG A 127     -28.355  -0.359  18.524  1.00 57.13      A    O
ATOM   1708  N   VAL A 128     -29.990  -0.647  17.013  1.00 55.49      A    N
ATOM   1709  CA  VAL A 128     -29.219  -1.523  16.161  1.00 54.95      A    C
ATOM   1711  CB  VAL A 128     -30.149  -2.405  15.322  1.00 52.08      A    C
ATOM   1713  CG1 VAL A 128     -29.350  -3.312  14.378  1.00 44.68      A    C
ATOM   1717  CG2 VAL A 128     -31.075  -3.218  16.242  1.00 49.59      A    C
ATOM   1721  C   VAL A 128     -28.344  -0.706  15.228  1.00 57.45      A    C
ATOM   1722  O   VAL A 128     -28.820   0.186  14.499  1.00 54.19      A    O
ATOM   1724  N   ASP A 129     -27.054  -1.027  15.250  1.00 57.86      A    N
ATOM   1725  CA  ASP A 129     -26.064  -0.247  14.551  1.00 56.36      A    C
ATOM   1727  CB  ASP A 129     -24.751  -0.243  15.331  1.00 51.89      A    C
ATOM   1730  CG  ASP A 129     -23.748   0.735  14.772  1.00 48.61      A    C
ATOM   1731  OD1 ASP A 129     -24.039   1.362  13.744  1.00 44.52      A    O
ATOM   1732  OD2 ASP A 129     -22.662   0.868  15.350  1.00 45.72      A    O
ATOM   1733  C   ASP A 129     -25.869  -0.761  13.138  1.00 55.26      A    C
ATOM   1734  O   ASP A 129     -24.927  -1.488  12.847  1.00 48.89      A    O
ATOM   1736  N   ARG A 130     -26.780  -0.365  12.259  1.00 57.45      A    N
ATOM   1737  CA  ARG A 130     -26.550  -0.492  10.839  1.00 58.19      A    C
ATOM   1739  CB  ARG A 130     -26.928  -1.878  10.301  1.00 70.29      A    C
ATOM   1742  CG  ARG A 130     -28.174  -2.508  10.875  1.00 74.37      A    C
ATOM   1745  CD  ARG A 130     -29.433  -1.799  10.391  1.00 81.38      A    C
ATOM   1748  NE  ARG A 130     -30.660  -2.508  10.770  1.00 82.96      A    N
ATOM   1750  CZ  ARG A 130     -31.098  -3.635  10.199  1.00 86.77      A    C
ATOM   1751  NH1 ARG A 130     -30.413  -4.229   9.211  1.00 88.68      A    N
ATOM   1754  NH2 ARG A 130     -32.229  -4.180  10.627  1.00 82.41      A    N
ATOM   1757  C   ARG A 130     -27.234   0.641  10.090  1.00 54.91      A    C
ATOM   1758  O   ARG A 130     -28.197   1.236  10.573  1.00 50.74      A    O
ATOM   1760  N   ASP A 131     -26.695   0.950   8.915  1.00 50.40      A    N
ATOM   1761  CA  ASP A 131     -27.135   2.100   8.143  1.00 48.43      A    C
ATOM   1763  CB  ASP A 131     -26.306   2.246   6.867  1.00 47.70      A    C
ATOM   1766  CG  ASP A 131     -25.047   3.037   7.060  1.00 44.01      A    C
ATOM   1767  OD1 ASP A 131     -24.899   3.710   8.100  1.00 41.41      A    O
ATOM   1768  OD2 ASP A 131     -24.207   2.985   6.138  1.00 41.76      A    O
ATOM   1769  C   ASP A 131     -28.567   2.006   7.702  1.00 44.62      A    C
ATOM   1770  O   ASP A 131     -29.042   0.950   7.312  1.00 48.72      A    O
ATOM   1772  N   VAL A 132     -29.246   3.136   7.715  1.00 43.05      A    N
ATOM   1773  CA  VAL A 132     -30.486   3.265   6.979  1.00 40.82      A    C
ATOM   1775  CB  VAL A 132     -31.152   4.598   7.225  1.00 36.97      A    C
ATOM   1777  CG1 VAL A 132     -32.424   4.702   6.395  1.00 39.65      A    C
ATOM   1781  CG2 VAL A 132     -31.456   4.742   8.674  1.00 35.91      A    C
ATOM   1785  C   VAL A 132     -30.134   3.122   5.504  1.00 41.80      A    C
ATOM   1786  O   VAL A 132     -29.155   3.679   5.036  1.00 43.66      A    O
ATOM   1788  N   ALA A 133     -30.934   2.347   4.791  1.00 45.37      A    N
ATOM   1789  CA  ALA A 133     -30.718   2.102   3.373  1.00 41.03      A    C
ATOM   1791  CB  ALA A 133     -31.801   1.132   2.846  1.00 36.86      A    C
ATOM   1795  C   ALA A 133     -30.758   3.414   2.581  1.00 37.89      A    C
ATOM   1796  O   ALA A 133     -31.562   4.309   2.890  1.00 38.61      A    O
ATOM   1798  N   PRO A 134     -29.892   3.545   1.563  1.00 36.46      A    N
ATOM   1799  CA  PRO A 134     -29.977   4.671   0.632  1.00 37.07      A    C
ATOM   1801  CB  PRO A 134     -28.945   4.320  -0.432  1.00 40.39      A    C
ATOM   1804  CG  PRO A 134     -27.940   3.464   0.278  1.00 39.21      A    C
ATOM   1807  CD  PRO A 134     -28.761   2.652   1.241  1.00 39.07      A    C
ATOM   1810  C   PRO A 134     -31.366   4.802   0.013  1.00 40.84      A    C
ATOM   1811  O   PRO A 134     -32.024   3.797  -0.243  1.00 44.50      A    O
ATOM   1812  N   GLY A 135     -31.821   6.034  -0.186  1.00 39.61      A    N
ATOM   1813  CA  GLY A 135     -33.135   6.291  -0.738  1.00 38.34      A    C
ATOM   1816  C   GLY A 135     -34.275   6.255   0.261  1.00 39.46      A    C
ATOM   1817  O   GLY A 135     -35.366   6.766  -0.020  1.00 40.78      A    O
ATOM   1819  N   THR A 136     -34.052   5.648   1.418  1.00 37.77      A    N
ATOM   1820  CA  THR A 136     -35.087   5.580   2.458  1.00 39.41      A    C
ATOM   1822  CB  THR A 136     -34.534   4.964   3.749  1.00 36.87      A    C
ATOM   1824  OG1 THR A 136     -33.934   3.699   3.448  1.00 34.97      A    O
ATOM   1826  CG2 THR A 136     -35.630   4.798   4.809  1.00 34.42      A    C
ATOM   1830  C   THR A 136     -35.574   6.988   2.775  1.00 39.88      A    C
ATOM   1831  O   THR A 136     -34.776   7.890   2.906  1.00 44.04      A    O
ATOM   1833  N   LEU A 137     -36.873   7.167   2.908  1.00 42.42      A    N
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ATOM	1834	CA	LEU	A	137	-37.446	8.507	3.028	1.00	43.50	A	C
ATOM	1836	CB	LEU	A	137	-38.768	8.576	2.258	1.00	48.15	A	C
ATOM	1839	CG	LEU	A	137	-38.998	9.780	1.342	1.00	50.05	A	C
ATOM	1841	CD1	LEU	A	137	-37.799	10.070	0.474	1.00	50.80	A	C
ATOM	1845	CD2	LEU	A	137	-40.204	9.499	0.481	1.00	48.54	A	C
ATOM	1849	C	LEU	A	137	-37.661	8.820	4.498	1.00	44.18	A	C
ATOM	1850	O	LEU	A	137	-38.449	8.139	5.161	1.00	45.74	A	O
ATOM	1852	N	CYS	A	138	-36.936	9.826	5.008	1.00	41.15	A	N
ATOM	1853	CA	CYS	A	138	-36.949	10.158	6.431	1.00	37.84	A	C
ATOM	1855	CB	CYS	A	138	-35.573	10.017	7.070	1.00	37.40	A	C
ATOM	1858	SG	CYS	A	138	-34.773	8.455	6.806	1.00	43.05	A	S
ATOM	1860	C	CYS	A	138	-37.459	11.563	6.672	1.00	35.64	A	C
ATOM	1861	O	CYS	A	138	-37.437	12.409	5.798	1.00	32.56	A	O
ATOM	1863	N	ASP	A	139	-37.892	11.801	7.897	1.00	39.34	A	N
ATOM	1864	CA	ASP	A	139	-38.601	13.015	8.258	1.00	38.90	A	C
ATOM	1866	CB	ASP	A	139	-39.915	12.604	8.925	1.00	38.83	A	C
ATOM	1869	CG	ASP	A	139	-40.897	13.730	9.017	1.00	39.10	A	C
ATOM	1870	OD1	ASP	A	139	-40.831	14.649	8.205	1.00	36.42	A	O
ATOM	1871	OD2	ASP	A	139	-41.757	13.679	9.902	1.00	43.88	A	O
ATOM	1872	C	ASP	A	139	-37.752	13.826	9.229	1.00	37.70	A	C
ATOM	1873	O	ASP	A	139	-37.428	13.346	10.328	1.00	35.55	A	O
ATOM	1875	N	VAL	A	140	-37.367	15.036	8.822	1.00	36.26	A	N
ATOM	1876	CA	VAL	A	140	-36.714	15.974	9.735	1.00	36.61	A	C
ATOM	1878	CB	VAL	A	140	-35.296	16.374	9.228	1.00	37.18	A	C
ATOM	1880	CG1	VAL	A	140	-35.375	17.121	7.915	1.00	39.07	A	C
ATOM	1884	CG2	VAL	A	140	-34.531	17.220	10.272	1.00	36.57	A	C
ATOM	1888	C	VAL	A	140	-37.659	17.174	10.010	1.00	35.17	A	C
ATOM	1889	O	VAL	A	140	-38.335	17.676	9.115	1.00	30.43	A	O
ATOM	1891	N	ALA	A	141	-37.768	17.570	11.275	1.00	37.52	A	N
ATOM	1892	CA	ALA	A	141	-38.592	18.724	11.658	1.00	37.71	A	C
ATOM	1894	CB	ALA	A	141	-39.822	18.292	12.493	1.00	36.75	A	C
ATOM	1898	C	ALA	A	141	-37.749	19.718	12.426	1.00	37.85	A	C
ATOM	1899	O	ALA	A	141	-36.688	19.354	13.000	1.00	32.37	A	O
ATOM	1901	N	GLY	A	142	-38.215	20.969	12.424	1.00	37.47	A	N
ATOM	1902	CA	GLY	A	142	-37.528	22.027	13.142	1.00	39.53	A	C
ATOM	1905	C	GLY	A	142	-38.056	23.434	12.962	1.00	39.91	A	C
ATOM	1906	O	GLY	A	142	-38.888	23.712	12.085	1.00	34.47	A	O
ATOM	1908	N	TRP	A	143	-37.532	24.332	13.797	1.00	40.62	A	N
ATOM	1909	CA	TRP	A	143	-37.880	25.746	13.733	1.00	40.77	A	C
ATOM	1911	CB	TRP	A	143	-38.228	26.277	15.126	1.00	36.15	A	C
ATOM	1914	CG	TRP	A	143	-39.550	25.865	15.693	1.00	34.52	A	C
ATOM	1915	CD1	TRP	A	143	-40.733	26.515	15.527	1.00	35.50	A	C
ATOM	1917	NE1	TRP	A	143	-41.713	25.898	16.250	1.00	36.17	A	N
ATOM	1919	CE2	TRP	A	143	-41.179	24.826	16.918	1.00	33.81	A	C
ATOM	1920	CD2	TRP	A	143	-39.815	24.768	16.590	1.00	26.46	A	C
ATOM	1921	CE3	TRP	A	143	-39.025	23.770	17.167	1.00	31.02	A	C
ATOM	1923	CZ3	TRP	A	143	-39.620	22.858	18.011	1.00	34.92	A	C
ATOM	1925	CH2	TRP	A	143	-40.998	22.921	18.298	1.00	34.20	A	C
ATOM	1927	CZ2	TRP	A	143	-41.787	23.905	17.772	1.00	34.41	A	C
ATOM	1929	C	TRP	A	143	-36.731	26.561	13.150	1.00	36.86	A	C
ATOM	1930	O	TRP	A	143	-36.637	27.751	13.400	1.00	37.75	A	O
ATOM	1932	N	GLY	A	144	-35.873	25.924	12.364	1.00	38.69	A	N
ATOM	1933	CA	GLY	A	144	-34.729	26.599	11.757	1.00	39.16	A	C
ATOM	1936	C	GLY	A	144	-35.109	27.384	10.520	1.00	38.42	A	C
ATOM	1937	O	GLY	A	144	-36.240	27.320	10.077	1.00	37.08	A	O
ATOM	1939	N	ILE	A	145	-34.157	28.111	9.946	1.00	42.31	A	N
ATOM	1940	CA	ILE	A	145	-34.445	28.986	8.800	1.00	42.33	A	C
ATOM	1942	CB	ILE	A	145	-33.175	29.777	8.293	1.00	39.85	A	C
ATOM	1944	CG1	ILE	A	145	-32.274	28.909	7.417	1.00	41.88	A	C
ATOM	1947	CD1	ILE	A	145	-30.951	29.589	6.997	1.00	44.49	A	C
ATOM	1951	CG2	ILE	A	145	-32.371	30.314	9.436	1.00	34.62	A	C
ATOM	1955	C	ILE	A	145	-35.115	28.247	7.614	1.00	41.51	A	C
ATOM	1956	O	ILE	A	145	-34.803	27.081	7.317	1.00	38.57	A	O
ATOM	1958	N	VAL	A	146	-36.037	28.957	6.955	1.00	43.53	A	N
ATOM	1959	CA	VAL	A	146	-36.881	28.409	5.892	1.00	41.17	A	C
ATOM	1961	CB	VAL	A	146	-38.384	28.657	6.174	1.00	39.49	A	C
ATOM	1963	CG1	VAL	A	146	-38.888	27.786	7.350	1.00	36.15	A	C
ATOM	1967	CG2	VAL	A	146	-38.653	30.133	6.425	1.00	35.62	A	C
ATOM	1971	C	VAL	A	146	-36.559	28.996	4.511	1.00	44.43	A	C
ATOM	1972	O	VAL	A	146	-37.202	28.633	3.504	1.00	40.71	A	O
ATOM	1974	N	ASN	A	147	-35.588	29.914	4.472	1.00	42.90	A	N
ATOM	1975	CA	ASN	A	147	-35.122	30.513	3.223	1.00	44.80	A	C
ATOM	1977	CB	ASN	A	147	-36.101	31.590	2.690	1.00	43.45	A	C
ATOM	1980	CG	ASN	A	147	-36.104	32.889	3.512	1.00	41.14	A	C
ATOM	1981	OD1	ASN	A	147	-35.173	33.181	4.270	1.00	36.71	A	O

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ATOM	1982	ND2	ASN	A	147	-37.148	33.689	3.329	1.00	37.21	A	N
ATOM	1985	C	ASN	A	147	-33.718	31.060	3.396	1.00	46.56	A	C
ATOM	1986	O	ASN	A	147	-33.194	31.097	4.510	1.00	48.44	A	O
ATOM	1988	N	HIS	A	148	-33.114	31.465	2.287	1.00	48.59	A	N
ATOM	1989	CA	HIS	A	148	-31.741	31.979	2.281	1.00	50.16	A	C
ATOM	1991	CB	HIS	A	148	-31.152	31.881	0.880	1.00	51.69	A	C
ATOM	1994	CG	HIS	A	148	-31.045	30.479	0.368	1.00	55.88	A	C
ATOM	1995	ND1	HIS	A	148	-30.188	29.549	0.919	1.00	56.47	A	N
ATOM	1997	CE1	HIS	A	148	-30.308	28.407	0.266	1.00	56.86	A	C
ATOM	1999	NE2	HIS	A	148	-31.209	28.560	-0.688	1.00	57.60	A	N
ATOM	2001	CD2	HIS	A	148	-31.687	29.848	-0.645	1.00	57.94	A	C
ATOM	2003	C	HIS	A	148	-31.582	33.401	2.800	1.00	49.10	A	C
ATOM	2004	O	HIS	A	148	-30.453	33.839	3.012	1.00	50.47	A	O
ATOM	2006	N	ALA	A	149	-32.697	34.108	2.999	1.00	48.35	A	N
ATOM	2007	CA	ALA	A	149	-32.712	35.401	3.700	1.00	50.44	A	C
ATOM	2009	CB	ALA	A	149	-33.958	36.169	3.351	1.00	34.90	A	C
ATOM	2013	C	ALA	A	149	-32.613	35.272	5.227	1.00	53.69	A	C
ATOM	2014	O	ALA	A	149	-32.592	36.278	5.940	1.00	56.86	A	O
ATOM	2016	N	GLY	A	150	-32.593	34.041	5.725	1.00	55.55	A	N
ATOM	2017	CA	GLY	A	150	-32.489	33.776	7.146	1.00	55.44	A	C
ATOM	2020	C	GLY	A	150	-33.772	33.947	7.939	1.00	54.50	A	C
ATOM	2021	O	GLY	A	150	-33.702	34.154	9.148	1.00	52.01	A	O
ATOM	2023	N	ARG	A	151	-34.937	33.852	7.287	1.00	57.28	A	N
ATOM	2024	CA	ARG	A	151	-36.219	33.955	7.996	1.00	58.48	A	C
ATOM	2026	CB	ARG	A	151	-37.414	33.950	7.034	1.00	57.67	A	C
ATOM	2029	CG	ARG	A	151	-38.741	34.183	7.748	1.00	58.97	A	C
ATOM	2032	CD	ARG	A	151	-39.673	35.111	7.040	1.00	65.28	A	C
ATOM	2035	NE	ARG	A	151	-40.025	34.644	5.707	1.00	69.75	A	N
ATOM	2037	CZ	ARG	A	151	-40.773	33.571	5.432	1.00	72.89	A	C
ATOM	2038	NH1	ARG	A	151	-41.262	32.785	6.391	1.00	73.75	A	N
ATOM	2041	NH2	ARG	A	151	-41.037	33.273	4.162	1.00	73.33	A	N
ATOM	2044	C	ARG	A	151	-36.203	32.791	9.004	1.00	57.87	A	C
ATOM	2045	O	ARG	A	151	-35.174	32.210	9.197	1.00	60.51	A	O
ATOM	2047	N	ARG	A	152	-37.313	32.425	9.608	1.00	59.47	A	N
ATOM	2048	CA	ARG	A	152	-37.374	31.773	10.912	1.00	56.90	A	C
ATOM	2050	CB	ARG	A	152	-36.818	32.599	12.082	1.00	62.78	A	C
ATOM	2053	CG	ARG	A	152	-35.303	32.885	12.141	1.00	66.60	A	C
ATOM	2056	CD	ARG	A	152	-34.399	31.707	11.801	1.00	69.59	A	C
ATOM	2059	NE	ARG	A	152	-33.990	30.879	12.935	1.00	70.08	A	N
ATOM	2061	CZ	ARG	A	152	-32.745	30.775	13.414	1.00	69.62	A	C
ATOM	2062	NH1	ARG	A	152	-32.507	29.957	14.433	1.00	69.04	A	N
ATOM	2065	NH2	ARG	A	152	-31.731	31.471	12.899	1.00	69.66	A	N
ATOM	2068	C	ARG	A	152	-38.874	31.614	11.029	1.00	50.16	A	C
ATOM	2069	O	ARG	A	152	-39.594	32.592	11.045	1.00	48.56	A	O
ATOM	2071	N	PRO	A	153	-39.357	30.375	11.038	1.00	48.68	A	N
ATOM	2072	CA	PRO	A	153	-40.798	30.179	11.122	1.00	47.58	A	C
ATOM	2074	CB	PRO	A	153	-40.959	28.719	10.715	1.00	44.69	A	C
ATOM	2077	CG	PRO	A	153	-39.689	28.059	11.206	1.00	39.90	A	C
ATOM	2080	CD	PRO	A	153	-38.622	29.094	11.003	1.00	43.66	A	C
ATOM	2083	C	PRO	A	153	-41.320	30.394	12.544	1.00	46.97	A	C
ATOM	2084	O	PRO	A	153	-40.578	30.251	13.507	1.00	48.12	A	O
ATOM	2085	N	ASP	A	154	-42.594	30.719	12.684	1.00	45.48	A	N
ATOM	2086	CA	ASP	A	154	-43.170	30.786	14.014	1.00	44.44	A	C
ATOM	2088	CB	ASP	A	154	-44.380	31.727	14.109	1.00	41.53	A	C
ATOM	2091	CG	ASP	A	154	-45.032	31.672	15.488	1.00	39.90	A	C
ATOM	2092	OD1	ASP	A	154	-44.490	32.293	16.427	1.00	38.75	A	O
ATOM	2093	OD2	ASP	A	154	-46.057	30.978	15.638	1.00	35.47	A	O
ATOM	2094	C	ASP	A	154	-43.569	29.389	14.447	1.00	40.16	A	C
ATOM	2095	O	ASP	A	154	-43.288	28.994	15.573	1.00	36.68	A	O
ATOM	2097	N	SER	A	155	-44.216	28.639	13.555	1.00	41.05	A	N
ATOM	2098	CA	SER	A	155	-44.588	27.250	13.858	1.00	42.47	A	C
ATOM	2100	CB	SER	A	155	-46.040	26.978	13.474	1.00	41.45	A	C
ATOM	2103	OG	SER	A	155	-46.312	27.377	12.149	1.00	46.34	A	O
ATOM	2105	C	SER	A	155	-43.654	26.188	13.239	1.00	43.44	A	C
ATOM	2106	O	SER	A	155	-42.904	26.455	12.277	1.00	41.58	A	O
ATOM	2108	N	LEU	A	156	-43.720	24.987	13.816	1.00	41.33	A	N
ATOM	2109	CA	LEU	A	156	-42.863	23.864	13.444	1.00	42.92	A	C
ATOM	2111	CB	LEU	A	156	-43.144	22.677	14.382	1.00	42.64	A	C
ATOM	2114	CG	LEU	A	156	-42.266	21.442	14.220	1.00	40.09	A	C
ATOM	2116	CD1	LEU	A	156	-40.893	21.795	14.703	1.00	31.96	A	C
ATOM	2120	CD2	LEU	A	156	-42.873	20.204	14.959	1.00	34.86	A	C
ATOM	2124	C	LEU	A	156	-43.045	23.424	11.979	1.00	42.41	A	C
ATOM	2125	O	LEU	A	156	-44.168	23.285	11.491	1.00	37.99	A	O
ATOM	2127	N	GLN	A	157	-41.918	23.212	11.302	1.00	44.06	A	N
ATOM	2128	CA	GLN	A	157	-41.878	22.811	9.899	1.00	44.55	A	C

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ATOM	2130	CB	GLN	A	157	-40.993	23.768	9.092	1.00	43.27	A C
ATOM	2133	CG	GLN	A	157	-41.327	25.206	9.223	1.00	40.04	A C
ATOM	2136	CD	GLN	A	157	-42.491	25.601	8.352	1.00	43.07	A C
ATOM	2137	OE1	GLN	A	157	-42.475	25.368	7.137	1.00	44.65	A O
ATOM	2138	NE2	GLN	A	157	-43.497	26.234	8.956	1.00	34.27	A N
ATOM	2141	C	GLN	A	157	-41.258	21.443	9.787	1.00	42.62	A C
ATOM	2142	O	GLN	A	157	-40.615	20.981	10.719	1.00	41.92	A O
ATOM	2144	N	HIS	A	158	-41.416	20.813	8.629	1.00	42.05	A N
ATOM	2145	CA	HIS	A	158	-40.799	19.522	8.399	1.00	44.73	A C
ATOM	2147	CB	HIS	A	158	-41.643	18.415	9.052	1.00	45.15	A C
ATOM	2150	CG	HIS	A	158	-42.773	17.932	8.207	1.00	42.71	A C
ATOM	2151	ND1	HIS	A	158	-43.941	18.649	8.051	1.00	44.34	A N
ATOM	2153	CE1	HIS	A	158	-44.748	17.992	7.240	1.00	46.07	A C
ATOM	2155	NE2	HIS	A	158	-44.147	16.873	6.869	1.00	46.91	A N
ATOM	2157	CD2	HIS	A	158	-42.913	16.808	7.464	1.00	39.06	A C
ATOM	2159	C	HIS	A	158	-40.582	19.261	6.914	1.00	45.23	A C
ATOM	2160	O	HIS	A	158	-41.121	19.971	6.068	1.00	45.76	A O
ATOM	2162	N	VAL	A	159	-39.773	18.247	6.610	1.00	42.85	A N
ATOM	2163	CA	VAL	A	159	-39.509	17.849	5.218	1.00	44.46	A C
ATOM	2165	CB	VAL	A	159	-38.377	18.727	4.543	1.00	40.51	A C
ATOM	2167	CG1	VAL	A	159	-36.990	18.315	5.020	1.00	36.60	A C
ATOM	2171	CG2	VAL	A	159	-38.467	18.658	3.037	1.00	31.26	A C
ATOM	2175	C	VAL	A	159	-39.142	16.372	5.146	1.00	43.03	A C
ATOM	2176	O	VAL	A	159	-38.463	15.856	6.035	1.00	39.12	A O
ATOM	2178	N	LEU	A	160	-39.606	15.698	4.098	1.00	45.51	A N
ATOM	2179	CA	LEU	A	160	-39.172	14.323	3.808	1.00	47.40	A C
ATOM	2181	CB	LEU	A	160	-40.261	13.498	3.112	1.00	49.83	A C
ATOM	2184	CG	LEU	A	160	-41.089	12.623	4.033	1.00	49.40	A C
ATOM	2186	CD1	LEU	A	160	-41.633	13.473	5.154	1.00	50.44	A C
ATOM	2190	CD2	LEU	A	160	-42.199	11.971	3.235	1.00	49.87	A C
ATOM	2194	C	LEU	A	160	-37.936	14.340	2.935	1.00	45.22	A C
ATOM	2195	O	LEU	A	160	-37.911	15.004	1.913	1.00	45.19	A O
ATOM	2197	N	LEU	A	161	-36.920	13.592	3.351	1.00	42.96	A N
ATOM	2198	CA	LEU	A	161	-35.634	13.594	2.694	1.00	43.40	A C
ATOM	2200	CB	LEU	A	161	-34.591	14.346	3.539	1.00	43.07	A C
ATOM	2203	CG	LEU	A	161	-34.879	15.796	3.937	1.00	39.52	A C
ATOM	2205	CD1	LEU	A	161	-33.810	16.315	4.893	1.00	39.37	A C
ATOM	2209	CD2	LEU	A	161	-34.995	16.701	2.707	1.00	39.15	A C
ATOM	2213	C	LEU	A	161	-35.187	12.160	2.482	1.00	43.31	A C
ATOM	2214	O	LEU	A	161	-35.307	11.349	3.386	1.00	44.13	A O
ATOM	2216	N	PRO	A	162	-34.679	11.839	1.283	1.00	43.26	A N
ATOM	2217	CA	PRO	A	162	-34.068	10.532	1.057	1.00	40.13	A C
ATOM	2219	CB	PRO	A	162	-34.038	10.390	-0.471	1.00	41.24	A C
ATOM	2222	CG	PRO	A	162	-34.565	11.675	-1.037	1.00	48.49	A C
ATOM	2225	CD	PRO	A	162	-34.679	12.676	0.070	1.00	48.01	A C
ATOM	2228	C	PRO	A	162	-32.647	10.427	1.601	1.00	40.60	A C
ATOM	2229	O	PRO	A	162	-31.813	11.299	1.354	1.00	36.37	A O
ATOM	2230	N	VAL	A	163	-32.379	9.355	2.330	1.00	39.55	A N
ATOM	2231	CA	VAL	A	163	-31.032	9.065	2.763	1.00	39.40	A C
ATOM	2233	CB	VAL	A	163	-30.956	7.757	3.593	1.00	42.89	A C
ATOM	2235	CG1	VAL	A	163	-29.541	7.267	3.701	1.00	35.35	A C
ATOM	2239	CG2	VAL	A	163	-31.570	7.965	4.992	1.00	42.51	A C
ATOM	2243	C	VAL	A	163	-30.114	8.975	1.536	1.00	42.15	A C
ATOM	2244	O	VAL	A	163	-30.477	8.401	0.502	1.00	42.10	A O
ATOM	2246	N	LEU	A	164	-28.932	9.577	1.675	1.00	41.57	A N
ATOM	2247	CA	LEU	A	164	-27.919	9.566	0.670	1.00	37.06	A C
ATOM	2249	CB	LEU	A	164	-27.456	11.005	0.439	1.00	41.05	A C
ATOM	2252	CG	LEU	A	164	-26.429	11.203	-0.670	1.00	41.57	A C
ATOM	2254	CD1	LEU	A	164	-27.047	10.795	-2.001	1.00	45.00	A C
ATOM	2258	CD2	LEU	A	164	-25.922	12.631	-0.709	1.00	40.98	A C
ATOM	2262	C	LEU	A	164	-26.787	8.673	1.181	1.00	37.55	A C
ATOM	2263	O	LEU	A	164	-26.374	8.807	2.329	1.00	39.36	A O
ATOM	2265	N	ASP	A	165	-26.299	7.752	0.343	1.00	38.67	A N
ATOM	2266	CA	ASP	A	165	-25.259	6.814	0.764	1.00	34.02	A C
ATOM	2268	CB	ASP	A	165	-25.021	5.713	-0.274	1.00	34.85	A C
ATOM	2271	CG	ASP	A	165	-24.223	6.185	-1.468	1.00	39.94	A C
ATOM	2272	OD1	ASP	A	165	-24.768	6.928	-2.313	1.00	40.37	A O
ATOM	2273	OD2	ASP	A	165	-23.043	5.791	-1.571	1.00	42.24	A O
ATOM	2274	C	ASP	A	165	-23.965	7.556	1.066	1.00	33.34	A C
ATOM	2275	O	ASP	A	165	-23.725	8.649	0.531	1.00	32.61	A O
ATOM	2277	N	ARG	A	166	-23.131	6.931	1.903	1.00	29.45	A N
ATOM	2278	CA	ARG	A	166	-21.949	7.558	2.432	1.00	30.14	A C
ATOM	2280	CB	ARG	A	166	-21.367	6.704	3.555	1.00	32.72	A C
ATOM	2283	CG	ARG	A	166	-20.189	7.359	4.305	1.00	35.16	A C
ATOM	2286	CD	ARG	A	166	-19.898	6.687	5.662	1.00	32.27	A C

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ATOM	2289	NE	ARG	A	166	-21.056	6.758	6.544	1.00	33.16	A N
ATOM	2291	CZ	ARG	A	166	-21.899	5.762	6.780	1.00	36.14	A C
ATOM	2292	NH1	ARG	A	166	-21.738	4.577	6.208	1.00	34.13	A N
ATOM	2295	NH2	ARG	A	166	-22.926	5.962	7.597	1.00	33.96	A N
ATOM	2298	C	ARG	A	166	-20.881	7.809	1.361	1.00	33.09	A C
ATOM	2299	O	ARG	A	166	-20.160	8.811	1.432	1.00	33.92	A O
ATOM	2301	N	ALA	A	167	-20.768	6.903	0.388	1.00	30.20	A N
ATOM	2302	CA	ALA	A	167	-19.770	7.041	-0.658	1.00	29.35	A C
ATOM	2304	CB	ALA	A	167	-19.646	5.748	-1.545	1.00	22.50	A C
ATOM	2308	C	ALA	A	167	-20.104	8.264	-1.471	1.00	29.35	A C
ATOM	2309	O	ALA	A	167	-19.282	9.156	-1.626	1.00	36.53	A O
ATOM	2311	N	THR	A	168	-21.326	8.365	-1.943	1.00	30.11	A N
ATOM	2312	CA	THR	A	168	-21.747	9.594	-2.644	1.00	32.69	A C
ATOM	2314	CB	THR	A	168	-23.235	9.561	-3.009	1.00	32.60	A C
ATOM	2316	OG1	THR	A	168	-23.504	8.411	-3.816	1.00	30.46	A O
ATOM	2318	CG2	THR	A	168	-23.659	10.831	-3.752	1.00	31.41	A C
ATOM	2322	C	THR	A	168	-21.513	10.844	-1.791	1.00	35.88	A C
ATOM	2323	O	THR	A	168	-21.073	11.884	-2.280	1.00	36.06	A O
ATOM	2325	N	CYS	A	169	-21.813	10.738	-0.501	1.00	37.03	A N
ATOM	2326	CA	CYS	A	169	-21.654	11.875	0.394	1.00	35.32	A C
ATOM	2328	CB	CYS	A	169	-22.320	11.600	1.745	1.00	35.01	A C
ATOM	2331	SG	CYS	A	169	-22.912	13.131	2.437	1.00	38.59	A S
ATOM	2333	C	CYS	A	169	-20.188	12.303	0.601	1.00	36.35	A C
ATOM	2334	O	CYS	A	169	-19.909	13.470	0.914	1.00	35.05	A O
ATOM	2336	N	ASN	A	170	-19.276	11.340	0.459	1.00	36.34	A N
ATOM	2337	CA	ASN	A	170	-17.864	11.569	0.643	1.00	35.95	A C
ATOM	2339	CB	ASN	A	170	-17.227	10.334	1.279	1.00	37.51	A C
ATOM	2342	CG	ASN	A	170	-17.286	10.377	2.771	1.00	34.09	A C
ATOM	2343	OD1	ASN	A	170	-17.147	11.439	3.359	1.00	36.99	A O
ATOM	2344	ND2	ASN	A	170	-17.481	9.225	3.401	1.00	35.29	A N
ATOM	2347	C	ASN	A	170	-17.076	11.997	-0.619	1.00	37.38	A C
ATOM	2348	O	ASN	A	170	-15.844	12.225	-0.563	1.00	36.39	A O
ATOM	2350	N	ARG	A	171	-17.778	12.135	-1.735	1.00	33.37	A N
ATOM	2351	CA	ARG	A	171	-17.174	12.663	-2.951	1.00	35.17	A C
ATOM	2353	CB	ARG	A	171	-18.210	12.811	-4.060	1.00	35.92	A C
ATOM	2356	CG	ARG	A	171	-18.870	11.511	-4.486	1.00	41.00	A C
ATOM	2359	CD	ARG	A	171	-19.026	11.464	-5.977	1.00	45.26	A C
ATOM	2362	NE	ARG	A	171	-19.745	12.634	-6.426	1.00	45.08	A N
ATOM	2364	CZ	ARG	A	171	-21.050	12.674	-6.684	1.00	52.64	A C
ATOM	2365	NH1	ARG	A	171	-21.594	13.824	-7.073	1.00	55.26	A N
ATOM	2368	NH2	ARG	A	171	-21.819	11.585	-6.583	1.00	48.32	A N
ATOM	2371	C	ARG	A	171	-16.558	14.023	-2.696	1.00	36.07	A C
ATOM	2372	O	ARG	A	171	-16.988	14.739	-1.782	1.00	34.21	A O
ATOM	2374	N	ARG	A	172	-15.576	14.412	-3.516	1.00	35.32	A N
ATOM	2375	CA	ARG	A	172	-14.899	15.720	-3.286	1.00	35.05	A C
ATOM	2377	CB	ARG	A	172	-13.718	15.943	-4.223	1.00	35.37	A C
ATOM	2380	CG	ARG	A	172	-14.065	16.317	-5.630	1.00	34.24	A C
ATOM	2383	CD	ARG	A	172	-12.840	16.294	-6.492	1.00	35.34	A C
ATOM	2386	NE	ARG	A	172	-12.237	14.959	-6.560	1.00	38.21	A N
ATOM	2388	CZ	ARG	A	172	-11.046	14.688	-7.101	1.00	40.10	A C
ATOM	2389	NH1	ARG	A	172	-10.289	15.657	-7.608	1.00	38.18	A N
ATOM	2392	NH2	ARG	A	172	-10.593	13.444	-7.114	1.00	40.26	A N
ATOM	2395	C	ARG	A	172	-15.850	16.906	-3.420	1.00	35.61	A C
ATOM	2396	O	ARG	A	172	-15.688	17.927	-2.734	1.00	32.88	A O
ATOM	2398	N	THR	A	173	-16.847	16.741	-4.299	1.00	35.32	A N
ATOM	2399	CA	THR	A	173	-17.841	17.755	-4.559	1.00	31.84	A C
ATOM	2401	CB	THR	A	173	-18.780	17.373	-5.699	1.00	31.65	A C
ATOM	2403	OG1	THR	A	173	-18.045	16.842	-6.802	1.00	39.07	A O
ATOM	2405	CG2	THR	A	173	-19.616	18.591	-6.168	1.00	31.50	A C
ATOM	2409	C	THR	A	173	-18.718	17.998	-3.327	1.00	37.18	A C
ATOM	2410	O	THR	A	173	-19.266	19.073	-3.168	1.00	40.53	A O
ATOM	2412	N	HIS	A	174	-18.867	16.976	-2.484	1.00	39.46	A N
ATOM	2413	CA	HIS	A	174	-19.766	16.996	-1.356	1.00	34.34	A C
ATOM	2415	CB	HIS	A	174	-20.615	15.720	-1.335	1.00	36.83	A C
ATOM	2418	CG	HIS	A	174	-21.535	15.599	-2.515	1.00	38.56	A C
ATOM	2419	ND1	HIS	A	174	-21.877	14.391	-3.080	1.00	40.71	A N
ATOM	2421	CE1	HIS	A	174	-22.706	14.594	-4.090	1.00	40.10	A C
ATOM	2423	NE2	HIS	A	174	-22.903	15.889	-4.209	1.00	41.44	A N
ATOM	2425	CD2	HIS	A	174	-22.174	16.541	-3.243	1.00	42.80	A C
ATOM	2427	C	HIS	A	174	-18.967	17.215	-0.090	1.00	33.27	A C
ATOM	2428	O	HIS	A	174	-18.417	18.300	0.083	1.00	39.26	A O
ATOM	2430	N	HIS	A	175	-18.826	16.212	0.771	1.00	36.74	A N
ATOM	2431	CA	HIS	A	175	-18.122	16.408	2.055	1.00	34.92	A C
ATOM	2433	CB	HIS	A	175	-19.007	15.957	3.224	1.00	37.96	A C
ATOM	2436	CG	HIS	A	175	-20.281	16.728	3.335	1.00	30.83	A C

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ATOM   2437  ND1 HIS A 175     -20.314  18.060   3.670  1.00 33.14      A    N
ATOM   2439  CE1 HIS A 175     -21.565  18.476   3.682  1.00 37.37      A    C
ATOM   2441  NE2 HIS A 175     -22.343  17.457   3.373  1.00 32.52      A    N
ATOM   2443  CD2 HIS A 175     -21.562  16.355   3.147  1.00 29.73      A    C
ATOM   2445  C   HIS A 175     -16.759  15.740   2.160  1.00 36.04      A    C
ATOM   2446  O   HIS A 175     -16.167  15.733   3.257  1.00 31.58      A    O
ATOM   2448  N   ASP A 176     -16.297  15.152   1.055  1.00 35.29      A    N
ATOM   2449  CA  ASP A 176     -14.863  14.891   0.815  1.00 37.38      A    C
ATOM   2451  CB  ASP A 176     -14.145  16.244   0.587  1.00 40.18      A    C
ATOM   2454  CG  ASP A 176     -12.887  16.127  -0.256  1.00 42.80      A    C
ATOM   2455  OD1 ASP A 176     -12.664  15.064  -0.864  1.00 45.47      A    O
ATOM   2456  OD2 ASP A 176     -12.116  17.122  -0.315  1.00 45.22      A    O
ATOM   2457  C   ASP A 176     -14.164  14.052   1.902  1.00 38.60      A    C
ATOM   2458  O   ASP A 176     -13.057  14.391   2.365  1.00 34.18      A    O
ATOM   2460  N   GLY A 177     -14.809  12.944   2.289  1.00 35.76      A    N
ATOM   2461  CA  GLY A 177     -14.217  11.994   3.235  1.00 33.97      A    C
ATOM   2464  C   GLY A 177     -14.545  12.278   4.674  1.00 34.54      A    C
ATOM   2465  O   GLY A 177     -14.194  11.471   5.556  1.00 36.61      A    O
ATOM   2467  N   ALA A 178     -15.232  13.396   4.926  1.00 34.17      A    N
ATOM   2468  CA  ALA A 178     -15.570  13.836   6.287  1.00 33.34      A    C
ATOM   2470  CB  ALA A 178     -16.009  15.308   6.243  1.00 32.67      A    C
ATOM   2474  C   ALA A 178     -16.658  12.977   6.956  1.00 35.09      A    C
ATOM   2475  O   ALA A 178     -16.825  13.001   8.197  1.00 35.68      A    O
ATOM   2477  N   ILE A 179     -17.387  12.209   6.143  1.00 34.85      A    N
ATOM   2478  CA  ILE A 179     -18.537  11.441   6.619  1.00 33.31      A    C
ATOM   2480  CB  ILE A 179     -19.607  11.325   5.548  1.00 33.10      A    C
ATOM   2482  CG1 ILE A 179     -19.876  12.702   4.917  1.00 32.61      A    C
ATOM   2485  CD1 ILE A 179     -20.518  13.742   5.892  1.00 26.74      A    C
ATOM   2489  CG2 ILE A 179     -20.934  10.734   6.163  1.00 33.35      A    C
ATOM   2493  C   ILE A 179     -18.065  10.074   7.064  1.00 32.66      A    C
ATOM   2494  O   ILE A 179     -17.679   9.247   6.228  1.00 31.85      A    O
ATOM   2496  N   THR A 180     -18.087   9.873   8.389  1.00 32.08      A    N
ATOM   2497  CA  THR A 180     -17.640   8.666   9.052  1.00 35.33      A    C
ATOM   2499  CB  THR A 180     -17.069   8.976  10.479  1.00 33.07      A    C
ATOM   2501  OG1 THR A 180     -18.126   9.422  11.333  1.00 32.91      A    O
ATOM   2503  CG2 THR A 180     -15.970  10.067  10.446  1.00 27.89      A    C
ATOM   2507  C   THR A 180     -18.828   7.711   9.189  1.00 40.80      A    C
ATOM   2508  O   THR A 180     -19.955   8.028   8.778  1.00 37.76      A    O
ATOM   2510  N   GLU A 181     -18.563   6.545   9.777  1.00 42.59      A    N
ATOM   2511  CA  GLU A 181     -19.592   5.537   9.976  1.00 46.07      A    C
ATOM   2513  CB  GLU A 181     -18.965   4.151  10.239  1.00 52.78      A    C
ATOM   2516  CG  GLU A 181     -18.696   3.397   8.916  1.00 58.42      A    C
ATOM   2519  CD  GLU A 181     -17.813   2.170   9.052  1.00 60.39      A    C
ATOM   2520  OE1 GLU A 181     -16.635   2.324   9.451  1.00 68.43      A    O
ATOM   2521  OE2 GLU A 181     -18.280   1.054   8.707  1.00 65.42      A    O
ATOM   2522  C   GLU A 181     -20.592   5.914  11.050  1.00 42.26      A    C
ATOM   2523  O   GLU A 181     -21.602   5.234  11.197  1.00 39.09      A    O
ATOM   2525  N   ARG A 182     -20.355   7.027  11.750  1.00 41.52      A    N
ATOM   2526  CA  ARG A 182     -21.281   7.469  12.811  1.00 42.98      A    C
ATOM   2528  CB  ARG A 182     -20.538   7.807  14.116  1.00 49.75      A    C
ATOM   2531  CG  ARG A 182     -19.086   7.427  14.098  1.00 53.11      A    C
ATOM   2534  CD  ARG A 182     -18.570   6.685  15.307  1.00 55.33      A    C
ATOM   2537  NE  ARG A 182     -17.822   5.492  14.858  1.00 63.67      A    N
ATOM   2539  CZ  ARG A 182     -16.805   5.478  13.980  1.00 58.31      A    C
ATOM   2540  NH1 ARG A 182     -16.338   6.585  13.414  1.00 53.04      A    N
ATOM   2543  NH2 ARG A 182     -16.234   4.322  13.667  1.00 62.47      A    N
ATOM   2546  C   ARG A 182     -22.114   8.655  12.375  1.00 35.97      A    C
ATOM   2547  O   ARG A 182     -22.873   9.207  13.174  1.00 37.71      A    O
ATOM   2549  N   LEU A 183     -21.958   9.050  11.117  1.00 34.71      A    N
ATOM   2550  CA  LEU A 183     -22.720  10.148  10.535  1.00 37.15      A    C
ATOM   2552  CB  LEU A 183     -21.800  11.297  10.073  1.00 30.19      A    C
ATOM   2555  CG  LEU A 183     -20.960  12.009  11.161  1.00 32.92      A    C
ATOM   2557  CD1 LEU A 183     -19.906  12.924  10.528  1.00 25.12      A    C
ATOM   2561  CD2 LEU A 183     -21.838  12.799  12.177  1.00 26.48      A    C
ATOM   2565  C   LEU A 183     -23.490   9.566   9.356  1.00 35.94      A    C
ATOM   2566  O   LEU A 183     -23.047   8.597   8.746  1.00 39.28      A    O
ATOM   2568  N   MET A 184     -24.650  10.138   9.059  1.00 35.50      A    N
ATOM   2569  CA  MET A 184     -25.404   9.759   7.864  1.00 37.11      A    C
ATOM   2571  CB  MET A 184     -26.694   8.985   8.198  1.00 36.84      A    C
ATOM   2574  CG  MET A 184     -27.614   9.629   9.220  1.00 35.25      A    C
ATOM   2577  SD  MET A 184     -29.141   8.700   9.560  1.00 36.12      A    S
ATOM   2578  CE  MET A 184     -29.872   8.750   7.919  1.00 31.31      A    C
ATOM   2582  C   MET A 184     -25.716  11.014   7.081  1.00 32.51      A    C
ATOM   2583  O   MET A 184     -25.638  12.108   7.611  1.00 32.39      A    O
ATOM   2585  N   CYS A 185     -26.058  10.839   5.817  1.00 33.27      A    N
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ATOM   2586  CA  CYS A 185     -26.361  11.948   4.940  1.00 36.65      A    C
ATOM   2588  CB  CYS A 185     -25.371  11.982   3.770  1.00 41.74      A    C
ATOM   2591  SG  CYS A 185     -23.777  12.677   4.200  1.00 41.29      A    S
ATOM   2593  C   CYS A 185     -27.762  11.835   4.415  1.00 35.13      A    C
ATOM   2594  O   CYS A 185     -28.290  10.744   4.295  1.00 36.05      A    O
ATOM   2596  N   ALA A 186     -28.361  12.980   4.113  1.00 35.07      A    N
ATOM   2597  CA  ALA A 186     -29.600  13.031   3.364  1.00 36.97      A    C
ATOM   2599  CB  ALA A 186     -30.700  13.420   4.251  1.00 34.59      A    C
ATOM   2603  C   ALA A 186     -29.415  14.055   2.256  1.00 40.76      A    C
ATOM   2604  O   ALA A 186     -28.535  14.934   2.356  1.00 43.01      A    O
ATOM   2606  N   GLU A 187     -30.220  13.923   1.201  1.00 41.54      A    N
ATOM   2607  CA  GLU A 187     -30.200  14.851   0.078  1.00 44.50      A    C
ATOM   2609  CB  GLU A 187     -31.098  14.354  -1.070  1.00 48.87      A    C
ATOM   2612  CG  GLU A 187     -30.496  13.141  -1.834  1.00 52.00      A    C
ATOM   2615  CD  GLU A 187     -31.376  12.633  -2.986  1.00 54.41      A    C
ATOM   2616  OE1 GLU A 187     -32.154  13.437  -3.559  1.00 58.93      A    O
ATOM   2617  OE2 GLU A 187     -31.284  11.426  -3.314  1.00 51.51      A    O
ATOM   2618  C   GLU A 187     -30.582  16.265   0.511  1.00 42.90      A    C
ATOM   2619  O   GLU A 187     -31.275  16.474   1.510  1.00 38.50      A    O
ATOM   2621  N   SER A 188     -30.070  17.233  -0.240  1.00 43.71      A    N
ATOM   2622  CA  SER A 188     -30.182  18.632   0.112  1.00 43.54      A    C
ATOM   2624  CB  SER A 188     -28.834  19.108   0.614  1.00 40.57      A    C
ATOM   2627  OG  SER A 188     -27.876  18.837  -0.377  1.00 38.62      A    O
ATOM   2629  C   SER A 188     -30.593  19.548  -1.031  1.00 44.88      A    C
ATOM   2630  O   SER A 188     -30.533  20.760  -0.859  1.00 47.60      A    O
ATOM   2632  N   ASN A 189     -31.023  19.003  -2.171  1.00 47.37      A    N
ATOM   2633  CA  ASN A 189     -31.386  19.848  -3.307  1.00 49.15      A    C
ATOM   2635  CB  ASN A 189     -31.507  19.046  -4.607  1.00 50.03      A    C
ATOM   2638  CG  ASN A 189     -31.408  19.934  -5.860  1.00 52.49      A    C
ATOM   2639  OD1 ASN A 189     -31.165  21.140  -5.771  1.00 56.54      A    O
ATOM   2640  ND2 ASN A 189     -31.574  19.331  -7.027  1.00 55.58      A    N
ATOM   2643  C   ASN A 189     -32.675  20.626  -3.034  1.00 49.54      A    C
ATOM   2644  O   ASN A 189     -33.777  20.087  -3.183  1.00 45.35      A    O
ATOM   2646  N   ARG A 190     -32.514  21.882  -2.600  1.00 51.57      A    N
ATOM   2647  CA  ARG A 190     -33.637  22.800  -2.337  1.00 58.42      A    C
ATOM   2649  CB  ARG A 190     -34.354  23.157  -3.653  1.00 62.87      A    C
ATOM   2652  CG  ARG A 190     -33.390  23.705  -4.743  1.00 69.39      A    C
ATOM   2655  CD  ARG A 190     -34.114  24.181  -6.002  1.00 71.52      A    C
ATOM   2658  NE  ARG A 190     -35.117  23.216  -6.472  1.00 76.40      A    N
ATOM   2660  CZ  ARG A 190     -35.997  23.448  -7.452  1.00 76.82      A    C
ATOM   2661  NH1 ARG A 190     -36.010  24.613  -8.103  1.00 78.15      A    N
ATOM   2664  NH2 ARG A 190     -36.878  22.504  -7.789  1.00 77.18      A    N
ATOM   2667  C   ARG A 190     -34.642  22.304  -1.288  1.00 56.61      A    C
ATOM   2668  O   ARG A 190     -35.744  22.826  -1.184  1.00 56.87      A    O
ATOM   2670  N   ARG A 191     -34.227  21.310  -0.507  1.00 55.75      A    N
ATOM   2671  CA  ARG A 191     -34.994  20.734   0.578  1.00 56.83      A    C
ATOM   2673  CB  ARG A 191     -35.766  19.509   0.113  1.00 60.20      A    C
ATOM   2676  CG  ARG A 191     -37.079  19.789  -0.552  1.00 68.48      A    C
ATOM   2679  CD  ARG A 191     -37.382  18.668  -1.520  1.00 74.41      A    C
ATOM   2682  NE  ARG A 191     -38.771  18.636  -1.965  1.00 80.80      A    N
ATOM   2684  CZ  ARG A 191     -39.217  17.885  -2.976  1.00 85.30      A    C
ATOM   2685  NH1 ARG A 191     -38.384  17.098  -3.662  1.00 85.72      A    N
ATOM   2688  NH2 ARG A 191     -40.506  17.920  -3.311  1.00 84.71      A    N
ATOM   2691  C   ARG A 191     -33.979  20.280   1.600  1.00 50.61      A    C
ATOM   2692  O   ARG A 191     -33.175  19.402   1.307  1.00 52.86      A    O
ATOM   2694  N   ASP A 192     -34.005  20.835   2.804  1.00 44.93      A    N
ATOM   2695  CA  ASP A 192     -32.893  20.603   3.691  1.00 44.37      A    C
ATOM   2697  CB  ASP A 192     -31.683  21.399   3.140  1.00 43.38      A    C
ATOM   2700  CG  ASP A 192     -30.338  20.807   3.540  1.00 39.39      A    C
ATOM   2701  OD1 ASP A 192     -30.299  19.820   4.328  1.00 34.22      A    O
ATOM   2702  OD2 ASP A 192     -29.319  21.365   3.073  1.00 33.45      A    O
ATOM   2703  C   ASP A 192     -33.162  20.964   5.152  1.00 40.62      A    C
ATOM   2704  O   ASP A 192     -34.109  21.666   5.476  1.00 37.59      A    O
ATOM   2706  N   SER A 193     -32.319  20.402   6.006  1.00 41.21      A    N
ATOM   2707  CA  SER A 193     -32.040  20.884   7.342  1.00 43.42      A    C
ATOM   2709  CB  SER A 193     -31.223  19.850   8.110  1.00 43.78      A    C
ATOM   2712  OG  SER A 193     -31.951  19.405   9.206  1.00 48.79      A    O
ATOM   2714  C   SER A 193     -31.212  22.152   7.219  1.00 47.18      A    C
ATOM   2715  O   SER A 193     -30.488  22.351   6.246  1.00 47.31      A    O
ATOM   2717  N   CYS A 194     -31.274  22.991   8.232  1.00 52.15      A    N
ATOM   2718  CA  CYS A 194     -30.808  24.336   8.069  1.00 54.60      A    C
ATOM   2720  CB  CYS A 194     -31.982  25.123   7.489  1.00 60.78      A    C
ATOM   2723  SG  CYS A 194     -31.641  26.188   6.127  1.00 70.11      A    S
ATOM   2725  C   CYS A 194     -30.359  24.902   9.405  1.00 53.53      A    C
ATOM   2726  O   CYS A 194     -30.439  24.238  10.427  1.00 53.31      A    O
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ATOM	2728	N	LYS	A	195	-29.886	26.134	9.385	1.00	54.56	A N
ATOM	2729	CA	LYS	A	195	-29.495	26.839	10.606	1.00	52.11	A C
ATOM	2731	CB	LYS	A	195	-28.934	28.220	10.231	1.00	54.40	A C
ATOM	2734	CG	LYS	A	195	-28.067	28.886	11.293	1.00	59.22	A C
ATOM	2737	CD	LYS	A	195	-26.883	29.631	10.646	1.00	64.38	A C
ATOM	2740	CE	LYS	A	195	-25.600	28.761	10.519	1.00	70.51	A C
ATOM	2743	NZ	LYS	A	195	-25.837	27.278	10.407	1.00	73.76	A N
ATOM	2747	C	LYS	A	195	-30.684	26.959	11.575	1.00	46.04	A C
ATOM	2748	O	LYS	A	195	-31.723	27.520	11.219	1.00	41.78	A O
ATOM	2750	N	GLY	A	196	-30.514	26.415	12.783	1.00	41.54	A N
ATOM	2751	CA	GLY	A	196	-31.577	26.343	13.799	1.00	37.71	A C
ATOM	2754	C	GLY	A	196	-32.331	25.011	13.830	1.00	35.75	A C
ATOM	2755	O	GLY	A	196	-33.190	24.806	14.678	1.00	34.33	A O
ATOM	2757	N	ASP	A	197	-32.026	24.105	12.898	1.00	32.07	A N
ATOM	2758	CA	ASP	A	197	-32.585	22.753	12.910	1.00	35.69	A C
ATOM	2760	CB	ASP	A	197	-32.841	22.229	11.482	1.00	31.60	A C
ATOM	2763	CG	ASP	A	197	-33.915	23.003	10.752	1.00	32.48	A C
ATOM	2764	OD1	ASP	A	197	-34.882	23.449	11.393	1.00	31.77	A O
ATOM	2765	OD2	ASP	A	197	-33.807	23.171	9.516	1.00	36.89	A O
ATOM	2766	C	ASP	A	197	-31.660	21.774	13.645	1.00	31.88	A C
ATOM	2767	O	ASP	A	197	-32.055	20.664	13.966	1.00	31.55	A O
ATOM	2769	N	SER	A	198	-30.442	22.195	13.926	1.00	31.47	A N
ATOM	2770	CA	SER	A	198	-29.480	21.368	14.654	1.00	34.60	A C
ATOM	2772	CB	SER	A	198	-28.200	22.157	14.920	1.00	33.82	A C
ATOM	2775	OG	SER	A	198	-27.555	22.415	13.705	1.00	30.12	A O
ATOM	2777	C	SER	A	198	-30.043	20.860	15.973	1.00	34.61	A C
ATOM	2778	O	SER	A	198	-30.775	21.556	16.648	1.00	35.71	A O
ATOM	2780	N	GLY	A	199	-29.676	19.642	16.330	1.00	36.86	A N
ATOM	2781	CA	GLY	A	199	-30.198	19.010	17.527	1.00	36.83	A C
ATOM	2784	C	GLY	A	199	-31.520	18.292	17.327	1.00	34.76	A C
ATOM	2785	O	GLY	A	199	-31.869	17.434	18.114	1.00	32.66	A O
ATOM	2787	N	GLY	A	200	-32.244	18.649	16.267	1.00	36.94	A N
ATOM	2788	CA	GLY	A	200	-33.531	18.056	15.955	1.00	34.99	A C
ATOM	2791	C	GLY	A	200	-33.435	16.669	15.343	1.00	38.15	A C
ATOM	2792	O	GLY	A	200	-32.341	16.208	14.967	1.00	38.12	A O
ATOM	2794	N	PRO	A	201	-34.593	15.995	15.225	1.00	39.66	A N
ATOM	2795	CA	PRO	A	201	-34.711	14.602	14.813	1.00	37.30	A C
ATOM	2797	CB	PRO	A	201	-36.037	14.184	15.472	1.00	37.28	A C
ATOM	2800	CG	PRO	A	201	-36.851	15.403	15.429	1.00	38.55	A C
ATOM	2803	CD	PRO	A	201	-35.913	16.567	15.553	1.00	38.49	A C
ATOM	2806	C	PRO	A	201	-34.786	14.341	13.319	1.00	33.30	A C
ATOM	2807	O	PRO	A	201	-35.494	15.044	12.623	1.00	31.72	A O
ATOM	2808	N	LEU	A	202	-34.037	13.337	12.862	1.00	32.10	A N
ATOM	2809	CA	LEU	A	202	-34.246	12.659	11.574	1.00	35.20	A C
ATOM	2811	CB	LEU	A	202	-32.935	12.502	10.794	1.00	36.98	A C
ATOM	2814	CG	LEU	A	202	-33.094	11.712	9.476	1.00	34.98	A C
ATOM	2816	CD1	LEU	A	202	-33.264	12.624	8.305	1.00	32.33	A C
ATOM	2820	CD2	LEU	A	202	-31.944	10.749	9.233	1.00	36.97	A C
ATOM	2824	C	LEU	A	202	-34.872	11.267	11.821	1.00	34.35	A C
ATOM	2825	O	LEU	A	202	-34.243	10.359	12.345	1.00	31.53	A O
ATOM	2827	N	VAL	A	203	-36.132	11.124	11.443	1.00	38.68	A N
ATOM	2828	CA	VAL	A	203	-36.957	9.985	11.857	1.00	37.25	A C
ATOM	2830	CB	VAL	A	203	-38.215	10.526	12.516	1.00	31.09	A C
ATOM	2832	CG1	VAL	A	203	-39.066	9.410	13.186	1.00	28.65	A C
ATOM	2836	CG2	VAL	A	203	-37.810	11.589	13.515	1.00	26.17	A C
ATOM	2840	C	VAL	A	203	-37.291	9.116	10.644	1.00	38.35	A C
ATOM	2841	O	VAL	A	203	-37.958	9.573	9.722	1.00	39.46	A O
ATOM	2843	N	CYS	A	204	-36.781	7.888	10.621	1.00	41.41	A N
ATOM	2844	CA	CYS	A	204	-37.033	6.970	9.499	1.00	45.49	A C
ATOM	2846	CB	CYS	A	204	-35.731	6.464	8.864	1.00	41.90	A C
ATOM	2849	SG	CYS	A	204	-34.428	7.666	8.615	1.00	38.41	A S
ATOM	2851	C	CYS	A	204	-37.862	5.761	9.951	1.00	48.67	A C
ATOM	2852	O	CYS	A	204	-37.390	4.926	10.729	1.00	48.60	A O
ATOM	2854	N	GLY	A	205	-39.085	5.664	9.438	1.00	50.07	A N
ATOM	2855	CA	GLY	A	205	-39.995	4.579	9.792	1.00	51.61	A C
ATOM	2858	C	GLY	A	205	-40.463	4.645	11.237	1.00	53.34	A C
ATOM	2859	O	GLY	A	205	-40.537	3.625	11.923	1.00	51.94	A O
ATOM	2861	N	GLY	A	206	-40.769	5.859	11.696	1.00	53.41	A N
ATOM	2862	CA	GLY	A	206	-41.195	6.112	13.073	1.00	51.89	A C
ATOM	2865	C	GLY	A	206	-40.139	6.091	14.179	1.00	50.95	A C
ATOM	2866	O	GLY	A	206	-40.430	6.463	15.312	1.00	48.96	A O
ATOM	2868	N	VAL	A	207	-38.924	5.645	13.863	1.00	50.42	A N
ATOM	2869	CA	VAL	A	207	-37.830	5.585	14.831	1.00	48.00	A C
ATOM	2871	CB	VAL	A	207	-37.115	4.230	14.746	1.00	49.45	A C
ATOM	2873	CG1	VAL	A	207	-35.983	4.147	15.770	1.00	48.25	A C

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ATOM	2877	CG2	VAL	A	207	-38.112	3.090	14.931	1.00	48.40	A	C
ATOM	2881	C	VAL	A	207	-36.802	6.705	14.567	1.00	45.98	A	C
ATOM	2882	O	VAL	A	207	-36.492	7.003	13.417	1.00	43.93	A	O
ATOM	2884	N	LEU	A	208	-36.286	7.312	15.639	1.00	42.48	A	N
ATOM	2885	CA	LEU	A	208	-35.193	8.282	15.543	1.00	41.09	A	C
ATOM	2887	CB	LEU	A	208	-34.898	8.940	16.903	1.00	36.84	A	C
ATOM	2890	CG	LEU	A	208	-33.789	10.013	16.885	1.00	39.04	A	C
ATOM	2892	CD1	LEU	A	208	-34.271	11.330	16.198	1.00	36.60	A	C
ATOM	2896	CD2	LEU	A	208	-33.234	10.272	18.295	1.00	34.74	A	C
ATOM	2900	C	LEU	A	208	-33.931	7.591	15.033	1.00	44.06	A	C
ATOM	2901	O	LEU	A	208	-33.485	6.595	15.612	1.00	46.66	A	O
ATOM	2903	N	GLU	A	209	-33.375	8.102	13.935	1.00	41.53	A	N
ATOM	2904	CA	GLU	A	209	-32.152	7.548	13.363	1.00	39.44	A	C
ATOM	2906	CB	GLU	A	209	-32.346	7.198	11.881	1.00	38.56	A	C
ATOM	2909	CG	GLU	A	209	-33.163	5.946	11.586	1.00	42.84	A	C
ATOM	2912	CD	GLU	A	209	-32.522	4.631	12.019	1.00	44.34	A	C
ATOM	2913	OE1	GLU	A	209	-31.282	4.574	12.145	1.00	48.36	A	O
ATOM	2914	OE2	GLU	A	209	-33.271	3.633	12.210	1.00	44.49	A	O
ATOM	2915	C	GLU	A	209	-30.976	8.528	13.482	1.00	39.58	A	C
ATOM	2916	O	GLU	A	209	-29.826	8.114	13.608	1.00	37.68	A	O
ATOM	2918	N	GLY	A	210	-31.276	9.821	13.405	1.00	38.87	A	N
ATOM	2919	CA	GLY	A	210	-30.271	10.845	13.323	1.00	38.51	A	C
ATOM	2922	C	GLY	A	210	-30.618	12.119	14.066	1.00	35.24	A	C
ATOM	2923	O	GLY	A	210	-31.762	12.411	14.277	1.00	35.69	A	O
ATOM	2925	N	VAL	A	211	-29.591	12.850	14.485	1.00	36.83	A	N
ATOM	2926	CA	VAL	A	211	-29.738	14.167	15.092	1.00	35.93	A	C
ATOM	2928	CB	VAL	A	211	-29.159	14.166	16.528	1.00	30.98	A	C
ATOM	2930	CG1	VAL	A	211	-29.313	15.515	17.230	1.00	34.41	A	C
ATOM	2934	CG2	VAL	A	211	-29.865	13.065	17.341	1.00	29.17	A	C
ATOM	2938	C	VAL	A	211	-29.059	15.128	14.115	1.00	34.50	A	C
ATOM	2939	O	VAL	A	211	-27.938	14.872	13.659	1.00	30.56	A	O
ATOM	2941	N	VAL	A	212	-29.796	16.158	13.694	1.00	36.07	A	N
ATOM	2942	CA	VAL	A	212	-29.264	17.107	12.744	1.00	41.08	A	C
ATOM	2944	CB	VAL	A	212	-30.205	18.312	12.440	1.00	35.30	A	C
ATOM	2946	CG1	VAL	A	212	-29.568	19.216	11.399	1.00	31.10	A	C
ATOM	2950	CG2	VAL	A	212	-31.548	17.872	11.957	1.00	33.45	A	C
ATOM	2954	C	VAL	A	212	-27.978	17.639	13.353	1.00	46.31	A	C
ATOM	2955	O	VAL	A	212	-27.971	18.184	14.467	1.00	43.56	A	O
ATOM	2957	N	THR	A	213	-26.872	17.432	12.659	1.00	55.28	A	N
ATOM	2958	CA	THR	A	213	-25.604	17.950	13.157	1.00	61.80	A	C
ATOM	2960	CB	THR	A	213	-24.357	17.104	12.720	1.00	66.03	A	C
ATOM	2962	OG1	THR	A	213	-23.198	17.571	13.424	1.00	68.49	A	O
ATOM	2964	CG2	THR	A	213	-24.111	17.170	11.235	1.00	67.10	A	C
ATOM	2968	C	THR	A	213	-25.603	19.416	12.750	1.00	68.25	A	C
ATOM	2969	O	THR	A	213	-26.278	20.210	13.374	1.00	73.71	A	O
ATOM	2971	N	SER	A	214	-24.865	19.775	11.718	1.00	72.25	A	N
ATOM	2972	CA	SER	A	214	-24.910	21.101	11.074	1.00	76.36	A	C
ATOM	2974	CB	SER	A	214	-26.159	21.951	11.364	1.00	77.22	A	C
ATOM	2977	OG	SER	A	214	-26.521	22.704	10.204	1.00	76.55	A	O
ATOM	2979	C	SER	A	214	-23.541	21.788	11.288	1.00	80.23	A	C
ATOM	2980	O	SER	A	214	-22.495	21.111	11.171	1.00	82.33	A	O
ATOM	2982	N	GLY	A	215	-23.532	23.083	11.604	1.00	77.85	A	N
ATOM	2983	CA	GLY	A	215	-22.313	23.871	11.585	1.00	76.95	A	C
ATOM	2986	C	GLY	A	215	-22.575	25.050	10.689	1.00	74.98	A	C
ATOM	2987	O	GLY	A	215	-23.632	25.666	10.767	1.00	77.19	A	O
ATOM	2989	N	SER	A	216	-21.625	25.358	9.823	1.00	72.84	A	N
ATOM	2990	CA	SER	A	216	-21.774	26.485	8.932	1.00	70.60	A	C
ATOM	2992	CB	SER	A	216	-20.643	27.462	9.189	1.00	72.77	A	C
ATOM	2995	OG	SER	A	216	-20.768	27.955	10.513	1.00	73.33	A	O
ATOM	2997	C	SER	A	216	-21.851	26.007	7.481	1.00	68.64	A	C
ATOM	2998	O	SER	A	216	-21.386	26.678	6.556	1.00	69.42	A	O
ATOM	3000	N	ARG	A	217	-22.468	24.839	7.315	1.00	65.04	A	N
ATOM	3001	CA	ARG	A	217	-22.796	24.281	6.011	1.00	63.03	A	C
ATOM	3003	CB	ARG	A	217	-23.265	22.835	6.176	1.00	60.33	A	C
ATOM	3006	CG	ARG	A	217	-23.578	22.123	4.875	1.00	58.26	A	C
ATOM	3009	CD	ARG	A	217	-24.149	20.754	5.154	1.00	56.30	A	C
ATOM	3012	NE	ARG	A	217	-25.409	20.830	5.895	1.00	48.69	A	N
ATOM	3014	CZ	ARG	A	217	-26.602	20.992	5.344	1.00	47.40	A	C
ATOM	3015	NH1	ARG	A	217	-26.741	21.090	4.029	1.00	48.72	A	N
ATOM	3018	NH2	ARG	A	217	-27.668	21.058	6.111	1.00	51.24	A	N
ATOM	3021	C	ARG	A	217	-23.923	25.080	5.380	1.00	60.55	A	C
ATOM	3022	O	ARG	A	217	-24.923	25.370	6.034	1.00	55.93	A	O
ATOM	3024	N	VAL	A	218	-23.762	25.420	4.107	1.00	61.08	A	N
ATOM	3025	CA	VAL	A	218	-24.795	26.129	3.360	1.00	59.99	A	C
ATOM	3027	CB	VAL	A	218	-24.305	26.522	1.937	1.00	60.01	A	C

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ATOM	3029	CG1	VAL	A	218	-24.019	25.275	1.078	1.00	58.46	A C
ATOM	3033	CG2	VAL	A	218	-25.326	27.448	1.243	1.00	62.88	A C
ATOM	3037	C	VAL	A	218	-26.053	25.267	3.246	1.00	59.59	A C
ATOM	3038	O	VAL	A	218	-25.961	24.042	3.159	1.00	60.26	A O
ATOM	3040	N	CYS	A	219	-27.216	25.917	3.228	1.00	54.32	A N
ATOM	3041	CA	CYS	A	219	-28.502	25.231	3.218	1.00	53.49	A C
ATOM	3043	CB	CYS	A	219	-29.517	26.011	4.074	1.00	56.74	A C
ATOM	3046	SG	CYS	A	219	-30.969	25.078	4.575	1.00	59.89	A S
ATOM	3048	C	CYS	A	219	-29.072	25.063	1.806	1.00	49.47	A C
ATOM	3049	O	CYS	A	219	-28.979	25.958	0.991	1.00	48.44	A O
ATOM	3051	N	GLY	A	220	-29.667	23.911	1.531	1.00	44.95	A N
ATOM	3052	CA	GLY	A	220	-30.422	23.705	0.313	1.00	47.94	A C
ATOM	3055	C	GLY	A	220	-29.632	23.594	-0.981	1.00	48.48	A C
ATOM	3056	O	GLY	A	220	-30.206	23.747	-2.064	1.00	47.22	A O
ATOM	3058	N	ASN	A	221	-28.332	23.330	-0.874	1.00	49.31	A N
ATOM	3059	CA	ASN	A	221	-27.482	23.155	-2.038	1.00	49.62	A C
ATOM	3061	CB	ASN	A	221	-26.178	23.946	-1.898	1.00	52.96	A C
ATOM	3064	CG	ASN	A	221	-25.343	23.950	-3.189	1.00	53.85	A C
ATOM	3065	OD1	ASN	A	221	-25.696	23.300	-4.182	1.00	53.83	A O
ATOM	3066	ND2	ASN	A	221	-24.224	24.681	-3.168	1.00	52.88	A N
ATOM	3069	C	ASN	A	221	-27.211	21.680	-2.226	1.00	49.03	A C
ATOM	3070	O	ASN	A	221	-26.660	21.026	-1.337	1.00	49.09	A O
ATOM	3072	N	ARG	A	222	-27.597	21.161	-3.389	1.00	51.03	A N
ATOM	3073	CA	ARG	A	222	-27.375	19.748	-3.739	1.00	49.73	A C
ATOM	3075	CB	ARG	A	222	-27.799	19.471	-5.183	1.00	54.93	A C
ATOM	3078	CG	ARG	A	222	-26.844	20.005	-6.260	1.00	55.59	A C
ATOM	3081	CD	ARG	A	222	-27.209	19.455	-7.625	1.00	57.22	A C
ATOM	3084	NE	ARG	A	222	-26.570	20.200	-8.709	1.00	61.33	A N
ATOM	3086	CZ	ARG	A	222	-25.264	20.171	-8.995	1.00	64.40	A C
ATOM	3087	NH1	ARG	A	222	-24.410	19.445	-8.279	1.00	63.49	A N
ATOM	3090	NH2	ARG	A	222	-24.799	20.884	-10.007	1.00	65.72	A N
ATOM	3093	C	ARG	A	222	-25.930	19.263	-3.572	1.00	44.96	A C
ATOM	3094	O	ARG	A	222	-25.704	18.078	-3.359	1.00	41.28	A O
ATOM	3096	N	LYS	A	223	-24.974	20.183	-3.702	1.00	41.97	A N
ATOM	3097	CA	LYS	A	223	-23.552	19.908	-3.541	1.00	41.05	A C
ATOM	3099	CB	LYS	A	223	-22.706	21.045	-4.164	1.00	42.51	A C
ATOM	3102	CG	LYS	A	223	-22.873	21.289	-5.679	1.00	38.48	A C
ATOM	3105	CD	LYS	A	223	-21.812	22.279	-6.187	1.00	38.52	A C
ATOM	3108	CE	LYS	A	223	-21.817	22.392	-7.729	1.00	39.66	A C
ATOM	3111	NZ	LYS	A	223	-20.778	23.351	-8.239	1.00	31.27	A N
ATOM	3115	C	LYS	A	223	-23.090	19.773	-2.090	1.00	41.57	A C
ATOM	3116	O	LYS	A	223	-21.961	19.352	-1.837	1.00	42.59	A O
ATOM	3118	N	LYS	A	224	-23.914	20.171	-1.130	1.00	39.53	A N
ATOM	3119	CA	LYS	A	224	-23.594	19.923	0.279	1.00	38.37	A C
ATOM	3121	CB	LYS	A	224	-23.275	21.230	0.998	1.00	39.87	A C
ATOM	3124	CG	LYS	A	224	-22.019	21.954	0.501	1.00	42.15	A C
ATOM	3127	CD	LYS	A	224	-20.746	21.203	0.889	1.00	47.01	A C
ATOM	3130	CE	LYS	A	224	-19.520	21.751	0.188	1.00	44.59	A C
ATOM	3133	NZ	LYS	A	224	-19.520	21.332	-1.218	1.00	49.17	A N
ATOM	3137	C	LYS	A	224	-24.733	19.182	1.001	1.00	36.72	A C
ATOM	3138	O	LYS	A	224	-25.578	19.800	1.619	1.00	36.89	A O
ATOM	3140	N	PRO	A	225	-24.756	17.842	0.919	1.00	35.57	A N
ATOM	3141	CA	PRO	A	225	-25.828	17.053	1.562	1.00	36.68	A C
ATOM	3143	CB	PRO	A	225	-25.419	15.606	1.273	1.00	34.34	A C
ATOM	3146	CG	PRO	A	225	-24.568	15.691	0.053	1.00	35.92	A C
ATOM	3149	CD	PRO	A	225	-23.791	16.974	0.218	1.00	34.59	A C
ATOM	3152	C	PRO	A	225	-25.929	17.288	3.070	1.00	37.33	A C
ATOM	3153	O	PRO	A	225	-24.963	17.701	3.703	1.00	37.24	A O
ATOM	3154	N	GLY	A	226	-27.104	17.034	3.638	1.00	37.58	A N
ATOM	3155	CA	GLY	A	226	-27.316	17.258	5.072	1.00	35.74	A C
ATOM	3158	C	GLY	A	226	-26.542	16.209	5.844	1.00	31.37	A C
ATOM	3159	O	GLY	A	226	-26.355	15.108	5.348	1.00	29.50	A O
ATOM	3161	N	ILE	A	227	-26.080	16.563	7.040	1.00	34.03	A N
ATOM	3162	CA	ILE	A	227	-25.290	15.656	7.898	1.00	34.66	A C
ATOM	3164	CB	ILE	A	227	-23.858	16.182	8.179	1.00	31.38	A C
ATOM	3166	CG1	ILE	A	227	-23.041	16.309	6.882	1.00	36.53	A C
ATOM	3169	CD1	ILE	A	227	-21.734	17.106	7.024	1.00	34.20	A C
ATOM	3173	CG2	ILE	A	227	-23.120	15.230	9.096	1.00	30.98	A C
ATOM	3177	C	ILE	A	227	-26.039	15.419	9.217	1.00	31.71	A C
ATOM	3178	O	ILE	A	227	-26.524	16.360	9.845	1.00	27.85	A O
ATOM	3180	N	TYR	A	228	-26.154	14.148	9.604	1.00	32.75	A N
ATOM	3181	CA	TYR	A	228	-26.949	13.742	10.776	1.00	33.62	A C
ATOM	3183	CB	TYR	A	228	-28.261	13.099	10.324	1.00	28.33	A C
ATOM	3186	CG	TYR	A	228	-29.019	13.985	9.382	1.00	26.44	A C
ATOM	3187	CD1	TYR	A	228	-29.969	14.855	9.858	1.00	27.41	A C

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ATOM   3189  CE1 TYR A 228     -30.666  15.681   9.009  1.00 29.99      A    C
ATOM   3191  CZ  TYR A 228     -30.396  15.669   7.649  1.00 27.71      A    C
ATOM   3192  OH  TYR A 228     -31.105  16.531   6.820  1.00 30.43      A    O
ATOM   3194  CE2 TYR A 228     -29.457  14.812   7.139  1.00 24.44      A    C
ATOM   3196  CD2 TYR A 228     -28.763  13.966   8.010  1.00 29.02      A    C
ATOM   3198  C   TYR A 228     -26.151  12.756  11.592  1.00 31.85      A    C
ATOM   3199  O   TYR A 228     -25.534  11.874  11.028  1.00 32.20      A    O
ATOM   3201  N   THR A 229     -26.122  12.914  12.908  1.00 35.77      A    N
ATOM   3202  CA  THR A 229     -25.367  11.979  13.751  1.00 36.18      A    C
ATOM   3204  CB  THR A 229     -24.896  12.608  15.088  1.00 33.69      A    C
ATOM   3206  OG1 THR A 229     -24.142  13.783  14.809  1.00 37.56      A    O
ATOM   3208  CG2 THR A 229     -23.983  11.631  15.888  1.00 31.81      A    C
ATOM   3212  C   THR A 229     -26.247  10.755  14.001  1.00 36.64      A    C
ATOM   3213  O   THR A 229     -27.390  10.884  14.417  1.00 33.42      A    O
ATOM   3215  N   ARG A 230     -25.690   9.576  13.739  1.00 38.08      A    N
ATOM   3216  CA  ARG A 230     -26.407   8.307  13.868  1.00 38.54      A    C
ATOM   3218  CB  ARG A 230     -25.671   7.194  13.090  1.00 39.30      A    C
ATOM   3221  CG  ARG A 230     -25.571   7.462  11.610  1.00 38.36      A    C
ATOM   3224  CD  ARG A 230     -24.893   6.366  10.827  1.00 42.84      A    C
ATOM   3227  NE  ARG A 230     -25.570   5.089  11.009  1.00 47.76      A    N
ATOM   3229  CZ  ARG A 230     -25.166   4.103  11.813  1.00 50.09      A    C
ATOM   3230  NH1 ARG A 230     -24.053   4.215  12.533  1.00 50.28      A    N
ATOM   3233  NH2 ARG A 230     -25.899   2.997  11.902  1.00 46.72      A    N
ATOM   3236  C   ARG A 230     -26.533   7.907  15.318  1.00 38.45      A    C
ATOM   3237  O   ARG A 230     -25.548   7.568  15.951  1.00 42.21      A    O
ATOM   3239  N   VAL A 231     -27.748   7.921  15.850  1.00 42.31      A    N
ATOM   3240  CA  VAL A 231     -27.961   7.597  17.261  1.00 39.18      A    C
ATOM   3242  CB  VAL A 231     -29.419   7.801  17.703  1.00 37.87      A    C
ATOM   3244  CG1 VAL A 231     -29.767   9.242  17.607  1.00 36.63      A    C
ATOM   3248  CG2 VAL A 231     -30.410   6.912  16.889  1.00 35.10      A    C
ATOM   3252  C   VAL A 231     -27.521   6.194  17.610  1.00 40.30      A    C
ATOM   3253  O   VAL A 231     -27.029   5.970  18.704  1.00 44.42      A    O
ATOM   3255  N   ALA A 232     -27.682   5.263  16.671  1.00 44.13      A    N
ATOM   3256  CA  ALA A 232     -27.288   3.848  16.856  1.00 41.46      A    C
ATOM   3258  CB  ALA A 232     -27.575   3.062  15.604  1.00 37.15      A    C
ATOM   3262  C   ALA A 232     -25.829   3.668  17.239  1.00 41.45      A    C
ATOM   3263  O   ALA A 232     -25.487   2.771  18.026  1.00 42.52      A    O
ATOM   3265  N   SER A 233     -24.985   4.514  16.652  1.00 41.76      A    N
ATOM   3266  CA  SER A 233     -23.571   4.560  16.942  1.00 39.20      A    C
ATOM   3268  CB  SER A 233     -22.888   5.626  16.072  1.00 39.85      A    C
ATOM   3271  OG ASER A 233     -22.493   5.089  14.827  0.70 42.98      A    O
ATOM   3272  OG BSER A 233     -22.500   5.086  14.824  0.30 41.27      A    O
ATOM   3275  C   SER A 233     -23.280   4.863  18.395  1.00 39.20      A    C
ATOM   3276  O   SER A 233     -22.242   4.462  18.888  1.00 39.30      A    O
ATOM   3278  N   TYR A 234     -24.174   5.590  19.071  1.00 41.68      A    N
ATOM   3279  CA  TYR A 234     -23.928   6.058  20.440  1.00 42.49      A    C
ATOM   3281  CB  TYR A 234     -24.027   7.580  20.483  1.00 38.75      A    C
ATOM   3284  CG  TYR A 234     -22.948   8.229  19.653  1.00 37.97      A    C
ATOM   3285  CD1 TYR A 234     -21.762   8.632  20.226  1.00 35.58      A    C
ATOM   3287  CE1 TYR A 234     -20.760   9.196  19.458  1.00 38.65      A    C
ATOM   3289  CZ  TYR A 234     -20.937   9.343  18.112  1.00 35.16      A    C
ATOM   3290  OH  TYR A 234     -19.961   9.930  17.365  1.00 37.63      A    O
ATOM   3292  CE2 TYR A 234     -22.106   8.947  17.514  1.00 38.19      A    C
ATOM   3294  CD2 TYR A 234     -23.104   8.393  18.278  1.00 37.30      A    C
ATOM   3296  C   TYR A 234     -24.860   5.408  21.469  1.00 44.63      A    C
ATOM   3297  O   TYR A 234     -25.100   5.958  22.554  1.00 41.33      A    O
ATOM   3299  N   ALA A 235     -25.332   4.206  21.128  1.00 46.09      A    N
ATOM   3300  CA  ALA A 235     -26.299   3.467  21.944  1.00 45.75      A    C
ATOM   3302  CB  ALA A 235     -26.686   2.138  21.282  1.00 41.82      A    C
ATOM   3306  C   ALA A 235     -25.826   3.247  23.370  1.00 46.58      A    C
ATOM   3307  O   ALA A 235     -26.569   3.522  24.295  1.00 47.29      A    O
ATOM   3309  N   ALA A 236     -24.596   2.781  23.549  1.00 47.60      A    N
ATOM   3310  CA  ALA A 236     -24.039   2.544  24.890  1.00 50.24      A    C
ATOM   3312  CB  ALA A 236     -22.669   1.834  24.792  1.00 53.25      A    C
ATOM   3316  C   ALA A 236     -23.928   3.821  25.734  1.00 52.61      A    C
ATOM   3317  O   ALA A 236     -24.230   3.798  26.935  1.00 58.24      A    O
ATOM   3319  N   TRP A 237     -23.518   4.927  25.111  1.00 50.90      A    N
ATOM   3320  CA  TRP A 237     -23.377   6.201  25.817  1.00 51.68      A    C
ATOM   3322  CB  TRP A 237     -22.646   7.256  24.973  1.00 48.68      A    C
ATOM   3325  CG  TRP A 237     -22.720   8.604  25.629  1.00 48.35      A    C
ATOM   3326  CD1 TRP A 237     -22.084   8.991  26.777  1.00 47.65      A    C
ATOM   3328  NE1 TRP A 237     -22.431  10.278  27.098  1.00 46.89      A    N
ATOM   3330  CE2 TRP A 237     -23.302  10.755  26.154  1.00 47.30      A    C
ATOM   3331  CD2 TRP A 237     -23.524   9.719  25.222  1.00 48.43      A    C
ATOM   3332  CE3 TRP A 237     -24.401   9.952  24.148  1.00 47.93      A    C
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ATOM   3334  CZ3 TRP A 237     -25.025  11.198  24.046  1.00 45.85      A    C
ATOM   3336  CH2 TRP A 237     -24.778  12.206  24.977  1.00 46.52      A    C
ATOM   3338  CZ2 TRP A 237     -23.925  12.011  26.042  1.00 48.32      A    C
ATOM   3340  C   TRP A 237     -24.720   6.770  26.268  1.00 53.93      A    C
ATOM   3341  O   TRP A 237     -24.859   7.240  27.400  1.00 56.83      A    O
ATOM   3343  N   ILE A 238     -25.703   6.746  25.378  1.00 52.57      A    N
ATOM   3344  CA  ILE A 238     -27.044   7.233  25.723  1.00 53.70      A    C
ATOM   3346  CB  ILE A 238     -28.006   7.237  24.497  1.00 50.89      A    C
ATOM   3348  CG1 ILE A 238     -27.462   8.169  23.387  1.00 49.63      A    C
ATOM   3351  CD1 ILE A 238     -28.198   8.064  22.057  1.00 46.38      A    C
ATOM   3355  CG2 ILE A 238     -29.423   7.651  24.914  1.00 44.00      A    C
ATOM   3359  C   ILE A 238     -27.641   6.398  26.871  1.00 56.57      A    C
ATOM   3360  O   ILE A 238     -28.297   6.938  27.761  1.00 57.87      A    O
ATOM   3362  N   ASP A 239     -27.399   5.088  26.854  1.00 58.74      A    N
ATOM   3363  CA  ASP A 239     -27.866   4.203  27.939  1.00 57.43      A    C
ATOM   3365  CB  ASP A 239     -27.583   2.722  27.643  1.00 54.42      A    C
ATOM   3368  CG  ASP A 239     -28.531   2.128  26.598  1.00 49.99      A    C
ATOM   3369  OD1 ASP A 239     -29.586   2.749  26.328  1.00 43.10      A    O
ATOM   3370  OD2 ASP A 239     -28.213   1.038  26.046  1.00 42.96      A    O
ATOM   3371  C   ASP A 239     -27.236   4.570  29.270  1.00 58.18      A    C
ATOM   3372  O   ASP A 239     -27.939   4.619  30.275  1.00 59.46      A    O
ATOM   3374  N   SER A 240     -25.928   4.840  29.275  1.00 58.65      A    N
ATOM   3375  CA  SER A 240     -25.216   5.192  30.512  1.00 59.40      A    C
ATOM   3377  CB  SER A 240     -23.707   5.339  30.249  1.00 61.80      A    C
ATOM   3380  OG ASER A 240     -23.402   6.541  29.555  0.60 62.77      A    O
ATOM   3381  OG BSER A 240     -23.406   6.539  29.552  0.40 62.28      A    O
ATOM   3384  C   SER A 240     -25.767   6.460  31.189  1.00 60.44      A    C
ATOM   3385  O   SER A 240     -25.845   6.529  32.411  1.00 63.16      A    O
ATOM   3387  N   VAL A 241     -26.144   7.446  30.380  1.00 60.46      A    N
ATOM   3388  CA  VAL A 241     -26.651   8.740  30.852  1.00 59.39      A    C
ATOM   3390  CB  VAL A 241     -26.525   9.796  29.727  1.00 56.72      A    C
ATOM   3392  CG1 VAL A 241     -27.171  11.138  30.130  1.00 53.63      A    C
ATOM   3396  CG2 VAL A 241     -25.065   9.952  29.335  1.00 47.46      A    C
ATOM   3400  C   VAL A 241     -28.109   8.665  31.307  1.00 60.05      A    C
ATOM   3401  O   VAL A 241     -28.490   9.284  32.296  1.00 61.32      A    O
ATOM   3403  N   LEU A 242     -28.918   7.905  30.578  1.00 61.37      A    N
ATOM   3404  CA  LEU A 242     -30.321   7.693  30.947  1.00 63.20      A    C
ATOM   3406  CB  LEU A 242     -31.144   7.160  29.764  1.00 60.26      A    C
ATOM   3409  CG  LEU A 242     -31.872   8.207  28.915  1.00 58.16      A    C
ATOM   3411  CD1 LEU A 242     -30.956   9.364  28.562  1.00 57.28      A    C
ATOM   3415  CD2 LEU A 242     -32.443   7.567  27.659  1.00 58.08      A    C
ATOM   3419  C   LEU A 242     -30.480   6.760  32.148  1.00 67.42      A    C
ATOM   3420  O   LEU A 242     -31.363   6.979  32.980  1.00 69.30      A    O
ATOM   3422  N   ALA A 243     -29.631   5.729  32.233  1.00 68.87      A    N
ATOM   3423  CA  ALA A 243     -29.675   4.752  33.331  1.00 68.18      A    C
ATOM   3425  CB  ALA A 243     -28.502   3.776  33.218  1.00 68.91      A    C
ATOM   3429  C   ALA A 243     -29.661   5.432  34.705  1.00 71.16      A    C
ATOM   3430  O   ALA A 243     -30.444   5.091  35.608  1.00 69.67      A    O
ATOM   3432  OXT ALA A 243     -28.867   6.352  34.932  1.00 73.66      A    O
ATOM   3433  N   ASP L   1     -22.592  16.088 -20.360  1.00 57.56      L    N
ATOM   3434  CA  ASP L   1     -21.209  16.210 -19.846  1.00 45.88      L    C
ATOM   3436  CB  ASP L   1     -20.262  15.267 -20.623  1.00 54.14      L    C
ATOM   3439  CG  ASP L   1     -20.474  13.776 -20.290  1.00 57.25      L    C
ATOM   3440  OD1 ASP L   1     -21.535  13.410 -19.738  1.00 58.37      L    O
ATOM   3441  OD2 ASP L   1     -19.564  12.962 -20.593  1.00 56.76      L    O
ATOM   3442  C   ASP L   1     -20.697  17.650 -19.951  1.00 44.64      L    C
ATOM   3443  O   ASP L   1     -20.755  18.254 -21.010  1.00 48.78      L    O
ATOM   3447  N   ILE L   2     -20.171  18.170 -18.842  1.00 43.07      L    N
ATOM   3448  CA  ILE L   2     -19.539  19.495 -18.801  1.00 41.00      L    C
ATOM   3450  CB  ILE L   2     -19.343  19.991 -17.367  1.00 39.37      L    C
ATOM   3452  CG1 ILE L   2     -20.706  20.022 -16.643  1.00 39.23      L    C
ATOM   3455  CD1 ILE L   2     -20.634  20.428 -15.185  1.00 36.61      L    C
ATOM   3459  CG2 ILE L   2     -18.682  21.375 -17.379  1.00 38.53      L    C
ATOM   3463  C   ILE L   2     -18.200  19.486 -19.542  1.00 42.94      L    C
ATOM   3464  O   ILE L   2     -17.422  18.538 -19.441  1.00 46.44      L    O
ATOM   3466  N   GLN L   3     -17.967  20.546 -20.308  1.00 46.56      L    N
ATOM   3467  CA  GLN L   3     -16.784  20.698 -21.145  1.00 45.19      L    C
ATOM   3469  CB  GLN L   3     -17.177  21.206 -22.539  1.00 51.70      L    C
ATOM   3472  CG  GLN L   3     -18.171  20.305 -23.287  1.00 59.10      L    C
ATOM   3475  CD  GLN L   3     -17.707  18.842 -23.371  1.00 67.82      L    C
ATOM   3476  OE1 GLN L   3     -16.535  18.558 -23.660  1.00 71.54      L    O
ATOM   3477  NE2 GLN L   3     -18.629  17.910 -23.110  1.00 68.81      L    N
ATOM   3480  C   GLN L   3     -15.826  21.676 -20.486  1.00 42.02      L    C
ATOM   3481  O   GLN L   3     -16.247  22.597 -19.792  1.00 41.16      L    O
ATOM   3483  N   VAL L   4     -14.534  21.453 -20.684  1.00 40.93      L    N
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ATOM	3484	CA	VAL	L	4	-13.507	22.347	-20.154	1.00	41.75	L	C
ATOM	3486	CB	VAL	L	4	-12.748	21.722	-18.991	1.00	39.04	L	C
ATOM	3488	CG1	VAL	L	4	-11.795	22.763	-18.372	1.00	44.23	L	C
ATOM	3492	CG2	VAL	L	4	-13.727	21.221	-17.968	1.00	42.02	L	C
ATOM	3496	C	VAL	L	4	-12.534	22.672	-21.282	1.00	39.98	L	C
ATOM	3497	O	VAL	L	4	-12.242	21.826	-22.113	1.00	40.20	L	O
ATOM	3499	N	THR	L	5	-12.056	23.899	-21.327	1.00	39.58	L	N
ATOM	3500	CA	THR	L	5	-11.073	24.291	-22.330	1.00	39.96	L	C
ATOM	3502	CB	THR	L	5	-11.609	25.438	-23.259	1.00	50.26	L	C
ATOM	3504	OG1	THR	L	5	-12.712	24.954	-24.042	1.00	56.19	L	O
ATOM	3506	CG2	THR	L	5	-10.505	25.977	-24.205	1.00	48.86	L	C
ATOM	3510	C	THR	L	5	-9.859	24.787	-21.555	1.00	34.14	L	C
ATOM	3511	O	THR	L	5	-9.957	25.801	-20.895	1.00	29.11	L	O
ATOM	3513	N	GLN	L	6	-8.752	24.040	-21.608	1.00	33.25	L	N
ATOM	3514	CA	GLN	L	6	-7.505	24.424	-20.938	1.00	33.93	L	C
ATOM	3516	CB	GLN	L	6	-6.764	23.186	-20.412	1.00	35.26	L	C
ATOM	3519	CG	GLN	L	6	-5.488	23.503	-19.626	1.00	32.60	L	C
ATOM	3522	CD	GLN	L	6	-5.083	22.410	-18.666	1.00	28.59	L	C
ATOM	3523	OE1	GLN	L	6	-5.807	21.451	-18.455	1.00	27.24	L	O
ATOM	3524	NE2	GLN	L	6	-3.926	22.567	-18.056	1.00	29.05	L	N
ATOM	3527	C	GLN	L	6	-6.590	25.182	-21.904	1.00	34.90	L	C
ATOM	3528	O	GLN	L	6	-6.553	24.875	-23.090	1.00	34.73	L	O
ATOM	3530	N	SER	L	7	-5.854	26.158	-21.377	1.00	33.37	L	N
ATOM	3531	CA	SER	L	7	-4.909	26.932	-22.153	1.00	32.07	L	C
ATOM	3533	CB	SER	L	7	-5.587	28.101	-22.858	1.00	37.89	L	C
ATOM	3536	OG	SER	L	7	-4.607	28.957	-23.447	1.00	42.88	L	O
ATOM	3538	C	SER	L	7	-3.808	27.476	-21.262	1.00	31.47	L	C
ATOM	3539	O	SER	L	7	-4.044	27.790	-20.101	1.00	34.89	L	O
ATOM	3541	N	PRO	L	8	-2.591	27.601	-21.801	1.00	31.53	L	N
ATOM	3542	CA	PRO	L	8	-2.189	27.203	-23.160	1.00	33.48	L	C
ATOM	3544	CB	PRO	L	8	-0.902	28.030	-23.399	1.00	29.04	L	C
ATOM	3547	CG	PRO	L	8	-0.344	28.295	-22.054	1.00	28.39	L	C
ATOM	3550	CD	PRO	L	8	-1.475	28.186	-21.035	1.00	29.12	L	C
ATOM	3553	C	PRO	L	8	-1.921	25.707	-23.267	1.00	32.37	L	C
ATOM	3554	O	PRO	L	8	-1.996	24.987	-22.281	1.00	36.84	L	O
ATOM	3555	N	SER	L	9	-1.583	25.255	-24.460	1.00	35.49	L	N
ATOM	3556	CA	SER	L	9	-1.230	23.870	-24.703	1.00	33.20	L	C
ATOM	3558	CB	SER	L	9	-1.394	23.574	-26.197	1.00	33.39	L	C
ATOM	3561	OG	SER	L	9	-0.838	22.315	-26.515	1.00	44.21	L	O
ATOM	3563	C	SER	L	9	0.201	23.554	-24.214	1.00	31.41	L	C
ATOM	3564	O	SER	L	9	0.484	22.454	-23.736	1.00	29.89	L	O
ATOM	3566	N	SER	L	10	1.106	24.515	-24.335	1.00	34.17	L	N
ATOM	3567	CA	SER	L	10	2.430	24.387	-23.744	1.00	31.49	L	C
ATOM	3569	CB	SER	L	10	3.350	23.487	-24.589	1.00	39.84	L	C
ATOM	3572	OG	SER	L	10	3.429	23.960	-25.914	1.00	40.04	L	O
ATOM	3574	C	SER	L	10	3.040	25.740	-23.593	1.00	34.42	L	C
ATOM	3575	O	SER	L	10	2.610	26.695	-24.214	1.00	38.55	L	O
ATOM	3577	N	LEU	L	11	4.035	25.812	-22.727	1.00	37.17	L	N
ATOM	3578	CA	LEU	L	11	4.730	27.058	-22.437	1.00	34.61	L	C
ATOM	3580	CB	LEU	L	11	3.926	27.928	-21.450	1.00	34.95	L	C
ATOM	3583	CG	LEU	L	11	3.748	27.465	-19.994	1.00	36.48	L	C
ATOM	3585	CD1	LEU	L	11	5.023	27.683	-19.177	1.00	29.27	L	C
ATOM	3589	CD2	LEU	L	11	2.570	28.188	-19.324	1.00	35.14	L	C
ATOM	3593	C	LEU	L	11	6.091	26.752	-21.851	1.00	33.86	L	C
ATOM	3594	O	LEU	L	11	6.323	25.678	-21.240	1.00	29.81	L	O
ATOM	3596	N	SER	L	12	6.969	27.736	-22.010	1.00	36.77	L	N
ATOM	3597	CA	SER	L	12	8.336	27.653	-21.544	1.00	37.94	L	C
ATOM	3599	CB	SER	L	12	9.282	27.505	-22.739	1.00	42.27	L	C
ATOM	3602	OG	SER	L	12	10.544	27.050	-22.310	1.00	47.65	L	O
ATOM	3604	C	SER	L	12	8.627	28.922	-20.765	1.00	36.43	L	C
ATOM	3605	O	SER	L	12	8.244	30.000	-21.195	1.00	38.70	L	O
ATOM	3607	N	ALA	L	13	9.265	28.782	-19.606	1.00	35.68	L	N
ATOM	3608	CA	ALA	L	13	9.603	29.916	-18.764	1.00	35.42	L	C
ATOM	3610	CB	ALA	L	13	8.422	30.254	-17.872	1.00	37.92	L	C
ATOM	3614	C	ALA	L	13	10.835	29.627	-17.923	1.00	36.26	L	C
ATOM	3615	O	ALA	L	13	11.260	28.483	-17.811	1.00	40.43	L	O
ATOM	3617	N	SER	L	14	11.385	30.667	-17.300	1.00	38.14	L	N
ATOM	3618	CA	SER	L	14	12.621	30.565	-16.529	1.00	37.65	L	C
ATOM	3620	CB	SER	L	14	13.439	31.842	-16.700	1.00	38.52	L	C
ATOM	3623	OG	SER	L	14	14.026	31.909	-17.985	1.00	40.88	L	O
ATOM	3625	C	SER	L	14	12.386	30.318	-15.037	1.00	38.57	L	C
ATOM	3626	O	SER	L	14	11.336	30.665	-14.486	1.00	36.87	L	O
ATOM	3628	N	VAL	L	15	13.384	29.722	-14.385	1.00	37.78	L	N
ATOM	3629	CA	VAL	L	15	13.362	29.538	-12.945	1.00	37.46	L	C
ATOM	3631	CB	VAL	L	15	14.694	28.923	-12.456	1.00	40.00	L	C

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ATOM	3633	CG1	VAL	L	15	14.937	29.191	-10.965	1.00	37.02	L	C
ATOM	3637	CG2	VAL	L	15	14.716	27.427	-12.780	1.00	35.60	L	C
ATOM	3641	C	VAL	L	15	13.114	30.895	-12.298	1.00	38.64	L	C
ATOM	3642	O	VAL	L	15	13.811	31.868	-12.582	1.00	41.97	L	O
ATOM	3644	N	GLY	L	16	12.097	30.963	-11.458	1.00	39.96	L	N
ATOM	3645	CA	GLY	L	16	11.749	32.207	-10.773	1.00	39.00	L	C
ATOM	3648	C	GLY	L	16	10.553	32.932	-11.362	1.00	37.74	L	C
ATOM	3649	O	GLY	L	16	9.971	33.787	-10.707	1.00	40.10	L	O
ATOM	3651	N	ASP	L	17	10.190	32.589	-12.598	1.00	40.74	L	N
ATOM	3652	CA	ASP	L	17	9.059	33.206	-13.299	1.00	40.30	L	C
ATOM	3654	CB	ASP	L	17	9.064	32.809	-14.784	1.00	37.61	L	C
ATOM	3657	CG	ASP	L	17	10.136	33.520	-15.601	1.00	43.36	L	C
ATOM	3658	OD1	ASP	L	17	10.818	34.426	-15.066	1.00	42.18	L	O
ATOM	3659	OD2	ASP	L	17	10.280	33.163	-16.806	1.00	44.96	L	O
ATOM	3660	C	ASP	L	17	7.699	32.779	-12.732	1.00	44.02	L	C
ATOM	3661	O	ASP	L	17	7.582	31.793	-11.998	1.00	43.56	L	O
ATOM	3663	N	ARG	L	18	6.670	33.532	-13.113	1.00	40.48	L	N
ATOM	3664	CA	ARG	L	18	5.316	33.210	-12.776	1.00	39.14	L	C
ATOM	3666	CB	ARG	L	18	4.525	34.466	-12.421	1.00	38.17	L	C
ATOM	3669	CG	ARG	L	18	3.037	34.192	-12.143	1.00	43.04	L	C
ATOM	3672	CD	ARG	L	18	2.311	35.404	-11.563	1.00	44.99	L	C
ATOM	3675	NE	ARG	L	18	2.983	35.941	-10.375	1.00	47.48	L	N
ATOM	3677	CZ	ARG	L	18	2.575	37.019	-9.716	1.00	49.83	L	C
ATOM	3678	NH1	ARG	L	18	1.490	37.680	-10.125	1.00	50.58	L	N
ATOM	3681	NH2	ARG	L	18	3.252	37.444	-8.652	1.00	47.68	L	N
ATOM	3684	C	ARG	L	18	4.646	32.538	-13.964	1.00	42.17	L	C
ATOM	3685	O	ARG	L	18	4.630	33.097	-15.066	1.00	43.32	L	O
ATOM	3687	N	VAL	L	19	4.058	31.364	-13.712	1.00	42.08	L	N
ATOM	3688	CA	VAL	L	19	3.330	30.599	-14.719	1.00	37.74	L	C
ATOM	3690	CB	VAL	L	19	3.759	29.113	-14.700	1.00	36.98	L	C
ATOM	3692	CG1	VAL	L	19	2.902	28.288	-15.642	1.00	33.86	L	C
ATOM	3696	CG2	VAL	L	19	5.223	29.010	-15.042	1.00	34.01	L	C
ATOM	3700	C	VAL	L	19	1.842	30.691	-14.475	1.00	37.21	L	C
ATOM	3701	O	VAL	L	19	1.383	30.518	-13.355	1.00	43.02	L	O
ATOM	3703	N	THR	L	20	1.091	30.963	-15.540	1.00	37.92	L	N
ATOM	3704	CA	THR	L	20	-0.344	31.154	-15.467	1.00	36.43	L	C
ATOM	3706	CB	THR	L	20	-0.741	32.621	-15.683	1.00	37.95	L	C
ATOM	3708	OG1	THR	L	20	-0.106	33.432	-14.685	1.00	43.67	L	O
ATOM	3710	CG2	THR	L	20	-2.268	32.788	-15.540	1.00	36.16	L	C
ATOM	3714	C	THR	L	20	-1.040	30.281	-16.499	1.00	38.23	L	C
ATOM	3715	O	THR	L	20	-0.800	30.424	-17.698	1.00	38.80	L	O
ATOM	3717	N	ILE	L	21	-1.902	29.383	-16.012	1.00	36.71	L	N
ATOM	3718	CA	ILE	L	21	-2.605	28.389	-16.826	1.00	35.70	L	C
ATOM	3720	CB	ILE	L	21	-2.188	26.945	-16.407	1.00	36.28	L	C
ATOM	3722	CG1	ILE	L	21	-0.726	26.683	-16.743	1.00	38.72	L	C
ATOM	3725	CD1	ILE	L	21	-0.175	25.395	-16.108	1.00	44.91	L	C
ATOM	3729	CG2	ILE	L	21	-3.056	25.876	-17.097	1.00	38.52	L	C
ATOM	3733	C	ILE	L	21	-4.083	28.549	-16.543	1.00	33.24	L	C
ATOM	3734	O	ILE	L	21	-4.429	28.711	-15.382	1.00	32.42	L	O
ATOM	3736	N	THR	L	22	-4.941	28.530	-17.572	1.00	32.33	L	N
ATOM	3737	CA	THR	L	22	-6.361	28.754	-17.381	1.00	39.90	L	C
ATOM	3739	CB	THR	L	22	-6.839	30.055	-18.096	1.00	41.23	L	C
ATOM	3741	OG1	THR	L	22	-6.564	29.970	-19.499	1.00	44.62	L	O
ATOM	3743	CG2	THR	L	22	-6.157	31.258	-17.515	1.00	37.62	L	C
ATOM	3747	C	THR	L	22	-7.272	27.594	-17.848	1.00	40.85	L	C
ATOM	3748	O	THR	L	22	-6.965	26.883	-18.799	1.00	41.14	L	O
ATOM	3750	N	CYS	L	23	-8.410	27.431	-17.175	1.00	43.42	L	N
ATOM	3751	CA	CYS	L	23	-9.481	26.547	-17.648	1.00	42.68	L	C
ATOM	3753	CB	CYS	L	23	-9.571	25.251	-16.831	1.00	48.31	L	C
ATOM	3756	SG	CYS	L	23	-8.377	24.025	-17.418	1.00	59.32	L	S
ATOM	3758	C	CYS	L	23	-10.802	27.301	-17.622	1.00	39.36	L	C
ATOM	3759	O	CYS	L	23	-11.076	28.042	-16.680	1.00	39.09	L	O
ATOM	3761	N	ILE	L	24	-11.586	27.121	-18.683	1.00	39.78	L	N
ATOM	3762	CA	ILE	L	24	-12.894	27.748	-18.840	1.00	42.12	L	C
ATOM	3764	CB	ILE	L	24	-12.931	28.701	-20.044	1.00	42.07	L	C
ATOM	3766	CG1	ILE	L	24	-11.931	29.852	-19.844	1.00	44.53	L	C
ATOM	3769	CD1	ILE	L	24	-11.500	30.472	-21.128	1.00	46.85	L	C
ATOM	3773	CG2	ILE	L	24	-14.345	29.252	-20.246	1.00	39.80	L	C
ATOM	3777	C	ILE	L	24	-13.943	26.680	-19.071	1.00	43.42	L	C
ATOM	3778	O	ILE	L	24	-13.843	25.905	-20.032	1.00	41.92	L	O
ATOM	3780	N	THR	L	25	-14.954	26.642	-18.200	1.00	44.73	L	N
ATOM	3781	CA	THR	L	25	-15.986	25.602	-18.258	1.00	40.41	L	C
ATOM	3783	CB	THR	L	25	-16.429	25.165	-16.854	1.00	43.51	L	C
ATOM	3785	OG1	THR	L	25	-16.842	26.313	-16.090	1.00	46.66	L	O
ATOM	3787	CG2	THR	L	25	-15.281	24.449	-16.129	1.00	40.24	L	C

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ATOM   3791  C   THR L  25     -17.190  26.055 -19.071  1.00 36.98      L    C
ATOM   3792  O   THR L  25     -17.424  27.248 -19.245  1.00 35.24      L    O
ATOM   3794  N   SER L  26     -17.944  25.087 -19.590  1.00 41.47      L    N
ATOM   3795  CA  SER L  26     -19.097  25.383 -20.442  1.00 43.97      L    C
ATOM   3797  CB  SER L  26     -19.428  24.193 -21.350  1.00 44.55      L    C
ATOM   3800  OG  SER L  26     -19.453  22.975 -20.620  1.00 48.76      L    O
ATOM   3802  C   SER L  26     -20.335  25.821 -19.627  1.00 47.07      L    C
ATOM   3803  O   SER L  26     -21.315  26.301 -20.208  1.00 49.17      L    O
ATOM   3805  N   THR L  27     -20.274  25.675 -18.296  1.00 47.68      L    N
ATOM   3806  CA  THR L  27     -21.361  26.068 -17.396  1.00 45.58      L    C
ATOM   3808  CB  THR L  27     -22.271  24.859 -17.048  1.00 53.79      L    C
ATOM   3810  OG1 THR L  27     -22.655  24.180 -18.252  1.00 62.51      L    O
ATOM   3812  CG2 THR L  27     -23.522  25.299 -16.298  1.00 52.78      L    C
ATOM   3816  C   THR L  27     -20.774  26.600 -16.100  1.00 45.19      L    C
ATOM   3817  O   THR L  27     -19.625  26.324 -15.774  1.00 48.40      L    O
ATOM   3819  N   ASP L  28     -21.573  27.362 -15.366  1.00 47.89      L    N
ATOM   3820  CA  ASP L  28     -21.197  27.803 -14.047  1.00 47.67      L    C
ATOM   3822  CB  ASP L  28     -22.234  28.779 -13.488  1.00 48.98      L    C
ATOM   3825  CG  ASP L  28     -21.759  29.452 -12.234  1.00 52.20      L    C
ATOM   3826  OD1 ASP L  28     -21.576  30.682 -12.249  1.00 62.24      L    O
ATOM   3827  OD2 ASP L  28     -21.521  28.749 -11.238  1.00 57.96      L    O
ATOM   3828  C   ASP L  28     -21.064  26.570 -13.151  1.00 46.01      L    C
ATOM   3829  O   ASP L  28     -21.991  25.781 -13.033  1.00 47.36      L    O
ATOM   3831  N   ILE L  29     -19.898  26.442 -12.530  1.00 42.48      L    N
ATOM   3832  CA  ILE L  29     -19.467  25.252 -11.801  1.00 42.20      L    C
ATOM   3834  CB  ILE L  29     -18.288  24.659 -12.622  1.00 43.38      L    C
ATOM   3836  CG1 ILE L  29     -18.856  23.657 -13.608  1.00 45.55      L    C
ATOM   3839  CD1 ILE L  29     -17.888  23.211 -14.614  1.00 51.65      L    C
ATOM   3843  CG2 ILE L  29     -17.167  24.099 -11.774  1.00 45.69      L    C
ATOM   3847  C   ILE L  29     -19.082  25.631 -10.375  1.00 39.62      L    C
ATOM   3848  O   ILE L  29     -18.412  24.880  -9.673  1.00 39.37      L    O
ATOM   3850  N   ASP L  30     -19.534  26.809  -9.953  1.00 39.45      L    N
ATOM   3851  CA  ASP L  30     -19.160  27.379  -8.657  1.00 41.59      L    C
ATOM   3853  CB  ASP L  30     -19.957  26.701  -7.518  1.00 42.61      L    C
ATOM   3856  CG  ASP L  30     -21.462  26.754  -7.749  1.00 43.50      L    C
ATOM   3857  OD1 ASP L  30     -21.994  27.876  -7.928  1.00 48.50      L    O
ATOM   3858  OD2 ASP L  30     -22.116  25.679  -7.775  1.00 46.86      L    O
ATOM   3859  C   ASP L  30     -17.638  27.360  -8.439  1.00 40.32      L    C
ATOM   3860  O   ASP L  30     -16.899  28.061  -9.133  1.00 41.74      L    O
ATOM   3862  N   ASP L  31     -17.186  26.556  -7.486  1.00 43.55      L    N
ATOM   3863  CA  ASP L  31     -15.829  26.562  -6.964  1.00 40.84      L    C
ATOM   3865  CB  ASP L  31     -15.983  26.632  -5.434  1.00 48.06      L    C
ATOM   3868  CG  ASP L  31     -15.072  27.626  -4.781  1.00 59.00      L    C
ATOM   3869  OD1 ASP L  31     -14.134  28.127  -5.439  1.00 69.59      L    O
ATOM   3870  OD2 ASP L  31     -15.305  27.909  -3.581  1.00 60.87      L    O
ATOM   3871  C   ASP L  31     -15.127  25.231  -7.280  1.00 36.47      L    C
ATOM   3872  O   ASP L  31     -14.001  24.989  -6.859  1.00 32.93      L    O
ATOM   3874  N   ASP L  32     -15.821  24.360  -7.988  1.00 34.59      L    N
ATOM   3875  CA  ASP L  32     -15.487  22.955  -8.025  1.00 38.68      L    C
ATOM   3877  CB  ASP L  32     -16.795  22.143  -8.094  1.00 42.00      L    C
ATOM   3880  CG  ASP L  32     -17.620  22.315  -6.841  1.00 42.45      L    C
ATOM   3881  OD1 ASP L  32     -17.052  22.133  -5.748  1.00 38.19      L    O
ATOM   3882  OD2 ASP L  32     -18.807  22.677  -6.934  1.00 49.29      L    O
ATOM   3883  C   ASP L  32     -14.511  22.605  -9.161  1.00 37.40      L    C
ATOM   3884  O   ASP L  32     -14.778  21.699  -9.979  1.00 35.32      L    O
ATOM   3886  N   MET L  33     -13.383  23.322  -9.157  1.00 34.11      L    N
ATOM   3887  CA  MET L  33     -12.293  23.097 -10.053  1.00 33.37      L    C
ATOM   3889  CB  MET L  33     -11.921  24.402 -10.748  1.00 37.31      L    C
ATOM   3892  CG  MET L  33     -10.847  24.290 -11.815  1.00 36.01      L    C
ATOM   3895  SD  MET L  33     -11.288  23.157 -13.133  1.00 42.53      L    S
ATOM   3896  CE  MET L  33     -12.617  24.023 -13.995  1.00 33.25      L    C
ATOM   3900  C   MET L  33     -11.079  22.542  -9.276  1.00 35.49      L    C
ATOM   3901  O   MET L  33     -10.786  22.976  -8.170  1.00 34.68      L    O
ATOM   3903  N   ASN L  34     -10.383  21.580  -9.893  1.00 37.27      L    N
ATOM   3904  CA  ASN L  34      -9.191  20.962  -9.327  1.00 34.76      L    C
ATOM   3906  CB  ASN L  34      -9.408  19.476  -9.023  1.00 38.89      L    C
ATOM   3909  CG  ASN L  34     -10.697  19.222  -8.307  1.00 36.18      L    C
ATOM   3910  OD1 ASN L  34     -10.725  19.050  -7.079  1.00 38.80      L    O
ATOM   3911  ND2 ASN L  34     -11.795  19.236  -9.061  1.00 40.53      L    N
ATOM   3914  C   ASN L  34      -8.067  21.055 -10.317  1.00 31.86      L    C
ATOM   3915  O   ASN L  34      -8.311  21.160 -11.521  1.00 33.02      L    O
ATOM   3917  N   TRP L  35      -6.844  20.994  -9.799  1.00 30.55      L    N
ATOM   3918  CA  TRP L  35      -5.654  20.996 -10.615  1.00 30.36      L    C
ATOM   3920  CB  TRP L  35      -4.918  22.340 -10.490  1.00 35.36      L    C
ATOM   3923  CG  TRP L  35      -5.705  23.475 -11.053  1.00 37.91      L    C
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ATOM   3924  CD1 TRP L  35      -6.598  24.281 -10.380  1.00 36.63       L    C
ATOM   3926  NE1 TRP L  35      -7.120  25.220 -11.235  1.00 34.78       L    N
ATOM   3928  CE2 TRP L  35      -6.592  25.033 -12.487  1.00 36.78       L    C
ATOM   3929  CD2 TRP L  35      -5.692  23.944 -12.412  1.00 40.85       L    C
ATOM   3930  CE3 TRP L  35      -4.995  23.564 -13.564  1.00 39.55       L    C
ATOM   3932  CZ3 TRP L  35      -5.219  24.270 -14.743  1.00 35.57       L    C
ATOM   3934  CH2 TRP L  35      -6.135  25.337 -14.782  1.00 38.18       L    C
ATOM   3936  CZ2 TRP L  35      -6.824  25.731 -13.673  1.00 36.85       L    C
ATOM   3938  C   TRP L  35      -4.745  19.829 -10.228  1.00 30.20       L    C
ATOM   3939  O   TRP L  35      -4.562  19.516  -9.031  1.00 28.74       L    O
ATOM   3941  N   TYR L  36      -4.187  19.187 -11.253  1.00 34.39       L    N
ATOM   3942  CA  TYR L  36      -3.289  18.039 -11.098  1.00 32.30       L    C
ATOM   3944  CB  TYR L  36      -3.879  16.791 -11.750  1.00 31.28       L    C
ATOM   3947  CG  TYR L  36      -5.057  16.148 -11.042  1.00 33.73       L    C
ATOM   3948  CD1 TYR L  36      -4.890  15.009 -10.246  1.00 35.52       L    C
ATOM   3950  CE1 TYR L  36      -5.989  14.408  -9.584  1.00 31.56       L    C
ATOM   3952  CZ  TYR L  36      -7.248  14.946  -9.745  1.00 35.40       L    C
ATOM   3953  OH  TYR L  36      -8.316  14.356  -9.129  1.00 33.56       L    O
ATOM   3955  CE2 TYR L  36      -7.441  16.097 -10.516  1.00 34.23       L    C
ATOM   3957  CD2 TYR L  36      -6.351  16.689 -11.154  1.00 37.76       L    C
ATOM   3959  C   TYR L  36      -1.963  18.329 -11.783  1.00 34.21       L    C
ATOM   3960  O   TYR L  36      -1.902  19.138 -12.726  1.00 33.60       L    O
ATOM   3962  N   GLN L  37      -0.918  17.666 -11.284  1.00 32.97       L    N
ATOM   3963  CA  GLN L  37       0.413  17.681 -11.838  1.00 35.58       L    C
ATOM   3965  CB  GLN L  37       1.407  18.115 -10.758  1.00 35.59       L    C
ATOM   3968  CG  GLN L  37       2.849  18.235 -11.201  1.00 35.46       L    C
ATOM   3971  CD  GLN L  37       3.732  18.717 -10.081  1.00 38.66       L    C
ATOM   3972  OE1 GLN L  37       3.723  18.126  -9.001  1.00 45.41       L    O
ATOM   3973  NE2 GLN L  37       4.481  19.810 -10.311  1.00 32.32       L    N
ATOM   3976  C   GLN L  37       0.765  16.262 -12.250  1.00 36.66       L    C
ATOM   3977  O   GLN L  37       0.560  15.333 -11.474  1.00 36.15       L    O
ATOM   3979  N   GLN L  38       1.295  16.083 -13.457  1.00 39.24       L    N
ATOM   3980  CA  GLN L  38       1.865  14.782 -13.833  1.00 40.38       L    C
ATOM   3982  CB  GLN L  38       0.968  14.037 -14.824  1.00 39.50       L    C
ATOM   3985  CG  GLN L  38       1.452  12.636 -15.131  1.00 39.67       L    C
ATOM   3988  CD  GLN L  38       0.467  11.834 -15.919  1.00 40.77       L    C
ATOM   3989  OE1 GLN L  38      -0.187  12.357 -16.817  1.00 47.43       L    O
ATOM   3990  NE2 GLN L  38       0.362  10.537 -15.609  1.00 39.83       L    N
ATOM   3993  C   GLN L  38       3.270  14.936 -14.395  1.00 40.58       L    C
ATOM   3994  O   GLN L  38       3.475  15.587 -15.416  1.00 41.61       L    O
ATOM   3996  N   LYS L  39       4.238  14.334 -13.716  1.00 45.50       L    N
ATOM   3997  CA  LYS L  39       5.620  14.337 -14.176  1.00 49.63       L    C
ATOM   3999  CB  LYS L  39       6.586  14.373 -12.985  1.00 46.97       L    C
ATOM   4002  CG  LYS L  39       6.413  15.646 -12.147  1.00 47.44       L    C
ATOM   4005  CD  LYS L  39       7.365  15.721 -10.964  1.00 50.26       L    C
ATOM   4008  CE  LYS L  39       6.790  16.591  -9.846  1.00 50.76       L    C
ATOM   4011  NZ  LYS L  39       7.808  17.101  -8.866  1.00 50.65       L    N
ATOM   4015  C   LYS L  39       5.834  13.138 -15.086  1.00 55.03       L    C
ATOM   4016  O   LYS L  39       5.045  12.191 -15.040  1.00 56.18       L    O
ATOM   4018  N   PRO L  40       6.862  13.200 -15.960  1.00 62.10       L    N
ATOM   4019  CA  PRO L  40       7.178  12.181 -16.959  1.00 62.84       L    C
ATOM   4021  CB  PRO L  40       8.717  12.174 -16.935  1.00 67.78       L    C
ATOM   4024  CG  PRO L  40       9.099  13.618 -16.530  1.00 68.06       L    C
ATOM   4027  CD  PRO L  40       7.828  14.314 -16.074  1.00 65.12       L    C
ATOM   4030  C   PRO L  40       6.601  10.773 -16.730  1.00 64.80       L    C
ATOM   4031  O   PRO L  40       5.681  10.362 -17.456  1.00 67.75       L    O
ATOM   4032  N   GLY L  41       7.138  10.041 -15.754  1.00 60.58       L    N
ATOM   4033  CA  GLY L  41       6.728   8.654 -15.514  1.00 61.09       L    C
ATOM   4036  C   GLY L  41       6.087   8.459 -14.147  1.00 63.15       L    C
ATOM   4037  O   GLY L  41       6.525   7.588 -13.368  1.00 62.69       L    O
ATOM   4039  N   LYS L  42       5.062   9.266 -13.835  1.00 59.76       L    N
ATOM   4040  CA  LYS L  42       4.415   9.193 -12.508  1.00 54.12       L    C
ATOM   4042  CB  LYS L  42       4.995  10.203 -11.480  1.00 62.46       L    C
ATOM   4045  CG  LYS L  42       6.084  11.162 -11.962  1.00 67.58       L    C
ATOM   4048  CD  LYS L  42       7.514  10.576 -11.906  1.00 69.45       L    C
ATOM   4051  CE  LYS L  42       8.471  11.203 -12.972  1.00 68.53       L    C
ATOM   4054  NZ  LYS L  42       9.482  12.194 -12.469  1.00 67.12       L    N
ATOM   4058  C   LYS L  42       2.899   9.264 -12.542  1.00 46.39       L    C
ATOM   4059  O   LYS L  42       2.285   9.605 -13.547  1.00 43.87       L    O
ATOM   4061  N   VAL L  43       2.286   8.896 -11.424  1.00 46.96       L    N
ATOM   4062  CA  VAL L  43       0.837   9.032 -11.275  1.00 45.71       L    C
ATOM   4064  CB  VAL L  43       0.262   8.169 -10.064  1.00 49.12       L    C
ATOM   4066  CG1 VAL L  43       0.725   6.742 -10.169  1.00 49.87       L    C
ATOM   4070  CG2 VAL L  43       0.659   8.754  -8.700  1.00 43.78       L    C
ATOM   4074  C   VAL L  43       0.501  10.512 -11.087  1.00 40.44       L    C
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ATOM	4075	O	VAL	L	43	1.307	11.262	-10.514	1.00	36.39	L	O
ATOM	4077	N	PRO	L	44	-0.680	10.947	-11.561	1.00	36.93	L	N
ATOM	4078	CA	PRO	L	44	-1.073	12.340	-11.263	1.00	37.73	L	C
ATOM	4080	CB	PRO	L	44	-2.438	12.477	-11.922	1.00	36.90	L	C
ATOM	4083	CG	PRO	L	44	-2.413	11.432	-13.035	1.00	37.84	L	C
ATOM	4086	CD	PRO	L	44	-1.656	10.276	-12.424	1.00	35.19	L	C
ATOM	4089	C	PRO	L	44	-1.147	12.692	-9.769	1.00	33.20	L	C
ATOM	4090	O	PRO	L	44	-1.457	11.857	-8.935	1.00	31.82	L	O
ATOM	4091	N	LYS	L	45	-0.837	13.934	-9.459	1.00	36.45	L	N
ATOM	4092	CA	LYS	L	45	-0.835	14.452	-8.093	1.00	35.63	L	C
ATOM	4094	CB	LYS	L	45	0.578	14.907	-7.706	1.00	39.36	L	C
ATOM	4097	CG	LYS	L	45	0.733	15.753	-6.435	1.00	39.89	L	C
ATOM	4100	CD	LYS	L	45	0.216	15.063	-5.181	1.00	43.00	L	C
ATOM	4103	CE	LYS	L	45	0.766	15.726	-3.918	1.00	43.84	L	C
ATOM	4106	NZ	LYS	L	45	0.264	15.099	-2.642	1.00	41.93	L	N
ATOM	4110	C	LYS	L	45	-1.829	15.626	-8.049	1.00	33.34	L	C
ATOM	4111	O	LYS	L	45	-1.683	16.594	-8.777	1.00	31.98	L	O
ATOM	4113	N	LEU	L	46	-2.859	15.514	-7.221	1.00	34.77	L	N
ATOM	4114	CA	LEU	L	46	-3.788	16.641	-7.005	1.00	32.13	L	C
ATOM	4116	CB	LEU	L	46	-5.018	16.182	-6.242	1.00	34.33	L	C
ATOM	4119	CG	LEU	L	46	-6.167	17.170	-6.065	1.00	33.49	L	C
ATOM	4121	CD1	LEU	L	46	-6.795	17.479	-7.410	1.00	28.78	L	C
ATOM	4125	CD2	LEU	L	46	-7.185	16.607	-5.114	1.00	28.04	L	C
ATOM	4129	C	LEU	L	46	-3.102	17.756	-6.229	1.00	34.35	L	C
ATOM	4130	O	LEU	L	46	-2.678	17.550	-5.094	1.00	35.17	L	O
ATOM	4132	N	LEU	L	47	-2.983	18.931	-6.846	1.00	35.02	L	N
ATOM	4133	CA	LEU	L	47	-2.338	20.080	-6.199	1.00	34.75	L	C
ATOM	4135	CB	LEU	L	47	-1.625	20.970	-7.235	1.00	37.30	L	C
ATOM	4138	CG	LEU	L	47	-0.511	20.433	-8.134	1.00	36.91	L	C
ATOM	4140	CD1	LEU	L	47	-0.185	21.506	-9.166	1.00	37.64	L	C
ATOM	4144	CD2	LEU	L	47	0.722	20.053	-7.379	1.00	36.33	L	C
ATOM	4148	C	LEU	L	47	-3.366	20.943	-5.449	1.00	34.71	L	C
ATOM	4149	O	LEU	L	47	-3.107	21.413	-4.333	1.00	35.58	L	O
ATOM	4151	N	ILE	L	48	-4.513	21.166	-6.095	1.00	34.25	L	N
ATOM	4152	CA	ILE	L	48	-5.510	22.151	-5.668	1.00	34.30	L	C
ATOM	4154	CB	ILE	L	48	-5.476	23.441	-6.547	1.00	36.91	L	C
ATOM	4156	CG1	ILE	L	48	-4.052	24.041	-6.669	1.00	38.99	L	C
ATOM	4159	CD1	ILE	L	48	-3.627	24.990	-5.565	1.00	42.17	L	C
ATOM	4163	CG2	ILE	L	48	-6.456	24.472	-6.033	1.00	35.75	L	C
ATOM	4167	C	ILE	L	48	-6.890	21.543	-5.842	1.00	36.46	L	C
ATOM	4168	O	ILE	L	48	-7.207	21.029	-6.922	1.00	30.87	L	O
ATOM	4170	N	SER	L	49	-7.719	21.607	-4.795	1.00	37.39	L	N
ATOM	4171	CA	SER	L	49	-9.112	21.176	-4.905	1.00	40.10	L	C
ATOM	4173	CB	SER	L	49	-9.481	20.176	-3.800	1.00	45.16	L	C
ATOM	4176	OG	SER	L	49	-8.959	20.537	-2.534	1.00	46.63	L	O
ATOM	4178	C	SER	L	49	-10.069	22.364	-4.872	1.00	40.45	L	C
ATOM	4179	O	SER	L	49	-9.681	23.500	-4.605	1.00	40.01	L	O
ATOM	4181	N	GLY	L	50	-11.334	22.082	-5.137	1.00	47.40	L	N
ATOM	4182	CA	GLY	L	50	-12.357	23.105	-5.190	1.00	50.48	L	C
ATOM	4185	C	GLY	L	50	-12.186	24.122	-4.084	1.00	57.17	L	C
ATOM	4186	O	GLY	L	50	-11.722	23.789	-2.975	1.00	64.58	L	O
ATOM	4188	N	GLY	L	51	-12.541	25.370	-4.375	1.00	57.23	L	N
ATOM	4189	CA	GLY	L	51	-12.319	26.452	-3.413	1.00	56.70	L	C
ATOM	4192	C	GLY	L	51	-10.895	26.977	-3.466	1.00	59.08	L	C
ATOM	4193	O	GLY	L	51	-10.520	27.844	-2.667	1.00	60.69	L	O
ATOM	4195	N	ASN	L	52	-10.103	26.449	-4.405	1.00	54.23	L	N
ATOM	4196	CA	ASN	L	52	-8.698	26.800	-4.537	1.00	50.30	L	C
ATOM	4198	CB	ASN	L	52	-8.583	28.239	-5.024	1.00	52.59	L	C
ATOM	4201	CG	ASN	L	52	-9.372	28.441	-6.304	1.00	59.49	L	C
ATOM	4202	OD1	ASN	L	52	-9.301	27.593	-7.223	1.00	53.16	L	O
ATOM	4203	ND2	ASN	L	52	-10.180	29.518	-6.358	1.00	62.40	L	N
ATOM	4206	C	ASN	L	52	-7.924	26.514	-3.267	1.00	44.30	L	C
ATOM	4207	O	ASN	L	52	-7.099	27.309	-2.811	1.00	40.03	L	O
ATOM	4209	N	THR	L	53	-8.181	25.316	-2.754	1.00	43.59	L	N
ATOM	4210	CA	THR	L	53	-7.552	24.801	-1.547	1.00	44.07	L	C
ATOM	4212	CB	THR	L	53	-8.496	23.833	-0.787	1.00	45.06	L	C
ATOM	4214	OG1	THR	L	53	-9.653	24.553	-0.360	1.00	46.82	L	O
ATOM	4216	CG2	THR	L	53	-7.796	23.228	0.424	1.00	42.81	L	C
ATOM	4220	C	THR	L	53	-6.300	24.034	-1.904	1.00	39.74	L	C
ATOM	4221	O	THR	L	53	-6.358	23.032	-2.590	1.00	39.11	L	O
ATOM	4223	N	LEU	L	54	-5.172	24.524	-1.419	1.00	41.00	L	N
ATOM	4224	CA	LEU	L	54	-3.916	23.833	-1.544	1.00	41.76	L	C
ATOM	4226	CB	LEU	L	54	-2.788	24.707	-0.999	1.00	42.70	L	C
ATOM	4229	CG	LEU	L	54	-1.362	24.215	-1.224	1.00	45.27	L	C
ATOM	4231	CD1	LEU	L	54	-1.085	24.009	-2.728	1.00	41.65	L	C

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ATOM   4235  CD2 LEU L  54     -0.382  25.199  -0.574  1.00 41.94      L    C
ATOM   4239  C   LEU L  54     -4.008  22.503  -0.784  1.00 45.21      L    C
ATOM   4240  O   LEU L  54     -4.636  22.416   0.277  1.00 46.41      L    O
ATOM   4242  N   ARG L  55     -3.401  21.461  -1.349  1.00 46.12      L    N
ATOM   4243  CA  ARG L  55     -3.434  20.148  -0.734  1.00 44.14      L    C
ATOM   4245  CB  ARG L  55     -3.618  19.062  -1.801  1.00 43.45      L    C
ATOM   4248  CG  ARG L  55     -5.003  19.057  -2.400  1.00 41.84      L    C
ATOM   4251  CD  ARG L  55     -5.962  18.453  -1.404  1.00 45.95      L    C
ATOM   4254  NE  ARG L  55     -7.311  18.290  -1.917  1.00 47.10      L    N
ATOM   4256  CZ  ARG L  55     -8.161  17.352  -1.496  1.00 48.12      L    C
ATOM   4257  NH1 ARG L  55     -7.798  16.456  -0.596  1.00 50.15      L    N
ATOM   4260  NH2 ARG L  55     -9.375  17.279  -2.008  1.00 49.95      L    N
ATOM   4263  C   ARG L  55     -2.183  19.883   0.096  1.00 46.76      L    C
ATOM   4264  O   ARG L  55     -1.120  20.450  -0.159  1.00 47.31      L    O
ATOM   4266  N   PRO L  56     -2.326  19.033   1.122  1.00 51.28      L    N
ATOM   4267  CA  PRO L  56     -1.230  18.484   1.884  1.00 50.47      L    C
ATOM   4269  CB  PRO L  56     -1.796  17.142   2.331  1.00 55.09      L    C
ATOM   4272  CG  PRO L  56     -3.266  17.461   2.603  1.00 57.06      L    C
ATOM   4275  CD  PRO L  56     -3.627  18.589   1.671  1.00 55.38      L    C
ATOM   4278  C   PRO L  56      0.051  18.235   1.106  1.00 51.45      L    C
ATOM   4279  O   PRO L  56      0.066  17.421   0.171  1.00 50.11      L    O
ATOM   4280  N   GLY L  57      1.113  18.936   1.496  1.00 51.39      L    N
ATOM   4281  CA  GLY L  57      2.472  18.650   1.013  1.00 49.83      L    C
ATOM   4284  C   GLY L  57      2.788  19.214  -0.357  1.00 48.23      L    C
ATOM   4285  O   GLY L  57      3.700  18.724  -1.063  1.00 50.72      L    O
ATOM   4287  N   VAL L  58      2.007  20.213  -0.757  1.00 45.82      L    N
ATOM   4288  CA  VAL L  58      2.200  20.893  -2.041  1.00 45.58      L    C
ATOM   4290  CB  VAL L  58      0.863  21.124  -2.789  1.00 45.31      L    C
ATOM   4292  CG1 VAL L  58      1.092  21.988  -4.022  1.00 47.89      L    C
ATOM   4296  CG2 VAL L  58      0.182  19.786  -3.181  1.00 45.27      L    C
ATOM   4300  C   VAL L  58      2.816  22.246  -1.724  1.00 43.35      L    C
ATOM   4301  O   VAL L  58      2.295  22.968  -0.852  1.00 47.99      L    O
ATOM   4303  N   PRO L  59      3.901  22.626  -2.420  1.00 42.38      L    N
ATOM   4304  CA  PRO L  59      4.475  23.927  -2.092  1.00 44.55      L    C
ATOM   4306  CB  PRO L  59      5.673  24.040  -3.040  1.00 43.20      L    C
ATOM   4309  CG  PRO L  59      5.957  22.692  -3.469  1.00 45.64      L    C
ATOM   4312  CD  PRO L  59      4.663  21.963  -3.483  1.00 45.82      L    C
ATOM   4315  C   PRO L  59      3.500  25.094  -2.308  1.00 47.38      L    C
ATOM   4316  O   PRO L  59      2.675  25.069  -3.228  1.00 47.35      L    O
ATOM   4317  N   SER L  60      3.614  26.101  -1.445  1.00 49.91      L    N
ATOM   4318  CA  SER L  60      2.732  27.275  -1.454  1.00 46.98      L    C
ATOM   4320  CB  SER L  60      2.979  28.096  -0.195  1.00 49.20      L    C
ATOM   4323  OG  SER L  60      4.350  28.469  -0.129  1.00 54.02      L    O
ATOM   4325  C   SER L  60      2.960  28.176  -2.683  1.00 45.00      L    C
ATOM   4326  O   SER L  60      2.218  29.132  -2.901  1.00 41.26      L    O
ATOM   4328  N   ARG L  61      3.994  27.892  -3.476  1.00 44.43      L    N
ATOM   4329  CA  ARG L  61      4.144  28.592  -4.755  1.00 40.58      L    C
ATOM   4331  CB  ARG L  61      5.535  28.408  -5.355  1.00 42.96      L    C
ATOM   4334  CG  ARG L  61      5.925  26.991  -5.736  1.00 46.79      L    C
ATOM   4337  CD  ARG L  61      7.219  26.983  -6.552  1.00 45.12      L    C
ATOM   4340  NE  ARG L  61      7.616  25.626  -6.881  1.00 45.75      L    N
ATOM   4342  CZ  ARG L  61      8.457  24.878  -6.170  1.00 52.14      L    C
ATOM   4343  NH1 ARG L  61      9.028  25.337  -5.056  1.00 54.70      L    N
ATOM   4346  NH2 ARG L  61      8.744  23.647  -6.582  1.00 52.43      L    N
ATOM   4349  C   ARG L  61      3.039  28.203  -5.747  1.00 39.79      L    C
ATOM   4350  O   ARG L  61      2.816  28.914  -6.712  1.00 38.24      L    O
ATOM   4352  N   PHE L  62      2.328  27.099  -5.489  1.00 40.12      L    N
ATOM   4353  CA  PHE L  62      1.128  26.768  -6.255  1.00 36.18      L    C
ATOM   4355  CB  PHE L  62      0.958  25.262  -6.373  1.00 37.77      L    C
ATOM   4358  CG  PHE L  62      2.045  24.594  -7.188  1.00 39.45      L    C
ATOM   4359  CD1 PHE L  62      1.905  24.437  -8.562  1.00 36.03      L    C
ATOM   4361  CE1 PHE L  62      2.921  23.830  -9.311  1.00 37.45      L    C
ATOM   4363  CZ  PHE L  62      4.083  23.373  -8.681  1.00 35.57      L    C
ATOM   4365  CE2 PHE L  62      4.225  23.524  -7.315  1.00 38.56      L    C
ATOM   4367  CD2 PHE L  62      3.218  24.142  -6.575  1.00 38.05      L    C
ATOM   4369  C   PHE L  62     -0.087  27.408  -5.625  1.00 39.32      L    C
ATOM   4370  O   PHE L  62     -0.219  27.419  -4.399  1.00 40.99      L    O
ATOM   4372  N   SER L  63     -0.965  27.963  -6.469  1.00 39.68      L    N
ATOM   4373  CA  SER L  63     -2.223  28.573  -6.005  1.00 37.11      L    C
ATOM   4375  CB  SER L  63     -1.989  30.005  -5.481  1.00 40.67      L    C
ATOM   4378  OG  SER L  63     -1.480  30.871  -6.483  1.00 44.67      L    O
ATOM   4380  C   SER L  63     -3.286  28.593  -7.103  1.00 36.69      L    C
ATOM   4381  O   SER L  63     -2.974  28.756  -8.287  1.00 36.38      L    O
ATOM   4383  N   GLY L  64     -4.550  28.454  -6.699  1.00 38.64      L    N
ATOM   4384  CA  GLY L  64     -5.669  28.532  -7.631  1.00 36.63      L    C
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ATOM   4387  C   GLY L  64      -6.551  29.743  -7.374  1.00 38.35      L    C
ATOM   4388  O   GLY L  64      -6.539  30.327  -6.277  1.00 38.90      L    O
ATOM   4390  N   SER L  65      -7.331  30.124  -8.390  1.00 38.60      L    N
ATOM   4391  CA  SER L  65      -8.243  31.250  -8.276  1.00 38.42      L    C
ATOM   4393  CB  SER L  65      -7.509  32.602  -8.350  1.00 45.55      L    C
ATOM   4396  OG  SER L  65      -6.959  32.871  -9.635  1.00 45.69      L    O
ATOM   4398  C   SER L  65      -9.300  31.168  -9.354  1.00 41.88      L    C
ATOM   4399  O   SER L  65      -9.166  30.409 -10.326  1.00 38.27      L    O
ATOM   4401  N   GLY L  66     -10.375  31.942  -9.153  1.00 44.14      L    N
ATOM   4402  CA  GLY L  66     -11.526  31.932 -10.048  1.00 41.05      L    C
ATOM   4405  C   GLY L  66     -12.698  31.162  -9.455  1.00 41.71      L    C
ATOM   4406  O   GLY L  66     -12.545  30.353  -8.540  1.00 42.11      L    O
ATOM   4408  N   SER L  67     -13.873  31.425 -10.018  1.00 42.51      L    N
ATOM   4409  CA  SER L  67     -15.138  30.913  -9.517  1.00 43.33      L    C
ATOM   4411  CB  SER L  67     -15.559  31.711  -8.269  1.00 47.74      L    C
ATOM   4414  OG  SER L  67     -16.798  31.250  -7.751  1.00 55.15      L    O
ATOM   4416  C   SER L  67     -16.162  31.074 -10.636  1.00 43.41      L    C
ATOM   4417  O   SER L  67     -16.076  32.014 -11.414  1.00 48.79      L    O
ATOM   4419  N   GLY L  68     -17.101  30.144 -10.748  1.00 44.16      L    N
ATOM   4420  CA  GLY L  68     -18.105  30.184 -11.811  1.00 41.67      L    C
ATOM   4423  C   GLY L  68     -17.664  29.436 -13.060  1.00 44.79      L    C
ATOM   4424  O   GLY L  68     -17.965  28.243 -13.241  1.00 42.27      L    O
ATOM   4426  N   THR L  69     -16.951  30.148 -13.924  1.00 44.49      L    N
ATOM   4427  CA  THR L  69     -16.613  29.656 -15.263  1.00 40.94      L    C
ATOM   4429  CB  THR L  69     -17.494  30.456 -16.286  1.00 42.07      L    C
ATOM   4431  OG1 THR L  69     -18.538  29.612 -16.800  1.00 45.57      L    O
ATOM   4433  CG2 THR L  69     -16.679  31.028 -17.436  1.00 35.26      L    C
ATOM   4437  C   THR L  69     -15.115  29.734 -15.635  1.00 37.03      L    C
ATOM   4438  O   THR L  69     -14.633  28.920 -16.426  1.00 39.25      L    O
ATOM   4440  N   ASP L  70     -14.385  30.671 -15.030  1.00 35.24      L    N
ATOM   4441  CA  ASP L  70     -13.042  31.052 -15.467  1.00 36.87      L    C
ATOM   4443  CB  ASP L  70     -13.009  32.549 -15.830  1.00 36.82      L    C
ATOM   4446  CG  ASP L  70     -13.711  32.881 -17.164  1.00 42.53      L    C
ATOM   4447  OD1 ASP L  70     -14.362  32.022 -17.799  1.00 45.02      L    O
ATOM   4448  OD2 ASP L  70     -13.604  34.049 -17.590  1.00 49.54      L    O
ATOM   4449  C   ASP L  70     -12.013  30.799 -14.379  1.00 36.38      L    C
ATOM   4450  O   ASP L  70     -11.962  31.530 -13.407  1.00 37.51      L    O
ATOM   4452  N   PHE L  71     -11.165  29.787 -14.559  1.00 38.56      L    N
ATOM   4453  CA  PHE L  71     -10.246  29.334 -13.502  1.00 36.26      L    C
ATOM   4455  CB  PHE L  71     -10.595  27.905 -13.128  1.00 37.35      L    C
ATOM   4458  CG  PHE L  71     -12.022  27.744 -12.685  1.00 39.36      L    C
ATOM   4459  CD1 PHE L  71     -12.376  27.944 -11.366  1.00 41.49      L    C
ATOM   4461  CE1 PHE L  71     -13.679  27.798 -10.970  1.00 41.70      L    C
ATOM   4463  CZ  PHE L  71     -14.645  27.472 -11.892  1.00 38.74      L    C
ATOM   4465  CE2 PHE L  71     -14.304  27.288 -13.201  1.00 35.34      L    C
ATOM   4467  CD2 PHE L  71     -13.009  27.421 -13.593  1.00 36.05      L    C
ATOM   4469  C   PHE L  71      -8.770  29.446 -13.875  1.00 35.85      L    C
ATOM   4470  O   PHE L  71      -8.412  29.261 -15.031  1.00 37.78      L    O
ATOM   4472  N   THR L  72      -7.930  29.768 -12.888  1.00 33.41      L    N
ATOM   4473  CA  THR L  72      -6.498  29.977 -13.116  1.00 37.62      L    C
ATOM   4475  CB  THR L  72      -6.100  31.478 -13.045  1.00 37.06      L    C
ATOM   4477  OG1 THR L  72      -6.900  32.233 -13.956  1.00 36.67      L    O
ATOM   4479  CG2 THR L  72      -4.656  31.669 -13.403  1.00 33.86      L    C
ATOM   4483  C   THR L  72      -5.686  29.195 -12.082  1.00 36.83      L    C
ATOM   4484  O   THR L  72      -6.071  29.159 -10.914  1.00 37.82      L    O
ATOM   4486  N   LEU L  73      -4.615  28.535 -12.549  1.00 33.33      L    N
ATOM   4487  CA  LEU L  73      -3.558  27.972 -11.714  1.00 34.88      L    C
ATOM   4489  CB  LEU L  73      -3.243  26.547 -12.140  1.00 37.22      L    C
ATOM   4492  CG  LEU L  73      -2.116  25.800 -11.422  1.00 36.88      L    C
ATOM   4494  CD1 LEU L  73      -2.586  25.278 -10.069  1.00 34.28      L    C
ATOM   4498  CD2 LEU L  73      -1.579  24.660 -12.284  1.00 33.30      L    C
ATOM   4502  C   LEU L  73      -2.326  28.842 -11.944  1.00 39.78      L    C
ATOM   4503  O   LEU L  73      -1.987  29.145 -13.097  1.00 41.70      L    O
ATOM   4505  N   THR L  74      -1.674  29.243 -10.847  1.00 37.29      L    N
ATOM   4506  CA  THR L  74      -0.479  30.088 -10.873  1.00 35.88      L    C
ATOM   4508  CB  THR L  74      -0.736  31.459 -10.233  1.00 33.16      L    C
ATOM   4510  OG1 THR L  74      -1.840  32.098 -10.883  1.00 39.65      L    O
ATOM   4512  CG2 THR L  74       0.483  32.369 -10.333  1.00 32.43      L    C
ATOM   4516  C   THR L  74       0.635  29.372 -10.098  1.00 40.00      L    C
ATOM   4517  O   THR L  74       0.434  28.928  -8.965  1.00 37.04      L    O
ATOM   4519  N   ILE L  75       1.793  29.235 -10.735  1.00 38.81      L    N
ATOM   4520  CA  ILE L  75       3.028  28.872 -10.052  1.00 38.64      L    C
ATOM   4522  CB  ILE L  75       3.870  27.853 -10.844  1.00 34.90      L    C
ATOM   4524  CG1 ILE L  75       2.967  26.783 -11.474  1.00 36.31      L    C
ATOM   4527  CD1 ILE L  75       3.685  25.831 -12.415  1.00 35.56      L    C
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ATOM	4531	CG2	ILE	L	75	4.913	27.264	-9.937	1.00	30.85	L	C
ATOM	4535	C	ILE	L	75	3.827	30.160	-9.913	1.00	40.29	L	C
ATOM	4536	O	ILE	L	75	4.343	30.684	-10.905	1.00	40.29	L	O
ATOM	4538	N	SER	L	76	3.967	30.653	-8.684	1.00	43.72	L	N
ATOM	4539	CA	SER	L	76	4.460	32.019	-8.467	1.00	45.63	L	C
ATOM	4541	CB	SER	L	76	4.101	32.517	-7.049	1.00	48.92	L	C
ATOM	4544	OG	SER	L	76	5.094	32.158	-6.088	1.00	49.89	L	O
ATOM	4546	C	SER	L	76	5.966	32.165	-8.719	1.00	48.57	L	C
ATOM	4547	O	SER	L	76	6.448	33.267	-9.064	1.00	53.90	L	O
ATOM	4549	N	SER	L	77	6.710	31.079	-8.517	1.00	45.29	L	N
ATOM	4550	CA	SER	L	77	8.158	31.103	-8.698	1.00	44.60	L	C
ATOM	4552	CB	SER	L	77	8.863	31.502	-7.387	1.00	48.40	L	C
ATOM	4555	OG	SER	L	77	10.168	30.952	-7.292	1.00	48.72	L	O
ATOM	4557	C	SER	L	77	8.623	29.741	-9.200	1.00	43.22	L	C
ATOM	4558	O	SER	L	77	9.030	28.873	-8.423	1.00	45.88	L	O
ATOM	4560	N	LEU	L	78	8.573	29.585	-10.522	1.00	36.56	L	N
ATOM	4561	CA	LEU	L	78	8.832	28.317	-11.180	1.00	37.70	L	C
ATOM	4563	CB	LEU	L	78	8.750	28.488	-12.704	1.00	36.72	L	C
ATOM	4566	CG	LEU	L	78	8.802	27.256	-13.620	1.00	38.10	L	C
ATOM	4568	CD1	LEU	L	78	7.586	26.375	-13.395	1.00	32.47	L	C
ATOM	4572	CD2	LEU	L	78	8.916	27.662	-15.110	1.00	35.07	L	C
ATOM	4576	C	LEU	L	78	10.178	27.725	-10.775	1.00	35.11	L	C
ATOM	4577	O	LEU	L	78	11.208	28.386	-10.876	1.00	38.08	L	O
ATOM	4579	N	GLN	L	79	10.155	26.480	-10.315	1.00	37.80	L	N
ATOM	4580	CA	GLN	L	79	11.369	25.762	-9.922	1.00	39.95	L	C
ATOM	4582	CB	GLN	L	79	11.242	25.286	-8.471	1.00	41.77	L	C
ATOM	4585	CG	GLN	L	79	11.091	26.410	-7.430	1.00	39.16	L	C
ATOM	4588	CD	GLN	L	79	12.279	27.338	-7.381	1.00	43.01	L	C
ATOM	4589	OE1	GLN	L	79	13.423	26.891	-7.245	1.00	45.36	L	O
ATOM	4590	NE2	GLN	L	79	12.022	28.642	-7.471	1.00	40.10	L	N
ATOM	4593	C	GLN	L	79	11.619	24.573	-10.879	1.00	38.08	L	C
ATOM	4594	O	GLN	L	79	10.693	24.073	-11.507	1.00	38.53	L	O
ATOM	4596	N	PRO	L	80	12.878	24.128	-11.002	1.00	40.67	L	N
ATOM	4597	CA	PRO	L	80	13.200	23.015	-11.895	1.00	41.65	L	C
ATOM	4599	CB	PRO	L	80	14.635	22.675	-11.500	1.00	43.62	L	C
ATOM	4602	CG	PRO	L	80	15.206	23.967	-11.082	1.00	42.88	L	C
ATOM	4605	CD	PRO	L	80	14.084	24.657	-10.344	1.00	41.99	L	C
ATOM	4608	C	PRO	L	80	12.288	21.790	-11.752	1.00	41.70	L	C
ATOM	4609	O	PRO	L	80	11.867	21.222	-12.764	1.00	40.54	L	O
ATOM	4610	N	GLU	L	81	11.998	21.393	-10.509	1.00	41.26	L	N
ATOM	4611	CA	GLU	L	81	11.119	20.253	-10.212	1.00	41.41	L	C
ATOM	4613	CB	GLU	L	81	11.128	19.953	-8.699	1.00	48.89	L	C
ATOM	4616	CG	GLU	L	81	10.628	21.086	-7.793	1.00	54.78	L	C
ATOM	4619	CD	GLU	L	81	11.752	21.829	-7.037	1.00	62.95	L	C
ATOM	4620	OE1	GLU	L	81	12.799	22.229	-7.656	1.00	58.58	L	O
ATOM	4621	OE2	GLU	L	81	11.562	22.013	-5.806	1.00	65.03	L	O
ATOM	4622	C	GLU	L	81	9.661	20.407	-10.666	1.00	40.11	L	C
ATOM	4623	O	GLU	L	81	8.888	19.463	-10.590	1.00	39.53	L	O
ATOM	4625	N	ASP	L	82	9.283	21.601	-11.112	1.00	40.76	L	N
ATOM	4626	CA	ASP	L	82	7.911	21.864	-11.549	1.00	40.67	L	C
ATOM	4628	CB	ASP	L	82	7.527	23.326	-11.323	1.00	42.80	L	C
ATOM	4631	CG	ASP	L	82	7.663	23.743	-9.892	1.00	45.91	L	C
ATOM	4632	OD1	ASP	L	82	7.456	22.877	-9.011	1.00	45.26	L	O
ATOM	4633	OD2	ASP	L	82	7.994	24.932	-9.661	1.00	46.45	L	O
ATOM	4634	C	ASP	L	82	7.657	21.509	-13.003	1.00	41.69	L	C
ATOM	4635	O	ASP	L	82	6.528	21.673	-13.487	1.00	44.51	L	O
ATOM	4637	N	VAL	L	83	8.683	21.027	-13.696	1.00	39.15	L	N
ATOM	4638	CA	VAL	L	83	8.517	20.602	-15.069	1.00	38.47	L	C
ATOM	4640	CB	VAL	L	83	9.861	20.325	-15.756	1.00	40.10	L	C
ATOM	4642	CG1	VAL	L	83	10.533	19.081	-15.186	1.00	45.50	L	C
ATOM	4646	CG2	VAL	L	83	9.652	20.160	-17.247	1.00	45.92	L	C
ATOM	4650	C	VAL	L	83	7.619	19.366	-15.063	1.00	41.48	L	C
ATOM	4651	O	VAL	L	83	7.950	18.357	-14.422	1.00	44.37	L	O
ATOM	4653	N	ALA	L	84	6.495	19.458	-15.778	1.00	37.83	L	N
ATOM	4654	CA	ALA	L	84	5.433	18.482	-15.704	1.00	35.03	L	C
ATOM	4656	CB	ALA	L	84	4.859	18.442	-14.302	1.00	36.88	L	C
ATOM	4660	C	ALA	L	84	4.367	18.906	-16.697	1.00	35.87	L	C
ATOM	4661	O	ALA	L	84	4.506	19.966	-17.309	1.00	32.35	L	O
ATOM	4663	N	THR	L	85	3.337	18.066	-16.893	1.00	34.44	L	N
ATOM	4664	CA	THR	L	85	2.109	18.504	-17.563	1.00	33.72	L	C
ATOM	4666	CB	THR	L	85	1.653	17.519	-18.643	1.00	33.23	L	C
ATOM	4668	OG1	THR	L	85	2.672	17.432	-19.640	1.00	37.48	L	O
ATOM	4670	CG2	THR	L	85	0.356	17.963	-19.299	1.00	30.16	L	C
ATOM	4674	C	THR	L	85	1.043	18.717	-16.491	1.00	35.04	L	C
ATOM	4675	O	THR	L	85	0.930	17.922	-15.561	1.00	37.05	L	O

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ATOM   4677  N   TYR L  86       0.300  19.819 -16.597  1.00 38.23      L    N
ATOM   4678  CA  TYR L  86      -0.727  20.177 -15.599  1.00 35.38      L    C
ATOM   4680  CB  TYR L  86      -0.530  21.593 -15.059  1.00 38.47      L    C
ATOM   4683  CG  TYR L  86       0.756  21.715 -14.279  1.00 37.97      L    C
ATOM   4684  CD1 TYR L  86       0.804  21.408 -12.924  1.00 41.81      L    C
ATOM   4686  CE1 TYR L  86       1.999  21.467 -12.211  1.00 40.89      L    C
ATOM   4688  CZ  TYR L  86       3.156  21.843 -12.861  1.00 41.50      L    C
ATOM   4689  OH  TYR L  86       4.350  21.913 -12.170  1.00 41.05      L    O
ATOM   4691  CE2 TYR L  86       3.125  22.151 -14.209  1.00 40.56      L    C
ATOM   4693  CD2 TYR L  86       1.932  22.081 -14.907  1.00 36.80      L    C
ATOM   4695  C   TYR L  86      -2.083  20.029 -16.226  1.00 34.72      L    C
ATOM   4696  O   TYR L  86      -2.260  20.374 -17.397  1.00 31.16      L    O
ATOM   4698  N   TYR L  87      -3.030  19.481 -15.447  1.00 34.27      L    N
ATOM   4699  CA  TYR L  87      -4.417  19.257 -15.926  1.00 31.60      L    C
ATOM   4701  CB  TYR L  87      -4.725  17.778 -16.100  1.00 30.92      L    C
ATOM   4704  CG  TYR L  87      -3.812  17.022 -17.029  1.00 28.71      L    C
ATOM   4705  CD1 TYR L  87      -4.127  16.869 -18.368  1.00 29.76      L    C
ATOM   4707  CE1 TYR L  87      -3.272  16.158 -19.251  1.00 26.57      L    C
ATOM   4709  CZ  TYR L  87      -2.123  15.593 -18.765  1.00 32.44      L    C
ATOM   4710  OH  TYR L  87      -1.290  14.889 -19.613  1.00 33.66      L    O
ATOM   4712  CE2 TYR L  87      -1.801  15.711 -17.413  1.00 32.99      L    C
ATOM   4714  CD2 TYR L  87      -2.651  16.426 -16.556  1.00 31.33      L    C
ATOM   4716  C   TYR L  87      -5.413  19.803 -14.942  1.00 31.18      L    C
ATOM   4717  O   TYR L  87      -5.332  19.490 -13.756  1.00 34.73      L    O
ATOM   4719  N   CYS L  88      -6.361  20.605 -15.415  1.00 30.90      L    N
ATOM   4720  CA  CYS L  88      -7.481  20.999 -14.575  1.00 30.40      L    C
ATOM   4722  CB  CYS L  88      -8.037  22.325 -15.019  1.00 34.53      L    C
ATOM   4725  SG  CYS L  88      -8.905  22.290 -16.549  1.00 47.15      L    S
ATOM   4727  C   CYS L  88      -8.561  19.913 -14.635  1.00 32.80      L    C
ATOM   4728  O   CYS L  88      -8.626  19.090 -15.575  1.00 33.13      L    O
ATOM   4730  N   LEU L  89      -9.378  19.863 -13.607  1.00 33.56      L    N
ATOM   4731  CA  LEU L  89     -10.494  18.897 -13.566  1.00 33.45      L    C
ATOM   4733  CB  LEU L  89     -10.093  17.574 -12.903  1.00 28.53      L    C
ATOM   4736  CG  LEU L  89     -11.251  16.607 -12.619  1.00 33.45      L    C
ATOM   4738  CD1 LEU L  89     -11.409  15.553 -13.683  1.00 24.26      L    C
ATOM   4742  CD2 LEU L  89     -11.075  15.981 -11.276  1.00 32.30      L    C
ATOM   4746  C   LEU L  89     -11.685  19.555 -12.830  1.00 33.18      L    C
ATOM   4747  O   LEU L  89     -11.576  20.043 -11.679  1.00 29.89      L    O
ATOM   4749  N   GLN L  90     -12.796  19.566 -13.544  1.00 31.68      L    N
ATOM   4750  CA  GLN L  90     -14.050  20.094 -13.095  1.00 37.35      L    C
ATOM   4752  CB  GLN L  90     -14.819  20.490 -14.378  1.00 38.34      L    C
ATOM   4755  CG  GLN L  90     -16.291  20.631 -14.278  1.00 44.48      L    C
ATOM   4758  CD  GLN L  90     -17.082  19.329 -14.290  1.00 40.86      L    C
ATOM   4759  OE1 GLN L  90     -16.749  18.380 -14.976  1.00 35.40      L    O
ATOM   4760  NE2 GLN L  90     -18.174  19.322 -13.550  1.00 39.92      L    N
ATOM   4763  C   GLN L  90     -14.746  18.958 -12.323  1.00 39.41      L    C
ATOM   4764  O   GLN L  90     -14.840  17.833 -12.833  1.00 33.79      L    O
ATOM   4766  N   SER L  91     -15.213  19.246 -11.104  1.00 41.54      L    N
ATOM   4767  CA  SER L  91     -15.961  18.261 -10.287  1.00 39.18      L    C
ATOM   4769  CB  SER L  91     -15.063  17.690  -9.189  1.00 41.54      L    C
ATOM   4772  OG  SER L  91     -14.822  18.637  -8.152  1.00 45.72      L    O
ATOM   4774  C   SER L  91     -17.276  18.859  -9.683  1.00 39.48      L    C
ATOM   4775  O   SER L  91     -17.603  18.631  -8.516  1.00 40.49      L    O
ATOM   4777  N   ASP L  92     -17.997  19.613 -10.510  1.00 33.27      L    N
ATOM   4778  CA  ASP L  92     -19.335  20.111 -10.236  1.00 36.99      L    C
ATOM   4780  CB  ASP L  92     -19.759  21.013 -11.423  1.00 39.33      L    C
ATOM   4783  CG  ASP L  92     -21.199  21.544 -11.323  1.00 39.69      L    C
ATOM   4784  OD1 ASP L  92     -21.405  22.576 -10.635  1.00 46.81      L    O
ATOM   4785  OD2 ASP L  92     -22.114  20.961 -11.969  1.00 37.09      L    O
ATOM   4786  C   ASP L  92     -20.355  18.980 -10.099  1.00 36.16      L    C
ATOM   4787  O   ASP L  92     -21.296  19.054  -9.319  1.00 37.40      L    O
ATOM   4789  N   SER L  93     -20.179  17.943 -10.902  1.00 41.72      L    N
ATOM   4790  CA  SER L  93     -21.124  16.839 -10.965  1.00 37.27      L    C
ATOM   4792  CB  SER L  93     -22.427  17.295 -11.638  1.00 40.52      L    C
ATOM   4795  OG  SER L  93     -22.181  18.081 -12.823  1.00 43.05      L    O
ATOM   4797  C   SER L  93     -20.472  15.738 -11.794  1.00 36.85      L    C
ATOM   4798  O   SER L  93     -19.450  15.961 -12.447  1.00 35.22      L    O
ATOM   4800  N   LEU L  94     -21.080  14.556 -11.753  1.00 37.02      L    N
ATOM   4801  CA  LEU L  94     -20.637  13.426 -12.517  1.00 35.53      L    C
ATOM   4803  CB  LEU L  94     -21.141  12.119 -11.890  1.00 36.28      L    C
ATOM   4806  CG  LEU L  94     -20.771  11.877 -10.423  1.00 35.07      L    C
ATOM   4808  CD1 LEU L  94     -21.484  10.638  -9.882  1.00 31.99      L    C
ATOM   4812  CD2 LEU L  94     -19.280  11.770 -10.314  1.00 30.89      L    C
ATOM   4816  C   LEU L  94     -21.208  13.555 -13.908  1.00 36.82      L    C
ATOM   4817  O   LEU L  94     -22.351  13.970 -14.053  1.00 43.10      L    O
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ATOM	4819	N	PRO	L	95	-20.433	13.182	-14.942	1.00	34.77	L	N
ATOM	4820	CA	PRO	L	95	-19.023	12.812	-14.886	1.00	33.72	L	C
ATOM	4822	CB	PRO	L	95	-18.768	12.176	-16.259	1.00	37.12	L	C
ATOM	4825	CG	PRO	L	95	-19.732	12.824	-17.162	1.00	36.72	L	C
ATOM	4828	CD	PRO	L	95	-20.978	13.052	-16.307	1.00	35.45	L	C
ATOM	4831	C	PRO	L	95	-18.105	14.020	-14.728	1.00	34.75	L	C
ATOM	4832	O	PRO	L	95	-18.364	15.089	-15.291	1.00	33.75	L	O
ATOM	4833	N	TYR	L	96	-17.017	13.840	-13.990	1.00	32.98	L	N
ATOM	4834	CA	TYR	L	96	-15.963	14.859	-13.941	1.00	32.41	L	C
ATOM	4836	CB	TYR	L	96	-14.947	14.512	-12.873	1.00	31.79	L	C
ATOM	4839	CG	TYR	L	96	-15.467	14.340	-11.459	1.00	33.90	L	C
ATOM	4840	CD1	TYR	L	96	-16.680	14.889	-11.036	1.00	36.68	L	C
ATOM	4842	CE1	TYR	L	96	-17.128	14.729	-9.686	1.00	29.86	L	C
ATOM	4844	CZ	TYR	L	96	-16.326	14.053	-8.785	1.00	32.83	L	C
ATOM	4845	OH	TYR	L	96	-16.690	13.890	-7.475	1.00	35.29	L	O
ATOM	4847	CE2	TYR	L	96	-15.105	13.530	-9.188	1.00	32.32	L	C
ATOM	4849	CD2	TYR	L	96	-14.686	13.674	-10.510	1.00	32.70	L	C
ATOM	4851	C	TYR	L	96	-15.250	14.964	-15.300	1.00	32.02	L	C
ATOM	4852	O	TYR	L	96	-15.311	14.036	-16.092	1.00	33.57	L	O
ATOM	4854	N	THR	L	97	-14.562	16.078	-15.554	1.00	31.32	L	N
ATOM	4855	CA	THR	L	97	-13.903	16.314	-16.846	1.00	32.79	L	C
ATOM	4857	CB	THR	L	97	-14.717	17.246	-17.786	1.00	37.55	L	C
ATOM	4859	OG1	THR	L	97	-16.119	16.912	-17.744	1.00	39.69	L	O
ATOM	4861	CG2	THR	L	97	-14.185	17.116	-19.218	1.00	33.61	L	C
ATOM	4865	C	THR	L	97	-12.559	16.990	-16.694	1.00	34.26	L	C
ATOM	4866	O	THR	L	97	-12.481	18.059	-16.084	1.00	34.49	L	O
ATOM	4868	N	PHE	L	98	-11.536	16.391	-17.309	1.00	34.71	L	N
ATOM	4869	CA	PHE	L	98	-10.209	16.987	-17.396	1.00	34.97	L	C
ATOM	4871	CB	PHE	L	98	-9.130	15.898	-17.680	1.00	36.14	L	C
ATOM	4874	CG	PHE	L	98	-8.778	15.047	-16.488	1.00	35.05	L	C
ATOM	4875	CD1	PHE	L	98	-7.907	15.513	-15.526	1.00	32.71	L	C
ATOM	4877	CE1	PHE	L	98	-7.567	14.736	-14.448	1.00	34.49	L	C
ATOM	4879	CZ	PHE	L	98	-8.100	13.466	-14.326	1.00	34.37	L	C
ATOM	4881	CE2	PHE	L	98	-8.944	12.986	-15.284	1.00	33.05	L	C
ATOM	4883	CD2	PHE	L	98	-9.295	13.772	-16.351	1.00	37.16	L	C
ATOM	4885	C	PHE	L	98	-10.091	18.027	-18.505	1.00	35.18	L	C
ATOM	4886	O	PHE	L	98	-10.690	17.882	-19.568	1.00	33.83	L	O
ATOM	4888	N	GLY	L	99	-9.248	19.033	-18.268	1.00	35.72	L	N
ATOM	4889	CA	GLY	L	99	-8.741	19.905	-19.341	1.00	33.95	L	C
ATOM	4892	C	GLY	L	99	-7.762	19.141	-20.225	1.00	37.37	L	C
ATOM	4893	O	GLY	L	99	-7.325	18.043	-19.886	1.00	36.13	L	O
ATOM	4895	N	GLN	L	100	-7.398	19.727	-21.365	1.00	37.30	L	N
ATOM	4896	CA	GLN	L	100	-6.548	19.038	-22.336	1.00	32.80	L	C
ATOM	4898	CB	GLN	L	100	-6.587	19.748	-23.664	1.00	35.58	L	C
ATOM	4901	CG	GLN	L	100	-7.951	19.791	-24.277	1.00	36.50	L	C
ATOM	4904	CD	GLN	L	100	-8.712	21.028	-23.912	1.00	37.51	L	C
ATOM	4905	OE1	GLN	L	100	-8.510	21.628	-22.842	1.00	37.83	L	O
ATOM	4906	NE2	GLN	L	100	-9.580	21.444	-24.812	1.00	39.58	L	N
ATOM	4909	C	GLN	L	100	-5.094	18.907	-21.904	1.00	34.99	L	C
ATOM	4910	O	GLN	L	100	-4.342	18.144	-22.502	1.00	38.49	L	O
ATOM	4912	N	GLY	L	101	-4.704	19.682	-20.892	1.00	35.27	L	N
ATOM	4913	CA	GLY	L	101	-3.352	19.677	-20.347	1.00	33.36	L	C
ATOM	4916	C	GLY	L	101	-2.480	20.812	-20.860	1.00	32.02	L	C
ATOM	4917	O	GLY	L	101	-2.653	21.301	-21.990	1.00	32.46	L	O
ATOM	4919	N	THR	L	102	-1.534	21.224	-20.017	1.00	33.10	L	N
ATOM	4920	CA	THR	L	102	-0.523	22.221	-20.364	1.00	31.76	L	C
ATOM	4922	CB	THR	L	102	-0.774	23.550	-19.684	1.00	32.01	L	C
ATOM	4924	OG1	THR	L	102	-2.075	24.016	-20.055	1.00	29.74	L	O
ATOM	4926	CG2	THR	L	102	0.283	24.616	-20.123	1.00	33.61	L	C
ATOM	4930	C	THR	L	102	0.856	21.707	-19.971	1.00	32.55	L	C
ATOM	4931	O	THR	L	102	1.148	21.511	-18.772	1.00	25.95	L	O
ATOM	4933	N	LYS	L	103	1.703	21.510	-20.987	1.00	30.82	L	N
ATOM	4934	CA	LYS	L	103	3.071	21.110	-20.758	1.00	33.32	L	C
ATOM	4936	CB	LYS	L	103	3.622	20.378	-21.982	1.00	36.36	L	C
ATOM	4939	CG	LYS	L	103	4.859	19.569	-21.667	1.00	37.25	L	C
ATOM	4942	CD	LYS	L	103	5.485	18.977	-22.919	1.00	40.83	L	C
ATOM	4945	CE	LYS	L	103	6.790	18.312	-22.573	1.00	40.62	L	C
ATOM	4948	NZ	LYS	L	103	6.886	17.001	-23.221	1.00	51.38	L	N
ATOM	4952	C	LYS	L	103	3.956	22.328	-20.415	1.00	34.87	L	C
ATOM	4953	O	LYS	L	103	4.014	23.279	-21.176	1.00	36.58	L	O
ATOM	4955	N	VAL	L	104	4.647	22.264	-19.271	1.00	36.48	L	N
ATOM	4956	CA	VAL	L	104	5.451	23.361	-18.713	1.00	32.34	L	C
ATOM	4958	CB	VAL	L	104	5.065	23.658	-17.231	1.00	28.05	L	C
ATOM	4960	CG1	VAL	L	104	6.053	24.597	-16.572	1.00	24.79	L	C
ATOM	4964	CG2	VAL	L	104	3.662	24.249	-17.126	1.00	20.70	L	C

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ATOM   4968  C   VAL L 104       6.933  22.993 -18.750  1.00 39.89       L    C
ATOM   4969  O   VAL L 104       7.379  22.084 -18.038  1.00 37.02       L    O
ATOM   4971  N   GLU L 105       7.698  23.712 -19.573  1.00 41.15       L    N
ATOM   4972  CA  GLU L 105       9.116  23.459 -19.709  1.00 45.11       L    C
ATOM   4974  CB  GLU L 105       9.462  23.286 -21.183  1.00 49.93       L    C
ATOM   4977  CG  GLU L 105       8.630  22.192 -21.888  1.00 58.13       L    C
ATOM   4980  CD  GLU L 105       8.392  22.487 -23.372  1.00 61.44       L    C
ATOM   4981  OE1 GLU L 105       7.538  23.361 -23.686  1.00 65.02       L    O
ATOM   4982  OE2 GLU L 105       9.059  21.839 -24.213  1.00 64.55       L    O
ATOM   4983  C   GLU L 105       9.916  24.598 -19.068  1.00 43.16       L    C
ATOM   4984  O   GLU L 105       9.396  25.707 -18.896  1.00 37.56       L    O
ATOM   4986  N   ILE L 106      11.165  24.313 -18.688  1.00 45.85       L    N
ATOM   4987  CA  ILE L 106      12.065  25.340 -18.150  1.00 48.75       L    C
ATOM   4989  CB  ILE L 106      12.860  24.870 -16.901  1.00 51.14       L    C
ATOM   4991  CG1 ILE L 106      11.939  24.748 -15.696  1.00 55.39       L    C
ATOM   4994  CD1 ILE L 106      12.402  25.581 -14.502  1.00 58.23       L    C
ATOM   4998  CG2 ILE L 106      13.998  25.874 -16.558  1.00 48.65       L    C
ATOM   5002  C   ILE L 106      13.070  25.834 -19.183  1.00 48.57       L    C
ATOM   5003  O   ILE L 106      13.790  25.040 -19.785  1.00 44.66       L    O
ATOM   5005  N   LYS L 107      13.114  27.153 -19.367  1.00 50.80       L    N
ATOM   5006  CA  LYS L 107      14.147  27.805 -20.162  1.00 52.40       L    C
ATOM   5008  CB  LYS L 107      13.652  29.136 -20.752  1.00 54.16       L    C
ATOM   5011  CG  LYS L 107      14.173  29.429 -22.164  1.00 59.91       L    C
ATOM   5014  CD  LYS L 107      14.636  30.877 -22.393  1.00 62.28       L    C
ATOM   5017  CE  LYS L 107      13.727  31.924 -21.728  1.00 68.64       L    C
ATOM   5020  NZ  LYS L 107      13.954  33.300 -22.291  1.00 68.03       L    N
ATOM   5024  C   LYS L 107      15.354  28.053 -19.258  1.00 50.89       L    C
ATOM   5025  O   LYS L 107      15.250  28.747 -18.238  1.00 49.97       L    O
ATOM   5027  N   ARG L 108      16.495  27.483 -19.637  1.00 49.65       L    N
ATOM   5028  CA  ARG L 108      17.732  27.643 -18.882  1.00 48.16       L    C
ATOM   5030  CB  ARG L 108      18.054  26.367 -18.097  1.00 41.15       L    C
ATOM   5033  CG  ARG L 108      18.236  25.150 -18.960  1.00 43.03       L    C
ATOM   5036  CD  ARG L 108      19.243  24.192 -18.375  1.00 46.09       L    C
ATOM   5039  NE  ARG L 108      20.598  24.731 -18.431  1.00 46.72       L    N
ATOM   5041  CZ  ARG L 108      21.637  24.223 -17.773  1.00 45.70       L    C
ATOM   5042  NH1 ARG L 108      21.492  23.165 -16.995  1.00 44.56       L    N
ATOM   5045  NH2 ARG L 108      22.824  24.801 -17.874  1.00 44.13       L    N
ATOM   5048  C   ARG L 108      18.879  28.031 -19.823  1.00 48.29       L    C
ATOM   5049  O   ARG L 108      18.696  28.125 -21.039  1.00 47.79       L    O
ATOM   5051  N   THR L 109      20.058  28.265 -19.263  1.00 48.42       L    N
ATOM   5052  CA  THR L 109      21.216  28.611 -20.088  1.00 48.51       L    C
ATOM   5054  CB  THR L 109      22.426  29.092 -19.256  1.00 44.23       L    C
ATOM   5056  OG1 THR L 109      22.970  28.001 -18.508  1.00 45.71       L    O
ATOM   5058  CG2 THR L 109      22.003  30.188 -18.304  1.00 39.23       L    C
ATOM   5062  C   THR L 109      21.581  27.419 -20.970  1.00 48.83       L    C
ATOM   5063  O   THR L 109      21.272  26.280 -20.648  1.00 51.87       L    O
ATOM   5065  N   VAL L 110      22.210  27.707 -22.101  1.00 49.67       L    N
ATOM   5066  CA  VAL L 110      22.637  26.680 -23.052  1.00 45.76       L    C
ATOM   5068  CB  VAL L 110      23.183  27.311 -24.344  1.00 44.22       L    C
ATOM   5070  CG1 VAL L 110      22.069  28.066 -25.052  1.00 43.40       L    C
ATOM   5074  CG2 VAL L 110      23.794  26.260 -25.251  1.00 44.62       L    C
ATOM   5078  C   VAL L 110      23.712  25.806 -22.420  1.00 42.26       L    C
ATOM   5079  O   VAL L 110      24.674  26.313 -21.873  1.00 40.90       L    O
ATOM   5081  N   ALA L 111      23.525  24.492 -22.488  1.00 45.41       L    N
ATOM   5082  CA  ALA L 111      24.533  23.513 -22.029  1.00 44.60       L    C
ATOM   5084  CB  ALA L 111      24.001  22.710 -20.829  1.00 39.41       L    C
ATOM   5088  C   ALA L 111      24.926  22.577 -23.179  1.00 43.11       L    C
ATOM   5089  O   ALA L 111      24.078  22.031 -23.871  1.00 40.94       L    O
ATOM   5091  N   ALA L 112      26.220  22.427 -23.412  1.00 49.15       L    N
ATOM   5092  CA  ALA L 112      26.699  21.573 -24.496  1.00 50.08       L    C
ATOM   5094  CB  ALA L 112      28.151  21.901 -24.864  1.00 42.07       L    C
ATOM   5098  C   ALA L 112      26.569  20.135 -24.027  1.00 49.38       L    C
ATOM   5099  O   ALA L 112      26.734  19.877 -22.835  1.00 51.49       L    O
ATOM   5101  N   PRO L 113      26.225  19.210 -24.942  1.00 48.90       L    N
ATOM   5102  CA  PRO L 113      26.176  17.794 -24.583  1.00 48.42       L    C
ATOM   5104  CB  PRO L 113      25.516  17.144 -25.804  1.00 50.58       L    C
ATOM   5107  CG  PRO L 113      25.887  18.032 -26.932  1.00 49.33       L    C
ATOM   5110  CD  PRO L 113      25.848  19.421 -26.348  1.00 47.65       L    C
ATOM   5113  C   PRO L 113      27.565  17.194 -24.383  1.00 47.12       L    C
ATOM   5114  O   PRO L 113      28.517  17.573 -25.065  1.00 45.30       L    O
ATOM   5115  N   SER L 114      27.664  16.266 -23.448  1.00 46.42       L    N
ATOM   5116  CA  SER L 114      28.854  15.456 -23.285  1.00 45.98       L    C
ATOM   5118  CB  SER L 114      29.108  15.207 -21.792  1.00 47.17       L    C
ATOM   5121  OG  SER L 114      30.341  14.564 -21.535  1.00 50.15       L    O
ATOM   5123  C   SER L 114      28.559  14.175 -24.056  1.00 46.68       L    C
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ATOM	5124	O	SER	L	114	27.543	13.531	-23.815	1.00	50.95	L	O
ATOM	5126	N	VAL	L	115	29.430	13.813	-24.993	1.00	46.24	L	N
ATOM	5127	CA	VAL	L	115	29.102	12.798	-25.997	1.00	44.53	L	C
ATOM	5129	CB	VAL	L	115	29.272	13.341	-27.448	1.00	40.93	L	C
ATOM	5131	CG1	VAL	L	115	28.894	12.287	-28.489	1.00	33.23	L	C
ATOM	5135	CG2	VAL	L	115	28.409	14.569	-27.634	1.00	39.80	L	C
ATOM	5139	C	VAL	L	115	29.917	11.527	-25.796	1.00	43.05	L	C
ATOM	5140	O	VAL	L	115	31.118	11.588	-25.573	1.00	42.76	L	O
ATOM	5142	N	PHE	L	116	29.225	10.381	-25.841	1.00	44.42	L	N
ATOM	5143	CA	PHE	L	116	29.825	9.061	-25.619	1.00	44.79	L	C
ATOM	5145	CB	PHE	L	116	29.431	8.467	-24.274	1.00	41.39	L	C
ATOM	5148	CG	PHE	L	116	29.624	9.381	-23.111	1.00	42.46	L	C
ATOM	5149	CD1	PHE	L	116	30.703	9.238	-22.281	1.00	42.31	L	C
ATOM	5151	CE1	PHE	L	116	30.867	10.046	-21.185	1.00	44.16	L	C
ATOM	5153	CZ	PHE	L	116	29.927	11.008	-20.901	1.00	45.07	L	C
ATOM	5155	CE2	PHE	L	116	28.830	11.162	-21.718	1.00	42.29	L	C
ATOM	5157	CD2	PHE	L	116	28.682	10.352	-22.809	1.00	45.73	L	C
ATOM	5159	C	PHE	L	116	29.380	8.081	-26.713	1.00	44.65	L	C
ATOM	5160	O	PHE	L	116	28.295	8.205	-27.273	1.00	43.63	L	O
ATOM	5162	N	ILE	L	117	30.231	7.101	-26.993	1.00	42.86	L	N
ATOM	5163	CA	ILE	L	117	29.949	6.122	-28.022	1.00	43.67	L	C
ATOM	5165	CB	ILE	L	117	30.688	6.415	-29.357	1.00	40.91	L	C
ATOM	5167	CG1	ILE	L	117	30.113	5.526	-30.474	1.00	40.94	L	C
ATOM	5170	CD1	ILE	L	117	30.491	5.978	-31.891	1.00	39.69	L	C
ATOM	5174	CG2	ILE	L	117	32.242	6.329	-29.196	1.00	27.30	L	C
ATOM	5178	C	ILE	L	117	30.266	4.757	-27.456	1.00	42.84	L	C
ATOM	5179	O	ILE	L	117	31.229	4.598	-26.705	1.00	42.49	L	O
ATOM	5181	N	PHE	L	118	29.375	3.805	-27.742	1.00	42.14	L	N
ATOM	5182	CA	PHE	L	118	29.466	2.457	-27.229	1.00	42.81	L	C
ATOM	5184	CB	PHE	L	118	28.313	2.164	-26.284	1.00	36.27	L	C
ATOM	5187	CG	PHE	L	118	28.302	3.019	-25.058	1.00	35.72	L	C
ATOM	5188	CD1	PHE	L	118	29.089	2.681	-23.953	1.00	33.49	L	C
ATOM	5190	CE1	PHE	L	118	29.075	3.445	-22.811	1.00	33.92	L	C
ATOM	5192	CZ	PHE	L	118	28.248	4.574	-22.754	1.00	34.24	L	C
ATOM	5194	CE2	PHE	L	118	27.453	4.902	-23.832	1.00	32.94	L	C
ATOM	5196	CD2	PHE	L	118	27.498	4.135	-24.994	1.00	27.53	L	C
ATOM	5198	C	PHE	L	118	29.397	1.505	-28.402	1.00	47.09	L	C
ATOM	5199	O	PHE	L	118	28.371	1.474	-29.115	1.00	43.53	L	O
ATOM	5201	N	PRO	L	119	30.490	0.732	-28.614	1.00	48.49	L	N
ATOM	5202	CA	PRO	L	119	30.456	-0.325	-29.619	1.00	47.48	L	C
ATOM	5204	CB	PRO	L	119	31.925	-0.790	-29.700	1.00	46.56	L	C
ATOM	5207	CG	PRO	L	119	32.728	0.300	-29.006	1.00	43.77	L	C
ATOM	5210	CD	PRO	L	119	31.804	0.816	-27.952	1.00	41.04	L	C
ATOM	5213	C	PRO	L	119	29.523	-1.459	-29.191	1.00	47.07	L	C
ATOM	5214	O	PRO	L	119	29.155	-1.540	-28.006	1.00	49.41	L	O
ATOM	5215	N	PRO	L	120	29.145	-2.327	-30.146	1.00	47.38	L	N
ATOM	5216	CA	PRO	L	120	28.343	-3.497	-29.835	1.00	48.65	L	C
ATOM	5218	CB	PRO	L	120	28.209	-4.208	-31.179	1.00	48.59	L	C
ATOM	5221	CG	PRO	L	120	28.614	-3.250	-32.196	1.00	47.84	L	C
ATOM	5224	CD	PRO	L	120	29.516	-2.267	-31.566	1.00	47.24	L	C
ATOM	5227	C	PRO	L	120	29.111	-4.390	-28.875	1.00	52.75	L	C
ATOM	5228	O	PRO	L	120	30.349	-4.490	-28.966	1.00	54.01	L	O
ATOM	5229	N	SER	L	121	28.381	-5.028	-27.969	1.00	54.84	L	N
ATOM	5230	CA	SER	L	121	28.946	-5.994	-27.052	1.00	51.57	L	C
ATOM	5232	CB	SER	L	121	27.917	-6.338	-25.989	1.00	45.76	L	C
ATOM	5235	OG	SER	L	121	26.928	-7.169	-26.567	1.00	43.98	L	O
ATOM	5237	C	SER	L	121	29.294	-7.268	-27.823	1.00	54.60	L	C
ATOM	5238	O	SER	L	121	28.665	-7.592	-28.839	1.00	55.02	L	O
ATOM	5240	N	ASP	L	122	30.269	-8.013	-27.313	1.00	55.44	L	N
ATOM	5241	CA	ASP	L	122	30.597	-9.311	-27.885	1.00	57.29	L	C
ATOM	5243	CB	ASP	L	122	31.803	-9.924	-27.178	1.00	62.63	L	C
ATOM	5246	CG	ASP	L	122	33.126	-9.323	-27.645	1.00	66.05	L	C
ATOM	5247	OD1	ASP	L	122	33.209	-8.835	-28.812	1.00	56.75	L	O
ATOM	5248	OD2	ASP	L	122	34.080	-9.360	-26.825	1.00	69.49	L	O
ATOM	5249	C	ASP	L	122	29.406	-10.267	-27.839	1.00	55.89	L	C
ATOM	5250	O	ASP	L	122	29.158	-10.996	-28.811	1.00	56.55	L	O
ATOM	5252	N	GLU	L	123	28.652	-10.241	-26.740	1.00	55.51	L	N
ATOM	5253	CA	GLU	L	123	27.454	-11.080	-26.620	1.00	58.05	L	C
ATOM	5255	CB	GLU	L	123	26.807	-10.913	-25.238	1.00	57.58	L	C
ATOM	5258	CG	GLU	L	123	25.599	-11.821	-25.002	1.00	62.56	L	C
ATOM	5261	CD	GLU	L	123	24.826	-11.491	-23.725	1.00	65.05	L	C
ATOM	5262	OE1	GLU	L	123	25.403	-10.852	-22.814	1.00	68.23	L	O
ATOM	5263	OE2	GLU	L	123	23.638	-11.878	-23.646	1.00	63.42	L	O
ATOM	5264	C	GLU	L	123	26.411	-10.796	-27.692	1.00	55.53	L	C
ATOM	5265	O	GLU	L	123	25.734	-11.703	-28.147	1.00	57.43	L	O

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ATOM	5267	N	GLN	L	124	26.266	-9.540	-28.095	1.00	53.06	L	N
ATOM	5268	CA	GLN	L	124	25.225	-9.207	-29.056	1.00	53.49	L	C
ATOM	5270	CB	GLN	L	124	24.923	-7.707	-29.054	1.00	46.17	L	C
ATOM	5273	CG	GLN	L	124	23.737	-7.345	-29.902	1.00	40.01	L	C
ATOM	5276	CD	GLN	L	124	23.614	-5.867	-30.189	1.00	43.65	L	C
ATOM	5277	OE1	GLN	L	124	24.439	-5.037	-29.749	1.00	43.56	L	O
ATOM	5278	NE2	GLN	L	124	22.577	-5.520	-30.946	1.00	36.12	L	N
ATOM	5281	C	GLN	L	124	25.616	-9.664	-30.450	1.00	54.05	L	C
ATOM	5282	O	GLN	L	124	24.775	-10.160	-31.200	1.00	54.97	L	O
ATOM	5284	N	LEU	L	125	26.885	-9.473	-30.799	1.00	59.71	L	N
ATOM	5285	CA	LEU	L	125	27.423	-9.975	-32.071	1.00	61.94	L	C
ATOM	5287	CB	LEU	L	125	28.944	-9.758	-32.168	1.00	61.02	L	C
ATOM	5290	CG	LEU	L	125	29.597	-8.411	-32.536	1.00	58.93	L	C
ATOM	5292	CD1	LEU	L	125	28.893	-7.659	-33.665	1.00	56.16	L	C
ATOM	5296	CD2	LEU	L	125	29.707	-7.560	-31.324	1.00	59.33	L	C
ATOM	5300	C	LEU	L	125	27.093	-11.468	-32.262	1.00	62.78	L	C
ATOM	5301	O	LEU	L	125	26.715	-11.883	-33.362	1.00	61.32	L	O
ATOM	5303	N	LYS	L	126	27.229	-12.245	-31.183	1.00	67.75	L	N
ATOM	5304	CA	LYS	L	126	26.823	-13.663	-31.145	1.00	72.81	L	C
ATOM	5306	CB	LYS	L	126	26.790	-14.142	-29.686	1.00	77.09	L	C
ATOM	5309	CG	LYS	L	126	27.284	-15.559	-29.465	1.00	81.38	L	C
ATOM	5312	CD	LYS	L	126	27.600	-15.802	-27.992	1.00	81.19	L	C
ATOM	5315	CE	LYS	L	126	28.899	-15.113	-27.556	1.00	84.36	L	C
ATOM	5318	NZ	LYS	L	126	28.812	-14.602	-26.144	1.00	84.63	L	N
ATOM	5322	C	LYS	L	126	25.450	-13.900	-31.790	1.00	74.90	L	C
ATOM	5323	O	LYS	L	126	25.304	-14.750	-32.670	1.00	75.61	L	O
ATOM	5325	N	SER	L	127	24.457	-13.121	-31.358	1.00	75.07	L	N
ATOM	5326	CA	SER	L	127	23.070	-13.268	-31.814	1.00	70.26	L	C
ATOM	5328	CB	SER	L	127	22.109	-12.501	-30.881	1.00	72.18	L	C
ATOM	5331	OG	SER	L	127	22.146	-11.098	-31.089	1.00	71.13	L	O
ATOM	5333	C	SER	L	127	22.838	-12.862	-33.281	1.00	69.16	L	C
ATOM	5334	O	SER	L	127	21.757	-13.114	-33.821	1.00	68.65	L	O
ATOM	5336	N	GLY	L	128	23.831	-12.237	-33.918	1.00	67.14	L	N
ATOM	5337	CA	GLY	L	128	23.752	-11.907	-35.346	1.00	65.59	L	C
ATOM	5340	C	GLY	L	128	23.413	-10.463	-35.679	1.00	66.30	L	C
ATOM	5341	O	GLY	L	128	23.073	-10.140	-36.828	1.00	63.42	L	O
ATOM	5343	N	THR	L	129	23.524	-9.583	-34.684	1.00	66.28	L	N
ATOM	5344	CA	THR	L	129	23.211	-8.161	-34.868	1.00	62.18	L	C
ATOM	5346	CB	THR	L	129	21.729	-7.884	-34.465	1.00	66.25	L	C
ATOM	5348	OG1	THR	L	129	21.354	-6.550	-34.856	1.00	64.76	L	O
ATOM	5350	CG2	THR	L	129	21.512	-8.099	-32.957	1.00	69.40	L	C
ATOM	5354	C	THR	L	129	24.184	-7.253	-34.094	1.00	56.00	L	C
ATOM	5355	O	THR	L	129	24.731	-7.650	-33.064	1.00	55.01	L	O
ATOM	5357	N	ALA	L	130	24.415	-6.048	-34.612	1.00	52.96	L	N
ATOM	5358	CA	ALA	L	130	25.257	-5.053	-33.939	1.00	49.66	L	C
ATOM	5360	CB	ALA	L	130	26.514	-4.827	-34.716	1.00	38.29	L	C
ATOM	5364	C	ALA	L	130	24.519	-3.726	-33.742	1.00	48.82	L	C
ATOM	5365	O	ALA	L	130	24.135	-3.069	-34.713	1.00	50.68	L	O
ATOM	5367	N	SER	L	131	24.324	-3.342	-32.480	1.00	47.22	L	N
ATOM	5368	CA	SER	L	131	23.850	-2.003	-32.121	1.00	44.47	L	C
ATOM	5370	CB	SER	L	131	22.782	-2.119	-31.036	1.00	43.25	L	C
ATOM	5373	OG	SER	L	131	21.736	-2.972	-31.473	1.00	43.16	L	O
ATOM	5375	C	SER	L	131	25.013	-1.100	-31.639	1.00	39.04	L	C
ATOM	5376	O	SER	L	131	25.675	-1.404	-30.652	1.00	39.98	L	O
ATOM	5378	N	VAL	L	132	25.231	0.017	-32.327	1.00	39.66	L	N
ATOM	5379	CA	VAL	L	132	26.186	1.051	-31.892	1.00	41.48	L	C
ATOM	5381	CB	VAL	L	132	27.033	1.548	-33.098	1.00	37.21	L	C
ATOM	5383	CG1	VAL	L	132	28.282	2.316	-32.640	1.00	31.30	L	C
ATOM	5387	CG2	VAL	L	132	27.411	0.363	-33.991	1.00	36.43	L	C
ATOM	5391	C	VAL	L	132	25.398	2.223	-31.259	1.00	43.23	L	C
ATOM	5392	O	VAL	L	132	24.507	2.803	-31.900	1.00	38.42	L	O
ATOM	5394	N	VAL	L	133	25.715	2.552	-30.004	1.00	43.19	L	N
ATOM	5395	CA	VAL	L	133	24.970	3.572	-29.255	1.00	40.97	L	C
ATOM	5397	CB	VAL	L	133	24.552	3.054	-27.866	1.00	34.05	L	C
ATOM	5399	CG1	VAL	L	133	23.810	4.145	-27.078	1.00	29.07	L	C
ATOM	5403	CG2	VAL	L	133	23.711	1.741	-27.996	1.00	31.84	L	C
ATOM	5407	C	VAL	L	133	25.760	4.890	-29.075	1.00	43.99	L	C
ATOM	5408	O	VAL	L	133	26.914	4.905	-28.641	1.00	40.46	L	O
ATOM	5410	N	CYS	L	134	25.109	5.997	-29.413	1.00	46.83	L	N
ATOM	5411	CA	CYS	L	134	25.649	7.312	-29.147	1.00	43.96	L	C
ATOM	5413	CB	CYS	L	134	25.619	8.173	-30.407	1.00	46.90	L	C
ATOM	5416	SG	CYS	L	134	26.836	9.491	-30.377	1.00	51.58	L	S
ATOM	5418	C	CYS	L	134	24.846	7.999	-28.053	1.00	42.57	L	C
ATOM	5419	O	CYS	L	134	23.651	8.191	-28.187	1.00	40.87	L	O
ATOM	5421	N	LEU	L	135	25.523	8.387	-26.981	1.00	40.87	L	N

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ATOM   5422  CA  LEU L 135      24.883   9.086 -25.877  1.00 41.05      L    C
ATOM   5424  CB  LEU L 135      25.262   8.422 -24.536  1.00 41.94      L    C
ATOM   5427  CG  LEU L 135      24.945   9.147 -23.222  1.00 37.54      L    C
ATOM   5429  CD1 LEU L 135      23.430   9.259 -23.035  1.00 36.05      L    C
ATOM   5433  CD2 LEU L 135      25.633   8.466 -22.027  1.00 36.10      L    C
ATOM   5437  C   LEU L 135      25.283  10.560 -25.881  1.00 43.54      L    C
ATOM   5438  O   LEU L 135      26.452  10.887 -25.746  1.00 41.08      L    O
ATOM   5440  N   LEU L 136      24.290  11.431 -26.044  1.00 45.15      L    N
ATOM   5441  CA  LEU L 136      24.424  12.867 -25.799  1.00 40.22      L    C
ATOM   5443  CB  LEU L 136      23.646  13.667 -26.834  1.00 40.10      L    C
ATOM   5446  CG  LEU L 136      24.119  13.798 -28.277  1.00 35.38      L    C
ATOM   5448  CD1 LEU L 136      24.446  12.459 -28.931  1.00 32.90      L    C
ATOM   5452  CD2 LEU L 136      23.008  14.541 -29.013  1.00 36.16      L    C
ATOM   5456  C   LEU L 136      23.829  13.178 -24.429  1.00 42.61      L    C
ATOM   5457  O   LEU L 136      22.621  13.158 -24.255  1.00 44.03      L    O
ATOM   5459  N   ASN L 137      24.686  13.502 -23.471  1.00 43.60      L    N
ATOM   5460  CA  ASN L 137      24.285  13.628 -22.087  1.00 41.98      L    C
ATOM   5462  CB  ASN L 137      25.267  12.855 -21.188  1.00 41.33      L    C
ATOM   5465  CG  ASN L 137      24.584  12.241 -19.997  1.00 37.11      L    C
ATOM   5466  OD1 ASN L 137      23.409  11.912 -20.064  1.00 34.55      L    O
ATOM   5467  ND2 ASN L 137      25.305  12.097 -18.899  1.00 39.60      L    N
ATOM   5470  C   ASN L 137      24.189  15.067 -21.590  1.00 43.36      L    C
ATOM   5471  O   ASN L 137      25.118  15.857 -21.772  1.00 42.54      L    O
ATOM   5473  N   ASN L 138      23.065  15.368 -20.929  1.00 45.15      L    N
ATOM   5474  CA  ASN L 138      22.876  16.602 -20.161  1.00 42.87      L    C
ATOM   5476  CB  ASN L 138      23.761  16.556 -18.915  1.00 39.48      L    C
ATOM   5479  CG  ASN L 138      23.332  15.462 -17.940  1.00 43.15      L    C
ATOM   5480  OD1 ASN L 138      22.238  14.888 -18.049  1.00 45.64      L    O
ATOM   5481  ND2 ASN L 138      24.192  15.162 -16.996  1.00 43.41      L    N
ATOM   5484  C   ASN L 138      23.079  17.900 -20.949  1.00 42.30      L    C
ATOM   5485  O   ASN L 138      23.943  18.723 -20.614  1.00 43.40      L    O
ATOM   5487  N   PHE L 139      22.268  18.071 -21.993  1.00 39.73      L    N
ATOM   5488  CA  PHE L 139      22.313  19.264 -22.840  1.00 41.08      L    C
ATOM   5490  CB  PHE L 139      22.617  18.891 -24.289  1.00 35.82      L    C
ATOM   5493  CG  PHE L 139      21.582  18.004 -24.945  1.00 34.55      L    C
ATOM   5494  CD1 PHE L 139      20.537  18.550 -25.657  1.00 38.43      L    C
ATOM   5496  CE1 PHE L 139      19.600  17.743 -26.314  1.00 36.03      L    C
ATOM   5498  CZ  PHE L 139      19.707  16.385 -26.246  1.00 37.97      L    C
ATOM   5500  CE2 PHE L 139      20.750  15.817 -25.541  1.00 36.18      L    C
ATOM   5502  CD2 PHE L 139      21.686  16.631 -24.899  1.00 36.90      L    C
ATOM   5504  C   PHE L 139      21.031  20.104 -22.780  1.00 42.49      L    C
ATOM   5505  O   PHE L 139      19.963  19.629 -22.373  1.00 42.55      L    O
ATOM   5507  N   TYR L 140      21.165  21.364 -23.165  1.00 43.46      L    N
ATOM   5508  CA  TYR L 140      20.036  22.258 -23.318  1.00 41.30      L    C
ATOM   5510  CB  TYR L 140      19.703  22.958 -21.985  1.00 42.20      L    C
ATOM   5513  CG  TYR L 140      18.472  23.803 -22.147  1.00 43.03      L    C
ATOM   5514  CD1 TYR L 140      17.226  23.268 -21.914  1.00 40.82      L    C
ATOM   5516  CE1 TYR L 140      16.093  24.004 -22.106  1.00 43.23      L    C
ATOM   5518  CZ  TYR L 140      16.183  25.295 -22.588  1.00 42.52      L    C
ATOM   5519  OH  TYR L 140      15.028  26.004 -22.788  1.00 42.38      L    O
ATOM   5521  CE2 TYR L 140      17.409  25.854 -22.869  1.00 44.15      L    C
ATOM   5523  CD2 TYR L 140      18.552  25.101 -22.665  1.00 44.84      L    C
ATOM   5525  C   TYR L 140      20.393  23.284 -24.390  1.00 40.33      L    C
ATOM   5526  O   TYR L 140      21.489  23.826 -24.355  1.00 42.85      L    O
ATOM   5528  N   PRO L 141      19.486  23.575 -25.340  1.00 44.05      L    N
ATOM   5529  CA  PRO L 141      18.095  23.167 -25.539  1.00 47.12      L    C
ATOM   5531  CB  PRO L 141      17.543  24.275 -26.431  1.00 44.96      L    C
ATOM   5534  CG  PRO L 141      18.704  24.689 -27.258  1.00 46.12      L    C
ATOM   5537  CD  PRO L 141      19.933  24.497 -26.401  1.00 45.97      L    C
ATOM   5540  C   PRO L 141      17.905  21.770 -26.162  1.00 45.02      L    C
ATOM   5541  O   PRO L 141      18.867  21.081 -26.424  1.00 45.97      L    O
ATOM   5542  N   ARG L 142      16.656  21.371 -26.375  1.00 49.41      L    N
ATOM   5543  CA  ARG L 142      16.302  19.997 -26.766  1.00 50.48      L    C
ATOM   5545  CB  ARG L 142      14.785  19.805 -26.661  1.00 54.32      L    C
ATOM   5548  CG  ARG L 142      14.323  18.368 -26.772  1.00 55.76      L    C
ATOM   5551  CD  ARG L 142      12.895  18.211 -26.300  1.00 61.09      L    C
ATOM   5554  NE  ARG L 142      12.358  16.886 -26.600  1.00 64.81      L    N
ATOM   5556  CZ  ARG L 142      11.940  16.492 -27.807  1.00 72.10      L    C
ATOM   5557  NH1 ARG L 142      12.000  17.320 -28.850  1.00 75.18      L    N
ATOM   5560  NH2 ARG L 142      11.457  15.259 -27.981  1.00 69.36      L    N
ATOM   5563  C   ARG L 142      16.770  19.607 -28.163  1.00 50.69      L    C
ATOM   5564  O   ARG L 142      17.037  18.437 -28.430  1.00 50.59      L    O
ATOM   5566  N   GLU L 143      16.867  20.597 -29.045  1.00 52.13      L    N
ATOM   5567  CA  GLU L 143      17.190  20.378 -30.442  1.00 50.78      L    C
ATOM   5569  CB  GLU L 143      16.875  21.652 -31.240  1.00 54.86      L    C
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ATOM   5572  CG  GLU L 143      15.362  21.973 -31.371  1.00 59.99      L    C
ATOM   5575  CD  GLU L 143      14.653  22.493 -30.079  1.00 61.27      L    C
ATOM   5576  OE1 GLU L 143      15.254  23.218 -29.238  1.00 58.45      L    O
ATOM   5577  OE2 GLU L 143      13.452  22.181 -29.936  1.00 62.39      L    O
ATOM   5578  C   GLU L 143      18.665  19.969 -30.588  1.00 48.43      L    C
ATOM   5579  O   GLU L 143      19.557  20.711 -30.196  1.00 47.86      L    O
ATOM   5581  N   ALA L 144      18.887  18.771 -31.131  1.00 45.09      L    N
ATOM   5582  CA  ALA L 144      20.218  18.218 -31.413  1.00 46.23      L    C
ATOM   5584  CB  ALA L 144      20.705  17.346 -30.266  1.00 32.72      L    C
ATOM   5588  C   ALA L 144      20.164  17.402 -32.704  1.00 44.67      L    C
ATOM   5589  O   ALA L 144      19.132  16.876 -33.053  1.00 46.24      L    O
ATOM   5591  N   LYS L 145      21.273  17.329 -33.425  1.00 49.37      L    N
ATOM   5592  CA  LYS L 145      21.340  16.569 -34.672  1.00 50.82      L    C
ATOM   5594  CB  LYS L 145      21.588  17.513 -35.855  1.00 53.42      L    C
ATOM   5597  CG  LYS L 145      21.618  16.867 -37.263  1.00 54.31      L    C
ATOM   5600  CD  LYS L 145      22.239  17.846 -38.281  1.00 56.75      L    C
ATOM   5603  CE  LYS L 145      21.594  17.778 -39.672  1.00 58.62      L    C
ATOM   5606  NZ  LYS L 145      21.928  18.988 -40.515  1.00 54.80      L    N
ATOM   5610  C   LYS L 145      22.463  15.550 -34.509  1.00 47.66      L    C
ATOM   5611  O   LYS L 145      23.571  15.903 -34.130  1.00 42.78      L    O
ATOM   5613  N   VAL L 146      22.154  14.282 -34.755  1.00 50.97      L    N
ATOM   5614  CA  VAL L 146      23.152  13.214 -34.701  1.00 52.66      L    C
ATOM   5616  CB  VAL L 146      22.768  12.083 -33.691  1.00 48.03      L    C
ATOM   5618  CG1 VAL L 146      23.940  11.123 -33.514  1.00 43.85      L    C
ATOM   5622  CG2 VAL L 146      22.356  12.664 -32.358  1.00 44.75      L    C
ATOM   5626  C   VAL L 146      23.299  12.598 -36.087  1.00 52.92      L    C
ATOM   5627  O   VAL L 146      22.308  12.226 -36.694  1.00 55.42      L    O
ATOM   5629  N   GLN L 147      24.528  12.491 -36.580  1.00 55.00      L    N
ATOM   5630  CA  GLN L 147      24.786  11.920 -37.905  1.00 56.58      L    C
ATOM   5632  CB  GLN L 147      25.313  12.968 -38.909  1.00 58.16      L    C
ATOM   5635  CG  GLN L 147      24.273  14.041 -39.282  1.00 61.93      L    C
ATOM   5638  CD  GLN L 147      24.629  14.858 -40.530  1.00 66.47      L    C
ATOM   5639  OE1 GLN L 147      25.800  15.133 -40.825  1.00 68.94      L    O
ATOM   5640  NE2 GLN L 147      23.602  15.255 -41.264  1.00 71.60      L    N
ATOM   5643  C   GLN L 147      25.775  10.787 -37.749  1.00 55.22      L    C
ATOM   5644  O   GLN L 147      26.789  10.919 -37.076  1.00 53.77      L    O
ATOM   5646  N   TRP L 148      25.464   9.663 -38.368  1.00 53.28      L    N
ATOM   5647  CA  TRP L 148      26.304   8.489 -38.273  1.00 52.81      L    C
ATOM   5649  CB  TRP L 148      25.424   7.237 -38.072  1.00 45.07      L    C
ATOM   5652  CG  TRP L 148      25.013   7.039 -36.663  1.00 41.91      L    C
ATOM   5653  CD1 TRP L 148      23.828   7.399 -36.088  1.00 42.92      L    C
ATOM   5655  NE1 TRP L 148      23.817   7.029 -34.764  1.00 42.81      L    N
ATOM   5657  CE2 TRP L 148      25.013   6.437 -34.460  1.00 40.65      L    C
ATOM   5658  CD2 TRP L 148      25.789   6.425 -35.633  1.00 40.26      L    C
ATOM   5659  CE3 TRP L 148      27.067   5.854 -35.592  1.00 42.10      L    C
ATOM   5661  CZ3 TRP L 148      27.519   5.333 -34.407  1.00 42.91      L    C
ATOM   5663  CH2 TRP L 148      26.713   5.347 -33.255  1.00 43.17      L    C
ATOM   5665  CZ2 TRP L 148      25.469   5.908 -33.263  1.00 43.30      L    C
ATOM   5667  C   TRP L 148      27.194   8.339 -39.509  1.00 50.33      L    C
ATOM   5668  O   TRP L 148      26.775   8.625 -40.619  1.00 47.50      L    O
ATOM   5670  N   LYS L 149      28.430   7.901 -39.285  1.00 54.01      L    N
ATOM   5671  CA  LYS L 149      29.364   7.592 -40.355  1.00 56.31      L    C
ATOM   5673  CB  LYS L 149      30.438   8.674 -40.458  1.00 59.36      L    C
ATOM   5676  CG  LYS L 149      29.940   9.965 -41.034  1.00 59.49      L    C
ATOM   5679  CD  LYS L 149      31.087  10.842 -41.465  1.00 62.05      L    C
ATOM   5682  CE  LYS L 149      30.583  12.037 -42.292  1.00 67.96      L    C
ATOM   5685  NZ  LYS L 149      29.612  12.933 -41.563  1.00 70.23      L    N
ATOM   5689  C   LYS L 149      30.042   6.249 -40.115  1.00 54.16      L    C
ATOM   5690  O   LYS L 149      30.626   6.016 -39.057  1.00 51.78      L    O
ATOM   5692  N   VAL L 150      29.970   5.384 -41.121  1.00 54.55      L    N
ATOM   5693  CA  VAL L 150      30.699   4.126 -41.129  1.00 55.08      L    C
ATOM   5695  CB  VAL L 150      29.760   2.925 -41.382  1.00 44.90      L    C
ATOM   5697  CG1 VAL L 150      30.548   1.622 -41.328  1.00 38.86      L    C
ATOM   5701  CG2 VAL L 150      28.610   2.924 -40.368  1.00 34.81      L    C
ATOM   5705  C   VAL L 150      31.749   4.196 -42.233  1.00 55.45      L    C
ATOM   5706  O   VAL L 150      31.408   4.388 -43.404  1.00 54.59      L    O
ATOM   5708  N   ASP L 151      33.019   4.024 -41.861  1.00 57.42      L    N
ATOM   5709  CA  ASP L 151      34.149   4.285 -42.768  1.00 58.26      L    C
ATOM   5711  CB  ASP L 151      34.315   3.158 -43.803  1.00 55.75      L    C
ATOM   5714  CG  ASP L 151      34.854   1.869 -43.216  1.00 55.54      L    C
ATOM   5715  OD1 ASP L 151      35.658   1.892 -42.258  1.00 50.93      L    O
ATOM   5716  OD2 ASP L 151      34.485   0.810 -43.767  1.00 56.01      L    O
ATOM   5717  C   ASP L 151      33.948   5.612 -43.518  1.00 57.64      L    C
ATOM   5718  O   ASP L 151      34.154   5.690 -44.732  1.00 56.65      L    O
ATOM   5720  N   ASN L 152      33.514   6.634 -42.788  1.00 58.24      L    N
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ATOM	5721	CA	ASN	L	152	33.278	7.971	-43.338	1.00	59.46	L C
ATOM	5723	CB	ASN	L	152	34.596	8.565	-43.856	1.00	63.45	L C
ATOM	5726	CG	ASN	L	152	34.514	10.059	-44.080	1.00	65.32	L C
ATOM	5727	OD1	ASN	L	152	34.105	10.822	-43.189	1.00	67.65	L O
ATOM	5728	ND2	ASN	L	152	34.897	10.490	-45.277	1.00	67.08	L N
ATOM	5731	C	ASN	L	152	32.195	8.067	-44.418	1.00	58.97	L C
ATOM	5732	O	ASN	L	152	32.124	9.069	-45.128	1.00	60.52	L O
ATOM	5734	N	ALA	L	153	31.360	7.036	-44.533	1.00	58.63	L N
ATOM	5735	CA	ALA	L	153	30.174	7.063	-45.391	1.00	59.33	L C
ATOM	5737	CB	ALA	L	153	29.989	5.720	-46.095	1.00	55.97	L C
ATOM	5741	C	ALA	L	153	28.937	7.381	-44.549	1.00	60.75	L C
ATOM	5742	O	ALA	L	153	28.531	6.572	-43.688	1.00	60.95	L O
ATOM	5744	N	LEU	L	154	28.324	8.536	-44.817	1.00	57.65	L N
ATOM	5745	CA	LEU	L	154	27.164	8.993	-44.043	1.00	57.10	L C
ATOM	5747	CB	LEU	L	154	26.734	10.425	-44.414	1.00	60.28	L C
ATOM	5750	CG	LEU	L	154	25.406	10.992	-43.836	1.00	64.48	L C
ATOM	5752	CD1	LEU	L	154	25.195	10.804	-42.287	1.00	64.36	L C
ATOM	5756	CD2	LEU	L	154	25.248	12.487	-44.204	1.00	60.40	L C
ATOM	5760	C	LEU	L	154	25.989	8.018	-44.166	1.00	58.12	L C
ATOM	5761	O	LEU	L	154	25.651	7.522	-45.253	1.00	55.93	L O
ATOM	5763	N	GLN	L	155	25.381	7.731	-43.022	1.00	54.77	L N
ATOM	5764	CA	GLN	L	155	24.334	6.741	-42.926	1.00	49.90	L C
ATOM	5766	CB	GLN	L	155	24.475	5.979	-41.608	1.00	46.93	L C
ATOM	5769	CG	GLN	L	155	25.736	5.204	-41.472	1.00	44.15	L C
ATOM	5772	CD	GLN	L	155	25.902	4.192	-42.592	1.00	49.82	L C
ATOM	5773	OE1	GLN	L	155	25.122	3.232	-42.710	1.00	47.02	L O
ATOM	5774	NE2	GLN	L	155	26.911	4.413	-43.437	1.00	49.06	L N
ATOM	5777	C	GLN	L	155	22.973	7.402	-42.972	1.00	48.25	L C
ATOM	5778	O	GLN	L	155	22.804	8.514	-42.503	1.00	53.59	L O
ATOM	5780	N	SER	L	156	21.997	6.717	-43.543	1.00	48.22	L N
ATOM	5781	CA	SER	L	156	20.610	7.109	-43.350	1.00	51.35	L C
ATOM	5783	CB	SER	L	156	20.107	8.107	-44.408	1.00	56.43	L C
ATOM	5786	OG	SER	L	156	19.754	7.479	-45.629	1.00	60.18	L O
ATOM	5788	C	SER	L	156	19.758	5.859	-43.306	1.00	48.34	L C
ATOM	5789	O	SER	L	156	20.108	4.840	-43.900	1.00	48.12	L O
ATOM	5791	N	GLY	L	157	18.677	5.935	-42.538	1.00	47.48	L N
ATOM	5792	CA	GLY	L	157	17.661	4.880	-42.488	1.00	47.13	L C
ATOM	5795	C	GLY	L	157	17.868	3.806	-41.445	1.00	46.38	L C
ATOM	5796	O	GLY	L	157	16.932	3.082	-41.120	1.00	48.95	L O
ATOM	5798	N	ASN	L	158	19.078	3.706	-40.904	1.00	45.80	L N
ATOM	5799	CA	ASN	L	158	19.457	2.604	-40.010	1.00	46.35	L C
ATOM	5801	CB	ASN	L	158	20.656	1.843	-40.600	1.00	46.18	L C
ATOM	5804	CG	ASN	L	158	21.856	2.741	-40.868	1.00	47.83	L C
ATOM	5805	OD1	ASN	L	158	21.825	3.941	-40.587	1.00	44.96	L O
ATOM	5806	ND2	ASN	L	158	22.931	2.152	-41.406	1.00	48.89	L N
ATOM	5809	C	ASN	L	158	19.767	3.049	-38.577	1.00	46.54	L C
ATOM	5810	O	ASN	L	158	20.536	2.390	-37.856	1.00	44.76	L O
ATOM	5812	N	SER	L	159	19.167	4.159	-38.163	1.00	47.13	L N
ATOM	5813	CA	SER	L	159	19.371	4.698	-36.820	1.00	45.05	L C
ATOM	5815	CB	SER	L	159	20.460	5.784	-36.818	1.00	45.81	L C
ATOM	5818	OG	SER	L	159	20.039	6.947	-37.518	1.00	44.63	L O
ATOM	5820	C	SER	L	159	18.069	5.259	-36.266	1.00	45.53	L C
ATOM	5821	O	SER	L	159	17.188	5.657	-37.017	1.00	44.89	L O
ATOM	5823	N	GLN	L	160	17.965	5.263	-34.941	1.00	43.89	L N
ATOM	5824	CA	GLN	L	160	16.784	5.723	-34.227	1.00	45.61	L C
ATOM	5826	CB	GLN	L	160	15.902	4.531	-33.790	1.00	48.08	L C
ATOM	5829	CG	GLN	L	160	14.876	4.082	-34.842	1.00	46.87	L C
ATOM	5832	CD	GLN	L	160	13.954	2.985	-34.335	1.00	52.11	L C
ATOM	5833	OE1	GLN	L	160	14.403	2.058	-33.653	1.00	59.14	L O
ATOM	5834	NE2	GLN	L	160	12.660	3.064	-34.684	1.00	48.67	L N
ATOM	5837	C	GLN	L	160	17.245	6.502	-33.006	1.00	43.43	L C
ATOM	5838	O	GLN	L	160	18.210	6.107	-32.362	1.00	43.47	L O
ATOM	5840	N	GLU	L	161	16.552	7.601	-32.698	1.00	45.17	L N
ATOM	5841	CA	GLU	L	161	16.897	8.450	-31.556	1.00	47.01	L C
ATOM	5843	CB	GLU	L	161	17.126	9.906	-31.982	1.00	51.76	L C
ATOM	5846	CG	GLU	L	161	18.506	10.225	-32.587	1.00	59.99	L C
ATOM	5849	CD	GLU	L	161	18.745	9.610	-33.986	1.00	65.42	L C
ATOM	5850	OE1	GLU	L	161	17.810	9.604	-34.822	1.00	69.22	L O
ATOM	5851	OE2	GLU	L	161	19.880	9.146	-34.256	1.00	60.47	L O
ATOM	5852	C	GLU	L	161	15.813	8.368	-30.479	1.00	46.00	L C
ATOM	5853	O	GLU	L	161	14.678	7.997	-30.755	1.00	42.86	L O
ATOM	5855	N	SER	L	162	16.198	8.705	-29.251	1.00	45.10	L N
ATOM	5856	CA	SER	L	162	15.298	8.748	-28.114	1.00	44.83	L C
ATOM	5858	CB	SER	L	162	15.228	7.373	-27.451	1.00	46.27	L C
ATOM	5861	OG	SER	L	162	14.185	7.274	-26.504	1.00	43.36	L O

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ATOM   5863  C   SER L 162      15.799   9.795 -27.122  1.00 43.94      L    C
ATOM   5864  O   SER L 162      16.966   9.769 -26.734  1.00 46.06      L    O
ATOM   5866  N   VAL L 163      14.921  10.725 -26.725  1.00 43.34      L    N
ATOM   5867  CA  VAL L 163      15.296  11.819 -25.824  1.00 41.68      L    C
ATOM   5869  CB  VAL L 163      15.111  13.238 -26.477  1.00 44.89      L    C
ATOM   5871  CG1 VAL L 163      13.646  13.562 -26.676  1.00 48.73      L    C
ATOM   5875  CG2 VAL L 163      15.777  14.337 -25.627  1.00 38.36      L    C
ATOM   5879  C   VAL L 163      14.526  11.717 -24.504  1.00 42.13      L    C
ATOM   5880  O   VAL L 163      13.341  11.406 -24.485  1.00 44.76      L    O
ATOM   5882  N   THR L 164      15.211  11.963 -23.393  1.00 44.51      L    N
ATOM   5883  CA  THR L 164      14.553  11.976 -22.100  1.00 44.55      L    C
ATOM   5885  CB  THR L 164      15.540  11.900 -20.934  1.00 44.16      L    C
ATOM   5887  OG1 THR L 164      16.492  12.990 -21.014  1.00 38.19      L    O
ATOM   5889  CG2 THR L 164      16.235  10.536 -20.925  1.00 43.45      L    C
ATOM   5893  C   THR L 164      13.717  13.232 -21.915  1.00 47.76      L    C
ATOM   5894  O   THR L 164      13.737  14.157 -22.727  1.00 50.86      L    O
ATOM   5896  N   GLU L 165      12.960  13.248 -20.833  1.00 52.21      L    N
ATOM   5897  CA  GLU L 165      12.254  14.451 -20.428  1.00 51.87      L    C
ATOM   5899  CB  GLU L 165      11.068  14.119 -19.503  1.00 60.15      L    C
ATOM   5902  CG  GLU L 165       9.868  13.437 -20.186  1.00 66.90      L    C
ATOM   5905  CD  GLU L 165       9.178  14.306 -21.239  1.00 73.87      L    C
ATOM   5906  OE1 GLU L 165       8.988  15.529 -21.004  1.00 79.27      L    O
ATOM   5907  OE2 GLU L 165       8.812  13.754 -22.303  1.00 75.01      L    O
ATOM   5908  C   GLU L 165      13.244  15.350 -19.698  1.00 50.07      L    C
ATOM   5909  O   GLU L 165      14.286  14.901 -19.214  1.00 53.11      L    O
ATOM   5911  N   GLN L 166      12.910  16.624 -19.626  1.00 45.02      L    N
ATOM   5912  CA  GLN L 166      13.731  17.584 -18.914  1.00 45.55      L    C
ATOM   5914  CB  GLN L 166      13.024  18.934 -18.865  1.00 42.82      L    C
ATOM   5917  CG  GLN L 166      13.969  20.080 -18.793  1.00 43.85      L    C
ATOM   5920  CD  GLN L 166      13.334  21.403 -19.131  1.00 40.52      L    C
ATOM   5921  OE1 GLN L 166      12.109  21.538 -19.140  1.00 42.89      L    O
ATOM   5922  NE2 GLN L 166      14.171  22.404 -19.380  1.00 33.65      L    N
ATOM   5925  C   GLN L 166      14.019  17.099 -17.489  1.00 48.19      L    C
ATOM   5926  O   GLN L 166      13.102  16.667 -16.771  1.00 49.10      L    O
ATOM   5928  N   ASP L 167      15.287  17.158 -17.089  1.00 48.15      L    N
ATOM   5929  CA  ASP L 167      15.687  16.704 -15.764  1.00 46.60      L    C
ATOM   5931  CB  ASP L 167      17.209  16.587 -15.628  1.00 45.82      L    C
ATOM   5934  CG  ASP L 167      17.652  16.256 -14.199  1.00 49.56      L    C
ATOM   5935  OD1 ASP L 167      17.188  15.248 -13.635  1.00 56.20      L    O
ATOM   5936  OD2 ASP L 167      18.470  17.003 -13.626  1.00 54.03      L    O
ATOM   5937  C   ASP L 167      15.162  17.691 -14.739  1.00 48.59      L    C
ATOM   5938  O   ASP L 167      15.280  18.906 -14.923  1.00 46.36      L    O
ATOM   5940  N   SER L 168      14.621  17.146 -13.648  1.00 46.59      L    N
ATOM   5941  CA  SER L 168      13.940  17.930 -12.624  1.00 45.21      L    C
ATOM   5943  CB  SER L 168      13.069  17.020 -11.760  1.00 48.94      L    C
ATOM   5946  OG  SER L 168      13.855  16.094 -11.027  1.00 57.06      L    O
ATOM   5948  C   SER L 168      14.882  18.721 -11.726  1.00 44.11      L    C
ATOM   5949  O   SER L 168      14.425  19.514 -10.908  1.00 45.25      L    O
ATOM   5951  N   LYS L 169      16.186  18.511 -11.864  1.00 47.10      L    N
ATOM   5952  CA  LYS L 169      17.165  19.268 -11.091  1.00 49.10      L    C
ATOM   5954  CB  LYS L 169      18.125  18.333 -10.345  1.00 55.10      L    C
ATOM   5957  CG  LYS L 169      17.483  17.623  -9.161  1.00 57.75      L    C
ATOM   5960  CD  LYS L 169      18.397  16.526  -8.637  1.00 58.16      L    C
ATOM   5963  CE  LYS L 169      17.714  15.701  -7.561  1.00 59.90      L    C
ATOM   5966  NZ  LYS L 169      18.703  14.778  -6.933  1.00 63.16      L    N
ATOM   5970  C   LYS L 169      17.959  20.247 -11.947  1.00 43.78      L    C
ATOM   5971  O   LYS L 169      18.130  21.390 -11.551  1.00 44.75      L    O
ATOM   5973  N   ASP L 170      18.470  19.802 -13.097  1.00 44.05      L    N
ATOM   5974  CA  ASP L 170      19.339  20.666 -13.927  1.00 44.32      L    C
ATOM   5976  CB  ASP L 170      20.724  20.021 -14.167  1.00 47.00      L    C
ATOM   5979  CG  ASP L 170      20.682  18.777 -15.046  1.00 46.20      L    C
ATOM   5980  OD1 ASP L 170      19.688  18.527 -15.742  1.00 42.07      L    O
ATOM   5981  OD2 ASP L 170      21.686  18.038 -15.053  1.00 52.35      L    O
ATOM   5982  C   ASP L 170      18.673  21.160 -15.222  1.00 40.84      L    C
ATOM   5983  O   ASP L 170      19.236  21.940 -15.956  1.00 41.42      L    O
ATOM   5985  N   SER L 171      17.462  20.695 -15.464  1.00 37.12      L    N
ATOM   5986  CA  SER L 171      16.625  21.125 -16.584  1.00 38.72      L    C
ATOM   5988  CB  SER L 171      16.211  22.591 -16.401  1.00 39.12      L    C
ATOM   5991  OG  SER L 171      15.678  22.775 -15.096  1.00 33.66      L    O
ATOM   5993  C   SER L 171      17.214  20.822 -17.966  1.00 39.72      L    C
ATOM   5994  O   SER L 171      16.866  21.476 -18.950  1.00 41.10      L    O
ATOM   5996  N   THR L 172      18.055  19.783 -18.032  1.00 43.50      L    N
ATOM   5997  CA  THR L 172      18.728  19.344 -19.266  1.00 39.90      L    C
ATOM   5999  CB  THR L 172      20.180  18.920 -18.980  1.00 41.17      L    C
ATOM   6001  OG1 THR L 172      20.184  17.842 -18.025  1.00 40.63      L    O
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ATOM	6003	CG2	THR	L	172	21.025	20.095	-18.463	1.00	35.88	L	C
ATOM	6007	C	THR	L	172	18.052	18.122	-19.894	1.00	42.74	L	C
ATOM	6008	O	THR	L	172	17.285	17.416	-19.252	1.00	42.53	L	O
ATOM	6010	N	TYR	L	173	18.348	17.890	-21.167	1.00	42.60	L	N
ATOM	6011	CA	TYR	L	173	17.907	16.689	-21.856	1.00	40.56	L	C
ATOM	6013	CB	TYR	L	173	17.245	17.054	-23.187	1.00	44.80	L	C
ATOM	6016	CG	TYR	L	173	16.138	18.075	-23.038	1.00	45.06	L	C
ATOM	6017	CD1	TYR	L	173	14.864	17.677	-22.702	1.00	45.05	L	C
ATOM	6019	CE1	TYR	L	173	13.849	18.583	-22.532	1.00	45.91	L	C
ATOM	6021	CZ	TYR	L	173	14.073	19.917	-22.703	1.00	44.80	L	C
ATOM	6022	OH	TYR	L	173	13.001	20.768	-22.531	1.00	48.20	L	O
ATOM	6024	CE2	TYR	L	173	15.334	20.371	-23.049	1.00	47.48	L	C
ATOM	6026	CD2	TYR	L	173	16.370	19.437	-23.221	1.00	48.33	L	C
ATOM	6028	C	TYR	L	173	19.125	15.784	-22.072	1.00	42.57	L	C
ATOM	6029	O	TYR	L	173	20.297	16.237	-22.036	1.00	40.79	L	O
ATOM	6031	N	SER	L	174	18.841	14.501	-22.259	1.00	39.04	L	N
ATOM	6032	CA	SER	L	174	19.820	13.533	-22.742	1.00	36.45	L	C
ATOM	6034	CB	SER	L	174	20.314	12.601	-21.624	1.00	31.74	L	C
ATOM	6037	OG	SER	L	174	21.100	13.321	-20.671	1.00	32.50	L	O
ATOM	6039	C	SER	L	174	19.176	12.760	-23.886	1.00	36.73	L	C
ATOM	6040	O	SER	L	174	17.948	12.775	-24.056	1.00	37.78	L	O
ATOM	6042	N	LEU	L	175	20.024	12.137	-24.699	1.00	39.33	L	N
ATOM	6043	CA	LEU	L	175	19.613	11.552	-25.970	1.00	38.72	L	C
ATOM	6045	CB	LEU	L	175	19.675	12.637	-27.049	1.00	38.96	L	C
ATOM	6048	CG	LEU	L	175	19.280	12.318	-28.489	1.00	38.52	L	C
ATOM	6050	CD1	LEU	L	175	18.662	13.571	-29.143	1.00	35.68	L	C
ATOM	6054	CD2	LEU	L	175	20.457	11.791	-29.304	1.00	30.92	L	C
ATOM	6058	C	LEU	L	175	20.501	10.350	-26.338	1.00	42.27	L	C
ATOM	6059	O	LEU	L	175	21.727	10.399	-26.223	1.00	38.62	L	O
ATOM	6061	N	SER	L	176	19.838	9.255	-26.709	1.00	42.77	L	N
ATOM	6062	CA	SER	L	176	20.474	8.080	-27.276	1.00	43.28	L	C
ATOM	6064	CB	SER	L	176	19.888	6.782	-26.667	1.00	44.27	L	C
ATOM	6067	OG	SER	L	176	18.646	6.397	-27.270	1.00	43.98	L	O
ATOM	6069	C	SER	L	176	20.239	8.106	-28.779	1.00	44.92	L	C
ATOM	6070	O	SER	L	176	19.189	8.537	-29.237	1.00	48.72	L	O
ATOM	6072	N	SER	L	177	21.247	7.697	-29.538	1.00	43.83	L	N
ATOM	6073	CA	SER	L	177	21.107	7.417	-30.954	1.00	42.60	L	C
ATOM	6075	CB	SER	L	177	21.830	8.466	-31.789	1.00	43.91	L	C
ATOM	6078	OG	SER	L	177	21.749	8.163	-33.172	1.00	39.89	L	O
ATOM	6080	C	SER	L	177	21.737	6.056	-31.189	1.00	44.74	L	C
ATOM	6081	O	SER	L	177	22.904	5.843	-30.842	1.00	41.52	L	O
ATOM	6083	N	THR	L	178	20.955	5.143	-31.764	1.00	41.55	L	N
ATOM	6084	CA	THR	L	178	21.367	3.782	-31.931	1.00	41.36	L	C
ATOM	6086	CB	THR	L	178	20.393	2.815	-31.202	1.00	41.23	L	C
ATOM	6088	OG1	THR	L	178	20.117	3.315	-29.886	1.00	34.82	L	O
ATOM	6090	CG2	THR	L	178	20.993	1.371	-31.129	1.00	34.06	L	C
ATOM	6094	C	THR	L	178	21.437	3.443	-33.421	1.00	42.99	L	C
ATOM	6095	O	THR	L	178	20.454	3.574	-34.149	1.00	41.03	L	O
ATOM	6097	N	LEU	L	179	22.616	3.014	-33.855	1.00	43.56	L	N
ATOM	6098	CA	LEU	L	179	22.823	2.536	-35.213	1.00	42.23	L	C
ATOM	6100	CB	LEU	L	179	24.224	2.942	-35.696	1.00	37.76	L	C
ATOM	6103	CG	LEU	L	179	24.612	2.568	-37.136	1.00	38.89	L	C
ATOM	6105	CD1	LEU	L	179	23.830	3.419	-38.129	1.00	28.87	L	C
ATOM	6109	CD2	LEU	L	179	26.116	2.724	-37.362	1.00	36.34	L	C
ATOM	6113	C	LEU	L	179	22.639	1.018	-35.217	1.00	44.98	L	C
ATOM	6114	O	LEU	L	179	23.266	0.332	-34.441	1.00	42.01	L	O
ATOM	6116	N	THR	L	180	21.765	0.497	-36.070	1.00	48.72	L	N
ATOM	6117	CA	THR	L	180	21.556	-0.957	-36.150	1.00	51.44	L	C
ATOM	6119	CB	THR	L	180	20.061	-1.349	-36.015	1.00	55.20	L	C
ATOM	6121	OG1	THR	L	180	19.538	-0.795	-34.805	1.00	58.87	L	O
ATOM	6123	CG2	THR	L	180	19.872	-2.895	-36.003	1.00	50.58	L	C
ATOM	6127	C	THR	L	180	22.109	-1.501	-37.459	1.00	52.06	L	C
ATOM	6128	O	THR	L	180	21.690	-1.077	-38.532	1.00	52.76	L	O
ATOM	6130	N	LEU	L	181	23.049	-2.438	-37.338	1.00	54.81	L	N
ATOM	6131	CA	LEU	L	181	23.693	-3.115	-38.475	1.00	55.33	L	C
ATOM	6133	CB	LEU	L	181	25.184	-2.794	-38.547	1.00	51.09	L	C
ATOM	6136	CG	LEU	L	181	25.657	-1.358	-38.624	1.00	48.89	L	C
ATOM	6138	CD1	LEU	L	181	27.144	-1.361	-38.469	1.00	47.10	L	C
ATOM	6142	CD2	LEU	L	181	25.235	-0.701	-39.933	1.00	50.67	L	C
ATOM	6146	C	LEU	L	181	23.594	-4.611	-38.283	1.00	56.24	L	C
ATOM	6147	O	LEU	L	181	23.395	-5.086	-37.162	1.00	57.83	L	O
ATOM	6149	N	SER	L	182	23.773	-5.340	-39.380	1.00	58.64	L	N
ATOM	6150	CA	SER	L	182	24.001	-6.777	-39.324	1.00	58.26	L	C
ATOM	6152	CB	SER	L	182	23.884	-7.392	-40.727	1.00	60.68	L	C
ATOM	6155	OG	SER	L	182	24.829	-6.842	-41.642	1.00	60.85	L	O

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ATOM	6157	C	SER	L	182	25.391	-7.009	-38.765	1.00	57.29	L	C
ATOM	6158	O	SER	L	182	26.250	-6.128	-38.861	1.00	57.42	L	O
ATOM	6160	N	LYS	L	183	25.630	-8.182	-38.193	1.00	60.44	L	N
ATOM	6161	CA	LYS	L	183	26.990	-8.564	-37.806	1.00	61.38	L	C
ATOM	6163	CB	LYS	L	183	26.995	-9.939	-37.139	1.00	63.73	L	C
ATOM	6166	CG	LYS	L	183	28.310	-10.287	-36.456	1.00	62.64	L	C
ATOM	6169	CD	LYS	L	183	28.448	-11.773	-36.254	1.00	63.18	L	C
ATOM	6172	CE	LYS	L	183	29.728	-12.117	-35.513	1.00	63.65	L	C
ATOM	6175	NZ	LYS	L	183	29.576	-13.442	-34.867	1.00	65.34	L	N
ATOM	6179	C	LYS	L	183	27.904	-8.583	-39.035	1.00	60.83	L	C
ATOM	6180	O	LYS	L	183	29.055	-8.163	-38.977	1.00	61.17	L	O
ATOM	6182	N	ALA	L	184	27.369	-9.074	-40.148	1.00	62.89	L	N
ATOM	6183	CA	ALA	L	184	28.083	-9.086	-41.427	1.00	62.19	L	C
ATOM	6185	CB	ALA	L	184	27.159	-9.599	-42.540	1.00	64.64	L	C
ATOM	6189	C	ALA	L	184	28.632	-7.715	-41.805	1.00	61.48	L	C
ATOM	6190	O	ALA	L	184	29.827	-7.566	-42.055	1.00	62.53	L	O
ATOM	6192	N	ASP	L	185	27.752	-6.717	-41.851	1.00	64.33	L	N
ATOM	6193	CA	ASP	L	185	28.145	-5.343	-42.204	1.00	60.71	L	C
ATOM	6195	CB	ASP	L	185	26.911	-4.468	-42.446	1.00	65.03	L	C
ATOM	6198	CG	ASP	L	185	26.152	-4.843	-43.711	1.00	69.12	L	C
ATOM	6199	OD1	ASP	L	185	26.584	-5.780	-44.420	1.00	72.16	L	O
ATOM	6200	OD2	ASP	L	185	25.115	-4.196	-43.996	1.00	68.56	L	O
ATOM	6201	C	ASP	L	185	29.018	-4.693	-41.134	1.00	56.36	L	C
ATOM	6202	O	ASP	L	185	29.933	-3.959	-41.442	1.00	58.96	L	O
ATOM	6204	N	TYR	L	186	28.737	-4.956	-39.870	1.00	56.41	L	N
ATOM	6205	CA	TYR	L	186	29.546	-4.393	-38.813	1.00	55.71	L	C
ATOM	6207	CB	TYR	L	186	28.992	-4.733	-37.448	1.00	49.93	L	C
ATOM	6210	CG	TYR	L	186	29.892	-4.204	-36.367	1.00	48.78	L	C
ATOM	6211	CD1	TYR	L	186	29.974	-2.841	-36.116	1.00	45.08	L	C
ATOM	6213	CE1	TYR	L	186	30.814	-2.347	-35.140	1.00	47.94	L	C
ATOM	6215	CZ	TYR	L	186	31.590	-3.220	-34.417	1.00	46.40	L	C
ATOM	6216	OH	TYR	L	186	32.428	-2.758	-33.436	1.00	47.87	L	O
ATOM	6218	CE2	TYR	L	186	31.525	-4.574	-34.658	1.00	48.48	L	C
ATOM	6220	CD2	TYR	L	186	30.693	-5.056	-35.634	1.00	45.30	L	C
ATOM	6222	C	TYR	L	186	30.999	-4.851	-38.897	1.00	55.83	L	C
ATOM	6223	O	TYR	L	186	31.918	-4.023	-38.794	1.00	52.78	L	O
ATOM	6225	N	GLU	L	187	31.199	-6.163	-39.071	1.00	61.69	L	N
ATOM	6226	CA	GLU	L	187	32.544	-6.756	-39.189	1.00	63.09	L	C
ATOM	6228	CB	GLU	L	187	32.489	-8.284	-39.012	1.00	65.43	L	C
ATOM	6231	CG	GLU	L	187	31.922	-8.793	-37.681	1.00	69.71	L	C
ATOM	6234	CD	GLU	L	187	32.804	-8.500	-36.471	1.00	75.45	L	C
ATOM	6235	OE1	GLU	L	187	33.938	-8.003	-36.632	1.00	80.50	L	O
ATOM	6236	OE2	GLU	L	187	32.362	-8.780	-35.335	1.00	78.84	L	O
ATOM	6237	C	GLU	L	187	33.232	-6.445	-40.527	1.00	63.09	L	C
ATOM	6238	O	GLU	L	187	34.419	-6.726	-40.700	1.00	62.81	L	O
ATOM	6240	N	LYS	L	188	32.479	-5.875	-41.464	1.00	64.28	L	N
ATOM	6241	CA	LYS	L	188	32.996	-5.466	-42.761	1.00	64.00	L	C
ATOM	6243	CB	LYS	L	188	31.829	-5.454	-43.754	1.00	66.06	L	C
ATOM	6246	CG	LYS	L	188	32.193	-5.251	-45.202	1.00	69.06	L	C
ATOM	6249	CD	LYS	L	188	30.950	-5.423	-46.080	1.00	71.62	L	C
ATOM	6252	CE	LYS	L	188	31.143	-4.797	-47.471	1.00	72.63	L	C
ATOM	6255	NZ	LYS	L	188	29.927	-4.957	-48.333	1.00	72.31	L	N
ATOM	6259	C	LYS	L	188	33.692	-4.089	-42.706	1.00	64.42	L	C
ATOM	6260	O	LYS	L	188	34.561	-3.803	-43.533	1.00	67.92	L	O
ATOM	6262	N	HIS	L	189	33.331	-3.251	-41.730	1.00	59.52	L	N
ATOM	6263	CA	HIS	L	189	33.865	-1.878	-41.644	1.00	57.93	L	C
ATOM	6265	CB	HIS	L	189	32.727	-0.867	-41.847	1.00	54.63	L	C
ATOM	6268	CG	HIS	L	189	31.967	-1.072	-43.124	1.00	53.62	L	C
ATOM	6269	ND1	HIS	L	189	32.411	-0.602	-44.340	1.00	55.10	L	N
ATOM	6271	CE1	HIS	L	189	31.551	-0.943	-45.285	1.00	54.65	L	C
ATOM	6273	NE2	HIS	L	189	30.564	-1.620	-44.726	1.00	54.19	L	N
ATOM	6275	CD2	HIS	L	189	30.803	-1.721	-43.377	1.00	54.45	L	C
ATOM	6277	C	HIS	L	189	34.647	-1.602	-40.353	1.00	55.08	L	C
ATOM	6278	O	HIS	L	189	34.524	-2.331	-39.377	1.00	50.86	L	O
ATOM	6280	N	LYS	L	190	35.462	-0.548	-40.375	1.00	60.20	L	N
ATOM	6281	CA	LYS	L	190	36.428	-0.245	-39.306	1.00	61.70	L	C
ATOM	6283	CB	LYS	L	190	37.794	0.046	-39.946	1.00	65.45	L	C
ATOM	6286	CG	LYS	L	190	38.980	0.269	-38.985	1.00	66.68	L	C
ATOM	6289	CD	LYS	L	190	40.202	0.796	-39.768	1.00	67.88	L	C
ATOM	6292	CE	LYS	L	190	41.533	0.617	-39.024	1.00	70.59	L	C
ATOM	6295	NZ	LYS	L	190	41.881	1.774	-38.144	1.00	72.68	L	N
ATOM	6299	C	LYS	L	190	36.003	0.946	-38.433	1.00	60.27	L	C
ATOM	6300	O	LYS	L	190	35.963	0.841	-37.209	1.00	61.09	L	O
ATOM	6302	N	VAL	L	191	35.693	2.075	-39.065	1.00	58.06	L	N
ATOM	6303	CA	VAL	L	191	35.486	3.328	-38.335	1.00	56.13	L	C

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ATOM	6305	CB	VAL	L	191	36.163	4.531	-39.022	1.00	51.38	L	C
ATOM	6307	CG1	VAL	L	191	36.327	5.666	-38.035	1.00	44.91	L	C
ATOM	6311	CG2	VAL	L	191	37.511	4.133	-39.618	1.00	46.86	L	C
ATOM	6315	C	VAL	L	191	34.012	3.639	-38.169	1.00	54.00	L	C
ATOM	6316	O	VAL	L	191	33.294	3.803	-39.141	1.00	51.82	L	O
ATOM	6318	N	TYR	L	192	33.579	3.721	-36.916	1.00	53.06	L	N
ATOM	6319	CA	TYR	L	192	32.207	4.051	-36.589	1.00	52.43	L	C
ATOM	6321	CB	TYR	L	192	31.590	2.913	-35.749	1.00	48.27	L	C
ATOM	6324	CG	TYR	L	192	31.431	1.670	-36.585	1.00	43.89	L	C
ATOM	6325	CD1	TYR	L	192	30.263	1.442	-37.294	1.00	46.86	L	C
ATOM	6327	CE1	TYR	L	192	30.122	0.337	-38.106	1.00	45.64	L	C
ATOM	6329	CZ	TYR	L	192	31.166	-0.548	-38.234	1.00	46.11	L	C
ATOM	6330	OH	TYR	L	192	31.008	-1.649	-39.054	1.00	46.65	L	O
ATOM	6332	CE2	TYR	L	192	32.343	-0.336	-37.551	1.00	43.77	L	C
ATOM	6334	CD2	TYR	L	192	32.472	0.775	-36.736	1.00	41.79	L	C
ATOM	6336	C	TYR	L	192	32.211	5.390	-35.883	1.00	49.70	L	C
ATOM	6337	O	TYR	L	192	32.914	5.575	-34.895	1.00	47.81	L	O
ATOM	6339	N	ALA	L	193	31.453	6.333	-36.426	1.00	45.97	L	N
ATOM	6340	CA	ALA	L	193	31.540	7.703	-35.986	1.00	49.30	L	C
ATOM	6342	CB	ALA	L	193	32.350	8.542	-37.023	1.00	42.40	L	C
ATOM	6346	C	ALA	L	193	30.168	8.300	-35.769	1.00	49.30	L	C
ATOM	6347	O	ALA	L	193	29.250	8.107	-36.567	1.00	47.78	L	O
ATOM	6349	N	CYS	L	194	30.070	9.035	-34.670	1.00	51.14	L	N
ATOM	6350	CA	CYS	L	194	28.875	9.749	-34.262	1.00	50.14	L	C
ATOM	6352	CB	CYS	L	194	28.528	9.329	-32.835	1.00	50.26	L	C
ATOM	6355	SG	CYS	L	194	27.025	9.988	-32.355	1.00	54.32	L	S
ATOM	6357	C	CYS	L	194	29.142	11.250	-34.268	1.00	48.33	L	C
ATOM	6358	O	CYS	L	194	29.904	11.729	-33.444	1.00	46.40	L	O
ATOM	6360	N	GLU	L	195	28.507	11.988	-35.178	1.00	50.19	L	N
ATOM	6361	CA	GLU	L	195	28.655	13.446	-35.254	1.00	50.14	L	C
ATOM	6363	CB	GLU	L	195	28.828	13.904	-36.705	1.00	49.47	L	C
ATOM	6366	CG	GLU	L	195	29.442	15.296	-36.815	1.00	50.72	L	C
ATOM	6369	CD	GLU	L	195	29.484	15.846	-38.241	1.00	53.94	L	C
ATOM	6370	OE1	GLU	L	195	28.487	15.645	-38.972	1.00	56.27	L	O
ATOM	6371	OE2	GLU	L	195	30.499	16.507	-38.606	1.00	46.08	L	O
ATOM	6372	C	GLU	L	195	27.472	14.192	-34.665	1.00	47.54	L	C
ATOM	6373	O	GLU	L	195	26.365	14.007	-35.117	1.00	47.84	L	O
ATOM	6375	N	VAL	L	196	27.726	15.087	-33.709	1.00	49.17	L	N
ATOM	6376	CA	VAL	L	196	26.661	15.799	-32.969	1.00	45.93	L	C
ATOM	6378	CB	VAL	L	196	26.742	15.500	-31.439	1.00	42.68	L	C
ATOM	6380	CG1	VAL	L	196	25.766	16.376	-30.603	1.00	34.28	L	C
ATOM	6384	CG2	VAL	L	196	26.488	14.019	-31.189	1.00	42.50	L	C
ATOM	6388	C	VAL	L	196	26.688	17.311	-33.193	1.00	45.66	L	C
ATOM	6389	O	VAL	L	196	27.691	17.954	-32.922	1.00	46.99	L	O
ATOM	6391	N	THR	L	197	25.570	17.856	-33.670	1.00	46.91	L	N
ATOM	6392	CA	THR	L	197	25.362	19.301	-33.844	1.00	46.84	L	C
ATOM	6394	CB	THR	L	197	24.759	19.615	-35.230	1.00	43.17	L	C
ATOM	6396	OG1	THR	L	197	25.604	19.073	-36.249	1.00	44.87	L	O
ATOM	6398	CG2	THR	L	197	24.610	21.110	-35.446	1.00	39.93	L	C
ATOM	6402	C	THR	L	197	24.390	19.829	-32.793	1.00	45.99	L	C
ATOM	6403	O	THR	L	197	23.282	19.331	-32.647	1.00	44.32	L	O
ATOM	6405	N	HIS	L	198	24.815	20.850	-32.072	1.00	48.27	L	N
ATOM	6406	CA	HIS	L	198	24.017	21.421	-31.002	1.00	48.02	L	C
ATOM	6408	CB	HIS	L	198	24.192	20.569	-29.726	1.00	46.41	L	C
ATOM	6411	CG	HIS	L	198	23.401	21.048	-28.552	1.00	44.30	L	C
ATOM	6412	ND1	HIS	L	198	22.071	20.738	-28.372	1.00	44.95	L	N
ATOM	6414	CE1	HIS	L	198	21.637	21.315	-27.266	1.00	43.07	L	C
ATOM	6416	NE2	HIS	L	198	22.638	21.975	-26.715	1.00	41.43	L	N
ATOM	6418	CD2	HIS	L	198	23.755	21.817	-27.496	1.00	42.19	L	C
ATOM	6420	C	HIS	L	198	24.491	22.840	-30.796	1.00	49.58	L	C
ATOM	6421	O	HIS	L	198	25.663	23.118	-30.993	1.00	52.10	L	O
ATOM	6423	N	GLN	L	199	23.574	23.722	-30.411	1.00	49.49	L	N
ATOM	6424	CA	GLN	L	199	23.859	25.135	-30.177	1.00	49.77	L	C
ATOM	6426	CB	GLN	L	199	22.595	25.815	-29.631	1.00	51.64	L	C
ATOM	6429	CG	GLN	L	199	22.779	27.305	-29.347	1.00	51.76	L	C
ATOM	6432	CD	GLN	L	199	21.484	28.016	-29.048	1.00	53.94	L	C
ATOM	6433	OE1	GLN	L	199	20.443	27.395	-28.772	1.00	50.61	L	O
ATOM	6434	NE2	GLN	L	199	21.539	29.340	-29.092	1.00	56.38	L	N
ATOM	6437	C	GLN	L	199	25.038	25.400	-29.219	1.00	49.16	L	C
ATOM	6438	O	GLN	L	199	25.795	26.351	-29.394	1.00	50.99	L	O
ATOM	6440	N	GLY	L	200	25.169	24.561	-28.202	1.00	46.70	L	N
ATOM	6441	CA	GLY	L	200	26.245	24.667	-27.213	1.00	46.48	L	C
ATOM	6444	C	GLY	L	200	27.595	24.140	-27.688	1.00	47.59	L	C
ATOM	6445	O	GLY	L	200	28.585	24.217	-26.958	1.00	46.17	L	O
ATOM	6447	N	LEU	L	201	27.641	23.610	-28.911	1.00	48.45	L	N

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ATOM   6448  CA  LEU L 201      28.898  23.232 -29.550  1.00 50.95      L    C
ATOM   6450  CB  LEU L 201      28.810  21.819 -30.115  1.00 48.31      L    C
ATOM   6453  CG  LEU L 201      28.481  20.691 -29.160  1.00 42.30      L    C
ATOM   6455  CD1 LEU L 201      28.103  19.460 -29.959  1.00 41.86      L    C
ATOM   6459  CD2 LEU L 201      29.648  20.441 -28.261  1.00 38.77      L    C
ATOM   6463  C   LEU L 201      29.186  24.184 -30.698  1.00 51.33      L    C
ATOM   6464  O   LEU L 201      28.361  24.312 -31.613  1.00 48.35      L    O
ATOM   6466  N   SER L 202      30.353  24.826 -30.653  1.00 54.52      L    N
ATOM   6467  CA  SER L 202      30.753  25.833 -31.649  1.00 56.76      L    C
ATOM   6469  CB  SER L 202      32.178  26.306 -31.359  1.00 50.69      L    C
ATOM   6472  OG  SER L 202      32.286  26.758 -30.036  1.00 48.46      L    O
ATOM   6474  C   SER L 202      30.682  25.290 -33.075  1.00 59.76      L    C
ATOM   6475  O   SER L 202      30.073  25.907 -33.947  1.00 58.24      L    O
ATOM   6477  N   SER L 203      31.340  24.151 -33.288  1.00 59.72      L    N
ATOM   6478  CA  SER L 203      31.172  23.329 -34.480  1.00 57.86      L    C
ATOM   6480  CB  SER L 203      32.460  23.267 -35.291  1.00 50.95      L    C
ATOM   6483  OG  SER L 203      32.819  24.548 -35.726  1.00 50.17      L    O
ATOM   6485  C   SER L 203      30.794  21.913 -34.050  1.00 58.51      L    C
ATOM   6486  O   SER L 203      31.028  21.541 -32.898  1.00 57.05      L    O
ATOM   6488  N   PRO L 204      30.222  21.114 -34.976  1.00 57.55      L    N
ATOM   6489  CA  PRO L 204      29.888  19.718 -34.701  1.00 57.91      L    C
ATOM   6491  CB  PRO L 204      29.421  19.194 -36.067  1.00 55.27      L    C
ATOM   6494  CG  PRO L 204      28.949  20.355 -36.772  1.00 53.04      L    C
ATOM   6497  CD  PRO L 204      29.826  21.490 -36.344  1.00 53.32      L    C
ATOM   6500  C   PRO L 204      31.043  18.841 -34.156  1.00 59.00      L    C
ATOM   6501  O   PRO L 204      32.135  18.794 -34.721  1.00 60.86      L    O
ATOM   6502  N   VAL L 205      30.756  18.137 -33.064  1.00 58.39      L    N
ATOM   6503  CA  VAL L 205      31.703  17.223 -32.418  1.00 55.63      L    C
ATOM   6505  CB  VAL L 205      31.570  17.320 -30.866  1.00 53.31      L    C
ATOM   6507  CG1 VAL L 205      32.248  16.153 -30.154  1.00 46.49      L    C
ATOM   6511  CG2 VAL L 205      32.124  18.650 -30.376  1.00 50.74      L    C
ATOM   6515  C   VAL L 205      31.440  15.783 -32.885  1.00 55.29      L    C
ATOM   6516  O   VAL L 205      30.293  15.340 -32.924  1.00 57.28      L    O
ATOM   6518  N   THR L 206      32.509  15.082 -33.254  1.00 54.15      L    N
ATOM   6519  CA  THR L 206      32.449  13.684 -33.657  1.00 51.32      L    C
ATOM   6521  CB  THR L 206      33.160  13.409 -34.991  1.00 53.60      L    C
ATOM   6523  OG1 THR L 206      32.382  13.946 -36.062  1.00 56.63      L    O
ATOM   6525  CG2 THR L 206      33.318  11.908 -35.225  1.00 53.34      L    C
ATOM   6529  C   THR L 206      33.083  12.830 -32.575  1.00 48.30      L    C
ATOM   6530  O   THR L 206      34.101  13.182 -32.003  1.00 44.93      L    O
ATOM   6532  N   LYS L 207      32.438  11.711 -32.278  1.00 48.11      L    N
ATOM   6533  CA  LYS L 207      32.951  10.746 -31.328  1.00 47.69      L    C
ATOM   6535  CB  LYS L 207      32.017  10.661 -30.130  1.00 51.27      L    C
ATOM   6538  CG  LYS L 207      32.591   9.963 -28.938  1.00 54.80      L    C
ATOM   6541  CD  LYS L 207      33.522  10.856 -28.161  1.00 56.35      L    C
ATOM   6544  CE  LYS L 207      34.129  10.089 -26.983  1.00 57.99      L    C
ATOM   6547  NZ  LYS L 207      35.075  10.969 -26.211  1.00 61.14      L    N
ATOM   6551  C   LYS L 207      32.995   9.447 -32.091  1.00 45.20      L    C
ATOM   6552  O   LYS L 207      32.029   9.100 -32.736  1.00 45.83      L    O
ATOM   6554  N   SER L 208      34.120   8.742 -32.062  1.00 46.22      L    N
ATOM   6555  CA  SER L 208      34.236   7.531 -32.871  1.00 47.63      L    C
ATOM   6557  CB  SER L 208      34.666   7.878 -34.302  1.00 47.55      L    C
ATOM   6560  OG  SER L 208      36.033   8.220 -34.384  1.00 41.56      L    O
ATOM   6562  C   SER L 208      35.180   6.500 -32.288  1.00 48.20      L    C
ATOM   6563  O   SER L 208      35.934   6.777 -31.362  1.00 52.20      L    O
ATOM   6565  N   PHE L 209      35.101   5.296 -32.831  1.00 46.66      L    N
ATOM   6566  CA  PHE L 209      36.035   4.233 -32.502  1.00 49.44      L    C
ATOM   6568  CB  PHE L 209      35.432   3.330 -31.420  1.00 46.41      L    C
ATOM   6571  CG  PHE L 209      34.239   2.542 -31.880  1.00 46.64      L    C
ATOM   6572  CD1 PHE L 209      34.398   1.286 -32.450  1.00 43.56      L    C
ATOM   6574  CE1 PHE L 209      33.311   0.548 -32.865  1.00 42.13      L    C
ATOM   6576  CZ  PHE L 209      32.052   1.059 -32.721  1.00 44.04      L    C
ATOM   6578  CE2 PHE L 209      31.870   2.314 -32.161  1.00 46.14      L    C
ATOM   6580  CD2 PHE L 209      32.956   3.047 -31.732  1.00 46.76      L    C
ATOM   6582  C   PHE L 209      36.341   3.409 -33.743  1.00 49.20      L    C
ATOM   6583  O   PHE L 209      35.588   3.448 -34.719  1.00 46.78      L    O
ATOM   6585  N   ASN L 210      37.426   2.640 -33.688  1.00 51.35      L    N
ATOM   6586  CA  ASN L 210      37.718   1.629 -34.720  1.00 52.39      L    C
ATOM   6588  CB  ASN L 210      39.204   1.572 -35.066  1.00 52.66      L    C
ATOM   6591  CG  ASN L 210      39.697   2.814 -35.753  1.00 51.88      L    C
ATOM   6592  OD1 ASN L 210      40.616   3.464 -35.271  1.00 49.14      L    O
ATOM   6593  ND2 ASN L 210      39.092   3.154 -36.891  1.00 53.74      L    N
ATOM   6596  C   ASN L 210      37.294   0.250 -34.228  1.00 52.59      L    C
ATOM   6597  O   ASN L 210      37.520  -0.089 -33.074  1.00 50.71      L    O
ATOM   6599  N   ARG L 211      36.684  -0.546 -35.096  1.00 55.47      L    N
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ATOM   6600  CA  ARG L 211      36.206  -1.863 -34.702  1.00 58.50           L    C
ATOM   6602  CB  ARG L 211      35.549  -2.581 -35.880  1.00 57.44           L    C
ATOM   6605  CG  ARG L 211      34.993  -3.961 -35.512  1.00 55.24           L    C
ATOM   6608  CD  ARG L 211      34.199  -4.594 -36.649  1.00 56.18           L    C
ATOM   6611  NE  ARG L 211      34.885  -4.525 -37.935  1.00 60.69           L    N
ATOM   6613  CZ  ARG L 211      36.031  -5.152 -38.235  1.00 60.74           L    C
ATOM   6614  NH1 ARG L 211      36.646  -5.936 -37.352  1.00 58.37           L    N
ATOM   6617  NH2 ARG L 211      36.570  -4.991 -39.443  1.00 55.17           L    N
ATOM   6620  C   ARG L 211      37.376  -2.679 -34.158  1.00 63.88           L    C
ATOM   6621  O   ARG L 211      38.414  -2.808 -34.814  1.00 61.01           L    O
ATOM   6623  N   GLY L 212      37.162  -3.266 -32.980  1.00 71.67           L    N
ATOM   6624  CA  GLY L 212      38.233  -3.558 -32.025  1.00 78.82           L    C
ATOM   6627  C   GLY L 212      38.122  -2.433 -31.015  1.00 85.15           L    C
ATOM   6628  O   GLY L 212      37.028  -1.892 -30.840  1.00 89.78           L    O
ATOM   6630  N   GLU L 213      39.221  -2.066 -30.357  1.00 87.23           L    N
ATOM   6631  CA  GLU L 213      39.267  -0.853 -29.493  1.00 87.94           L    C
ATOM   6633  CB  GLU L 213      39.310   0.415 -30.349  1.00 87.71           L    C
ATOM   6636  CG  GLU L 213      40.434   0.514 -31.355  1.00 86.45           L    C
ATOM   6639  CD  GLU L 213      40.584   1.929 -31.898  1.00 84.96           L    C
ATOM   6640  OE1 GLU L 213      39.728   2.794 -31.599  1.00 80.72           L    O
ATOM   6641  OE2 GLU L 213      41.559   2.168 -32.633  1.00 83.00           L    O
ATOM   6642  C   GLU L 213      38.089  -0.655 -28.506  1.00 89.34           L    C
ATOM   6643  O   GLU L 213      36.944  -0.930 -28.844  1.00 88.75           L    O
ATOM   6645  N   CYS L 214      38.358  -0.117 -27.313  1.00 88.21           L    N
ATOM   6646  CA  CYS L 214      37.330   0.005 -26.256  1.00 88.02           L    C
ATOM   6648  CB  CYS L 214      37.737  -0.738 -24.973  1.00 88.17           L    C
ATOM   6651  SG  CYS L 214      38.487  -2.372 -25.224  1.00 87.90           L    S
ATOM   6653  C   CYS L 214      37.054   1.467 -25.929  1.00 87.94           L    C
ATOM   6654  O   CYS L 214      37.836   2.119 -25.236  1.00 87.27           L    O
ATOM   6656  N   GLU H   1      -2.069   3.119   6.492  1.00 44.41           H    N
ATOM   6657  CA  GLU H   1      -2.053   4.100   5.359  1.00 46.29           H    C
ATOM   6659  CB  GLU H   1      -0.634   4.500   4.954  1.00 46.98           H    C
ATOM   6662  CG  GLU H   1       0.037   3.605   3.923  1.00 50.56           H    C
ATOM   6665  CD  GLU H   1       0.350   2.212   4.415  1.00 50.71           H    C
ATOM   6666  OE1 GLU H   1       0.116   1.878   5.612  1.00 47.53           H    O
ATOM   6667  OE2 GLU H   1       0.830   1.440   3.566  1.00 54.91           H    O
ATOM   6668  C   GLU H   1      -2.853   3.592   4.156  1.00 47.06           H    C
ATOM   6669  O   GLU H   1      -3.028   2.398   3.968  1.00 47.23           H    O
ATOM   6673  N   VAL H   2      -3.341   4.522   3.340  1.00 48.38           H    N
ATOM   6674  CA  VAL H   2      -4.169   4.166   2.196  1.00 41.58           H    C
ATOM   6676  CB  VAL H   2      -5.126   5.328   1.775  1.00 39.99           H    C
ATOM   6678  CG1 VAL H   2      -5.920   4.969   0.502  1.00 37.91           H    C
ATOM   6682  CG2 VAL H   2      -6.081   5.700   2.925  1.00 36.96           H    C
ATOM   6686  C   VAL H   2      -3.267   3.725   1.053  1.00 41.29           H    C
ATOM   6687  O   VAL H   2      -2.196   4.330   0.801  1.00 38.23           H    O
ATOM   6689  N   GLN H   3      -3.697   2.653   0.389  1.00 39.72           H    N
ATOM   6690  CA  GLN H   3      -3.020   2.111  -0.788  1.00 40.63           H    C
ATOM   6692  CB  GLN H   3      -2.121   0.929  -0.386  1.00 41.89           H    C
ATOM   6695  CG  GLN H   3      -1.071   1.275   0.639  1.00 45.64           H    C
ATOM   6698  CD  GLN H   3      -0.044   2.270   0.104  1.00 47.09           H    C
ATOM   6699  OE1 GLN H   3       0.014   2.553  -1.107  1.00 47.60           H    O
ATOM   6700  NE2 GLN H   3       0.766   2.810   1.005  1.00 39.17           H    N
ATOM   6703  C   GLN H   3      -4.057   1.618  -1.816  1.00 37.05           H    C
ATOM   6704  O   GLN H   3      -5.119   1.080  -1.451  1.00 36.65           H    O
ATOM   6706  N   LEU H   4      -3.716   1.799  -3.083  1.00 33.69           H    N
ATOM   6707  CA  LEU H   4      -4.460   1.265  -4.193  1.00 35.71           H    C
ATOM   6709  CB  LEU H   4      -5.228   2.383  -4.921  1.00 38.38           H    C
ATOM   6712  CG  LEU H   4      -6.286   3.156  -4.113  1.00 32.18           H    C
ATOM   6714  CD1 LEU H   4      -6.875   4.315  -4.936  1.00 33.93           H    C
ATOM   6718  CD2 LEU H   4      -7.400   2.258  -3.677  1.00 35.29           H    C
ATOM   6722  C   LEU H   4      -3.445   0.589  -5.112  1.00 34.33           H    C
ATOM   6723  O   LEU H   4      -2.504   1.229  -5.599  1.00 34.20           H    O
ATOM   6725  N   VAL H   5      -3.600  -0.719  -5.293  1.00 34.00           H    N
ATOM   6726  CA  VAL H   5      -2.628  -1.512  -6.008  1.00 35.22           H    C
ATOM   6728  CB  VAL H   5      -1.968  -2.536  -5.040  1.00 33.57           H    C
ATOM   6730  CG1 VAL H   5      -1.056  -3.515  -5.810  1.00 32.11           H    C
ATOM   6734  CG2 VAL H   5      -1.187  -1.781  -3.956  1.00 31.13           H    C
ATOM   6738  C   VAL H   5      -3.356  -2.204  -7.146  1.00 37.40           H    C
ATOM   6739  O   VAL H   5      -4.295  -2.962  -6.891  1.00 39.10           H    O
ATOM   6741  N   GLN H   6      -2.933  -1.914  -8.379  1.00 36.95           H    N
ATOM   6742  CA  GLN H   6      -3.536  -2.451  -9.562  1.00 38.93           H    C
ATOM   6744  CB  GLN H   6      -3.671  -1.341 -10.615  1.00 44.00           H    C
ATOM   6747  CG  GLN H   6      -4.609  -0.174 -10.223  1.00 39.67           H    C
ATOM   6750  CD  GLN H   6      -4.610   0.916 -11.276  1.00 38.07           H    C
ATOM   6751  OE1 GLN H   6      -4.106   2.031 -11.066  1.00 33.97           H    O
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ATOM	6752	NE2	GLN	H	6	-5.152	0.594	-12.425	1.00	39.45	H	N
ATOM	6755	C	GLN	H	6	-2.742	-3.651	-10.122	1.00	41.19	H	C
ATOM	6756	O	GLN	H	6	-1.579	-3.836	-9.831	1.00	35.70	H	O
ATOM	6758	N	SER	H	7	-3.410	-4.478	-10.912	1.00	44.44	H	N
ATOM	6759	CA	SER	H	7	-2.780	-5.612	-11.572	1.00	41.36	H	C
ATOM	6761	CB	SER	H	7	-3.854	-6.534	-12.172	1.00	40.72	H	C
ATOM	6764	OG	SER	H	7	-4.864	-5.787	-12.854	1.00	38.23	H	O
ATOM	6766	C	SER	H	7	-1.774	-5.144	-12.633	1.00	41.77	H	C
ATOM	6767	O	SER	H	7	-1.750	-3.963	-13.005	1.00	42.33	H	O
ATOM	6769	N	GLY	H	8	-0.955	-6.084	-13.106	1.00	38.12	H	N
ATOM	6770	CA	GLY	H	8	0.159	-5.793	-13.984	1.00	39.46	H	C
ATOM	6773	C	GLY	H	8	-0.242	-5.567	-15.424	1.00	39.60	H	C
ATOM	6774	O	GLY	H	8	-1.418	-5.666	-15.757	1.00	40.34	H	O
ATOM	6776	N	PRO	H	9	0.739	-5.256	-16.282	1.00	39.99	H	N
ATOM	6777	CA	PRO	H	9	0.491	-4.955	-17.678	1.00	41.96	H	C
ATOM	6779	CB	PRO	H	9	1.883	-4.571	-18.216	1.00	42.07	H	C
ATOM	6782	CG	PRO	H	9	2.860	-5.196	-17.297	1.00	42.68	H	C
ATOM	6785	CD	PRO	H	9	2.177	-5.184	-15.946	1.00	47.57	H	C
ATOM	6788	C	PRO	H	9	-0.036	-6.167	-18.402	1.00	44.52	H	C
ATOM	6789	O	PRO	H	9	0.319	-7.284	-18.042	1.00	45.20	H	O
ATOM	6790	N	GLU	H	10	-0.877	-5.944	-19.412	1.00	46.33	H	N
ATOM	6791	CA	GLU	H	10	-1.410	-7.029	-20.199	1.00	47.53	H	C
ATOM	6793	CB	GLU	H	10	-2.784	-7.379	-19.698	1.00	53.37	H	C
ATOM	6796	CG	GLU	H	10	-2.710	-8.092	-18.383	1.00	54.90	H	C
ATOM	6799	CD	GLU	H	10	-4.055	-8.433	-17.889	1.00	57.03	H	C
ATOM	6800	OE1	GLU	H	10	-4.560	-7.731	-16.989	1.00	59.14	H	O
ATOM	6801	OE2	GLU	H	10	-4.623	-9.391	-18.440	1.00	68.47	H	O
ATOM	6802	C	GLU	H	10	-1.431	-6.749	-21.686	1.00	46.71	H	C
ATOM	6803	O	GLU	H	10	-1.543	-5.606	-22.128	1.00	47.81	H	O
ATOM	6805	N	LEU	H	11	-1.276	-7.824	-22.448	1.00	48.57	H	N
ATOM	6806	CA	LEU	H	11	-1.296	-7.786	-23.898	1.00	47.81	H	C
ATOM	6808	CB	LEU	H	11	0.007	-8.397	-24.458	1.00	50.65	H	C
ATOM	6811	CG	LEU	H	11	0.072	-8.710	-25.955	1.00	46.87	H	C
ATOM	6813	CD1	LEU	H	11	0.007	-7.438	-26.762	1.00	41.30	H	C
ATOM	6817	CD2	LEU	H	11	1.315	-9.517	-26.280	1.00	47.16	H	C
ATOM	6821	C	LEU	H	11	-2.498	-8.612	-24.300	1.00	46.37	H	C
ATOM	6822	O	LEU	H	11	-2.632	-9.756	-23.869	1.00	41.42	H	O
ATOM	6824	N	LYS	H	12	-3.380	-8.000	-25.087	1.00	46.53	H	N
ATOM	6825	CA	LYS	H	12	-4.588	-8.634	-25.566	1.00	45.75	H	C
ATOM	6827	CB	LYS	H	12	-5.803	-8.007	-24.875	1.00	46.13	H	C
ATOM	6830	CG	LYS	H	12	-5.865	-8.292	-23.376	1.00	42.46	H	C
ATOM	6833	CD	LYS	H	12	-6.254	-9.732	-23.094	1.00	43.81	H	C
ATOM	6836	CE	LYS	H	12	-6.012	-10.084	-21.650	1.00	44.50	H	C
ATOM	6839	NZ	LYS	H	12	-6.470	-11.454	-21.313	1.00	42.52	H	N
ATOM	6843	C	LYS	H	12	-4.666	-8.440	-27.062	1.00	44.24	H	C
ATOM	6844	O	LYS	H	12	-4.068	-7.504	-27.605	1.00	41.65	H	O
ATOM	6846	N	LYS	H	13	-5.370	-9.347	-27.729	1.00	46.12	H	N
ATOM	6847	CA	LYS	H	13	-5.550	-9.251	-29.167	1.00	50.31	H	C
ATOM	6849	CB	LYS	H	13	-5.668	-10.646	-29.789	1.00	56.21	H	C
ATOM	6852	CG	LYS	H	13	-4.537	-11.594	-29.326	1.00	57.01	H	C
ATOM	6855	CD	LYS	H	13	-3.869	-12.359	-30.468	1.00	55.53	H	C
ATOM	6858	CE	LYS	H	13	-2.612	-13.118	-29.978	1.00	55.81	H	C
ATOM	6861	NZ	LYS	H	13	-1.466	-12.995	-30.936	1.00	50.29	H	N
ATOM	6865	C	LYS	H	13	-6.753	-8.379	-29.421	1.00	45.92	H	C
ATOM	6866	O	LYS	H	13	-7.574	-8.185	-28.524	1.00	44.27	H	O
ATOM	6868	N	PRO	H	14	-6.839	-7.788	-30.613	1.00	47.12	H	N
ATOM	6869	CA	PRO	H	14	-8.039	-7.030	-30.912	1.00	49.95	H	C
ATOM	6871	CB	PRO	H	14	-7.786	-6.537	-32.339	1.00	50.25	H	C
ATOM	6874	CG	PRO	H	14	-6.311	-6.500	-32.455	1.00	48.04	H	C
ATOM	6877	CD	PRO	H	14	-5.863	-7.704	-31.710	1.00	50.66	H	C
ATOM	6880	C	PRO	H	14	-9.258	-7.929	-30.831	1.00	51.78	H	C
ATOM	6881	O	PRO	H	14	-9.149	-9.129	-31.139	1.00	52.51	H	O
ATOM	6882	N	GLY	H	15	-10.386	-7.366	-30.379	1.00	51.68	H	N
ATOM	6883	CA	GLY	H	15	-11.642	-8.122	-30.239	1.00	49.53	H	C
ATOM	6886	C	GLY	H	15	-11.797	-8.818	-28.901	1.00	46.32	H	C
ATOM	6887	O	GLY	H	15	-12.902	-9.107	-28.487	1.00	51.33	H	O
ATOM	6889	N	ALA	H	16	-10.685	-9.077	-28.221	1.00	43.87	H	N
ATOM	6890	CA	ALA	H	16	-10.714	-9.655	-26.887	1.00	44.61	H	C
ATOM	6892	CB	ALA	H	16	-9.329	-10.249	-26.508	1.00	40.53	H	C
ATOM	6896	C	ALA	H	16	-11.180	-8.645	-25.810	1.00	43.92	H	C
ATOM	6897	O	ALA	H	16	-11.552	-7.488	-26.081	1.00	45.90	H	O
ATOM	6899	N	SER	H	17	-11.183	-9.122	-24.582	1.00	42.33	H	N
ATOM	6900	CA	SER	H	17	-11.592	-8.329	-23.456	1.00	47.23	H	C
ATOM	6902	CB	SER	H	17	-12.929	-8.848	-22.918	1.00	53.98	H	C
ATOM	6905	OG	SER	H	17	-12.745	-10.020	-22.146	1.00	56.45	H	O

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ATOM	6907	C	SER	H	17	-10.518	-8.408	-22.372	1.00	47.23	H	C
ATOM	6908	O	SER	H	17	-9.720	-9.361	-22.331	1.00	43.65	H	O
ATOM	6910	N	VAL	H	18	-10.500	-7.411	-21.497	1.00	45.22	H	N
ATOM	6911	CA	VAL	H	18	-9.517	-7.387	-20.411	1.00	45.51	H	C
ATOM	6913	CB	VAL	H	18	-8.282	-6.498	-20.768	1.00	46.57	H	C
ATOM	6915	CG1	VAL	H	18	-8.649	-5.047	-20.735	1.00	45.60	H	C
ATOM	6919	CG2	VAL	H	18	-7.122	-6.783	-19.816	1.00	45.99	H	C
ATOM	6923	C	VAL	H	18	-10.163	-6.918	-19.106	1.00	46.25	H	C
ATOM	6924	O	VAL	H	18	-11.101	-6.131	-19.109	1.00	39.23	H	O
ATOM	6926	N	LYS	H	19	-9.652	-7.424	-17.988	1.00	50.25	H	N
ATOM	6927	CA	LYS	H	19	-10.161	-7.053	-16.684	1.00	47.70	H	C
ATOM	6929	CB	LYS	H	19	-10.854	-8.244	-16.026	1.00	51.54	H	C
ATOM	6932	CG	LYS	H	19	-11.356	-7.962	-14.609	1.00	57.22	H	C
ATOM	6935	CD	LYS	H	19	-12.866	-7.841	-14.520	1.00	61.40	H	C
ATOM	6938	CE	LYS	H	19	-13.479	-9.111	-13.974	1.00	62.59	H	C
ATOM	6941	NZ	LYS	H	19	-14.945	-8.960	-13.816	1.00	63.97	H	N
ATOM	6945	C	LYS	H	19	-9.010	-6.574	-15.802	1.00	44.19	H	C
ATOM	6946	O	LYS	H	19	-8.164	-7.361	-15.421	1.00	44.02	H	O
ATOM	6948	N	VAL	H	20	-9.014	-5.290	-15.459	1.00	43.25	H	N
ATOM	6949	CA	VAL	H	20	-8.010	-4.701	-14.580	1.00	42.18	H	C
ATOM	6951	CB	VAL	H	20	-7.571	-3.308	-15.082	1.00	38.88	H	C
ATOM	6953	CG1	VAL	H	20	-6.553	-2.688	-14.164	1.00	38.24	H	C
ATOM	6957	CG2	VAL	H	20	-7.009	-3.439	-16.482	1.00	35.76	H	C
ATOM	6961	C	VAL	H	20	-8.565	-4.605	-13.167	1.00	41.65	H	C
ATOM	6962	O	VAL	H	20	-9.737	-4.277	-12.966	1.00	42.26	H	O
ATOM	6964	N	SER	H	21	-7.724	-4.909	-12.184	1.00	43.70	H	N
ATOM	6965	CA	SER	H	21	-8.123	-4.855	-10.788	1.00	41.09	H	C
ATOM	6967	CB	SER	H	21	-7.819	-6.172	-10.052	1.00	48.51	H	C
ATOM	6970	OG	SER	H	21	-6.435	-6.461	-9.991	1.00	52.42	H	O
ATOM	6972	C	SER	H	21	-7.475	-3.681	-10.076	1.00	42.88	H	C
ATOM	6973	O	SER	H	21	-6.356	-3.258	-10.417	1.00	41.68	H	O
ATOM	6975	N	CYS	H	22	-8.215	-3.147	-9.102	1.00	42.75	H	N
ATOM	6976	CA	CYS	H	22	-7.755	-2.100	-8.217	1.00	40.50	H	C
ATOM	6978	CB	CYS	H	22	-8.450	-0.763	-8.548	1.00	41.81	H	C
ATOM	6981	SG	CYS	H	22	-7.980	0.592	-7.398	1.00	42.41	H	S
ATOM	6983	C	CYS	H	22	-8.043	-2.521	-6.761	1.00	38.28	H	C
ATOM	6984	O	CYS	H	22	-9.115	-2.229	-6.220	1.00	37.51	H	O
ATOM	6986	N	LYS	H	23	-7.069	-3.177	-6.132	1.00	40.57	H	N
ATOM	6987	CA	LYS	H	23	-7.179	-3.620	-4.737	1.00	43.95	H	C
ATOM	6989	CB	LYS	H	23	-6.211	-4.775	-4.438	1.00	48.68	H	C
ATOM	6992	CG	LYS	H	23	-6.407	-6.037	-5.293	1.00	58.62	H	C
ATOM	6995	CD	LYS	H	23	-5.069	-6.752	-5.685	1.00	59.16	H	C
ATOM	6998	CE	LYS	H	23	-4.404	-7.554	-4.541	1.00	62.49	H	C
ATOM	7001	NZ	LYS	H	23	-2.913	-7.774	-4.753	1.00	57.21	H	N
ATOM	7005	C	LYS	H	23	-6.856	-2.463	-3.776	1.00	41.66	H	C
ATOM	7006	O	LYS	H	23	-5.757	-1.921	-3.793	1.00	41.41	H	O
ATOM	7008	N	ALA	H	24	-7.812	-2.120	-2.922	1.00	39.41	H	N
ATOM	7009	CA	ALA	H	24	-7.690	-1.004	-2.000	1.00	37.89	H	C
ATOM	7011	CB	ALA	H	24	-9.002	-0.198	-2.011	1.00	29.31	H	C
ATOM	7015	C	ALA	H	24	-7.404	-1.516	-0.592	1.00	37.96	H	C
ATOM	7016	O	ALA	H	24	-7.988	-2.511	-0.147	1.00	35.64	H	O
ATOM	7018	N	SER	H	25	-6.524	-0.826	0.123	1.00	41.16	H	N
ATOM	7019	CA	SER	H	25	-6.249	-1.171	1.532	1.00	40.67	H	C
ATOM	7021	CB	SER	H	25	-4.960	-2.028	1.679	1.00	38.85	H	C
ATOM	7024	OG	SER	H	25	-4.445	-2.478	0.422	1.00	45.75	H	O
ATOM	7026	C	SER	H	25	-6.133	0.115	2.363	1.00	38.77	H	C
ATOM	7027	O	SER	H	25	-5.933	1.184	1.829	1.00	36.88	H	O
ATOM	7029	N	GLY	H	26	-6.230	-0.018	3.674	1.00	39.12	H	N
ATOM	7030	CA	GLY	H	26	-5.881	1.061	4.588	1.00	39.22	H	C
ATOM	7033	C	GLY	H	26	-7.044	1.945	5.013	1.00	40.31	H	C
ATOM	7034	O	GLY	H	26	-6.873	2.920	5.770	1.00	43.74	H	O
ATOM	7036	N	TYR	H	27	-8.227	1.611	4.519	1.00	36.28	H	N
ATOM	7037	CA	TYR	H	27	-9.412	2.398	4.767	1.00	35.38	H	C
ATOM	7039	CB	TYR	H	27	-9.430	3.663	3.895	1.00	35.94	H	C
ATOM	7042	CG	TYR	H	27	-9.750	3.425	2.427	1.00	35.71	H	C
ATOM	7043	CD1	TYR	H	27	-11.055	3.634	1.924	1.00	37.41	H	C
ATOM	7045	CE1	TYR	H	27	-11.352	3.421	0.587	1.00	34.95	H	C
ATOM	7047	CZ	TYR	H	27	-10.334	3.005	-0.276	1.00	35.55	H	C
ATOM	7048	OH	TYR	H	27	-10.588	2.801	-1.608	1.00	33.27	H	O
ATOM	7050	CE2	TYR	H	27	-9.043	2.801	0.201	1.00	36.94	H	C
ATOM	7052	CD2	TYR	H	27	-8.760	3.004	1.543	1.00	34.54	H	C
ATOM	7054	C	TYR	H	27	-10.669	1.571	4.499	1.00	34.75	H	C
ATOM	7055	O	TYR	H	27	-10.593	0.443	4.033	1.00	31.57	H	O
ATOM	7057	N	THR	H	28	-11.830	2.143	4.794	1.00	38.68	H	N
ATOM	7058	CA	THR	H	28	-13.099	1.443	4.547	1.00	37.61	H	C

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ATOM   7060  CB  THR H  28     -14.251   1.933   5.486  1.00 40.36      H    C
ATOM   7062  OG1 THR H  28     -13.831   1.847   6.849  1.00 42.52      H    O
ATOM   7064  CG2 THR H  28     -15.532   1.066   5.301  1.00 42.93      H    C
ATOM   7068  C   THR H  28     -13.557   1.602   3.092  1.00 37.95      H    C
ATOM   7069  O   THR H  28     -14.098   2.634   2.707  1.00 37.82      H    O
ATOM   7071  N   PHE H  29     -13.371   0.546   2.310  1.00 39.48      H    N
ATOM   7072  CA  PHE H  29     -13.672   0.529   0.880  1.00 38.21      H    C
ATOM   7074  CB  PHE H  29     -13.834  -0.916   0.449  1.00 37.30      H    C
ATOM   7077  CG  PHE H  29     -13.892  -1.125  -1.039  1.00 40.52      H    C
ATOM   7078  CD1 PHE H  29     -12.870  -0.680  -1.864  1.00 40.12      H    C
ATOM   7080  CE1 PHE H  29     -12.923  -0.894  -3.248  1.00 37.44      H    C
ATOM   7082  CZ  PHE H  29     -13.995  -1.588  -3.806  1.00 37.58      H    C
ATOM   7084  CE2 PHE H  29     -14.997  -2.065  -3.002  1.00 35.77      H    C
ATOM   7086  CD2 PHE H  29     -14.944  -1.842  -1.611  1.00 40.68      H    C
ATOM   7088  C   PHE H  29     -14.948   1.302   0.521  1.00 38.70      H    C
ATOM   7089  O   PHE H  29     -14.979   2.115  -0.428  1.00 36.24      H    O
ATOM   7091  N   THR H  30     -15.999   1.045   1.288  1.00 39.29      H    N
ATOM   7092  CA  THR H  30     -17.344   1.533   0.949  1.00 36.64      H    C
ATOM   7094  CB  THR H  30     -18.502   0.663   1.541  1.00 37.48      H    C
ATOM   7096  OG1 THR H  30     -18.355   0.537   2.961  1.00 34.24      H    O
ATOM   7098  CG2 THR H  30     -18.565  -0.711   0.881  1.00 31.39      H    C
ATOM   7102  C   THR H  30     -17.612   2.965   1.380  1.00 35.00      H    C
ATOM   7103  O   THR H  30     -18.674   3.504   1.083  1.00 37.71      H    O
ATOM   7105  N   ASN H  31     -16.675   3.591   2.078  1.00 36.04      H    N
ATOM   7106  CA  ASN H  31     -16.818   5.004   2.397  1.00 37.44      H    C
ATOM   7108  CB  ASN H  31     -15.923   5.374   3.588  1.00 44.04      H    C
ATOM   7111  CG  ASN H  31     -16.546   4.994   4.922  1.00 43.80      H    C
ATOM   7112  OD1 ASN H  31     -17.609   4.348   4.970  1.00 37.35      H    O
ATOM   7113  ND2 ASN H  31     -15.887   5.398   6.019  1.00 43.42      H    N
ATOM   7116  C   ASN H  31     -16.531   5.926   1.208  1.00 33.99      H    C
ATOM   7117  O   ASN H  31     -16.973   7.077   1.177  1.00 32.67      H    O
ATOM   7119  N   TYR H  32     -15.780   5.430   0.234  1.00 35.95      H    N
ATOM   7120  CA  TYR H  32     -15.290   6.251  -0.857  1.00 35.74      H    C
ATOM   7122  CB  TYR H  32     -13.815   6.484  -0.666  1.00 41.31      H    C
ATOM   7125  CG  TYR H  32     -13.440   7.234   0.579  1.00 41.68      H    C
ATOM   7126  CD1 TYR H  32     -13.091   8.567   0.510  1.00 40.27      H    C
ATOM   7128  CE1 TYR H  32     -12.708   9.262   1.624  1.00 40.72      H    C
ATOM   7130  CZ  TYR H  32     -12.671   8.648   2.847  1.00 43.51      H    C
ATOM   7131  OH  TYR H  32     -12.271   9.403   3.940  1.00 43.46      H    O
ATOM   7133  CE2 TYR H  32     -13.032   7.312   2.962  1.00 43.36      H    C
ATOM   7135  CD2 TYR H  32     -13.404   6.607   1.817  1.00 41.58      H    C
ATOM   7137  C   TYR H  32     -15.479   5.508  -2.146  1.00 34.61      H    C
ATOM   7138  O   TYR H  32     -15.144   4.345  -2.224  1.00 35.22      H    O
ATOM   7140  N   GLY H  33     -15.980   6.202  -3.168  1.00 37.25      H    N
ATOM   7141  CA  GLY H  33     -16.134   5.631  -4.502  1.00 34.00      H    C
ATOM   7144  C   GLY H  33     -14.786   5.504  -5.185  1.00 33.97      H    C
ATOM   7145  O   GLY H  33     -13.754   5.887  -4.619  1.00 35.49      H    O
ATOM   7147  N   MET H  34     -14.799   4.984  -6.410  1.00 31.65      H    N
ATOM   7148  CA  MET H  34     -13.582   4.786  -7.189  1.00 32.60      H    C
ATOM   7150  CB  MET H  34     -13.293   3.279  -7.315  1.00 34.92      H    C
ATOM   7153  CG  MET H  34     -11.840   2.878  -7.630  1.00 36.96      H    C
ATOM   7156  SD  MET H  34     -10.641   3.345  -6.341  1.00 42.66      H    S
ATOM   7157  CE  MET H  34     -10.978   2.083  -5.110  1.00 38.61      H    C
ATOM   7161  C   MET H  34     -13.760   5.415  -8.565  1.00 31.99      H    C
ATOM   7162  O   MET H  34     -14.744   5.126  -9.254  1.00 33.25      H    O
ATOM   7164  N   ASN H  35     -12.827   6.291  -8.955  1.00 29.67      H    N
ATOM   7165  CA  ASN H  35     -12.793   6.829 -10.316  1.00 30.93      H    C
ATOM   7167  CB  ASN H  35     -12.310   8.270 -10.329  1.00 38.41      H    C
ATOM   7170  CG  ASN H  35     -13.121   9.159  -9.433  1.00 36.55      H    C
ATOM   7171  OD1 ASN H  35     -14.293   8.883  -9.170  1.00 35.28      H    O
ATOM   7172  ND2 ASN H  35     -12.505  10.241  -8.956  1.00 34.90      H    N
ATOM   7175  C   ASN H  35     -11.868   5.999 -11.188  1.00 29.55      H    C
ATOM   7176  O   ASN H  35     -10.906   5.403 -10.694  1.00 29.61      H    O
ATOM   7178  N   TRP H  36     -12.186   5.946 -12.478  1.00 33.67      H    N
ATOM   7179  CA  TRP H  36     -11.316   5.339 -13.479  1.00 32.57      H    C
ATOM   7181  CB  TRP H  36     -12.054   4.189 -14.174  1.00 34.47      H    C
ATOM   7184  CG  TRP H  36     -12.151   2.998 -13.278  1.00 36.68      H    C
ATOM   7185  CD1 TRP H  36     -13.222   2.629 -12.476  1.00 34.33      H    C
ATOM   7187  NE1 TRP H  36     -12.907   1.493 -11.779  1.00 33.27      H    N
ATOM   7189  CE2 TRP H  36     -11.626   1.104 -12.100  1.00 35.81      H    C
ATOM   7190  CD2 TRP H  36     -11.120   2.033 -13.037  1.00 37.28      H    C
ATOM   7191  CE3 TRP H  36      -9.820   1.854 -13.531  1.00 36.98      H    C
ATOM   7193  CZ3 TRP H  36      -9.071   0.759 -13.070  1.00 35.74      H    C
ATOM   7195  CH2 TRP H  36      -9.615  -0.149 -12.152  1.00 34.72      H    C
ATOM   7197  CZ2 TRP H  36     -10.879   0.000 -11.665  1.00 34.45      H    C
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ATOM	7199	C	TRP	H	36	-10.838	6.401	-14.472	1.00	31.55	H	C
ATOM	7200	O	TRP	H	36	-11.616	7.241	-14.929	1.00	33.50	H	O
ATOM	7202	N	VAL	H	37	-9.545	6.376	-14.770	1.00	35.31	H	N
ATOM	7203	CA	VAL	H	37	-8.907	7.379	-15.621	1.00	32.74	H	C
ATOM	7205	CB	VAL	H	37	-8.078	8.327	-14.728	1.00	35.31	H	C
ATOM	7207	CG1	VAL	H	37	-7.252	9.344	-15.548	1.00	31.80	H	C
ATOM	7211	CG2	VAL	H	37	-9.002	9.029	-13.700	1.00	28.38	H	C
ATOM	7215	C	VAL	H	37	-8.028	6.653	-16.652	1.00	34.51	H	C
ATOM	7216	O	VAL	H	37	-7.355	5.664	-16.328	1.00	31.66	H	O
ATOM	7218	N	ARG	H	38	-8.072	7.129	-17.891	1.00	35.53	H	N
ATOM	7219	CA	ARG	H	38	-7.304	6.561	-18.998	1.00	36.02	H	C
ATOM	7221	CB	ARG	H	38	-8.285	6.245	-20.125	1.00	38.86	H	C
ATOM	7224	CG	ARG	H	38	-7.703	5.713	-21.398	1.00	38.77	H	C
ATOM	7227	CD	ARG	H	38	-8.786	5.655	-22.452	1.00	42.62	H	C
ATOM	7230	NE	ARG	H	38	-8.282	5.229	-23.748	1.00	44.69	H	N
ATOM	7232	CZ	ARG	H	38	-8.094	6.013	-24.818	1.00	56.14	H	C
ATOM	7233	NH1	ARG	H	38	-8.361	7.312	-24.800	1.00	57.13	H	N
ATOM	7236	NH2	ARG	H	38	-7.634	5.483	-25.941	1.00	56.02	H	N
ATOM	7239	C	ARG	H	38	-6.248	7.552	-19.509	1.00	34.09	H	C
ATOM	7240	O	ARG	H	38	-6.507	8.747	-19.595	1.00	30.74	H	O
ATOM	7242	N	GLN	H	39	-5.064	7.057	-19.862	1.00	32.78	H	N
ATOM	7243	CA	GLN	H	39	-4.079	7.870	-20.594	1.00	32.90	H	C
ATOM	7245	CB	GLN	H	39	-2.996	8.369	-19.663	1.00	30.72	H	C
ATOM	7248	CG	GLN	H	39	-2.163	9.503	-20.270	1.00	34.90	H	C
ATOM	7251	CD	GLN	H	39	-1.277	10.138	-19.245	1.00	36.13	H	C
ATOM	7252	OE1	GLN	H	39	-0.820	9.471	-18.315	1.00	42.34	H	O
ATOM	7253	NE2	GLN	H	39	-1.023	11.423	-19.396	1.00	39.51	H	N
ATOM	7256	C	GLN	H	39	-3.435	7.106	-21.746	1.00	36.84	H	C
ATOM	7257	O	GLN	H	39	-2.567	6.241	-21.542	1.00	39.35	H	O
ATOM	7259	N	ALA	H	40	-3.882	7.403	-22.960	1.00	38.89	H	N
ATOM	7260	CA	ALA	H	40	-3.262	6.842	-24.145	1.00	39.82	H	C
ATOM	7262	CB	ALA	H	40	-4.056	7.213	-25.394	1.00	35.21	H	C
ATOM	7266	C	ALA	H	40	-1.825	7.387	-24.228	1.00	43.70	H	C
ATOM	7267	O	ALA	H	40	-1.533	8.460	-23.664	1.00	43.29	H	O
ATOM	7269	N	PRO	H	41	-0.925	6.656	-24.922	1.00	44.16	H	N
ATOM	7270	CA	PRO	H	41	0.473	7.054	-24.945	1.00	48.23	H	C
ATOM	7272	CB	PRO	H	41	1.143	5.956	-25.785	1.00	51.01	H	C
ATOM	7275	CG	PRO	H	41	0.213	4.784	-25.668	1.00	48.33	H	C
ATOM	7278	CD	PRO	H	41	-1.136	5.419	-25.693	1.00	47.24	H	C
ATOM	7281	C	PRO	H	41	0.718	8.454	-25.521	1.00	47.09	H	C
ATOM	7282	O	PRO	H	41	0.339	8.746	-26.653	1.00	47.59	H	O
ATOM	7283	N	GLY	H	42	1.313	9.313	-24.699	1.00	48.32	H	N
ATOM	7284	CA	GLY	H	42	1.620	10.688	-25.081	1.00	49.56	H	C
ATOM	7287	C	GLY	H	42	0.422	11.629	-25.108	1.00	51.19	H	C
ATOM	7288	O	GLY	H	42	0.553	12.770	-25.570	1.00	54.61	H	O
ATOM	7290	N	GLN	H	43	-0.739	11.168	-24.637	1.00	48.17	H	N
ATOM	7291	CA	GLN	H	43	-1.971	11.970	-24.663	1.00	43.52	H	C
ATOM	7293	CB	GLN	H	43	-3.107	11.147	-25.249	1.00	47.91	H	C
ATOM	7296	CG	GLN	H	43	-2.807	10.646	-26.641	1.00	54.23	H	C
ATOM	7299	CD	GLN	H	43	-2.197	11.728	-27.493	1.00	61.41	H	C
ATOM	7300	OE1	GLN	H	43	-0.988	11.758	-27.695	1.00	65.50	H	O
ATOM	7301	NE2	GLN	H	43	-3.025	12.658	-27.957	1.00	65.88	H	N
ATOM	7304	C	GLN	H	43	-2.324	12.454	-23.269	1.00	39.74	H	C
ATOM	7305	O	GLN	H	43	-1.603	12.178	-22.322	1.00	39.98	H	O
ATOM	7307	N	GLY	H	44	-3.415	13.200	-23.142	1.00	35.42	H	N
ATOM	7308	CA	GLY	H	44	-3.819	13.714	-21.854	1.00	34.85	H	C
ATOM	7311	C	GLY	H	44	-4.646	12.716	-21.063	1.00	34.31	H	C
ATOM	7312	O	GLY	H	44	-4.988	11.640	-21.557	1.00	37.19	H	O
ATOM	7314	N	LEU	H	45	-4.964	13.100	-19.826	1.00	34.18	H	N
ATOM	7315	CA	LEU	H	45	-5.808	12.312	-18.921	1.00	32.85	H	C
ATOM	7317	CB	LEU	H	45	-5.637	12.817	-17.487	1.00	34.12	H	C
ATOM	7320	CG	LEU	H	45	-4.291	12.714	-16.771	1.00	33.64	H	C
ATOM	7322	CD1	LEU	H	45	-4.379	13.432	-15.423	1.00	34.35	H	C
ATOM	7326	CD2	LEU	H	45	-3.853	11.271	-16.562	1.00	36.29	H	C
ATOM	7330	C	LEU	H	45	-7.292	12.380	-19.313	1.00	31.68	H	C
ATOM	7331	O	LEU	H	45	-7.785	13.421	-19.706	1.00	32.19	H	O
ATOM	7333	N	GLU	H	46	-7.989	11.253	-19.177	1.00	35.41	H	N
ATOM	7334	CA	GLU	H	46	-9.391	11.116	-19.540	1.00	35.81	H	C
ATOM	7336	CB	GLU	H	46	-9.554	10.252	-20.769	1.00	37.73	H	C
ATOM	7339	CG	GLU	H	46	-9.007	10.885	-22.006	1.00	43.61	H	C
ATOM	7342	CD	GLU	H	46	-9.023	9.930	-23.159	1.00	45.03	H	C
ATOM	7343	OE1	GLU	H	46	-7.937	9.384	-23.474	1.00	50.98	H	O
ATOM	7344	OE2	GLU	H	46	-10.114	9.712	-23.727	1.00	46.27	H	O
ATOM	7345	C	GLU	H	46	-10.149	10.442	-18.435	1.00	35.60	H	C
ATOM	7346	O	GLU	H	46	-9.874	9.274	-18.126	1.00	31.88	H	O

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ATOM   7348  N   TRP H  47     -11.102  11.193 -17.871  1.00 32.10      H    N
ATOM   7349  CA  TRP H  47     -11.984  10.729 -16.860  1.00 34.63      H    C
ATOM   7351  CB  TRP H  47     -12.703  11.940 -16.219  1.00 37.13      H    C
ATOM   7354  CG  TRP H  47     -13.132  11.655 -14.831  1.00 36.26      H    C
ATOM   7355  CD1 TRP H  47     -12.384  11.776 -13.708  1.00 35.96      H    C
ATOM   7357  NE1 TRP H  47     -13.101  11.383 -12.621  1.00 35.97      H    N
ATOM   7359  CE2 TRP H  47     -14.339  10.968 -13.039  1.00 34.00      H    C
ATOM   7360  CD2 TRP H  47     -14.385  11.120 -14.430  1.00 33.29      H    C
ATOM   7361  CE3 TRP H  47     -15.562  10.787 -15.115  1.00 36.82      H    C
ATOM   7363  CZ3 TRP H  47     -16.628  10.326 -14.407  1.00 36.76      H    C
ATOM   7365  CH2 TRP H  47     -16.552  10.180 -13.005  1.00 38.30      H    C
ATOM   7367  CZ2 TRP H  47     -15.412  10.493 -12.313  1.00 35.51      H    C
ATOM   7369  C   TRP H  47     -12.998   9.743 -17.475  1.00 36.24      H    C
ATOM   7370  O   TRP H  47     -13.868  10.118 -18.265  1.00 35.47      H    O
ATOM   7372  N   MET H  48     -12.883   8.477 -17.116  1.00 33.60      H    N
ATOM   7373  CA  MET H  48     -13.699   7.437 -17.743  1.00 36.97      H    C
ATOM   7375  CB  MET H  48     -12.994   6.080 -17.639  1.00 36.09      H    C
ATOM   7378  CG  MET H  48     -11.743   6.010 -18.455  1.00 37.06      H    C
ATOM   7381  SD  MET H  48     -10.894   4.444 -18.220  1.00 38.14      H    S
ATOM   7382  CE  MET H  48     -12.035   3.348 -19.051  1.00 32.38      H    C
ATOM   7386  C   MET H  48     -15.064   7.306 -17.100  1.00 37.72      H    C
ATOM   7387  O   MET H  48     -16.097   7.131 -17.785  1.00 39.03      H    O
ATOM   7389  N   GLY H  49     -15.052   7.333 -15.777  1.00 37.51      H    N
ATOM   7390  CA  GLY H  49     -16.256   7.129 -15.007  1.00 39.63      H    C
ATOM   7393  C   GLY H  49     -15.994   6.916 -13.528  1.00 38.13      H    C
ATOM   7394  O   GLY H  49     -14.855   6.938 -13.085  1.00 37.98      H    O
ATOM   7396  N   TRP H  50     -17.085   6.742 -12.784  1.00 38.96      H    N
ATOM   7397  CA  TRP H  50     -17.083   6.476 -11.354  1.00 39.32      H    C
ATOM   7399  CB  TRP H  50     -17.660   7.734 -10.655  1.00 40.19      H    C
ATOM   7402  CG  TRP H  50     -18.758   7.566  -9.643  1.00 36.03      H    C
ATOM   7403  CD1 TRP H  50     -20.037   7.212  -9.882  1.00 36.96      H    C
ATOM   7405  NE1 TRP H  50     -20.752   7.178  -8.701  1.00 36.57      H    N
ATOM   7407  CE2 TRP H  50     -19.929   7.539  -7.672  1.00 34.53      H    C
ATOM   7408  CD2 TRP H  50     -18.664   7.804  -8.224  1.00 35.85      H    C
ATOM   7409  CE3 TRP H  50     -17.621   8.178  -7.368  1.00 36.68      H    C
ATOM   7411  CZ3 TRP H  50     -17.877   8.304  -6.023  1.00 36.79      H    C
ATOM   7413  CH2 TRP H  50     -19.147   8.033  -5.495  1.00 37.80      H    C
ATOM   7415  CZ2 TRP H  50     -20.189   7.658  -6.305  1.00 39.26      H    C
ATOM   7417  C   TRP H  50     -17.912   5.214 -11.050  1.00 39.23      H    C
ATOM   7418  O   TRP H  50     -18.866   4.912 -11.765  1.00 35.89      H    O
ATOM   7420  N   ILE H  51     -17.498   4.458 -10.027  1.00 37.83      H    N
ATOM   7421  CA  ILE H  51     -18.346   3.431  -9.438  1.00 38.80      H    C
ATOM   7423  CB  ILE H  51     -17.781   1.991  -9.645  1.00 40.46      H    C
ATOM   7425  CG1 ILE H  51     -18.849   0.935  -9.250  1.00 40.79      H    C
ATOM   7428  CD1 ILE H  51     -18.888  -0.324 -10.148  1.00 39.97      H    C
ATOM   7432  CG2 ILE H  51     -16.478   1.826  -8.878  1.00 34.34      H    C
ATOM   7436  C   ILE H  51     -18.558   3.715  -7.946  1.00 38.29      H    C
ATOM   7437  O   ILE H  51     -17.622   3.918  -7.198  1.00 36.10      H    O
ATOM   7439  N   ASN H  52     -19.815   3.750  -7.529  1.00 38.79      H    N
ATOM   7440  CA  ASN H  52     -20.145   3.912  -6.122  1.00 36.28      H    C
ATOM   7442  CB  ASN H  52     -21.585   4.396  -5.980  1.00 33.26      H    C
ATOM   7445  CG  ASN H  52     -21.943   4.749  -4.565  1.00 35.45      H    C
ATOM   7446  OD1 ASN H  52     -21.675   3.994  -3.632  1.00 35.68      H    O
ATOM   7447  ND2 ASN H  52     -22.579   5.892  -4.394  1.00 33.30      H    N
ATOM   7450  C   ASN H  52     -19.929   2.573  -5.432  1.00 35.39      H    C
ATOM   7451  O   ASN H  52     -20.619   1.623  -5.733  1.00 31.82      H    O
ATOM   7453  N   THR H  53     -18.952   2.514  -4.523  1.00 38.91      H    N
ATOM   7454  CA  THR H  53     -18.562   1.264  -3.858  1.00 37.86      H    C
ATOM   7456  CB  THR H  53     -17.205   1.426  -3.213  1.00 35.94      H    C
ATOM   7458  OG1 THR H  53     -17.259   2.561  -2.347  1.00 37.41      H    O
ATOM   7460  CG2 THR H  53     -16.151   1.637  -4.270  1.00 38.55      H    C
ATOM   7464  C   THR H  53     -19.512   0.827  -2.752  1.00 38.34      H    C
ATOM   7465  O   THR H  53     -19.355  -0.272  -2.198  1.00 39.70      H    O
ATOM   7467  N   TYR H  54     -20.434   1.715  -2.377  1.00 38.18      H    N
ATOM   7468  CA  TYR H  54     -21.450   1.423  -1.356  1.00 36.73      H    C
ATOM   7470  CB  TYR H  54     -21.900   2.695  -0.615  1.00 37.16      H    C
ATOM   7473  CG  TYR H  54     -22.821   2.452   0.575  1.00 36.13      H    C
ATOM   7474  CD1 TYR H  54     -22.395   2.720   1.874  1.00 37.48      H    C
ATOM   7476  CE1 TYR H  54     -23.233   2.515   2.979  1.00 36.84      H    C
ATOM   7478  CZ  TYR H  54     -24.515   2.023   2.795  1.00 37.51      H    C
ATOM   7479  OH  TYR H  54     -25.336   1.799   3.895  1.00 36.82      H    O
ATOM   7481  CE2 TYR H  54     -24.969   1.747   1.508  1.00 36.73      H    C
ATOM   7483  CD2 TYR H  54     -24.116   1.963   0.406  1.00 38.87      H    C
ATOM   7485  C   TYR H  54     -22.674   0.820  -2.046  1.00 40.64      H    C
ATOM   7486  O   TYR H  54     -23.216  -0.193  -1.606  1.00 41.79      H    O
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ATOM	7488	N	THR	H	55	-23.106	1.475	-3.128	1.00	41.00	H	N
ATOM	7489	CA	THR	H	55	-24.347	1.132	-3.814	1.00	39.47	H	C
ATOM	7491	CB	THR	H	55	-25.219	2.353	-4.178	1.00	41.85	H	C
ATOM	7493	OG1	THR	H	55	-24.547	3.137	-5.179	1.00	47.24	H	O
ATOM	7495	CG2	THR	H	55	-25.520	3.196	-2.951	1.00	38.40	H	C
ATOM	7499	C	THR	H	55	-24.128	0.369	-5.123	1.00	41.26	H	C
ATOM	7500	O	THR	H	55	-25.051	-0.249	-5.634	1.00	43.37	H	O
ATOM	7502	N	GLY	H	56	-22.929	0.432	-5.695	1.00	40.36	H	N
ATOM	7503	CA	GLY	H	56	-22.648	-0.288	-6.935	1.00	38.27	H	C
ATOM	7506	C	GLY	H	56	-23.104	0.435	-8.179	1.00	39.84	H	C
ATOM	7507	O	GLY	H	56	-22.891	-0.067	-9.277	1.00	42.42	H	O
ATOM	7509	N	GLU	H	57	-23.731	1.605	-8.020	1.00	40.68	H	N
ATOM	7510	CA	GLU	H	57	-24.110	2.440	-9.145	1.00	40.64	H	C
ATOM	7512	CB	GLU	H	57	-24.850	3.707	-8.703	1.00	45.68	H	C
ATOM	7515	CG	GLU	H	57	-26.209	3.510	-8.059	1.00	49.60	H	C
ATOM	7518	CD	GLU	H	57	-26.622	4.723	-7.233	1.00	53.37	H	C
ATOM	7519	OE1	GLU	H	57	-26.283	4.748	-6.024	1.00	58.46	H	O
ATOM	7520	OE2	GLU	H	57	-27.250	5.653	-7.791	1.00	54.24	H	O
ATOM	7521	C	GLU	H	57	-22.850	2.895	-9.848	1.00	40.80	H	C
ATOM	7522	O	GLU	H	57	-21.774	2.989	-9.230	1.00	37.28	H	O
ATOM	7524	N	THR	H	58	-23.022	3.233	-11.125	1.00	40.14	H	N
ATOM	7525	CA	THR	H	58	-21.928	3.623	-12.004	1.00	39.91	H	C
ATOM	7527	CB	THR	H	58	-21.513	2.460	-12.948	1.00	39.54	H	C
ATOM	7529	OG1	THR	H	58	-22.618	2.082	-13.797	1.00	37.19	H	O
ATOM	7531	CG2	THR	H	58	-21.034	1.230	-12.122	1.00	32.89	H	C
ATOM	7535	C	THR	H	58	-22.320	4.823	-12.843	1.00	42.95	H	C
ATOM	7536	O	THR	H	58	-23.486	4.991	-13.209	1.00	40.76	H	O
ATOM	7538	N	THR	H	59	-21.340	5.670	-13.155	1.00	43.98	H	N
ATOM	7539	CA	THR	H	59	-21.551	6.746	-14.110	1.00	40.17	H	C
ATOM	7541	CB	THR	H	59	-21.780	8.100	-13.446	1.00	43.00	H	C
ATOM	7543	OG1	THR	H	59	-22.850	7.994	-12.495	1.00	48.02	H	O
ATOM	7545	CG2	THR	H	59	-22.155	9.137	-14.505	1.00	40.84	H	C
ATOM	7549	C	THR	H	59	-20.362	6.844	-15.047	1.00	42.75	H	C
ATOM	7550	O	THR	H	59	-19.200	6.909	-14.617	1.00	44.86	H	O
ATOM	7552	N	TYR	H	60	-20.670	6.883	-16.336	1.00	42.67	H	N
ATOM	7553	CA	TYR	H	60	-19.669	6.815	-17.376	1.00	41.64	H	C
ATOM	7555	CB	TYR	H	60	-20.005	5.669	-18.335	1.00	40.97	H	C
ATOM	7558	CG	TYR	H	60	-19.934	4.312	-17.691	1.00	39.33	H	C
ATOM	7559	CD1	TYR	H	60	-18.714	3.625	-17.607	1.00	41.14	H	C
ATOM	7561	CE1	TYR	H	60	-18.616	2.365	-16.993	1.00	37.37	H	C
ATOM	7563	CZ	TYR	H	60	-19.748	1.768	-16.474	1.00	39.80	H	C
ATOM	7564	OH	TYR	H	60	-19.630	0.527	-15.880	1.00	37.17	H	O
ATOM	7566	CE2	TYR	H	60	-20.990	2.430	-16.542	1.00	40.30	H	C
ATOM	7568	CD2	TYR	H	60	-21.070	3.705	-17.156	1.00	41.49	H	C
ATOM	7570	C	TYR	H	60	-19.649	8.114	-18.135	1.00	43.51	H	C
ATOM	7571	O	TYR	H	60	-20.724	8.630	-18.455	1.00	48.72	H	O
ATOM	7573	N	ALA	H	61	-18.453	8.663	-18.394	1.00	39.52	H	N
ATOM	7574	CA	ALA	H	61	-18.314	9.770	-19.367	1.00	43.93	H	C
ATOM	7576	CB	ALA	H	61	-16.870	10.281	-19.472	1.00	30.30	H	C
ATOM	7580	C	ALA	H	61	-18.799	9.292	-20.732	1.00	43.44	H	C
ATOM	7581	O	ALA	H	61	-18.673	8.109	-21.046	1.00	42.24	H	O
ATOM	7583	N	ASP	H	62	-19.316	10.219	-21.542	1.00	47.04	H	N
ATOM	7584	CA	ASP	H	62	-20.018	9.892	-22.795	1.00	49.58	H	C
ATOM	7586	CB	ASP	H	62	-20.350	11.153	-23.600	1.00	54.89	H	C
ATOM	7589	CG	ASP	H	62	-21.487	11.955	-23.016	1.00	62.22	H	C
ATOM	7590	OD1	ASP	H	62	-21.716	13.061	-23.548	1.00	65.69	H	O
ATOM	7591	OD2	ASP	H	62	-22.150	11.504	-22.045	1.00	68.12	H	O
ATOM	7592	C	ASP	H	62	-19.240	8.987	-23.722	1.00	50.77	H	C
ATOM	7593	O	ASP	H	62	-19.819	8.128	-24.385	1.00	52.70	H	O
ATOM	7595	N	ASP	H	63	-17.941	9.229	-23.832	1.00	53.52	H	N
ATOM	7596	CA	ASP	H	63	-17.090	8.339	-24.587	1.00	54.70	H	C
ATOM	7598	CB	ASP	H	63	-15.623	8.795	-24.534	1.00	59.08	H	C
ATOM	7601	CG	ASP	H	63	-15.343	9.977	-25.457	1.00	65.05	H	C
ATOM	7602	OD1	ASP	H	63	-14.409	9.864	-26.285	1.00	71.29	H	O
ATOM	7603	OD2	ASP	H	63	-16.051	11.008	-25.374	1.00	64.78	H	O
ATOM	7604	C	ASP	H	63	-17.336	6.992	-23.936	1.00	55.97	H	C
ATOM	7605	O	ASP	H	63	-18.417	6.438	-24.059	1.00	65.01	H	O
ATOM	7607	N	PHE	H	64	-16.371	6.456	-23.242	1.00	53.68	H	N
ATOM	7608	CA	PHE	H	64	-16.541	5.266	-22.378	1.00	49.07	H	C
ATOM	7610	CB	PHE	H	64	-15.792	5.621	-21.101	1.00	43.07	H	C
ATOM	7613	CG	PHE	H	64	-14.468	6.256	-21.408	1.00	39.83	H	C
ATOM	7614	CD1	PHE	H	64	-13.487	5.512	-22.020	1.00	40.89	H	C
ATOM	7616	CE1	PHE	H	64	-12.283	6.082	-22.363	1.00	41.59	H	C
ATOM	7618	CZ	PHE	H	64	-12.064	7.403	-22.127	1.00	39.53	H	C
ATOM	7620	CE2	PHE	H	64	-13.055	8.168	-21.556	1.00	41.42	H	C

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ATOM   7622  CD2 PHE H  64     -14.257   7.607 -21.231  1.00 36.13      H    C
ATOM   7624  C   PHE H  64     -17.888   4.559 -22.095  1.00 45.03      H    C
ATOM   7625  O   PHE H  64     -17.949   3.712 -21.215  1.00 42.22      H    O
ATOM   7627  N   LYS H  65     -18.939   4.835 -22.860  1.00 49.40      H    N
ATOM   7628  CA  LYS H  65     -20.220   4.127 -22.704  1.00 52.43      H    C
ATOM   7630  CB  LYS H  65     -21.396   5.089 -22.988  1.00 51.77      H    C
ATOM   7633  CG  LYS H  65     -21.591   6.146 -21.892  1.00 52.27      H    C
ATOM   7636  CD  LYS H  65     -22.718   7.135 -22.234  1.00 52.59      H    C
ATOM   7639  CE  LYS H  65     -23.069   8.028 -21.039  1.00 53.37      H    C
ATOM   7642  NZ  LYS H  65     -24.035   9.149 -21.372  1.00 56.07      H    N
ATOM   7646  C   LYS H  65     -20.284   2.865 -23.595  1.00 51.32      H    C
ATOM   7647  O   LYS H  65     -20.014   2.911 -24.783  1.00 57.14      H    O
ATOM   7649  N   GLY H  66     -20.622   1.729 -23.015  1.00 52.70      H    N
ATOM   7650  CA  GLY H  66     -20.807   0.515 -23.811  1.00 52.02      H    C
ATOM   7653  C   GLY H  66     -19.810  -0.583 -23.496  1.00 49.51      H    C
ATOM   7654  O   GLY H  66     -20.147  -1.535 -22.765  1.00 49.25      H    O
ATOM   7656  N   ARG H  67     -18.593  -0.449 -24.045  1.00 48.43      H    N
ATOM   7657  CA  ARG H  67     -17.540  -1.471 -23.922  1.00 45.13      H    C
ATOM   7659  CB  ARG H  67     -16.489  -1.243 -25.010  1.00 49.01      H    C
ATOM   7662  CG  ARG H  67     -17.027  -1.252 -26.425  1.00 50.37      H    C
ATOM   7665  CD  ARG H  67     -15.939  -1.428 -27.496  1.00 47.48      H    C
ATOM   7668  NE  ARG H  67     -15.063  -0.259 -27.624  1.00 46.18      H    N
ATOM   7670  CZ  ARG H  67     -13.796  -0.196 -27.208  1.00 46.87      H    C
ATOM   7671  NH1 ARG H  67     -13.216  -1.239 -26.610  1.00 47.13      H    N
ATOM   7674  NH2 ARG H  67     -13.097   0.918 -27.396  1.00 42.78      H    N
ATOM   7677  C   ARG H  67     -16.811  -1.484 -22.574  1.00 43.46      H    C
ATOM   7678  O   ARG H  67     -15.995  -2.384 -22.298  1.00 43.15      H    O
ATOM   7680  N   PHE H  68     -17.082  -0.485 -21.738  1.00 42.22      H    N
ATOM   7681  CA  PHE H  68     -16.359  -0.320 -20.482  1.00 41.30      H    C
ATOM   7683  CB  PHE H  68     -15.761   1.079 -20.397  1.00 41.99      H    C
ATOM   7686  CG  PHE H  68     -14.911   1.433 -21.581  1.00 39.74      H    C
ATOM   7687  CD1 PHE H  68     -13.546   1.311 -21.529  1.00 43.32      H    C
ATOM   7689  CE1 PHE H  68     -12.764   1.641 -22.634  1.00 44.51      H    C
ATOM   7691  CZ  PHE H  68     -13.360   2.090 -23.803  1.00 41.12      H    C
ATOM   7693  CE2 PHE H  68     -14.719   2.217 -23.859  1.00 42.21      H    C
ATOM   7695  CD2 PHE H  68     -15.491   1.887 -22.753  1.00 41.06      H    C
ATOM   7697  C   PHE H  68     -17.298  -0.550 -19.318  1.00 39.49      H    C
ATOM   7698  O   PHE H  68     -18.277   0.165 -19.185  1.00 40.01      H    O
ATOM   7700  N   VAL H  69     -16.978  -1.527 -18.474  1.00 34.21      H    N
ATOM   7701  CA  VAL H  69     -17.807  -1.869 -17.346  1.00 34.50      H    C
ATOM   7703  CB  VAL H  69     -18.503  -3.230 -17.575  1.00 36.75      H    C
ATOM   7705  CG1 VAL H  69     -19.407  -3.592 -16.386  1.00 32.54      H    C
ATOM   7709  CG2 VAL H  69     -19.298  -3.202 -18.886  1.00 32.85      H    C
ATOM   7713  C   VAL H  69     -17.030  -1.875 -16.003  1.00 36.79      H    C
ATOM   7714  O   VAL H  69     -16.013  -2.564 -15.864  1.00 38.02      H    O
ATOM   7716  N   PHE H  70     -17.514  -1.098 -15.028  1.00 38.27      H    N
ATOM   7717  CA  PHE H  70     -16.940  -1.110 -13.684  1.00 36.89      H    C
ATOM   7719  CB  PHE H  70     -16.991   0.273 -13.014  1.00 37.97      H    C
ATOM   7722  CG  PHE H  70     -16.513   1.413 -13.883  1.00 37.49      H    C
ATOM   7723  CD1 PHE H  70     -15.379   1.295 -14.683  1.00 37.10      H    C
ATOM   7725  CE1 PHE H  70     -14.965   2.340 -15.475  1.00 34.60      H    C
ATOM   7727  CZ  PHE H  70     -15.654   3.518 -15.461  1.00 38.72      H    C
ATOM   7729  CE2 PHE H  70     -16.773   3.669 -14.657  1.00 38.62      H    C
ATOM   7731  CD2 PHE H  70     -17.195   2.616 -13.877  1.00 38.59      H    C
ATOM   7733  C   PHE H  70     -17.687  -2.121 -12.810  1.00 39.44      H    C
ATOM   7734  O   PHE H  70     -18.894  -2.287 -12.939  1.00 43.06      H    O
ATOM   7736  N   SER H  71     -16.959  -2.785 -11.911  1.00 40.67      H    N
ATOM   7737  CA  SER H  71     -17.557  -3.732 -10.970  1.00 38.04      H    C
ATOM   7739  CB  SER H  71     -17.685  -5.118 -11.605  1.00 36.07      H    C
ATOM   7742  OG  SER H  71     -16.426  -5.692 -11.912  1.00 42.12      H    O
ATOM   7744  C   SER H  71     -16.757  -3.763  -9.666  1.00 39.17      H    C
ATOM   7745  O   SER H  71     -15.708  -3.092  -9.530  1.00 37.28      H    O
ATOM   7747  N   LEU H  72     -17.295  -4.502  -8.699  1.00 38.22      H    N
ATOM   7748  CA  LEU H  72     -16.768  -4.551  -7.346  1.00 41.56      H    C
ATOM   7750  CB  LEU H  72     -17.707  -3.818  -6.364  1.00 36.01      H    C
ATOM   7753  CG  LEU H  72     -18.133  -2.370  -6.637  1.00 38.72      H    C
ATOM   7755  CD1 LEU H  72     -19.197  -1.915  -5.658  1.00 33.87      H    C
ATOM   7759  CD2 LEU H  72     -16.933  -1.434  -6.565  1.00 42.67      H    C
ATOM   7763  C   LEU H  72     -16.674  -5.987  -6.878  1.00 44.49      H    C
ATOM   7764  O   LEU H  72     -17.483  -6.830  -7.290  1.00 43.02      H    O
ATOM   7766  N   ASP H  73     -15.690  -6.247  -6.019  1.00 44.88      H    N
ATOM   7767  CA  ASP H  73     -15.768  -7.342  -5.070  1.00 47.36      H    C
ATOM   7769  CB  ASP H  73     -14.851  -8.519  -5.423  1.00 47.09      H    C
ATOM   7772  CG  ASP H  73     -15.079  -9.719  -4.515  1.00 45.19      H    C
ATOM   7773  OD1 ASP H  73     -15.889  -9.635  -3.574  1.00 47.55      H    O
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ATOM   7774  OD2 ASP H  73     -14.453 -10.755  -4.732  1.00 51.84      H    O
ATOM   7775  C   ASP H  73     -15.424  -6.778  -3.687  1.00 47.48      H    C
ATOM   7776  O   ASP H  73     -14.252  -6.682  -3.284  1.00 45.49      H    O
ATOM   7778  N   THR H  74     -16.480  -6.404  -2.982  1.00 48.74      H    N
ATOM   7779  CA  THR H  74     -16.418  -5.804  -1.663  1.00 50.41      H    C
ATOM   7781  CB  THR H  74     -17.869  -5.492  -1.227  1.00 50.35      H    C
ATOM   7783  OG1 THR H  74     -18.374  -4.445  -2.070  1.00 52.92      H    O
ATOM   7785  CG2 THR H  74     -17.941  -5.063   0.211  1.00 53.62      H    C
ATOM   7789  C   THR H  74     -15.732  -6.668  -0.602  1.00 54.47      H    C
ATOM   7790  O   THR H  74     -15.102  -6.146   0.330  1.00 55.52      H    O
ATOM   7792  N   SER H  75     -15.854  -7.983  -0.756  1.00 55.70      H    N
ATOM   7793  CA  SER H  75     -15.243  -8.942   0.164  1.00 54.19      H    C
ATOM   7795  CB  SER H  75     -15.761 -10.359  -0.146  1.00 55.37      H    C
ATOM   7798  OG  SER H  75     -15.314 -10.810  -1.411  1.00 50.62      H    O
ATOM   7800  C   SER H  75     -13.702  -8.879   0.166  1.00 53.11      H    C
ATOM   7801  O   SER H  75     -13.074  -9.078   1.210  1.00 55.62      H    O
ATOM   7803  N   VAL H  76     -13.112  -8.570  -0.994  1.00 53.20      H    N
ATOM   7804  CA  VAL H  76     -11.653  -8.381  -1.147  1.00 49.54      H    C
ATOM   7806  CB  VAL H  76     -11.104  -9.248  -2.321  1.00 50.89      H    C
ATOM   7808  CG1 VAL H  76     -11.159 -10.737  -1.956  1.00 53.64      H    C
ATOM   7812  CG2 VAL H  76     -11.850  -8.964  -3.624  1.00 42.57      H    C
ATOM   7816  C   VAL H  76     -11.279  -6.903  -1.371  1.00 50.15      H    C
ATOM   7817  O   VAL H  76     -10.124  -6.590  -1.700  1.00 48.48      H    O
ATOM   7819  N   SER H  77     -12.265  -6.014  -1.171  1.00 48.22      H    N
ATOM   7820  CA  SER H  77     -12.145  -4.561  -1.355  1.00 42.63      H    C
ATOM   7822  CB  SER H  77     -11.592  -3.908  -0.077  1.00 45.66      H    C
ATOM   7825  OG  SER H  77     -10.193  -3.784  -0.118  1.00 53.93      H    O
ATOM   7827  C   SER H  77     -11.402  -4.179  -2.666  1.00 38.13      H    C
ATOM   7828  O   SER H  77     -10.471  -3.362  -2.684  1.00 33.76      H    O
ATOM   7830  N   THR H  78     -11.857  -4.794  -3.763  1.00 36.24      H    N
ATOM   7831  CA  THR H  78     -11.273  -4.623  -5.096  1.00 36.51      H    C
ATOM   7833  CB  THR H  78     -10.782  -5.978  -5.670  1.00 36.43      H    C
ATOM   7835  OG1 THR H  78      -9.825  -6.550  -4.774  1.00 41.05      H    O
ATOM   7837  CG2 THR H  78     -10.163  -5.826  -7.081  1.00 35.83      H    C
ATOM   7841  C   THR H  78     -12.321  -4.058  -6.036  1.00 35.31      H    C
ATOM   7842  O   THR H  78     -13.494  -4.427  -5.957  1.00 36.20      H    O
ATOM   7844  N   ALA H  79     -11.882  -3.145  -6.901  1.00 35.17      H    N
ATOM   7845  CA  ALA H  79     -12.700  -2.614  -7.988  1.00 35.93      H    C
ATOM   7847  CB  ALA H  79     -12.774  -1.118  -7.934  1.00 33.61      H    C
ATOM   7851  C   ALA H  79     -12.087  -3.082  -9.298  1.00 35.83      H    C
ATOM   7852  O   ALA H  79     -10.890  -3.310  -9.370  1.00 34.53      H    O
ATOM   7854  N   TYR H  80     -12.924  -3.262 -10.317  1.00 38.14      H    N
ATOM   7855  CA  TYR H  80     -12.489  -3.829 -11.590  1.00 37.74      H    C
ATOM   7857  CB  TYR H  80     -13.080  -5.225 -11.780  1.00 40.28      H    C
ATOM   7860  CG  TYR H  80     -12.695  -6.207 -10.713  1.00 40.76      H    C
ATOM   7861  CD1 TYR H  80     -11.510  -6.967 -10.822  1.00 41.81      H    C
ATOM   7863  CE1 TYR H  80     -11.146  -7.878  -9.835  1.00 37.71      H    C
ATOM   7865  CZ  TYR H  80     -11.975  -8.043  -8.732  1.00 42.30      H    C
ATOM   7866  OH  TYR H  80     -11.643  -8.940  -7.746  1.00 46.15      H    O
ATOM   7868  CE2 TYR H  80     -13.145  -7.305  -8.601  1.00 40.06      H    C
ATOM   7870  CD2 TYR H  80     -13.502  -6.395  -9.599  1.00 40.44      H    C
ATOM   7872  C   TYR H  80     -12.946  -2.982 -12.746  1.00 36.55      H    C
ATOM   7873  O   TYR H  80     -14.025  -2.403 -12.703  1.00 39.92      H    O
ATOM   7875  N   LEU H  81     -12.128  -2.917 -13.787  1.00 41.55      H    N
ATOM   7876  CA  LEU H  81     -12.525  -2.308 -15.048  1.00 41.25      H    C
ATOM   7878  CB  LEU H  81     -11.556  -1.186 -15.432  1.00 43.83      H    C
ATOM   7881  CG  LEU H  81     -11.650  -0.664 -16.872  1.00 41.73      H    C
ATOM   7883  CD1 LEU H  81     -13.006  -0.019 -17.115  1.00 34.95      H    C
ATOM   7887  CD2 LEU H  81     -10.498   0.305 -17.130  1.00 40.26      H    C
ATOM   7891  C   LEU H  81     -12.486  -3.396 -16.097  1.00 42.34      H    C
ATOM   7892  O   LEU H  81     -11.446  -3.966 -16.336  1.00 41.26      H    O
ATOM   7894  N   GLN H  82     -13.622  -3.669 -16.718  1.00 49.16      H    N
ATOM   7895  CA  GLN H  82     -13.727  -4.631 -17.801  1.00 44.88      H    C
ATOM   7897  CB  GLN H  82     -14.975  -5.478 -17.591  1.00 51.09      H    C
ATOM   7900  CG  GLN H  82     -15.328  -6.451 -18.728  1.00 59.70      H    C
ATOM   7903  CD  GLN H  82     -14.912  -7.872 -18.435  1.00 64.09      H    C
ATOM   7904  OE1 GLN H  82     -14.027  -8.420 -19.103  1.00 70.68      H    O
ATOM   7905  NE2 GLN H  82     -15.529  -8.473 -17.417  1.00 63.38      H    N
ATOM   7908  C   GLN H  82     -13.853  -3.827 -19.077  1.00 41.52      H    C
ATOM   7909  O   GLN H  82     -14.709  -2.947 -19.157  1.00 41.03      H    O
ATOM   7911  N   ILE H  83     -12.983  -4.106 -20.051  1.00 38.81      H    N
ATOM   7912  CA  ILE H  83     -13.063  -3.525 -21.386  1.00 42.49      H    C
ATOM   7914  CB  ILE H  83     -11.791  -2.770 -21.770  1.00 39.06      H    C
ATOM   7916  CG1 ILE H  83     -11.323  -1.899 -20.594  1.00 37.92      H    C
ATOM   7919  CD1 ILE H  83     -10.135  -0.972 -20.910  1.00 38.49      H    C
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ATOM   7923  CG2 ILE H  83     -12.021  -1.953 -23.083  1.00 35.20      H    C
ATOM   7927  C   ILE H  83     -13.236  -4.657 -22.367  1.00 44.98      H    C
ATOM   7928  O   ILE H  83     -12.481  -5.633 -22.317  1.00 46.70      H    O
ATOM   7930  N   SER H  84     -14.224  -4.538 -23.250  1.00 47.83      H    N
ATOM   7931  CA  SER H  84     -14.556  -5.611 -24.194  1.00 50.12      H    C
ATOM   7933  CB  SER H  84     -15.977  -6.108 -23.943  1.00 55.64      H    C
ATOM   7936  OG  SER H  84     -16.017  -6.907 -22.770  1.00 61.42      H    O
ATOM   7938  C   SER H  84     -14.411  -5.135 -25.627  1.00 49.84      H    C
ATOM   7939  O   SER H  84     -14.407  -3.940 -25.874  1.00 48.77      H    O
ATOM   7941  N   SER H  85     -14.289  -6.081 -26.556  1.00 52.28      H    N
ATOM   7942  CA  SER H  85     -14.102  -5.796 -27.994  1.00 50.70      H    C
ATOM   7944  CB  SER H  85     -15.393  -5.301 -28.637  1.00 50.51      H    C
ATOM   7947  OG  SER H  85     -16.312  -6.368 -28.751  1.00 53.98      H    O
ATOM   7949  C   SER H  85     -12.923  -4.836 -28.231  1.00 50.77      H    C
ATOM   7950  O   SER H  85     -13.018  -3.828 -28.952  1.00 46.20      H    O
ATOM   7952  N   LEU H  86     -11.805  -5.194 -27.610  1.00 50.77      H    N
ATOM   7953  CA  LEU H  86     -10.610  -4.363 -27.557  1.00 47.00      H    C
ATOM   7955  CB  LEU H  86      -9.494  -5.130 -26.799  1.00 45.31      H    C
ATOM   7958  CG  LEU H  86      -9.113  -4.883 -25.325  1.00 46.04      H    C
ATOM   7960  CD1 LEU H  86     -10.143  -4.165 -24.507  1.00 42.57      H    C
ATOM   7964  CD2 LEU H  86      -8.709  -6.161 -24.609  1.00 47.45      H    C
ATOM   7968  C   LEU H  86     -10.135  -3.962 -28.969  1.00 48.89      H    C
ATOM   7969  O   LEU H  86     -10.151  -4.774 -29.892  1.00 50.16      H    O
ATOM   7971  N   LYS H  87      -9.729  -2.708 -29.134  1.00 51.06      H    N
ATOM   7972  CA  LYS H  87      -9.119  -2.253 -30.375  1.00 52.45      H    C
ATOM   7974  CB  LYS H  87     -10.035  -1.357 -31.222  1.00 56.18      H    C
ATOM   7977  CG  LYS H  87     -10.922  -0.375 -30.486  1.00 58.96      H    C
ATOM   7980  CD  LYS H  87     -11.916   0.209 -31.472  1.00 61.55      H    C
ATOM   7983  CE  LYS H  87     -12.812   1.290 -30.877  1.00 66.30      H    C
ATOM   7986  NZ  LYS H  87     -14.279   1.051 -31.184  1.00 68.38      H    N
ATOM   7990  C   LYS H  87      -7.795  -1.582 -30.055  1.00 53.66      H    C
ATOM   7991  O   LYS H  87      -7.499  -1.294 -28.889  1.00 50.30      H    O
ATOM   7993  N   ALA H  88      -7.005  -1.366 -31.108  1.00 50.15      H    N
ATOM   7994  CA  ALA H  88      -5.665  -0.786 -31.007  1.00 48.90      H    C
ATOM   7996  CB  ALA H  88      -5.118  -0.492 -32.395  1.00 45.66      H    C
ATOM   8000  C   ALA H  88      -5.648   0.488 -30.185  1.00 48.76      H    C
ATOM   8001  O   ALA H  88      -4.756   0.699 -29.364  1.00 50.77      H    O
ATOM   8003  N   GLU H  89      -6.652   1.329 -30.419  1.00 48.32      H    N
ATOM   8004  CA  GLU H  89      -6.749   2.638 -29.785  1.00 46.73      H    C
ATOM   8006  CB  GLU H  89      -7.817   3.530 -30.452  1.00 55.88      H    C
ATOM   8009  CG  GLU H  89      -8.823   2.838 -31.392  1.00 63.79      H    C
ATOM   8012  CD  GLU H  89      -8.219   2.456 -32.744  1.00 68.91      H    C
ATOM   8013  OE1 GLU H  89      -7.574   3.328 -33.379  1.00 70.31      H    O
ATOM   8014  OE2 GLU H  89      -8.390   1.281 -33.162  1.00 69.81      H    O
ATOM   8015  C   GLU H  89      -6.973   2.580 -28.265  1.00 44.87      H    C
ATOM   8016  O   GLU H  89      -6.871   3.611 -27.611  1.00 47.72      H    O
ATOM   8018  N   ASP H  90      -7.265   1.393 -27.720  1.00 40.09      H    N
ATOM   8019  CA  ASP H  90      -7.509   1.192 -26.286  1.00 40.19      H    C
ATOM   8021  CB  ASP H  90      -8.375  -0.057 -26.039  1.00 36.37      H    C
ATOM   8024  CG  ASP H  90      -9.807   0.141 -26.443  1.00 40.71      H    C
ATOM   8025  OD1 ASP H  90     -10.372   1.209 -26.132  1.00 45.67      H    O
ATOM   8026  OD2 ASP H  90     -10.392  -0.773 -27.054  1.00 44.51      H    O
ATOM   8027  C   ASP H  90      -6.210   0.995 -25.541  1.00 36.02      H    C
ATOM   8028  O   ASP H  90      -6.185   0.830 -24.327  1.00 37.09      H    O
ATOM   8030  N   THR H  91      -5.132   0.912 -26.284  1.00 37.59      H    N
ATOM   8031  CA  THR H  91      -3.804   0.835 -25.698  1.00 40.36      H    C
ATOM   8033  CB  THR H  91      -2.707   0.681 -26.806  1.00 42.84      H    C
ATOM   8035  OG1 THR H  91      -2.882  -0.584 -27.484  1.00 40.04      H    O
ATOM   8037  CG2 THR H  91      -1.284   0.803 -26.200  1.00 39.40      H    C
ATOM   8041  C   THR H  91      -3.569   2.110 -24.872  1.00 41.02      H    C
ATOM   8042  O   THR H  91      -3.520   3.223 -25.395  1.00 37.75      H    O
ATOM   8044  N   ALA H  92      -3.442   1.932 -23.566  1.00 39.46      H    N
ATOM   8045  CA  ALA H  92      -3.367   3.058 -22.641  1.00 37.53      H    C
ATOM   8047  CB  ALA H  92      -4.744   3.799 -22.532  1.00 30.87      H    C
ATOM   8051  C   ALA H  92      -2.975   2.550 -21.282  1.00 38.57      H    C
ATOM   8052  O   ALA H  92      -3.007   1.349 -21.009  1.00 42.27      H    O
ATOM   8054  N   VAL H  93      -2.601   3.485 -20.424  1.00 42.81      H    N
ATOM   8055  CA  VAL H  93      -2.492   3.219 -19.000  1.00 35.25      H    C
ATOM   8057  CB  VAL H  93      -1.382   4.063 -18.343  1.00 34.09      H    C
ATOM   8059  CG1 VAL H  93      -1.413   3.947 -16.789  1.00 28.67      H    C
ATOM   8063  CG2 VAL H  93      -0.014   3.650 -18.906  1.00 33.91      H    C
ATOM   8067  C   VAL H  93      -3.838   3.549 -18.381  1.00 36.37      H    C
ATOM   8068  O   VAL H  93      -4.437   4.582 -18.669  1.00 37.24      H    O
ATOM   8070  N   TYR H  94      -4.312   2.652 -17.532  1.00 37.50      H    N
ATOM   8071  CA  TYR H  94      -5.567   2.821 -16.841  1.00 34.60      H    C
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ATOM	8073	CB	TYR	H	94	-6.471	1.623	-17.113	1.00	34.12	H	C
ATOM	8076	CG	TYR	H	94	-6.862	1.559	-18.551	1.00	32.16	H	C
ATOM	8077	CD1	TYR	H	94	-7.962	2.248	-19.011	1.00	33.50	H	C
ATOM	8079	CE1	TYR	H	94	-8.327	2.196	-20.371	1.00	36.31	H	C
ATOM	8081	CZ	TYR	H	94	-7.561	1.464	-21.258	1.00	34.70	H	C
ATOM	8082	OH	TYR	H	94	-7.906	1.423	-22.595	1.00	36.69	H	O
ATOM	8084	CE2	TYR	H	94	-6.457	0.781	-20.812	1.00	30.57	H	C
ATOM	8086	CD2	TYR	H	94	-6.103	0.842	-19.469	1.00	33.34	H	C
ATOM	8088	C	TYR	H	94	-5.281	2.926	-15.372	1.00	36.11	H	C
ATOM	8089	O	TYR	H	94	-4.601	2.053	-14.802	1.00	34.38	H	O
ATOM	8091	N	TYR	H	95	-5.786	4.005	-14.768	1.00	36.22	H	N
ATOM	8092	CA	TYR	H	95	-5.649	4.233	-13.338	1.00	35.02	H	C
ATOM	8094	CB	TYR	H	95	-5.144	5.634	-13.005	1.00	39.99	H	C
ATOM	8097	CG	TYR	H	95	-3.834	6.046	-13.614	1.00	43.50	H	C
ATOM	8098	CD1	TYR	H	95	-2.643	5.807	-12.951	1.00	43.38	H	C
ATOM	8100	CE1	TYR	H	95	-1.430	6.209	-13.495	1.00	41.50	H	C
ATOM	8102	CZ	TYR	H	95	-1.409	6.853	-14.711	1.00	41.89	H	C
ATOM	8103	OH	TYR	H	95	-0.207	7.245	-15.227	1.00	44.03	H	O
ATOM	8105	CE2	TYR	H	95	-2.584	7.123	-15.395	1.00	41.94	H	C
ATOM	8107	CD2	TYR	H	95	-3.789	6.729	-14.842	1.00	41.79	H	C
ATOM	8109	C	TYR	H	95	-6.996	4.109	-12.654	1.00	34.71	H	C
ATOM	8110	O	TYR	H	95	-8.035	4.423	-13.222	1.00	31.25	H	O
ATOM	8112	N	CYS	H	96	-6.951	3.656	-11.414	1.00	39.13	H	N
ATOM	8113	CA	CYS	H	96	-8.030	3.871	-10.484	1.00	37.29	H	C
ATOM	8115	CB	CYS	H	96	-8.329	2.600	-9.663	1.00	41.25	H	C
ATOM	8118	SG	CYS	H	96	-7.036	2.010	-8.498	1.00	43.16	H	S
ATOM	8120	C	CYS	H	96	-7.578	5.051	-9.608	1.00	36.44	H	C
ATOM	8121	O	CYS	H	96	-6.381	5.211	-9.333	1.00	34.39	H	O
ATOM	8123	N	GLU	H	97	-8.527	5.922	-9.274	1.00	35.66	H	N
ATOM	8124	CA	GLU	H	97	-8.325	6.997	-8.313	1.00	34.76	H	C
ATOM	8126	CB	GLU	H	97	-8.390	8.365	-8.990	1.00	35.14	H	C
ATOM	8129	CG	GLU	H	97	-8.242	9.545	-8.002	1.00	37.35	H	C
ATOM	8132	CD	GLU	H	97	-8.775	10.884	-8.537	1.00	40.55	H	C
ATOM	8133	OE1	GLU	H	97	-9.769	10.893	-9.313	1.00	39.27	H	O
ATOM	8134	OE2	GLU	H	97	-8.194	11.931	-8.155	1.00	44.29	H	O
ATOM	8135	C	GLU	H	97	-9.448	6.909	-7.293	1.00	29.71	H	C
ATOM	8136	O	GLU	H	97	-10.605	6.921	-7.689	1.00	30.33	H	O
ATOM	8138	N	ARG	H	98	-9.114	6.830	-6.001	1.00	27.30	H	N
ATOM	8139	CA	ARG	H	98	-10.153	6.873	-4.940	1.00	31.99	H	C
ATOM	8141	CB	ARG	H	98	-9.667	6.437	-3.566	1.00	29.04	H	C
ATOM	8144	CG	ARG	H	98	-10.707	6.636	-2.439	1.00	32.88	H	C
ATOM	8147	CD	ARG	H	98	-10.160	6.311	-1.033	1.00	30.87	H	C
ATOM	8150	NE	ARG	H	98	-9.391	7.423	-0.493	1.00	33.11	H	N
ATOM	8152	CZ	ARG	H	98	-9.104	7.606	0.799	1.00	34.99	H	C
ATOM	8153	NH1	ARG	H	98	-9.497	6.745	1.712	1.00	42.49	H	N
ATOM	8156	NH2	ARG	H	98	-8.408	8.659	1.189	1.00	33.95	H	N
ATOM	8159	C	ARG	H	98	-10.720	8.268	-4.823	1.00	33.05	H	C
ATOM	8160	O	ARG	H	98	-10.002	9.273	-4.833	1.00	32.74	H	O
ATOM	8162	N	GLU	H	99	-12.023	8.323	-4.667	1.00	35.20	H	N
ATOM	8163	CA	GLU	H	99	-12.697	9.593	-4.714	1.00	36.56	H	C
ATOM	8165	CB	GLU	H	99	-13.919	9.449	-5.638	1.00	33.51	H	C
ATOM	8168	CG	GLU	H	99	-14.874	10.610	-5.658	1.00	35.26	H	C
ATOM	8171	CD	GLU	H	99	-14.242	11.892	-6.173	1.00	38.27	H	C
ATOM	8172	OE1	GLU	H	99	-13.218	11.816	-6.926	1.00	33.31	H	O
ATOM	8173	OE2	GLU	H	99	-14.782	12.970	-5.808	1.00	31.39	H	O
ATOM	8174	C	GLU	H	99	-13.193	10.253	-3.439	1.00	40.17	H	C
ATOM	8175	O	GLU	H	99	-14.000	9.666	-2.711	1.00	47.04	H	O
ATOM	8177	N	GLY	H	100	-12.576	11.375	-3.070	1.00	43.96	H	N
ATOM	8178	CA	GLY	H	100	-12.404	11.810	-1.711	1.00	41.52	H	C
ATOM	8181	C	GLY	H	100	-11.291	11.566	-0.767	1.00	41.90	H	C
ATOM	8182	O	GLY	H	100	-10.654	10.542	-0.780	1.00	47.55	H	O
ATOM	8184	N	GLY	H	101	-11.136	12.538	0.124	1.00	40.92	H	N
ATOM	8185	CA	GLY	H	101	-10.151	12.495	1.172	1.00	38.85	H	C
ATOM	8188	C	GLY	H	101	-8.811	12.874	0.585	1.00	40.15	H	C
ATOM	8189	O	GLY	H	101	-8.740	13.476	-0.510	1.00	37.79	H	O
ATOM	8191	N	VAL	H	108	-7.766	12.489	1.322	1.00	36.77	H	N
ATOM	8192	CA	VAL	H	108	-6.403	12.589	0.892	1.00	33.64	H	C
ATOM	8194	CB	VAL	H	108	-5.476	12.042	2.002	1.00	33.69	H	C
ATOM	8196	CG1	VAL	H	108	-4.054	12.298	1.689	1.00	35.24	H	C
ATOM	8200	CG2	VAL	H	108	-5.796	12.750	3.325	1.00	35.01	H	C
ATOM	8204	C	VAL	H	108	-6.415	11.800	-0.405	1.00	32.82	H	C
ATOM	8205	O	VAL	H	108	-6.894	10.659	-0.459	1.00	35.08	H	O
ATOM	8207	N	ASN	H	109	-5.947	12.446	-1.465	1.00	32.62	H	N
ATOM	8208	CA	ASN	H	109	-6.112	11.919	-2.796	1.00	33.42	H	C
ATOM	8210	CB	ASN	H	109	-6.000	13.038	-3.815	1.00	36.24	H	C

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ATOM	8213	CG	ASN	H	109	-6.444	12.619	-5.186	1.00	38.29	H C
ATOM	8214	OD1	ASN	H	109	-7.599	12.199	-5.399	1.00	45.32	H O
ATOM	8215	ND2	ASN	H	109	-5.528	12.713	-6.132	1.00	36.40	H N
ATOM	8218	C	ASN	H	109	-5.106	10.817	-3.063	1.00	35.11	H C
ATOM	8219	O	ASN	H	109	-3.896	10.996	-2.878	1.00	30.04	H O
ATOM	8221	N	ASN	H	110	-5.634	9.668	-3.490	1.00	38.32	H N
ATOM	8222	CA	ASN	H	110	-4.836	8.475	-3.709	1.00	36.09	H C
ATOM	8224	CB	ASN	H	110	-5.108	7.444	-2.596	1.00	36.91	H C
ATOM	8227	CG	ASN	H	110	-4.205	7.617	-1.398	1.00	38.56	H C
ATOM	8228	OD1	ASN	H	110	-3.148	6.971	-1.298	1.00	44.77	H O
ATOM	8229	ND2	ASN	H	110	-4.616	8.473	-0.470	1.00	36.28	H N
ATOM	8232	C	ASN	H	110	-5.154	7.853	-5.060	1.00	34.88	H C
ATOM	8233	O	ASN	H	110	-6.316	7.730	-5.431	1.00	36.48	H O
ATOM	8235	N	TRP	H	111	-4.100	7.434	-5.752	1.00	35.16	H N
ATOM	8236	CA	TRP	H	111	-4.175	6.806	-7.050	1.00	34.91	H C
ATOM	8238	CB	TRP	H	111	-3.408	7.657	-8.067	1.00	34.76	H C
ATOM	8241	CG	TRP	H	111	-4.151	8.860	-8.463	1.00	35.84	H C
ATOM	8242	CD1	TRP	H	111	-4.529	9.894	-7.656	1.00	36.17	H C
ATOM	8244	NE1	TRP	H	111	-5.229	10.822	-8.378	1.00	35.97	H N
ATOM	8246	CE2	TRP	H	111	-5.338	10.385	-9.677	1.00	36.89	H C
ATOM	8247	CD2	TRP	H	111	-4.664	9.155	-9.766	1.00	34.84	H C
ATOM	8248	CE3	TRP	H	111	-4.605	8.508	-10.997	1.00	38.25	H C
ATOM	8250	CZ3	TRP	H	111	-5.209	9.105	-12.095	1.00	36.65	H C
ATOM	8252	CH2	TRP	H	111	-5.871	10.331	-11.977	1.00	36.07	H C
ATOM	8254	CZ2	TRP	H	111	-5.942	10.989	-10.783	1.00	35.02	H C
ATOM	8256	C	TRP	H	111	-3.524	5.447	-6.967	1.00	37.71	H C
ATOM	8257	O	TRP	H	111	-2.569	5.240	-6.179	1.00	31.90	H O
ATOM	8259	N	GLY	H	112	-4.033	4.518	-7.783	1.00	35.70	H N
ATOM	8260	CA	GLY	H	112	-3.269	3.329	-8.120	1.00	37.62	H C
ATOM	8263	C	GLY	H	112	-2.118	3.684	-9.027	1.00	38.02	H C
ATOM	8264	O	GLY	H	112	-2.054	4.802	-9.564	1.00	36.55	H O
ATOM	8266	N	GLN	H	113	-1.226	2.717	-9.228	1.00	36.06	H N
ATOM	8267	CA	GLN	H	113	0.019	2.961	-9.946	1.00	33.03	H C
ATOM	8269	CB	GLN	H	113	1.135	2.026	-9.391	1.00	33.37	H C
ATOM	8272	CG	GLN	H	113	1.136	0.570	-9.836	1.00	36.35	H C
ATOM	8275	CD	GLN	H	113	0.078	-0.335	-9.172	1.00	35.12	H C
ATOM	8276	OE1	GLN	H	113	-0.846	0.119	-8.485	1.00	37.69	H O
ATOM	8277	NE2	GLN	H	113	0.213	-1.628	-9.409	1.00	30.39	H N
ATOM	8280	C	GLN	H	113	-0.172	2.933	-11.474	1.00	36.45	H C
ATOM	8281	O	GLN	H	113	0.694	3.424	-12.231	1.00	36.80	H O
ATOM	8283	N	GLY	H	114	-1.331	2.446	-11.927	1.00	37.39	H N
ATOM	8284	CA	GLY	H	114	-1.606	2.306	-13.365	1.00	36.71	H C
ATOM	8287	C	GLY	H	114	-1.391	0.897	-13.899	1.00	39.39	H C
ATOM	8288	O	GLY	H	114	-0.622	0.119	-13.338	1.00	39.14	H O
ATOM	8290	N	THR	H	115	-2.100	0.577	-14.976	1.00	35.67	H N
ATOM	8291	CA	THR	H	115	-1.999	-0.701	-15.657	1.00	37.44	H C
ATOM	8293	CB	THR	H	115	-3.229	-1.627	-15.327	1.00	34.83	H C
ATOM	8295	OG1	THR	H	115	-3.320	-1.829	-13.899	1.00	32.32	H O
ATOM	8297	CG2	THR	H	115	-3.109	-2.969	-16.031	1.00	31.86	H C
ATOM	8301	C	THR	H	115	-1.925	-0.390	-17.135	1.00	35.26	H C
ATOM	8302	O	THR	H	115	-2.832	0.227	-17.672	1.00	34.11	H O
ATOM	8304	N	LEU	H	116	-0.822	-0.767	-17.782	1.00	40.12	H N
ATOM	8305	CA	LEU	H	116	-0.690	-0.566	-19.221	1.00	39.95	H C
ATOM	8307	CB	LEU	H	116	0.782	-0.439	-19.614	1.00	39.97	H C
ATOM	8310	CG	LEU	H	116	1.105	-0.280	-21.106	1.00	41.28	H C
ATOM	8312	CD1	LEU	H	116	0.268	0.775	-21.802	1.00	40.18	H C
ATOM	8316	CD2	LEU	H	116	2.556	0.058	-21.235	1.00	46.77	H C
ATOM	8320	C	LEU	H	116	-1.346	-1.760	-19.877	1.00	41.81	H C
ATOM	8321	O	LEU	H	116	-0.940	-2.891	-19.640	1.00	45.01	H O
ATOM	8323	N	VAL	H	117	-2.384	-1.509	-20.666	1.00	44.17	H N
ATOM	8324	CA	VAL	H	117	-2.965	-2.537	-21.506	1.00	39.99	H C
ATOM	8326	CB	VAL	H	117	-4.492	-2.599	-21.315	1.00	41.79	H C
ATOM	8328	CG1	VAL	H	117	-5.138	-3.464	-22.398	1.00	36.30	H C
ATOM	8332	CG2	VAL	H	117	-4.854	-3.086	-19.833	1.00	31.57	H C
ATOM	8336	C	VAL	H	117	-2.536	-2.201	-22.935	1.00	41.57	H C
ATOM	8337	O	VAL	H	117	-2.779	-1.104	-23.388	1.00	42.32	H O
ATOM	8339	N	THR	H	118	-1.828	-3.132	-23.601	1.00	44.82	H N
ATOM	8340	CA	THR	H	118	-1.490	-3.034	-25.032	1.00	44.05	H C
ATOM	8342	CB	THR	H	118	-0.007	-3.448	-25.271	1.00	43.87	H C
ATOM	8344	OG1	THR	H	118	0.845	-2.767	-24.339	1.00	41.97	H O
ATOM	8346	CG2	THR	H	118	0.449	-3.132	-26.676	1.00	41.90	H C
ATOM	8350	C	THR	H	118	-2.444	-3.922	-25.844	1.00	43.78	H C
ATOM	8351	O	THR	H	118	-2.684	-5.047	-25.466	1.00	42.54	H O
ATOM	8353	N	VAL	H	119	-3.021	-3.398	-26.929	1.00	48.16	H N
ATOM	8354	CA	VAL	H	119	-3.911	-4.193	-27.788	1.00	47.41	H C

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ATOM   8356  CB  VAL H 119      -5.288  -3.547 -28.035  1.00 44.41           H     C
ATOM   8358  CG1 VAL H 119      -6.124  -4.491 -28.891  1.00 41.97           H     C
ATOM   8362  CG2 VAL H 119      -6.000  -3.210 -26.716  1.00 35.77           H     C
ATOM   8366  C   VAL H 119      -3.245  -4.413 -29.131  1.00 47.62           H     C
ATOM   8367  O   VAL H 119      -3.167  -3.486 -29.909  1.00 46.52           H     O
ATOM   8369  N   SER H 120      -2.797  -5.649 -29.382  1.00 49.23           H     N
ATOM   8370  CA  SER H 120      -2.001  -5.995 -30.571  1.00 49.64           H     C
ATOM   8372  CB  SER H 120      -0.531  -5.663 -30.314  1.00 52.13           H     C
ATOM   8375  OG  SER H 120       0.264  -5.865 -31.475  1.00 56.16           H     O
ATOM   8377  C   SER H 120      -2.103  -7.476 -30.947  1.00 46.46           H     C
ATOM   8378  O   SER H 120      -2.204  -8.329 -30.073  1.00 46.52           H     O
ATOM   8380  N   SER H 121      -2.061  -7.766 -32.251  1.00 49.63           H     N
ATOM   8381  CA  SER H 121      -1.971  -9.149 -32.751  1.00 50.00           H     C
ATOM   8383  CB  SER H 121      -2.407  -9.223 -34.224  1.00 51.79           H     C
ATOM   8386  OG  SER H 121      -1.549  -8.449 -35.060  1.00 57.61           H     O
ATOM   8388  C   SER H 121      -0.544  -9.747 -32.568  1.00 46.41           H     C
ATOM   8389  O   SER H 121      -0.348 -10.953 -32.669  1.00 45.92           H     O
ATOM   8391  N   ALA H 122       0.440  -8.892 -32.291  1.00 46.62           H     N
ATOM   8392  CA  ALA H 122       1.810  -9.339 -32.085  1.00 45.86           H     C
ATOM   8394  CB  ALA H 122       2.786  -8.140 -32.185  1.00 44.27           H     C
ATOM   8398  C   ALA H 122       1.943 -10.060 -30.752  1.00 48.21           H     C
ATOM   8399  O   ALA H 122       1.237  -9.748 -29.811  1.00 51.02           H     O
ATOM   8401  N   SER H 123       2.851 -11.035 -30.682  1.00 48.89           H     N
ATOM   8402  CA  SER H 123       3.001 -11.866 -29.494  1.00 47.49           H     C
ATOM   8404  CB  SER H 123       3.209 -13.331 -29.890  1.00 53.26           H     C
ATOM   8407  OG  SER H 123       4.498 -13.556 -30.387  1.00 53.60           H     O
ATOM   8409  C   SER H 123       4.108 -11.378 -28.556  1.00 48.02           H     C
ATOM   8410  O   SER H 123       4.996 -10.593 -28.955  1.00 46.30           H     O
ATOM   8412  N   THR H 124       4.011 -11.825 -27.296  1.00 45.73           H     N
ATOM   8413  CA  THR H 124       4.950 -11.460 -26.226  1.00 45.97           H     C
ATOM   8415  CB  THR H 124       4.468 -12.039 -24.868  1.00 45.36           H     C
ATOM   8417  OG1 THR H 124       3.178 -11.490 -24.557  1.00 54.73           H     O
ATOM   8419  CG2 THR H 124       5.435 -11.693 -23.749  1.00 44.63           H     C
ATOM   8423  C   THR H 124       6.399 -11.921 -26.493  1.00 46.03           H     C
ATOM   8424  O   THR H 124       6.634 -13.079 -26.815  1.00 43.24           H     O
ATOM   8426  N   LYS H 125       7.354 -10.998 -26.356  1.00 46.51           H     N
ATOM   8427  CA  LYS H 125       8.780 -11.312 -26.419  1.00 44.43           H     C
ATOM   8429  CB  LYS H 125       9.362 -10.869 -27.773  1.00 47.29           H     C
ATOM   8432  CG  LYS H 125      10.867 -11.145 -27.978  1.00 46.78           H     C
ATOM   8435  CD  LYS H 125      11.217 -12.644 -27.970  1.00 47.36           H     C
ATOM   8438  CE  LYS H 125      12.719 -12.886 -27.845  1.00 46.96           H     C
ATOM   8441  NZ  LYS H 125      13.225 -12.815 -26.402  1.00 44.86           H     N
ATOM   8445  C   LYS H 125       9.516 -10.605 -25.280  1.00 42.72           H     C
ATOM   8446  O   LYS H 125       9.400  -9.395 -25.104  1.00 42.10           H     O
ATOM   8448  N   GLY H 126      10.288 -11.364 -24.519  1.00 42.29           H     N
ATOM   8449  CA  GLY H 126      11.110 -10.801 -23.468  1.00 41.31           H     C
ATOM   8452  C   GLY H 126      12.338 -10.134 -24.062  1.00 39.53           H     C
ATOM   8453  O   GLY H 126      12.746 -10.466 -25.161  1.00 40.73           H     O
ATOM   8455  N   PRO H 127      12.952  -9.202 -23.322  1.00 38.71           H     N
ATOM   8456  CA  PRO H 127      14.101  -8.476 -23.849  1.00 40.86           H     C
ATOM   8458  CB  PRO H 127      14.183  -7.258 -22.930  1.00 38.60           H     C
ATOM   8461  CG  PRO H 127      13.730  -7.777 -21.610  1.00 36.71           H     C
ATOM   8464  CD  PRO H 127      12.633  -8.781 -21.947  1.00 40.01           H     C
ATOM   8467  C   PRO H 127      15.395  -9.273 -23.748  1.00 43.32           H     C
ATOM   8468  O   PRO H 127      15.507 -10.181 -22.902  1.00 45.48           H     O
ATOM   8469  N   SER H 128      16.339  -8.943 -24.626  1.00 43.60           H     N
ATOM   8470  CA  SER H 128      17.725  -9.373 -24.497  1.00 44.17           H     C
ATOM   8472  CB  SER H 128      18.271  -9.767 -25.860  1.00 43.32           H     C
ATOM   8475  OG  SER H 128      17.281 -10.482 -26.568  1.00 43.03           H     O
ATOM   8477  C   SER H 128      18.495  -8.194 -23.933  1.00 42.72           H     C
ATOM   8478  O   SER H 128      18.327  -7.084 -24.402  1.00 45.87           H     O
ATOM   8480  N   VAL H 129      19.299  -8.428 -22.906  1.00 44.34           H     N
ATOM   8481  CA  VAL H 129      19.958  -7.348 -22.180  1.00 44.40           H     C
ATOM   8483  CB  VAL H 129      19.663  -7.403 -20.677  1.00 40.33           H     C
ATOM   8485  CG1 VAL H 129      20.239  -6.174 -19.980  1.00 37.67           H     C
ATOM   8489  CG2 VAL H 129      18.158  -7.555 -20.434  1.00 30.14           H     C
ATOM   8493  C   VAL H 129      21.453  -7.442 -22.434  1.00 47.64           H     C
ATOM   8494  O   VAL H 129      22.057  -8.495 -22.249  1.00 54.01           H     O
ATOM   8496  N   PHE H 130      22.028  -6.326 -22.881  1.00 47.33           H     N
ATOM   8497  CA  PHE H 130      23.420  -6.243 -23.308  1.00 43.32           H     C
ATOM   8499  CB  PHE H 130      23.520  -5.986 -24.820  1.00 37.55           H     C
ATOM   8502  CG  PHE H 130      22.906  -7.071 -25.668  1.00 38.88           H     C
ATOM   8503  CD1 PHE H 130      23.451  -8.333 -25.703  1.00 39.93           H     C
ATOM   8505  CE1 PHE H 130      22.877  -9.322 -26.472  1.00 37.55           H     C
ATOM   8507  CZ  PHE H 130      21.774  -9.057 -27.207  1.00 34.12           H     C
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ATOM   8509  CE2 PHE H 130      21.242  -7.807 -27.213  1.00 35.71           H    C
ATOM   8511  CD2 PHE H 130      21.802  -6.821 -26.448  1.00 37.91           H    C
ATOM   8513  C   PHE H 130      24.106  -5.099 -22.591  1.00 44.96           H    C
ATOM   8514  O   PHE H 130      23.546  -4.012 -22.460  1.00 45.58           H    O
ATOM   8516  N   PRO H 131      25.342  -5.323 -22.146  1.00 46.34           H    N
ATOM   8517  CA  PRO H 131      26.021  -4.258 -21.416  1.00 45.99           H    C
ATOM   8519  CB  PRO H 131      27.213  -4.973 -20.802  1.00 47.36           H    C
ATOM   8522  CG  PRO H 131      27.525  -6.074 -21.804  1.00 49.65           H    C
ATOM   8525  CD  PRO H 131      26.184  -6.521 -22.320  1.00 45.87           H    C
ATOM   8528  C   PRO H 131      26.505  -3.158 -22.359  1.00 46.06           H    C
ATOM   8529  O   PRO H 131      26.911  -3.437 -23.483  1.00 50.40           H    O
ATOM   8530  N   LEU H 132      26.407  -1.915 -21.904  1.00 43.52           H    N
ATOM   8531  CA  LEU H 132      27.095  -0.801 -22.530  1.00 42.28           H    C
ATOM   8533  CB  LEU H 132      26.149   0.374 -22.738  1.00 38.65           H    C
ATOM   8536  CG  LEU H 132      24.992   0.189 -23.730  1.00 34.97           H    C
ATOM   8538  CD1 LEU H 132      23.957   1.305 -23.531  1.00 35.43           H    C
ATOM   8542  CD2 LEU H 132      25.509   0.214 -25.148  1.00 31.92           H    C
ATOM   8546  C   LEU H 132      28.260  -0.457 -21.592  1.00 42.78           H    C
ATOM   8547  O   LEU H 132      28.139   0.368 -20.676  1.00 44.18           H    O
ATOM   8549  N   ALA H 133      29.373  -1.147 -21.816  1.00 47.75           H    N
ATOM   8550  CA  ALA H 133      30.551  -1.102 -20.947  1.00 48.53           H    C
ATOM   8552  CB  ALA H 133      31.662  -2.066 -21.488  1.00 44.30           H    C
ATOM   8556  C   ALA H 133      31.131   0.299 -20.825  1.00 47.84           H    C
ATOM   8557  O   ALA H 133      31.058   1.087 -21.761  1.00 49.21           H    O
ATOM   8559  N   PRO H 134      31.731   0.610 -19.672  1.00 51.22           H    N
ATOM   8560  CA  PRO H 134      32.427   1.878 -19.579  1.00 56.12           H    C
ATOM   8562  CB  PRO H 134      32.648   2.040 -18.081  1.00 55.78           H    C
ATOM   8565  CG  PRO H 134      32.788   0.634 -17.576  1.00 54.55           H    C
ATOM   8568  CD  PRO H 134      31.852  -0.185 -18.436  1.00 54.64           H    C
ATOM   8571  C   PRO H 134      33.761   1.730 -20.287  1.00 61.07           H    C
ATOM   8572  O   PRO H 134      34.434   0.704 -20.149  1.00 64.73           H    O
ATOM   8573  N   SER H 135      34.145   2.730 -21.055  1.00 65.21           H    N
ATOM   8574  CA  SER H 135      35.445   2.700 -21.705  1.00 69.82           H    C
ATOM   8576  CB  SER H 135      35.296   2.247 -23.169  1.00 75.57           H    C
ATOM   8579  OG  SER H 135      34.097   2.724 -23.774  1.00 78.77           H    O
ATOM   8581  C   SER H 135      36.092   4.064 -21.621  1.00 73.31           H    C
ATOM   8582  O   SER H 135      35.507   5.007 -21.076  1.00 72.91           H    O
ATOM   8584  N   SER H 136      37.306   4.174 -22.154  1.00 78.87           H    N
ATOM   8585  CA  SER H 136      37.909   5.496 -22.395  1.00 78.82           H    C
ATOM   8587  CB  SER H 136      39.328   5.370 -22.948  1.00 80.85           H    C
ATOM   8590  OG  SER H 136      39.795   6.632 -23.402  1.00 83.33           H    O
ATOM   8592  C   SER H 136      37.030   6.324 -23.363  1.00 81.81           H    C
ATOM   8593  O   SER H 136      36.948   7.558 -23.243  1.00 83.39           H    O
ATOM   8595  N   LYS H 137      36.360   5.629 -24.294  1.00 81.77           H    N
ATOM   8596  CA  LYS H 137      35.405   6.253 -25.227  1.00 80.20           H    C
ATOM   8598  CB  LYS H 137      35.084   5.305 -26.405  1.00 79.96           H    C
ATOM   8601  CG  LYS H 137      36.273   4.671 -27.130  1.00 78.99           H    C
ATOM   8604  CD  LYS H 137      37.098   5.680 -27.907  1.00 80.23           H    C
ATOM   8607  CE  LYS H 137      38.059   4.978 -28.896  1.00 80.65           H    C
ATOM   8610  NZ  LYS H 137      39.106   4.112 -28.249  1.00 78.44           H    N
ATOM   8614  C   LYS H 137      34.091   6.638 -24.517  1.00 77.67           H    C
ATOM   8615  O   LYS H 137      33.136   7.112 -25.167  1.00 70.96           H    O
ATOM   8617  N   SER H 138      34.049   6.396 -23.201  1.00 79.02           H    N
ATOM   8618  CA  SER H 138      32.908   6.725 -22.347  1.00 79.60           H    C
ATOM   8620  CB  SER H 138      32.045   5.475 -22.144  1.00 77.51           H    C
ATOM   8623  OG  SER H 138      31.867   5.192 -20.768  1.00 77.09           H    O
ATOM   8625  C   SER H 138      33.294   7.337 -20.976  1.00 80.08           H    C
ATOM   8626  O   SER H 138      32.448   7.436 -20.072  1.00 77.53           H    O
ATOM   8628  N   THR H 139      34.559   7.741 -20.825  1.00 81.86           H    N
ATOM   8629  CA  THR H 139      35.013   8.479 -19.633  1.00 83.05           H    C
ATOM   8631  CB  THR H 139      36.479   8.060 -19.175  1.00 83.13           H    C
ATOM   8633  OG1 THR H 139      36.527   6.653 -18.864  1.00 79.56           H    O
ATOM   8635  CG2 THR H 139      36.958   8.872 -17.945  1.00 79.07           H    C
ATOM   8639  C   THR H 139      34.913   9.993 -19.934  1.00 84.14           H    C
ATOM   8640  O   THR H 139      34.933  10.412 -21.105  1.00 84.01           H    O
ATOM   8642  N   SER H 140      34.768  10.790 -18.876  1.00 83.65           H    N
ATOM   8643  CA  SER H 140      34.610  12.232 -18.997  1.00 84.11           H    C
ATOM   8645  CB  SER H 140      33.116  12.566 -19.119  1.00 87.28           H    C
ATOM   8648  OG  SER H 140      32.318  11.706 -18.329  1.00 91.86           H    O
ATOM   8650  C   SER H 140      35.230  12.957 -17.795  1.00 83.42           H    C
ATOM   8651  O   SER H 140      34.544  13.233 -16.807  1.00 81.47           H    O
ATOM   8653  N   GLY H 141      36.521  13.281 -17.903  1.00 84.14           H    N
ATOM   8654  CA  GLY H 141      37.309  13.723 -16.750  1.00 83.18           H    C
ATOM   8657  C   GLY H 141      37.385  12.602 -15.714  1.00 84.46           H    C
ATOM   8658  O   GLY H 141      38.023  11.561 -15.943  1.00 87.72           H    O
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ATOM   8660  N   GLY H 142      36.719  12.803 -14.579  1.00 79.83           H    N
ATOM   8661  CA  GLY H 142      36.615  11.767 -13.560  1.00 76.15           H    C
ATOM   8664  C   GLY H 142      35.314  10.983 -13.638  1.00 73.07           H    C
ATOM   8665  O   GLY H 142      35.081  10.122 -12.796  1.00 72.55           H    O
ATOM   8667  N   THR H 143      34.486  11.268 -14.648  1.00 70.20           H    N
ATOM   8668  CA  THR H 143      33.156  10.670 -14.798  1.00 67.07           H    C
ATOM   8670  CB  THR H 143      32.133  11.781 -15.066  1.00 70.83           H    C
ATOM   8672  OG1 THR H 143      32.306  12.814 -14.087  1.00 73.93           H    O
ATOM   8674  CG2 THR H 143      30.697  11.250 -15.005  1.00 71.41           H    C
ATOM   8678  C   THR H 143      33.106   9.630 -15.934  1.00 64.83           H    C
ATOM   8679  O   THR H 143      33.472   9.927 -17.073  1.00 65.33           H    O
ATOM   8681  N   ALA H 144      32.664   8.410 -15.626  1.00 61.30           H    N
ATOM   8682  CA  ALA H 144      32.466   7.373 -16.650  1.00 56.92           H    C
ATOM   8684  CB  ALA H 144      33.199   6.095 -16.270  1.00 54.56           H    C
ATOM   8688  C   ALA H 144      30.988   7.089 -16.870  1.00 54.17           H    C
ATOM   8689  O   ALA H 144      30.242   6.964 -15.909  1.00 55.41           H    O
ATOM   8691  N   ALA H 145      30.575   6.999 -18.134  1.00 50.55           H    N
ATOM   8692  CA  ALA H 145      29.219   6.600 -18.499  1.00 47.56           H    C
ATOM   8694  CB  ALA H 145      28.753   7.367 -19.741  1.00 43.41           H    C
ATOM   8698  C   ALA H 145      29.157   5.098 -18.777  1.00 48.05           H    C
ATOM   8699  O   ALA H 145      30.030   4.562 -19.459  1.00 48.66           H    O
ATOM   8701  N   LEU H 146      28.112   4.432 -18.270  1.00 46.22           H    N
ATOM   8702  CA  LEU H 146      27.830   3.025 -18.616  1.00 45.39           H    C
ATOM   8704  CB  LEU H 146      28.468   2.049 -17.614  1.00 49.59           H    C
ATOM   8707  CG  LEU H 146      28.201   2.235 -16.118  1.00 50.31           H    C
ATOM   8709  CD1 LEU H 146      26.969   1.451 -15.666  1.00 52.95           H    C
ATOM   8713  CD2 LEU H 146      29.415   1.805 -15.313  1.00 49.61           H    C
ATOM   8717  C   LEU H 146      26.344   2.790 -18.709  1.00 43.31           H    C
ATOM   8718  O   LEU H 146      25.557   3.650 -18.315  1.00 44.23           H    O
ATOM   8720  N   GLY H 147      25.953   1.630 -19.232  1.00 44.00           H    N
ATOM   8721  CA  GLY H 147      24.533   1.302 -19.337  1.00 43.01           H    C
ATOM   8724  C   GLY H 147      24.156  -0.120 -19.697  1.00 41.62           H    C
ATOM   8725  O   GLY H 147      24.953  -1.068 -19.563  1.00 36.99           H    O
ATOM   8727  N   CYS H 148      22.906  -0.256 -20.130  1.00 44.05           H    N
ATOM   8728  CA  CYS H 148      22.369  -1.522 -20.620  1.00 42.28           H    C
ATOM   8730  CB  CYS H 148      21.615  -2.286 -19.515  1.00 44.19           H    C
ATOM   8733  SG  CYS H 148      22.726  -3.180 -18.379  1.00 49.43           H    S
ATOM   8735  C   CYS H 148      21.455  -1.267 -21.814  1.00 39.10           H    C
ATOM   8736  O   CYS H 148      20.625  -0.369 -21.788  1.00 39.14           H    O
ATOM   8738  N   LEU H 149      21.629  -2.063 -22.857  1.00 36.07           H    N
ATOM   8739  CA  LEU H 149      20.707  -2.102 -23.987  1.00 36.55           H    C
ATOM   8741  CB  LEU H 149      21.466  -2.405 -25.273  1.00 36.46           H    C
ATOM   8744  CG  LEU H 149      20.749  -2.461 -26.630  1.00 37.06           H    C
ATOM   8746  CD1 LEU H 149      19.956  -1.182 -26.990  1.00 34.85           H    C
ATOM   8750  CD2 LEU H 149      21.799  -2.789 -27.691  1.00 36.54           H    C
ATOM   8754  C   LEU H 149      19.661  -3.172 -23.747  1.00 40.19           H    C
ATOM   8755  O   LEU H 149      19.979  -4.358 -23.643  1.00 37.51           H    O
ATOM   8757  N   VAL H 150      18.411  -2.731 -23.604  1.00 39.59           H    N
ATOM   8758  CA  VAL H 150      17.303  -3.616 -23.381  1.00 36.69           H    C
ATOM   8760  CB  VAL H 150      16.393  -3.069 -22.319  1.00 33.37           H    C
ATOM   8762  CG1 VAL H 150      15.295  -4.062 -22.067  1.00 30.88           H    C
ATOM   8766  CG2 VAL H 150      17.218  -2.785 -21.079  1.00 30.65           H    C
ATOM   8770  C   VAL H 150      16.580  -3.716 -24.694  1.00 37.50           H    C
ATOM   8771  O   VAL H 150      15.776  -2.851 -25.030  1.00 38.91           H    O
ATOM   8773  N   LYS H 151      16.833  -4.809 -25.408  1.00 39.40           H    N
ATOM   8774  CA  LYS H 151      16.505  -4.885 -26.811  1.00 40.07           H    C
ATOM   8776  CB  LYS H 151      17.772  -5.131 -27.621  1.00 43.23           H    C
ATOM   8779  CG  LYS H 151      17.649  -4.749 -29.080  1.00 43.04           H    C
ATOM   8782  CD  LYS H 151      18.899  -5.106 -29.856  1.00 42.51           H    C
ATOM   8785  CE  LYS H 151      18.853  -4.519 -31.259  1.00 43.56           H    C
ATOM   8788  NZ  LYS H 151      17.923  -5.259 -32.133  1.00 44.67           H    N
ATOM   8792  C   LYS H 151      15.503  -5.969 -27.139  1.00 42.33           H    C
ATOM   8793  O   LYS H 151      15.492  -7.033 -26.507  1.00 43.20           H    O
ATOM   8795  N   ASP H 152      14.668  -5.676 -28.138  1.00 42.41           H    N
ATOM   8796  CA  ASP H 152      13.758  -6.642 -28.781  1.00 42.14           H    C
ATOM   8798  CB  ASP H 152      14.532  -7.741 -29.510  1.00 40.87           H    C
ATOM   8801  CG  ASP H 152      15.351  -7.230 -30.688  1.00 43.71           H    C
ATOM   8802  OD1 ASP H 152      14.901  -6.322 -31.435  1.00 39.56           H    O
ATOM   8803  OD2 ASP H 152      16.454  -7.784 -30.879  1.00 43.05           H    O
ATOM   8804  C   ASP H 152      12.749  -7.287 -27.826  1.00 41.35           H    C
ATOM   8805  O   ASP H 152      12.753  -8.485 -27.649  1.00 45.45           H    O
ATOM   8807  N   TYR H 153      11.887  -6.475 -27.226  1.00 42.13           H    N
ATOM   8808  CA  TYR H 153      10.839  -6.973 -26.366  1.00 42.23           H    C
ATOM   8810  CB  TYR H 153      11.161  -6.629 -24.909  1.00 40.02           H    C
ATOM   8813  CG  TYR H 153      11.066  -5.176 -24.622  1.00 41.06           H    C
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ATOM   8814  CD1 TYR H 153       9.833  -4.598 -24.254  1.00 39.43      H    C
ATOM   8816  CE1 TYR H 153       9.721  -3.244 -24.000  1.00 38.17      H    C
ATOM   8818  CZ  TYR H 153      10.842  -2.437 -24.132  1.00 39.34      H    C
ATOM   8819  OH  TYR H 153      10.736  -1.102 -23.893  1.00 38.42      H    O
ATOM   8821  CE2 TYR H 153      12.070  -2.977 -24.518  1.00 41.11      H    C
ATOM   8823  CD2 TYR H 153      12.174  -4.348 -24.767  1.00 40.86      H    C
ATOM   8825  C   TYR H 153       9.458  -6.413 -26.769  1.00 45.11      H    C
ATOM   8826  O   TYR H 153       9.343  -5.359 -27.390  1.00 42.90      H    O
ATOM   8828  N   PHE H 154       8.416  -7.161 -26.422  1.00 46.57      H    N
ATOM   8829  CA  PHE H 154       7.059  -6.739 -26.645  1.00 44.01      H    C
ATOM   8831  CB  PHE H 154       6.580  -7.103 -28.050  1.00 44.53      H    C
ATOM   8834  CG  PHE H 154       5.293  -6.417 -28.444  1.00 44.85      H    C
ATOM   8835  CD1 PHE H 154       5.298  -5.108 -28.903  1.00 44.81      H    C
ATOM   8837  CE1 PHE H 154       4.108  -4.452 -29.259  1.00 42.87      H    C
ATOM   8839  CZ  PHE H 154       2.911  -5.129 -29.153  1.00 44.19      H    C
ATOM   8841  CE2 PHE H 154       2.896  -6.443 -28.691  1.00 46.54      H    C
ATOM   8843  CD2 PHE H 154       4.074  -7.077 -28.329  1.00 47.24      H    C
ATOM   8845  C   PHE H 154       6.185  -7.395 -25.578  1.00 41.15      H    C
ATOM   8846  O   PHE H 154       6.453  -8.521 -25.175  1.00 43.67      H    O
ATOM   8848  N   PRO H 155       5.169  -6.672 -25.071  1.00 39.86      H    N
ATOM   8849  CA  PRO H 155       4.829  -5.284 -25.307  1.00 39.89      H    C
ATOM   8851  CB  PRO H 155       3.336  -5.263 -24.989  1.00 38.85      H    C
ATOM   8854  CG  PRO H 155       3.261  -6.165 -23.792  1.00 40.53      H    C
ATOM   8857  CD  PRO H 155       4.243  -7.277 -24.101  1.00 41.11      H    C
ATOM   8860  C   PRO H 155       5.601  -4.412 -24.317  1.00 40.95      H    C
ATOM   8861  O   PRO H 155       6.530  -4.884 -23.667  1.00 38.89      H    O
ATOM   8862  N   GLU H 156       5.224  -3.147 -24.206  1.00 44.59      H    N
ATOM   8863  CA  GLU H 156       5.706  -2.303 -23.110  1.00 41.40      H    C
ATOM   8865  CB  GLU H 156       5.499  -0.842 -23.490  1.00 48.94      H    C
ATOM   8868  CG  GLU H 156       6.214   0.195 -22.657  1.00 55.98      H    C
ATOM   8871  CD  GLU H 156       7.643   0.473 -23.087  1.00 52.84      H    C
ATOM   8872  OE1 GLU H 156       7.790   1.339 -23.956  1.00 53.29      H    O
ATOM   8873  OE2 GLU H 156       8.599  -0.105 -22.516  1.00 47.55      H    O
ATOM   8874  C   GLU H 156       4.896  -2.734 -21.886  1.00 39.49      H    C
ATOM   8875  O   GLU H 156       3.831  -3.308 -22.035  1.00 41.52      H    O
ATOM   8877  N   PRO H 157       5.389  -2.491 -20.660  1.00 40.48      H    N
ATOM   8878  CA  PRO H 157       6.632  -1.843 -20.264  1.00 38.35      H    C
ATOM   8880  CB  PRO H 157       6.186  -1.001 -19.063  1.00 37.61      H    C
ATOM   8883  CG  PRO H 157       5.210  -1.941 -18.335  1.00 36.52      H    C
ATOM   8886  CD  PRO H 157       4.587  -2.828 -19.461  1.00 37.65      H    C
ATOM   8889  C   PRO H 157       7.714  -2.809 -19.806  1.00 38.06      H    C
ATOM   8890  O   PRO H 157       7.461  -4.005 -19.626  1.00 40.68      H    O
ATOM   8891  N   VAL H 158       8.921  -2.260 -19.689  1.00 38.70      H    N
ATOM   8892  CA  VAL H 158      10.007  -2.834 -18.918  1.00 42.29      H    C
ATOM   8894  CB  VAL H 158      11.300  -3.148 -19.759  1.00 41.19      H    C
ATOM   8896  CG1 VAL H 158      11.055  -4.309 -20.747  1.00 39.02      H    C
ATOM   8900  CG2 VAL H 158      11.861  -1.889 -20.460  1.00 39.14      H    C
ATOM   8904  C   VAL H 158      10.352  -1.802 -17.877  1.00 44.51      H    C
ATOM   8905  O   VAL H 158      10.153  -0.625 -18.116  1.00 46.95      H    O
ATOM   8907  N   THR H 159      10.802  -2.237 -16.706  1.00 46.32      H    N
ATOM   8908  CA  THR H 159      11.435  -1.315 -15.758  1.00 45.55      H    C
ATOM   8910  CB  THR H 159      10.856  -1.384 -14.322  1.00 44.23      H    C
ATOM   8912  OG1 THR H 159      11.374  -2.531 -13.644  1.00 43.43      H    O
ATOM   8914  CG2 THR H 159       9.352  -1.406 -14.349  1.00 41.58      H    C
ATOM   8918  C   THR H 159      12.925  -1.610 -15.706  1.00 45.43      H    C
ATOM   8919  O   THR H 159      13.355  -2.747 -15.876  1.00 44.87      H    O
ATOM   8921  N   VAL H 160      13.710  -0.567 -15.482  1.00 44.82      H    N
ATOM   8922  CA  VAL H 160      15.134  -0.706 -15.325  1.00 43.74      H    C
ATOM   8924  CB  VAL H 160      15.913  -0.076 -16.540  1.00 43.89      H    C
ATOM   8926  CG1 VAL H 160      17.390  -0.428 -16.503  1.00 38.34      H    C
ATOM   8930  CG2 VAL H 160      15.294  -0.483 -17.885  1.00 42.75      H    C
ATOM   8934  C   VAL H 160      15.508   0.017 -14.036  1.00 44.74      H    C
ATOM   8935  O   VAL H 160      15.156   1.170 -13.863  1.00 47.18      H    O
ATOM   8937  N   SER H 161      16.163  -0.681 -13.111  1.00 44.54      H    N
ATOM   8938  CA  SER H 161      16.804  -0.027 -11.966  1.00 45.20      H    C
ATOM   8940  CB  SER H 161      16.206  -0.499 -10.626  1.00 43.42      H    C
ATOM   8943  OG  SER H 161      16.262  -1.908 -10.497  1.00 48.40      H    O
ATOM   8945  C   SER H 161      18.288  -0.314 -12.016  1.00 43.57      H    C
ATOM   8946  O   SER H 161      18.729  -1.165 -12.780  1.00 45.02      H    O
ATOM   8948  N   TRP H 162      19.052   0.391 -11.186  1.00 45.13      H    N
ATOM   8949  CA  TRP H 162      20.488   0.132 -11.037  1.00 47.55      H    C
ATOM   8951  CB  TRP H 162      21.336   1.336 -11.514  1.00 43.28      H    C
ATOM   8954  CG  TRP H 162      21.367   1.455 -13.016  1.00 41.03      H    C
ATOM   8955  CD1 TRP H 162      20.460   2.114 -13.822  1.00 40.11      H    C
ATOM   8957  NE1 TRP H 162      20.807   1.960 -15.140  1.00 41.72      H    N
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ATOM	8959	CE2	TRP	H	162	21.945	1.192	-15.213	1.00	42.07	H	C
ATOM	8960	CD2	TRP	H	162	22.317	0.849	-13.897	1.00	41.55	H	C
ATOM	8961	CE3	TRP	H	162	23.454	0.054	-13.700	1.00	41.40	H	C
ATOM	8963	CZ3	TRP	H	162	24.161	-0.366	-14.782	1.00	40.81	H	C
ATOM	8965	CH2	TRP	H	162	23.776	-0.007	-16.084	1.00	43.08	H	C
ATOM	8967	CZ2	TRP	H	162	22.673	0.768	-16.319	1.00	42.01	H	C
ATOM	8969	C	TRP	H	162	20.815	-0.236	-9.593	1.00	49.43	H	C
ATOM	8970	O	TRP	H	162	20.354	0.425	-8.666	1.00	51.30	H	O
ATOM	8972	N	ASN	H	163	21.606	-1.292	-9.409	1.00	52.91	H	N
ATOM	8973	CA	ASN	H	163	21.951	-1.789	-8.069	1.00	54.41	H	C
ATOM	8975	CB	ASN	H	163	22.992	-0.874	-7.409	1.00	55.25	H	C
ATOM	8978	CG	ASN	H	163	24.327	-0.902	-8.119	1.00	55.62	H	C
ATOM	8979	OD1	ASN	H	163	25.024	0.109	-8.180	1.00	51.67	H	O
ATOM	8980	ND2	ASN	H	163	24.700	-2.065	-8.648	1.00	56.38	H	N
ATOM	8983	C	ASN	H	163	20.704	-1.912	-7.195	1.00	56.37	H	C
ATOM	8984	O	ASN	H	163	20.650	-1.375	-6.096	1.00	58.93	H	O
ATOM	8986	N	SER	H	164	19.692	-2.577	-7.750	1.00	59.97	H	N
ATOM	8987	CA	SER	H	164	18.417	-2.855	-7.093	1.00	56.55	H	C
ATOM	8989	CB	SER	H	164	18.620	-3.923	-6.027	1.00	51.98	H	C
ATOM	8992	OG	SER	H	164	19.212	-5.060	-6.608	1.00	46.71	H	O
ATOM	8994	C	SER	H	164	17.710	-1.644	-6.514	1.00	57.67	H	C
ATOM	8995	O	SER	H	164	17.012	-1.769	-5.507	1.00	59.77	H	O
ATOM	8997	N	GLY	H	165	17.866	-0.489	-7.170	1.00	58.76	H	N
ATOM	8998	CA	GLY	H	165	17.275	0.782	-6.706	1.00	56.36	H	C
ATOM	9001	C	GLY	H	165	18.196	1.647	-5.849	1.00	54.63	H	C
ATOM	9002	O	GLY	H	165	17.861	2.792	-5.546	1.00	54.68	H	O
ATOM	9004	N	ALA	H	166	19.346	1.100	-5.457	1.00	53.47	H	N
ATOM	9005	CA	ALA	H	166	20.345	1.837	-4.682	1.00	55.29	H	C
ATOM	9007	CB	ALA	H	166	21.490	0.897	-4.284	1.00	54.60	H	C
ATOM	9011	C	ALA	H	166	20.915	3.036	-5.438	1.00	56.04	H	C
ATOM	9012	O	ALA	H	166	21.043	4.117	-4.878	1.00	57.31	H	O
ATOM	9014	N	LEU	H	167	21.278	2.821	-6.703	1.00	56.51	H	N
ATOM	9015	CA	LEU	H	167	21.842	3.864	-7.561	1.00	52.29	H	C
ATOM	9017	CB	LEU	H	167	22.909	3.278	-8.490	1.00	53.38	H	C
ATOM	9020	CG	LEU	H	167	23.654	4.226	-9.458	1.00	53.24	H	C
ATOM	9022	CD1	LEU	H	167	24.351	5.373	-8.695	1.00	48.05	H	C
ATOM	9026	CD2	LEU	H	167	24.654	3.463	-10.341	1.00	48.18	H	C
ATOM	9030	C	LEU	H	167	20.743	4.539	-8.375	1.00	52.47	H	C
ATOM	9031	O	LEU	H	167	20.195	3.960	-9.307	1.00	53.99	H	O
ATOM	9033	N	THR	H	168	20.420	5.771	-8.007	1.00	53.50	H	N
ATOM	9034	CA	THR	H	168	19.399	6.554	-8.692	1.00	53.76	H	C
ATOM	9036	CB	THR	H	168	18.317	6.980	-7.672	1.00	56.47	H	C
ATOM	9038	OG1	THR	H	168	17.022	6.617	-8.167	1.00	60.03	H	O
ATOM	9040	CG2	THR	H	168	18.374	8.494	-7.355	1.00	58.05	H	C
ATOM	9044	C	THR	H	168	20.003	7.791	-9.396	1.00	54.76	H	C
ATOM	9045	O	THR	H	168	19.522	8.222	-10.448	1.00	52.82	H	O
ATOM	9047	N	SER	H	169	21.066	8.339	-8.809	1.00	56.67	H	N
ATOM	9048	CA	SER	H	169	21.665	9.591	-9.259	1.00	55.97	H	C
ATOM	9050	CB	SER	H	169	22.621	10.104	-8.172	1.00	58.30	H	C
ATOM	9053	OG	SER	H	169	23.468	11.132	-8.644	1.00	59.09	H	O
ATOM	9055	C	SER	H	169	22.437	9.436	-10.570	1.00	57.31	H	C
ATOM	9056	O	SER	H	169	23.321	8.586	-10.683	1.00	60.22	H	O
ATOM	9058	N	GLY	H	170	22.118	10.280	-11.546	1.00	53.53	H	N
ATOM	9059	CA	GLY	H	170	22.802	10.257	-12.836	1.00	50.50	H	C
ATOM	9062	C	GLY	H	170	22.194	9.314	-13.867	1.00	48.82	H	C
ATOM	9063	O	GLY	H	170	22.663	9.271	-15.009	1.00	47.19	H	O
ATOM	9065	N	VAL	H	171	21.143	8.584	-13.474	1.00	49.42	H	N
ATOM	9066	CA	VAL	H	171	20.503	7.593	-14.338	1.00	43.12	H	C
ATOM	9068	CB	VAL	H	171	19.736	6.539	-13.517	1.00	37.13	H	C
ATOM	9070	CG1	VAL	H	171	18.953	5.595	-14.427	1.00	36.43	H	C
ATOM	9074	CG2	VAL	H	171	20.698	5.755	-12.663	1.00	34.37	H	C
ATOM	9078	C	VAL	H	171	19.569	8.255	-15.339	1.00	42.58	H	C
ATOM	9079	O	VAL	H	171	18.771	9.114	-14.981	1.00	42.12	H	O
ATOM	9081	N	HIS	H	172	19.700	7.856	-16.602	1.00	42.66	H	N
ATOM	9082	CA	HIS	H	172	18.796	8.264	-17.674	1.00	40.49	H	C
ATOM	9084	CB	HIS	H	172	19.514	9.126	-18.723	1.00	42.19	H	C
ATOM	9087	CG	HIS	H	172	20.048	10.412	-18.185	1.00	44.33	H	C
ATOM	9088	ND1	HIS	H	172	19.265	11.317	-17.502	1.00	47.16	H	N
ATOM	9090	CE1	HIS	H	172	19.996	12.359	-17.153	1.00	43.46	H	C
ATOM	9092	NE2	HIS	H	172	21.228	12.158	-17.577	1.00	48.54	H	N
ATOM	9094	CD2	HIS	H	172	21.289	10.943	-18.220	1.00	45.85	H	C
ATOM	9096	C	HIS	H	172	18.343	7.001	-18.333	1.00	39.00	H	C
ATOM	9097	O	HIS	H	172	19.148	6.307	-18.962	1.00	45.19	H	O
ATOM	9099	N	THR	H	173	17.070	6.684	-18.178	1.00	40.10	H	N
ATOM	9100	CA	THR	H	173	16.470	5.520	-18.828	1.00	39.09	H	C

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ATOM   9102  CB  THR H 173      15.689   4.676 -17.841  1.00 35.21      H    C
ATOM   9104  OG1 THR H 173      16.626   4.011 -16.986  1.00 38.93      H    O
ATOM   9106  CG2 THR H 173      14.834   3.661 -18.558  1.00 30.16      H    C
ATOM   9110  C   THR H 173      15.583   6.039 -19.937  1.00 39.08      H    C
ATOM   9111  O   THR H 173      14.601   6.738 -19.692  1.00 40.91      H    O
ATOM   9113  N   PHE H 174      15.959   5.727 -21.170  1.00 40.19      H    N
ATOM   9114  CA  PHE H 174      15.352   6.379 -22.321  1.00 39.23      H    C
ATOM   9116  CB  PHE H 174      16.277   6.320 -23.536  1.00 36.98      H    C
ATOM   9119  CG  PHE H 174      17.543   7.115 -23.366  1.00 37.32      H    C
ATOM   9120  CD1 PHE H 174      17.546   8.486 -23.572  1.00 41.02      H    C
ATOM   9122  CE1 PHE H 174      18.689   9.214 -23.413  1.00 36.21      H    C
ATOM   9124  CZ  PHE H 174      19.858   8.584 -23.044  1.00 35.93      H    C
ATOM   9126  CE2 PHE H 174      19.874   7.215 -22.847  1.00 37.04      H    C
ATOM   9128  CD2 PHE H 174      18.728   6.496 -22.997  1.00 37.31      H    C
ATOM   9130  C   PHE H 174      14.013   5.757 -22.643  1.00 39.98      H    C
ATOM   9131  O   PHE H 174      13.828   4.574 -22.444  1.00 42.53      H    O
ATOM   9133  N   PRO H 175      13.067   6.572 -23.139  1.00 41.12      H    N
ATOM   9134  CA  PRO H 175      11.824   6.008 -23.617  1.00 40.00      H    C
ATOM   9136  CB  PRO H 175      11.083   7.230 -24.181  1.00 39.62      H    C
ATOM   9139  CG  PRO H 175      11.625   8.371 -23.437  1.00 42.28      H    C
ATOM   9142  CD  PRO H 175      13.073   8.043 -23.273  1.00 45.24      H    C
ATOM   9145  C   PRO H 175      12.067   4.967 -24.708  1.00 42.55      H    C
ATOM   9146  O   PRO H 175      12.945   5.146 -25.575  1.00 44.24      H    O
ATOM   9147  N   ALA H 176      11.258   3.914 -24.673  1.00 41.96      H    N
ATOM   9148  CA  ALA H 176      11.309   2.854 -25.659  1.00 41.92      H    C
ATOM   9150  CB  ALA H 176      10.317   1.779 -25.289  1.00 42.76      H    C
ATOM   9154  C   ALA H 176      10.976   3.377 -27.038  1.00 43.59      H    C
ATOM   9155  O   ALA H 176      10.102   4.228 -27.172  1.00 43.47      H    O
ATOM   9157  N   VAL H 177      11.661   2.851 -28.054  1.00 45.84      H    N
ATOM   9158  CA  VAL H 177      11.301   3.112 -29.440  1.00 43.47      H    C
ATOM   9160  CB  VAL H 177      12.415   3.821 -30.256  1.00 48.12      H    C
ATOM   9162  CG1 VAL H 177      11.998   3.931 -31.733  1.00 45.24      H    C
ATOM   9166  CG2 VAL H 177      12.705   5.217 -29.678  1.00 49.52      H    C
ATOM   9170  C   VAL H 177      10.918   1.815 -30.137  1.00 44.50      H    C
ATOM   9171  O   VAL H 177      11.522   0.780 -29.920  1.00 48.47      H    O
ATOM   9173  N   LEU H 178       9.907   1.897 -30.990  1.00 47.73      H    N
ATOM   9174  CA  LEU H 178       9.437   0.760 -31.747  1.00 46.99      H    C
ATOM   9176  CB  LEU H 178       7.973   0.963 -32.156  1.00 50.11      H    C
ATOM   9179  CG  LEU H 178       7.167  -0.265 -32.622  1.00 51.37      H    C
ATOM   9181  CD1 LEU H 178       7.151  -1.406 -31.572  1.00 48.44      H    C
ATOM   9185  CD2 LEU H 178       5.735   0.154 -32.974  1.00 49.05      H    C
ATOM   9189  C   LEU H 178      10.299   0.592 -32.985  1.00 49.30      H    C
ATOM   9190  O   LEU H 178      10.285   1.432 -33.877  1.00 52.49      H    O
ATOM   9192  N   GLN H 179      11.050  -0.501 -33.035  1.00 49.34      H    N
ATOM   9193  CA  GLN H 179      11.889  -0.817 -34.164  1.00 47.35      H    C
ATOM   9195  CB  GLN H 179      12.837  -1.950 -33.786  1.00 47.18      H    C
ATOM   9198  CG  GLN H 179      13.808  -1.532 -32.707  1.00 49.69      H    C
ATOM   9201  CD  GLN H 179      14.519  -2.689 -32.093  1.00 53.67      H    C
ATOM   9202  OE1 GLN H 179      13.891  -3.589 -31.531  1.00 59.36      H    O
ATOM   9203  NE2 GLN H 179      15.845  -2.674 -32.170  1.00 55.87      H    N
ATOM   9206  C   GLN H 179      11.017  -1.229 -35.331  1.00 46.64      H    C
ATOM   9207  O   GLN H 179       9.828  -1.472 -35.163  1.00 48.17      H    O
ATOM   9209  N   SER H 180      11.614  -1.329 -36.511  1.00 48.88      H    N
ATOM   9210  CA  SER H 180      10.881  -1.727 -37.712  1.00 51.20      H    C
ATOM   9212  CB  SER H 180      11.781  -1.636 -38.947  1.00 53.59      H    C
ATOM   9215  OG  SER H 180      12.870  -2.527 -38.817  1.00 57.94      H    O
ATOM   9217  C   SER H 180      10.320  -3.136 -37.591  1.00 51.63      H    C
ATOM   9218  O   SER H 180       9.391  -3.508 -38.301  1.00 49.96      H    O
ATOM   9220  N   SER H 181      10.890  -3.914 -36.681  1.00 53.44      H    N
ATOM   9221  CA  SER H 181      10.468  -5.290 -36.432  1.00 51.01      H    C
ATOM   9223  CB  SER H 181      11.593  -6.014 -35.697  1.00 52.96      H    C
ATOM   9226  OG  SER H 181      12.047  -5.237 -34.602  1.00 53.95      H    O
ATOM   9228  C   SER H 181       9.185  -5.407 -35.602  1.00 52.52      H    C
ATOM   9229  O   SER H 181       8.630  -6.499 -35.445  1.00 52.47      H    O
ATOM   9231  N   GLY H 182       8.707  -4.295 -35.056  1.00 52.16      H    N
ATOM   9232  CA  GLY H 182       7.573  -4.344 -34.144  1.00 49.10      H    C
ATOM   9235  C   GLY H 182       7.976  -4.779 -32.742  1.00 47.72      H    C
ATOM   9236  O   GLY H 182       7.132  -5.197 -31.943  1.00 50.01      H    O
ATOM   9238  N   LEU H 183       9.265  -4.687 -32.443  1.00 45.04      H    N
ATOM   9239  CA  LEU H 183       9.790  -5.012 -31.117  1.00 47.46      H    C
ATOM   9241  CB  LEU H 183      10.926  -6.051 -31.195  1.00 45.78      H    C
ATOM   9244  CG  LEU H 183      10.637  -7.435 -31.772  1.00 45.87      H    C
ATOM   9246  CD1 LEU H 183      11.929  -8.234 -31.858  1.00 44.77      H    C
ATOM   9250  CD2 LEU H 183       9.610  -8.160 -30.930  1.00 42.52      H    C
ATOM   9254  C   LEU H 183      10.347  -3.717 -30.523  1.00 47.06      H    C
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ATOM   9255  O   LEU H 183      10.954  -2.923 -31.243  1.00 46.04           H    O
ATOM   9257  N   TYR H 184      10.175  -3.528 -29.221  1.00 43.71           H    N
ATOM   9258  CA  TYR H 184      10.705  -2.330 -28.570  1.00 43.44           H    C
ATOM   9260  CB  TYR H 184       9.903  -1.963 -27.328  1.00 45.32           H    C
ATOM   9263  CG  TYR H 184       8.517  -1.462 -27.631  1.00 45.63           H    C
ATOM   9264  CD1 TYR H 184       8.291  -0.114 -27.932  1.00 47.91           H    C
ATOM   9266  CE1 TYR H 184       7.027   0.357 -28.206  1.00 46.89           H    C
ATOM   9268  CZ  TYR H 184       5.963  -0.518 -28.168  1.00 46.18           H    C
ATOM   9269  OH  TYR H 184       4.696  -0.077 -28.434  1.00 45.93           H    O
ATOM   9271  CE2 TYR H 184       6.160  -1.853 -27.860  1.00 47.38           H    C
ATOM   9273  CD2 TYR H 184       7.431  -2.320 -27.597  1.00 44.51           H    C
ATOM   9275  C   TYR H 184      12.169  -2.468 -28.183  1.00 40.25           H    C
ATOM   9276  O   TYR H 184      12.660  -3.565 -27.907  1.00 39.41           H    O
ATOM   9278  N   SER H 185      12.855  -1.335 -28.146  1.00 39.04           H    N
ATOM   9279  CA  SER H 185      14.213  -1.307 -27.670  1.00 42.98           H    C
ATOM   9281  CB  SER H 185      15.179  -1.452 -28.863  1.00 45.82           H    C
ATOM   9284  OG  SER H 185      16.516  -1.399 -28.427  1.00 47.49           H    O
ATOM   9286  C   SER H 185      14.476  -0.023 -26.915  1.00 41.19           H    C
ATOM   9287  O   SER H 185      13.913   1.021 -27.229  1.00 42.25           H    O
ATOM   9289  N   LEU H 186      15.326  -0.111 -25.906  1.00 43.63           H    N
ATOM   9290  CA  LEU H 186      15.695   1.050 -25.096  1.00 43.06           H    C
ATOM   9292  CB  LEU H 186      14.644   1.391 -24.043  1.00 42.69           H    C
ATOM   9295  CG  LEU H 186      14.528   0.577 -22.765  1.00 42.26           H    C
ATOM   9297  CD1 LEU H 186      15.661   0.850 -21.783  1.00 33.31           H    C
ATOM   9301  CD2 LEU H 186      13.166   0.945 -22.148  1.00 44.38           H    C
ATOM   9305  C   LEU H 186      17.030   0.801 -24.442  1.00 44.39           H    C
ATOM   9306  O   LEU H 186      17.462  -0.346 -24.311  1.00 43.04           H    O
ATOM   9308  N   SER H 187      17.677   1.896 -24.056  1.00 46.61           H    N
ATOM   9309  CA  SER H 187      18.906   1.870 -23.302  1.00 39.45           H    C
ATOM   9311  CB  SER H 187      20.036   2.502 -24.118  1.00 43.73           H    C
ATOM   9314  OG  SER H 187      20.602   1.597 -25.064  1.00 42.54           H    O
ATOM   9316  C   SER H 187      18.701   2.640 -22.006  1.00 37.79           H    C
ATOM   9317  O   SER H 187      17.951   3.612 -21.941  1.00 36.72           H    O
ATOM   9319  N   SER H 188      19.339   2.171 -20.955  1.00 39.93           H    N
ATOM   9320  CA  SER H 188      19.397   2.897 -19.707  1.00 40.27           H    C
ATOM   9322  CB  SER H 188      18.879   2.036 -18.555  1.00 37.81           H    C
ATOM   9325  OG  SER H 188      18.694   2.839 -17.413  1.00 38.20           H    O
ATOM   9327  C   SER H 188      20.853   3.212 -19.525  1.00 39.95           H    C
ATOM   9328  O   SER H 188      21.683   2.340 -19.736  1.00 39.14           H    O
ATOM   9330  N   VAL H 189      21.180   4.455 -19.188  1.00 42.77           H    N
ATOM   9331  CA  VAL H 189      22.586   4.815 -18.908  1.00 43.87           H    C
ATOM   9333  CB  VAL H 189      23.210   5.709 -20.023  1.00 43.83           H    C
ATOM   9335  CG1 VAL H 189      23.155   4.992 -21.377  1.00 41.98           H    C
ATOM   9339  CG2 VAL H 189      22.514   7.058 -20.099  1.00 35.58           H    C
ATOM   9343  C   VAL H 189      22.717   5.488 -17.546  1.00 45.13           H    C
ATOM   9344  O   VAL H 189      21.737   5.980 -16.993  1.00 46.37           H    O
ATOM   9346  N   VAL H 190      23.921   5.440 -16.999  1.00 44.81           H    N
ATOM   9347  CA  VAL H 190      24.267   6.137 -15.773  1.00 46.26           H    C
ATOM   9349  CB  VAL H 190      24.152   5.226 -14.553  1.00 43.18           H    C
ATOM   9351  CG1 VAL H 190      24.975   3.946 -14.754  1.00 39.28           H    C
ATOM   9355  CG2 VAL H 190      24.580   5.986 -13.300  1.00 41.41           H    C
ATOM   9359  C   VAL H 190      25.724   6.653 -15.877  1.00 48.98           H    C
ATOM   9360  O   VAL H 190      26.622   5.940 -16.352  1.00 46.58           H    O
ATOM   9362  N   THR H 191      25.939   7.898 -15.461  1.00 49.75           H    N
ATOM   9363  CA  THR H 191      27.282   8.458 -15.341  1.00 51.45           H    C
ATOM   9365  CB  THR H 191      27.342   9.924 -15.836  1.00 50.75           H    C
ATOM   9367  OG1 THR H 191      26.065  10.549 -15.648  1.00 56.96           H    O
ATOM   9369  CG2 THR H 191      27.674   9.974 -17.332  1.00 52.88           H    C
ATOM   9373  C   THR H 191      27.740   8.324 -13.882  1.00 51.60           H    C
ATOM   9374  O   THR H 191      27.030   8.714 -12.960  1.00 52.06           H    O
ATOM   9376  N   VAL H 192      28.925   7.750 -13.699  1.00 54.85           H    N
ATOM   9377  CA  VAL H 192      29.520   7.486 -12.386  1.00 57.62           H    C
ATOM   9379  CB  VAL H 192      29.578   5.962 -12.131  1.00 54.49           H    C
ATOM   9381  CG1 VAL H 192      30.349   5.260 -13.229  1.00 56.43           H    C
ATOM   9385  CG2 VAL H 192      30.226   5.669 -10.798  1.00 57.27           H    C
ATOM   9389  C   VAL H 192      30.960   8.076 -12.318  1.00 62.03           H    C
ATOM   9390  O   VAL H 192      31.556   8.341 -13.354  1.00 62.24           H    O
ATOM   9392  N   PRO H 193      31.498   8.351 -11.103  1.00 66.85           H    N
ATOM   9393  CA  PRO H 193      32.956   8.515 -10.994  1.00 65.53           H    C
ATOM   9395  CB  PRO H 193      33.201   8.615  -9.478  1.00 66.15           H    C
ATOM   9398  CG  PRO H 193      31.878   8.391  -8.815  1.00 66.24           H    C
ATOM   9401  CD  PRO H 193      30.826   8.664  -9.828  1.00 66.54           H    C
ATOM   9404  C   PRO H 193      33.776   7.359 -11.597  1.00 67.53           H    C
ATOM   9405  O   PRO H 193      33.376   6.196 -11.505  1.00 65.84           H    O
ATOM   9406  N   SER H 194      34.915   7.690 -12.203  1.00 69.86           H    N
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ATOM   9407  CA  SER H 194      35.774   6.690 -12.846  1.00 70.78      H    C
ATOM   9409  CB  SER H 194      36.784   7.361 -13.782  1.00 70.20      H    C
ATOM   9412  OG  SER H 194      36.152   7.874 -14.941  1.00 71.59      H    O
ATOM   9414  C   SER H 194      36.511   5.828 -11.822  1.00 71.77      H    C
ATOM   9415  O   SER H 194      36.640   4.618 -11.996  1.00 68.40      H    O
ATOM   9417  N   SER H 195      37.002   6.464 -10.762  1.00 74.61      H    N
ATOM   9418  CA  SER H 195      37.690   5.763  -9.676  1.00 76.05      H    C
ATOM   9420  CB  SER H 195      38.089   6.757  -8.579  1.00 77.52      H    C
ATOM   9423  OG  SER H 195      36.975   7.532  -8.155  1.00 78.25      H    O
ATOM   9425  C   SER H 195      36.836   4.634  -9.084  1.00 77.66      H    C
ATOM   9426  O   SER H 195      37.374   3.620  -8.623  1.00 76.66      H    O
ATOM   9428  N   SER H 196      35.514   4.818  -9.115  1.00 78.30      H    N
ATOM   9429  CA  SER H 196      34.553   3.850  -8.578  1.00 78.76      H    C
ATOM   9431  CB  SER H 196      33.144   4.438  -8.630  1.00 83.25      H    C
ATOM   9434  OG  SER H 196      32.188   3.464  -8.261  1.00 86.36      H    O
ATOM   9436  C   SER H 196      34.538   2.498  -9.290  1.00 78.25      H    C
ATOM   9437  O   SER H 196      34.191   1.485  -8.683  1.00 77.35      H    O
ATOM   9439  N   LEU H 197      34.899   2.487 -10.572  1.00 78.82      H    N
ATOM   9440  CA  LEU H 197      34.935   1.247 -11.363  1.00 79.00      H    C
ATOM   9442  CB  LEU H 197      35.247   1.545 -12.835  1.00 77.46      H    C
ATOM   9445  CG  LEU H 197      34.137   2.087 -13.742  1.00 76.25      H    C
ATOM   9447  CD1 LEU H 197      33.429   3.270 -13.133  1.00 76.60      H    C
ATOM   9451  CD2 LEU H 197      34.726   2.470 -15.102  1.00 78.68      H    C
ATOM   9455  C   LEU H 197      35.977   0.285 -10.795  1.00 80.70      H    C
ATOM   9456  O   LEU H 197      36.875   0.701 -10.057  1.00 83.00      H    O
ATOM   9458  N   GLY H 198      35.844  -1.000 -11.115  1.00 81.01      H    N
ATOM   9459  CA  GLY H 198      36.741  -2.028 -10.571  1.00 82.81      H    C
ATOM   9462  C   GLY H 198      36.483  -2.423  -9.116  1.00 84.82      H    C
ATOM   9463  O   GLY H 198      36.642  -3.598  -8.758  1.00 84.22      H    O
ATOM   9465  N   THR H 199      36.110  -1.448  -8.276  1.00 84.80      H    N
ATOM   9466  CA  THR H 199      35.787  -1.686  -6.863  1.00 83.33      H    C
ATOM   9468  CB  THR H 199      36.358  -0.577  -5.975  1.00 86.44      H    C
ATOM   9470  OG1 THR H 199      37.775  -0.490  -6.172  1.00 89.54      H    O
ATOM   9472  CG2 THR H 199      36.052  -0.849  -4.495  1.00 86.08      H    C
ATOM   9476  C   THR H 199      34.274  -1.809  -6.625  1.00 83.43      H    C
ATOM   9477  O   THR H 199      33.800  -2.864  -6.210  1.00 84.75      H    O
ATOM   9479  N   GLN H 200      33.530  -0.732  -6.881  1.00 80.48      H    N
ATOM   9480  CA  GLN H 200      32.060  -0.749  -6.812  1.00 77.33      H    C
ATOM   9482  CB  GLN H 200      31.512   0.681  -6.677  1.00 79.01      H    C
ATOM   9485  CG  GLN H 200      30.042   0.885  -7.059  1.00 79.89      H    C
ATOM   9488  CD  GLN H 200      29.078   0.587  -5.921  1.00 81.86      H    C
ATOM   9489  OE1 GLN H 200      28.549  -0.525  -5.812  1.00 81.90      H    O
ATOM   9490  NE2 GLN H 200      28.838   1.587  -5.071  1.00 78.91      H    N
ATOM   9493  C   GLN H 200      31.488  -1.431  -8.062  1.00 75.24      H    C
ATOM   9494  O   GLN H 200      31.795  -1.027  -9.184  1.00 74.83      H    O
ATOM   9496  N   THR H 201      30.650  -2.449  -7.861  1.00 72.53      H    N
ATOM   9497  CA  THR H 201      30.041  -3.175  -8.977  1.00 70.91      H    C
ATOM   9499  CB  THR H 201      29.934  -4.693  -8.685  1.00 74.12      H    C
ATOM   9501  OG1 THR H 201      30.058  -5.425  -9.914  1.00 78.67      H    O
ATOM   9503  CG2 THR H 201      28.627  -5.046  -7.979  1.00 74.72      H    C
ATOM   9507  C   THR H 201      28.696  -2.540  -9.381  1.00 69.53      H    C
ATOM   9508  O   THR H 201      27.993  -1.969  -8.538  1.00 68.84      H    O
ATOM   9510  N   TYR H 202      28.379  -2.625 -10.679  1.00 65.85      H    N
ATOM   9511  CA  TYR H 202      27.205  -1.974 -11.290  1.00 60.67      H    C
ATOM   9513  CB  TYR H 202      27.660  -0.909 -12.283  1.00 61.49      H    C
ATOM   9516  CG  TYR H 202      28.338   0.234 -11.608  1.00 62.94      H    C
ATOM   9517  CD1 TYR H 202      27.607   1.139 -10.851  1.00 61.94      H    C
ATOM   9519  CE1 TYR H 202      28.226   2.179 -10.206  1.00 62.61      H    C
ATOM   9521  CZ  TYR H 202      29.595   2.325 -10.313  1.00 61.00      H    C
ATOM   9522  OH  TYR H 202      30.208   3.360  -9.671  1.00 64.17      H    O
ATOM   9524  CE2 TYR H 202      30.342   1.449 -11.053  1.00 60.00      H    C
ATOM   9526  CD2 TYR H 202      29.716   0.403 -11.694  1.00 62.36      H    C
ATOM   9528  C   TYR H 202      26.339  -2.963 -12.049  1.00 56.01      H    C
ATOM   9529  O   TYR H 202      26.779  -3.544 -13.037  1.00 50.08      H    O
ATOM   9531  N   ILE H 203      25.100  -3.131 -11.592  1.00 56.23      H    N
ATOM   9532  CA  ILE H 203      24.170  -4.079 -12.195  1.00 55.56      H    C
ATOM   9534  CB  ILE H 203      23.821  -5.243 -11.247  1.00 56.28      H    C
ATOM   9536  CG1 ILE H 203      25.095  -5.868 -10.663  1.00 55.50      H    C
ATOM   9539  CD1 ILE H 203      24.865  -6.586  -9.358  1.00 55.61      H    C
ATOM   9543  CG2 ILE H 203      23.013  -6.309 -11.982  1.00 52.74      H    C
ATOM   9547  C   ILE H 203      22.917  -3.324 -12.604  1.00 51.64      H    C
ATOM   9548  O   ILE H 203      22.441  -2.451 -11.885  1.00 49.15      H    O
ATOM   9550  N   CYS H 204      22.422  -3.640 -13.795  1.00 50.38      H    N
ATOM   9551  CA  CYS H 204      21.134  -3.149 -14.259  1.00 48.93      H    C
ATOM   9553  CB  CYS H 204      21.231  -2.699 -15.733  1.00 48.68      H    C
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ATOM   9556  SG  CYS H 204      21.530  -4.012 -16.959  1.00 52.72           H    S
ATOM   9558  C   CYS H 204      20.102  -4.266 -14.052  1.00 45.45           H    C
ATOM   9559  O   CYS H 204      20.310  -5.414 -14.467  1.00 40.75           H    O
ATOM   9561  N   ASN H 205      19.019  -3.925 -13.367  1.00 43.41           H    N
ATOM   9562  CA  ASN H 205      17.948  -4.862 -13.078  1.00 44.04           H    C
ATOM   9564  CB  ASN H 205      17.548  -4.745 -11.618  1.00 39.09           H    C
ATOM   9567  CG  ASN H 205      18.747  -4.584 -10.722  1.00 41.87           H    C
ATOM   9568  OD1 ASN H 205      18.994  -3.502 -10.201  1.00 40.79           H    O
ATOM   9569  ND2 ASN H 205      19.548  -5.642 -10.599  1.00 39.97           H    N
ATOM   9572  C   ASN H 205      16.792  -4.556 -14.013  1.00 41.64           H    C
ATOM   9573  O   ASN H 205      16.123  -3.528 -13.905  1.00 41.30           H    O
ATOM   9575  N   VAL H 206      16.579  -5.459 -14.948  1.00 39.92           H    N
ATOM   9576  CA  VAL H 206      15.583  -5.281 -15.977  1.00 40.33           H    C
ATOM   9578  CB  VAL H 206      16.212  -5.520 -17.365  1.00 36.78           H    C
ATOM   9580  CG1 VAL H 206      15.165  -5.404 -18.497  1.00 33.62           H    C
ATOM   9584  CG2 VAL H 206      17.371  -4.542 -17.580  1.00 40.68           H    C
ATOM   9588  C   VAL H 206      14.450  -6.268 -15.703  1.00 39.13           H    C
ATOM   9589  O   VAL H 206      14.700  -7.466 -15.570  1.00 36.96           H    O
ATOM   9591  N   ASN H 207      13.228  -5.737 -15.582  1.00 40.08           H    N
ATOM   9592  CA  ASN H 207      12.049  -6.532 -15.371  1.00 41.51           H    C
ATOM   9594  CB  ASN H 207      11.435  -6.196 -14.009  1.00 41.52           H    C
ATOM   9597  CG  ASN H 207      10.395  -7.204 -13.572  1.00 40.87           H    C
ATOM   9598  OD1 ASN H 207      10.618  -8.398 -13.626  1.00 46.27           H    O
ATOM   9599  ND2 ASN H 207       9.252  -6.719 -13.144  1.00 48.80           H    N
ATOM   9602  C   ASN H 207      11.066  -6.291 -16.512  1.00 43.64           H    C
ATOM   9603  O   ASN H 207      10.805  -5.151 -16.879  1.00 42.50           H    O
ATOM   9605  N   HIS H 208      10.558  -7.383 -17.084  1.00 43.58           H    N
ATOM   9606  CA  HIS H 208       9.588  -7.330 -18.148  1.00 40.01           H    C
ATOM   9608  CB  HIS H 208      10.257  -7.710 -19.462  1.00 36.58           H    C
ATOM   9611  CG  HIS H 208       9.329  -7.744 -20.633  1.00 38.15           H    C
ATOM   9612  ND1 HIS H 208       8.715  -6.614 -21.136  1.00 38.16           H    N
ATOM   9614  CE1 HIS H 208       7.974  -6.952 -22.176  1.00 37.26           H    C
ATOM   9616  NE2 HIS H 208       8.098  -8.252 -22.376  1.00 36.08           H    N
ATOM   9618  CD2 HIS H 208       8.929  -8.770 -21.416  1.00 32.56           H    C
ATOM   9620  C   HIS H 208       8.479  -8.304 -17.784  1.00 39.63           H    C
ATOM   9621  O   HIS H 208       8.565  -9.479 -18.123  1.00 42.51           H    O
ATOM   9623  N   LYS H 209       7.440  -7.785 -17.116  1.00 39.40           H    N
ATOM   9624  CA  LYS H 209       6.361  -8.577 -16.536  1.00 42.78           H    C
ATOM   9626  CB  LYS H 209       5.412  -7.677 -15.725  1.00 44.50           H    C
ATOM   9629  CG  LYS H 209       6.011  -7.148 -14.461  1.00 48.65           H    C
ATOM   9632  CD  LYS H 209       5.077  -6.149 -13.773  1.00 50.95           H    C
ATOM   9635  CE  LYS H 209       5.577  -5.740 -12.388  1.00 52.83           H    C
ATOM   9638  NZ  LYS H 209       4.864  -4.517 -11.892  1.00 55.49           H    N
ATOM   9642  C   LYS H 209       5.547  -9.372 -17.548  1.00 43.59           H    C
ATOM   9643  O   LYS H 209       5.163 -10.508 -17.268  1.00 44.62           H    O
ATOM   9645  N   PRO H 210       5.232  -8.767 -18.703  1.00 43.11           H    N
ATOM   9646  CA  PRO H 210       4.460  -9.512 -19.692  1.00 44.51           H    C
ATOM   9648  CB  PRO H 210       4.472  -8.591 -20.902  1.00 47.73           H    C
ATOM   9651  CG  PRO H 210       4.584  -7.217 -20.303  1.00 46.77           H    C
ATOM   9654  CD  PRO H 210       5.513  -7.387 -19.149  1.00 43.15           H    C
ATOM   9657  C   PRO H 210       5.060 -10.854 -20.061  1.00 45.26           H    C
ATOM   9658  O   PRO H 210       4.308 -11.791 -20.321  1.00 47.05           H    O
ATOM   9659  N   SER H 211       6.386 -10.964 -20.067  1.00 46.02           H    N
ATOM   9660  CA  SER H 211       7.047 -12.245 -20.388  1.00 45.93           H    C
ATOM   9662  CB  SER H 211       8.191 -12.008 -21.377  1.00 42.90           H    C
ATOM   9665  OG  SER H 211       9.380 -11.542 -20.733  1.00 33.39           H    O
ATOM   9667  C   SER H 211       7.587 -12.969 -19.160  1.00 44.32           H    C
ATOM   9668  O   SER H 211       8.271 -13.973 -19.290  1.00 43.74           H    O
ATOM   9670  N   ASN H 212       7.292 -12.434 -17.980  1.00 47.88           H    N
ATOM   9671  CA  ASN H 212       7.905 -12.870 -16.707  1.00 49.36           H    C
ATOM   9673  CB  ASN H 212       7.342 -14.224 -16.264  1.00 50.79           H    C
ATOM   9676  CG  ASN H 212       5.844 -14.265 -16.323  1.00 52.28           H    C
ATOM   9677  OD1 ASN H 212       5.159 -13.496 -15.638  1.00 47.66           H    O
ATOM   9678  ND2 ASN H 212       5.317 -15.147 -17.163  1.00 55.13           H    N
ATOM   9681  C   ASN H 212       9.418 -12.971 -16.746  1.00 49.44           H    C
ATOM   9682  O   ASN H 212       9.985 -13.870 -16.132  1.00 50.09           H    O
ATOM   9684  N   THR H 213      10.065 -12.057 -17.463  1.00 50.19           H    N
ATOM   9685  CA  THR H 213      11.524 -12.068 -17.595  1.00 50.92           H    C
ATOM   9687  CB  THR H 213      11.973 -11.913 -19.046  1.00 47.24           H    C
ATOM   9689  OG1 THR H 213      11.348 -12.929 -19.846  1.00 47.32           H    O
ATOM   9691  CG2 THR H 213      13.473 -12.068 -19.131  1.00 45.56           H    C
ATOM   9695  C   THR H 213      12.201 -11.007 -16.718  1.00 50.20           H    C
ATOM   9696  O   THR H 213      11.944  -9.797 -16.849  1.00 48.21           H    O
ATOM   9698  N   LYS H 214      13.066 -11.482 -15.820  1.00 54.79           H    N
ATOM   9699  CA  LYS H 214      13.887 -10.606 -14.970  1.00 54.47           H    C
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ATOM   9701  CB  LYS H 214      13.558 -10.755 -13.487  1.00 54.14      H    C
ATOM   9704  CG  LYS H 214      14.215  -9.686 -12.617  1.00 58.38      H    C
ATOM   9707  CD  LYS H 214      14.077  -9.966 -11.116  1.00 61.54      H    C
ATOM   9710  CE  LYS H 214      12.627  -9.846 -10.630  1.00 66.20      H    C
ATOM   9713  NZ  LYS H 214      12.510  -9.965  -9.124  1.00 65.86      H    N
ATOM   9717  C   LYS H 214      15.371 -10.898 -15.198  1.00 54.93      H    C
ATOM   9718  O   LYS H 214      15.832 -12.019 -15.015  1.00 55.62      H    O
ATOM   9720  N   VAL H 215      16.108  -9.873 -15.604  1.00 54.51      H    N
ATOM   9721  CA  VAL H 215      17.529  -9.995 -15.871  1.00 52.81      H    C
ATOM   9723  CB  VAL H 215      17.888  -9.630 -17.346  1.00 47.64      H    C
ATOM   9725  CG1 VAL H 215      19.366  -9.822 -17.606  1.00 45.37      H    C
ATOM   9729  CG2 VAL H 215      17.071 -10.448 -18.336  1.00 44.93      H    C
ATOM   9733  C   VAL H 215      18.298  -9.071 -14.943  1.00 53.03      H    C
ATOM   9734  O   VAL H 215      17.914  -7.926 -14.726  1.00 52.97      H    O
ATOM   9736  N   ASP H 216      19.375  -9.585 -14.367  1.00 53.61      H    N
ATOM   9737  CA  ASP H 216      20.311  -8.754 -13.612  1.00 55.12      H    C
ATOM   9739  CB  ASP H 216      20.410  -9.195 -12.148  1.00 53.31      H    C
ATOM   9742  CG  ASP H 216      19.064  -9.253 -11.474  1.00 54.40      H    C
ATOM   9743  OD1 ASP H 216      18.418  -8.192 -11.360  1.00 54.45      H    O
ATOM   9744  OD2 ASP H 216      18.648 -10.363 -11.072  1.00 59.35      H    O
ATOM   9745  C   ASP H 216      21.657  -8.873 -14.311  1.00 54.36      H    C
ATOM   9746  O   ASP H 216      22.263  -9.941 -14.335  1.00 55.93      H    O
ATOM   9748  N   LYS H 217      22.118  -7.783 -14.900  1.00 52.86      H    N
ATOM   9749  CA  LYS H 217      23.320  -7.835 -15.709  1.00 53.23      H    C
ATOM   9751  CB  LYS H 217      23.014  -7.527 -17.171  1.00 52.88      H    C
ATOM   9754  CG  LYS H 217      24.253  -7.483 -18.065  1.00 54.51      H    C
ATOM   9757  CD  LYS H 217      23.953  -7.938 -19.477  1.00 57.52      H    C
ATOM   9760  CE  LYS H 217      24.294  -9.414 -19.678  1.00 60.10      H    C
ATOM   9763  NZ  LYS H 217      24.012  -9.925 -21.055  1.00 53.62      H    N
ATOM   9767  C   LYS H 217      24.411  -6.928 -15.153  1.00 51.61      H    C
ATOM   9768  O   LYS H 217      24.243  -5.712 -15.049  1.00 47.99      H    O
ATOM   9770  N   LYS H 218      25.523  -7.559 -14.783  1.00 56.27      H    N
ATOM   9771  CA  LYS H 218      26.703  -6.864 -14.325  1.00 58.26      H    C
ATOM   9773  CB  LYS H 218      27.721  -7.860 -13.742  1.00 61.31      H    C
ATOM   9776  CG  LYS H 218      27.329  -8.418 -12.364  1.00 64.90      H    C
ATOM   9779  CD  LYS H 218      28.319  -9.460 -11.792  1.00 64.68      H    C
ATOM   9782  CE  LYS H 218      27.928 -10.912 -12.122  1.00 69.23      H    C
ATOM   9785  NZ  LYS H 218      28.514 -11.428 -13.423  1.00 69.44      H    N
ATOM   9789  C   LYS H 218      27.291  -6.142 -15.522  1.00 58.21      H    C
ATOM   9790  O   LYS H 218      27.468  -6.740 -16.587  1.00 58.68      H    O
ATOM   9792  N   VAL H 219      27.551  -4.848 -15.365  1.00 56.06      H    N
ATOM   9793  CA  VAL H 219      28.163  -4.062 -16.435  1.00 56.27      H    C
ATOM   9795  CB  VAL H 219      27.349  -2.797 -16.751  1.00 53.08      H    C
ATOM   9797  CG1 VAL H 219      27.967  -2.033 -17.923  1.00 47.56      H    C
ATOM   9801  CG2 VAL H 219      25.918  -3.191 -17.052  1.00 49.45      H    C
ATOM   9805  C   VAL H 219      29.595  -3.732 -16.042  1.00 55.86      H    C
ATOM   9806  O   VAL H 219      29.842  -2.826 -15.252  1.00 55.73      H    O
ATOM   9808  N   GLU H 220      30.533  -4.493 -16.598  1.00 58.90      H    N
ATOM   9809  CA  GLU H 220      31.946  -4.371 -16.255  1.00 62.62      H    C
ATOM   9811  CB  GLU H 220      32.477  -5.739 -15.809  1.00 62.94      H    C
ATOM   9814  CG  GLU H 220      32.025  -6.148 -14.403  1.00 67.00      H    C
ATOM   9817  CD  GLU H 220      31.629  -7.618 -14.273  1.00 68.23      H    C
ATOM   9818  OE1 GLU H 220      31.359  -8.276 -15.309  1.00 70.86      H    O
ATOM   9819  OE2 GLU H 220      31.574  -8.112 -13.118  1.00 69.06      H    O
ATOM   9820  C   GLU H 220      32.797  -3.823 -17.414  1.00 62.91      H    C
ATOM   9821  O   GLU H 220      32.448  -4.004 -18.586  1.00 60.46      H    O
ATOM   9823  N   PRO H 221      33.922  -3.158 -17.083  1.00 63.57      H    N
ATOM   9824  CA  PRO H 221      34.861  -2.644 -18.091  1.00 66.60      H    C
ATOM   9826  CB  PRO H 221      35.911  -1.894 -17.249  1.00 64.02      H    C
ATOM   9829  CG  PRO H 221      35.805  -2.450 -15.891  1.00 61.31      H    C
ATOM   9832  CD  PRO H 221      34.379  -2.868 -15.710  1.00 61.60      H    C
ATOM   9835  C   PRO H 221      35.533  -3.767 -18.886  1.00 69.39      H    C
ATOM   9836  O   PRO H 221      35.711  -4.861 -18.352  1.00 69.87      H    O
ATOM   9837  N   LYS H 222      35.903  -3.495 -20.137  1.00 73.22      H    N
ATOM   9838  CA  LYS H 222      36.522  -4.509 -21.008  1.00 74.12      H    C
ATOM   9840  CB  LYS H 222      35.587  -4.848 -22.169  1.00 71.72      H    C
ATOM   9843  CG  LYS H 222      34.283  -5.526 -21.709  1.00 72.65      H    C
ATOM   9846  CD  LYS H 222      34.453  -7.015 -21.398  1.00 72.92      H    C
ATOM   9849  CE  LYS H 222      33.272  -7.608 -20.606  1.00 72.40      H    C
ATOM   9852  NZ  LYS H 222      33.596  -7.881 -19.158  1.00 70.05      H    N
ATOM   9856  C   LYS H 222      37.937  -4.122 -21.494  1.00 74.83      H    C
ATOM   9857  O   LYS H 222      38.338  -2.962 -21.393  1.00 75.55      H    O
ATOM   9859  N   SER H 223      38.656  -5.112 -22.039  1.00 72.32      H    N
ATOM   9860  CA  SER H 223      40.107  -5.056 -22.280  1.00 75.20      H    C
ATOM   9862  CB  SER H 223      40.685  -6.467 -22.313  1.00 73.77      H    C
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ATOM   9865  OG  SER H 223      40.975  -6.923 -21.022  1.00 74.25      H    O
ATOM   9867  C   SER H 223      40.596  -4.347 -23.545  1.00 80.84      H    C
ATOM   9868  O   SER H 223      41.116  -3.228 -23.443  1.00 83.26      H    O
ATOM   9870  N   CYS H 224      40.499  -5.036 -24.699  1.00 83.94      H    N
ATOM   9871  CA  CYS H 224      40.952  -4.555 -26.041  1.00 85.60      H    C
ATOM   9873  CB  CYS H 224      41.338  -3.080 -26.037  1.00 90.17      H    C
ATOM   9876  SG  CYS H 224      40.032  -1.982 -26.486  1.00 91.75      H    S
ATOM   9878  C   CYS H 224      42.122  -5.313 -26.691  1.00 87.98      H    C
ATOM   9879  O   CYS H 224      43.262  -5.190 -26.239  1.00 91.43      H    O
ATOM   9881  OXT CYS H 224      41.976  -5.989 -27.720  1.00 82.26      H    O
ATOM   9882  N   ILE B  16     -75.549   8.158 -84.796  1.00 37.34      B    N
ATOM   9883  CA  ILE B  16     -75.602   6.669 -84.844  1.00 41.00      B    C
ATOM   9885  CB  ILE B  16     -77.028   6.178 -85.070  1.00 39.70      B    C
ATOM   9887  CG1 ILE B  16     -77.947   6.671 -83.941  1.00 40.19      B    C
ATOM   9890  CD1 ILE B  16     -77.455   6.377 -82.542  1.00 36.48      B    C
ATOM   9894  CG2 ILE B  16     -77.065   4.659 -85.178  1.00 39.69      B    C
ATOM   9898  C   ILE B  16     -74.712   6.166 -85.962  1.00 41.64      B    C
ATOM   9899  O   ILE B  16     -74.984   6.430 -87.127  1.00 41.42      B    O
ATOM   9903  N   LEU B  17     -73.655   5.435 -85.603  1.00 43.95      B    N
ATOM   9904  CA  LEU B  17     -72.668   4.942 -86.576  1.00 43.78      B    C
ATOM   9906  CB  LEU B  17     -71.245   5.229 -86.082  1.00 45.12      B    C
ATOM   9909  CG  LEU B  17     -70.038   4.596 -86.790  1.00 46.50      B    C
ATOM   9911  CD1 LEU B  17     -69.040   5.655 -87.245  1.00 48.07      B    C
ATOM   9915  CD2 LEU B  17     -69.349   3.570 -85.895  1.00 46.80      B    C
ATOM   9919  C   LEU B  17     -72.908   3.457 -86.854  1.00 43.26      B    C
ATOM   9920  O   LEU B  17     -73.241   2.697 -85.940  1.00 40.13      B    O
ATOM   9922  N   GLY B  18     -72.785   3.064 -88.124  1.00 43.20      B    N
ATOM   9923  CA  GLY B  18     -73.065   1.691 -88.549  1.00 44.81      B    C
ATOM   9926  C   GLY B  18     -74.523   1.308 -88.351  1.00 46.61      B    C
ATOM   9927  O   GLY B  18     -74.850   0.141 -88.122  1.00 47.11      B    O
ATOM   9929  N   GLY B  19     -75.399   2.302 -88.424  1.00 49.23      B    N
ATOM   9930  CA  GLY B  19     -76.828   2.085 -88.336  1.00 52.43      B    C
ATOM   9933  C   GLY B  19     -77.454   2.382 -89.682  1.00 55.21      B    C
ATOM   9934  O   GLY B  19     -76.766   2.411 -90.711  1.00 52.80      B    O
ATOM   9936  N   ARG B  20     -78.762   2.612 -89.661  1.00 55.61      B    N
ATOM   9937  CA  ARG B  20     -79.516   2.943 -90.859  1.00 58.41      B    C
ATOM   9939  CB  ARG B  20     -80.012   1.664 -91.536  1.00 63.68      B    C
ATOM   9942  CG  ARG B  20     -81.059   0.892 -90.727  1.00 65.31      B    C
ATOM   9945  CD  ARG B  20     -81.060  -0.582 -91.095  1.00 67.31      B    C
ATOM   9948  NE  ARG B  20     -82.372  -1.205 -90.915  1.00 69.03      B    N
ATOM   9950  CZ  ARG B  20     -82.742  -2.371 -91.452  1.00 71.67      B    C
ATOM   9951  NH1 ARG B  20     -81.906  -3.076 -92.216  1.00 71.24      B    N
ATOM   9954  NH2 ARG B  20     -83.964  -2.840 -91.224  1.00 71.95      B    N
ATOM   9957  C   ARG B  20     -80.693   3.828 -90.487  1.00 56.18      B    C
ATOM   9958  O   ARG B  20     -81.023   3.971 -89.304  1.00 54.73      B    O
ATOM   9960  N   GLU B  21     -81.328   4.401 -91.504  1.00 53.63      B    N
ATOM   9961  CA  GLU B  21     -82.417   5.344 -91.314  1.00 51.74      B    C
ATOM   9963  CB  GLU B  21     -82.847   5.908 -92.673  1.00 55.95      B    C
ATOM   9966  CG  GLU B  21     -83.760   7.140 -92.606  1.00 56.54      B    C
ATOM   9969  CD  GLU B  21     -84.202   7.619 -93.982  1.00 57.26      B    C
ATOM   9970  OE1 GLU B  21     -83.761   7.027 -95.000  1.00 55.92      B    O
ATOM   9971  OE2 GLU B  21     -84.997   8.586 -94.041  1.00 58.76      B    O
ATOM   9972  C   GLU B  21     -83.602   4.688 -90.612  1.00 49.12      B    C
ATOM   9973  O   GLU B  21     -83.997   3.563 -90.942  1.00 47.99      B    O
ATOM   9975  N   ALA B  22     -84.150   5.400 -89.629  1.00 47.34      B    N
ATOM   9976  CA  ALA B  22     -85.314   4.933 -88.888  1.00 48.37      B    C
ATOM   9978  CB  ALA B  22     -85.492   5.766 -87.616  1.00 48.29      B    C
ATOM   9982  C   ALA B  22     -86.560   5.032 -89.758  1.00 50.53      B    C
ATOM   9983  O   ALA B  22     -86.605   5.833 -90.700  1.00 47.19      B    O
ATOM   9985  N   GLU B  23     -87.565   4.212 -89.450  1.00 52.59      B    N
ATOM   9986  CA  GLU B  23     -88.877   4.349 -90.065  1.00 51.27      B    C
ATOM   9988  CB  GLU B  23     -89.752   3.117 -89.775  1.00 54.81      B    C
ATOM   9991  CG  GLU B  23     -91.057   3.075 -90.589  1.00 56.64      B    C
ATOM   9994  CD  GLU B  23     -91.979   1.928 -90.187  1.00 58.75      B    C
ATOM   9995  OE1 GLU B  23     -91.473   0.806 -89.958  1.00 59.07      B    O
ATOM   9996  OE2 GLU B  23     -93.212   2.152 -90.111  1.00 60.34      B    O
ATOM   9997  C   GLU B  23     -89.528   5.599 -89.488  1.00 49.54      B    C
ATOM   9998  O   GLU B  23     -89.700   5.697 -88.270  1.00 49.76      B    O
ATOM  10000  N   ALA B  24     -89.900   6.539 -90.361  1.00 49.62      B    N
ATOM  10001  CA  ALA B  24     -90.451   7.826 -89.938  1.00 46.58      B    C
ATOM  10003  CB  ALA B  24     -91.029   8.571 -91.121  1.00 48.32      B    C
ATOM  10007  C   ALA B  24     -91.505   7.635 -88.853  1.00 46.97      B    C
ATOM  10008  O   ALA B  24     -92.429   6.831 -89.002  1.00 50.36      B    O
ATOM  10010  N   HIS B  25     -91.317   8.340 -87.739  1.00 49.89      B    N
ATOM  10011  CA  HIS B  25     -92.310   8.438 -86.655  1.00 48.48      B    C
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ATOM	10013	CB	HIS	B	25	-93.559	9.189	-87.157	1.00	52.90	B	C
ATOM	10016	CG	HIS	B	25	-93.237	10.434	-87.931	1.00	55.68	B	C
ATOM	10017	ND1	HIS	B	25	-93.290	10.496	-89.310	1.00	56.69	B	N
ATOM	10019	CE1	HIS	B	25	-92.937	11.706	-89.710	1.00	55.84	B	C
ATOM	10021	NE2	HIS	B	25	-92.648	12.430	-88.642	1.00	56.43	B	N
ATOM	10023	CD2	HIS	B	25	-92.822	11.656	-87.518	1.00	56.72	B	C
ATOM	10025	C	HIS	B	25	-92.690	7.096	-86.002	1.00	47.84	B	C
ATOM	10026	O	HIS	B	25	-93.665	7.024	-85.257	1.00	47.07	B	O
ATOM	10028	N	ALA	B	26	-91.896	6.051	-86.248	1.00	50.04	B	N
ATOM	10029	CA	ALA	B	26	-92.093	4.748	-85.597	1.00	49.28	B	C
ATOM	10031	CB	ALA	B	26	-91.314	3.659	-86.334	1.00	49.81	B	C
ATOM	10035	C	ALA	B	26	-91.677	4.803	-84.117	1.00	49.17	B	C
ATOM	10036	O	ALA	B	26	-92.022	3.919	-83.321	1.00	46.71	B	O
ATOM	10038	N	ARG	B	27	-90.922	5.840	-83.763	1.00	50.59	B	N
ATOM	10039	CA	ARG	B	27	-90.523	6.083	-82.387	1.00	49.42	B	C
ATOM	10041	CB	ARG	B	27	-88.999	6.045	-82.283	1.00	53.55	B	C
ATOM	10044	CG	ARG	B	27	-88.464	4.654	-82.541	1.00	53.88	B	C
ATOM	10047	CD	ARG	B	27	-86.967	4.605	-82.670	1.00	55.25	B	C
ATOM	10050	NE	ARG	B	27	-86.563	3.255	-83.060	1.00	56.70	B	N
ATOM	10052	CZ	ARG	B	27	-86.253	2.871	-84.299	1.00	58.45	B	C
ATOM	10053	NH1	ARG	B	27	-86.289	3.722	-85.322	1.00	60.57	B	N
ATOM	10056	NH2	ARG	B	27	-85.901	1.609	-84.520	1.00	58.55	B	N
ATOM	10059	C	ARG	B	27	-91.090	7.432	-81.975	1.00	46.79	B	C
ATOM	10060	O	ARG	B	27	-90.395	8.448	-82.062	1.00	46.22	B	O
ATOM	10062	N	PRO	B	28	-92.371	7.447	-81.542	1.00	47.35	B	N
ATOM	10063	CA	PRO	B	28	-93.064	8.715	-81.232	1.00	47.41	B	C
ATOM	10065	CB	PRO	B	28	-94.502	8.264	-80.925	1.00	49.25	B	C
ATOM	10068	CG	PRO	B	28	-94.372	6.827	-80.484	1.00	49.15	B	C
ATOM	10071	CD	PRO	B	28	-93.236	6.269	-81.300	1.00	48.76	B	C
ATOM	10074	C	PRO	B	28	-92.467	9.461	-80.033	1.00	47.06	B	C
ATOM	10075	O	PRO	B	28	-92.647	10.676	-79.898	1.00	43.96	B	O
ATOM	10076	N	TYR	B	29	-91.753	8.723	-79.184	1.00	46.40	B	N
ATOM	10077	CA	TYR	B	29	-91.088	9.282	-78.001	1.00	44.27	B	C
ATOM	10079	CB	TYR	B	29	-90.760	8.166	-76.997	1.00	46.88	B	C
ATOM	10082	CG	TYR	B	29	-90.019	6.973	-77.591	1.00	48.48	B	C
ATOM	10083	CD1	TYR	B	29	-88.663	7.057	-77.934	1.00	49.49	B	C
ATOM	10085	CE1	TYR	B	29	-87.989	5.970	-78.484	1.00	46.95	B	C
ATOM	10087	CZ	TYR	B	29	-88.668	4.782	-78.687	1.00	46.58	B	C
ATOM	10088	OH	TYR	B	29	-88.010	3.704	-79.226	1.00	47.68	B	O
ATOM	10090	CE2	TYR	B	29	-90.008	4.670	-78.354	1.00	46.77	B	C
ATOM	10092	CD2	TYR	B	29	-90.674	5.759	-77.809	1.00	47.54	B	C
ATOM	10094	C	TYR	B	29	-89.814	10.075	-78.300	1.00	45.14	B	C
ATOM	10095	O	TYR	B	29	-89.290	10.744	-77.413	1.00	45.79	B	O
ATOM	10097	N	MET	B	30	-89.330	10.017	-79.538	1.00	42.89	B	N
ATOM	10098	CA	MET	B	30	-88.046	10.617	-79.888	1.00	43.21	B	C
ATOM	10100	CB	MET	B	30	-87.559	10.049	-81.226	1.00	42.69	B	C
ATOM	10103	CG	MET	B	30	-86.117	10.405	-81.568	1.00	43.55	B	C
ATOM	10106	SD	MET	B	30	-84.894	9.565	-80.533	1.00	40.52	B	S
ATOM	10107	CE	MET	B	30	-83.643	10.856	-80.480	1.00	37.23	B	C
ATOM	10111	C	MET	B	30	-88.103	12.145	-79.976	1.00	44.00	B	C
ATOM	10112	O	MET	B	30	-88.913	12.698	-80.719	1.00	51.80	B	O
ATOM	10114	N	ALA	B	31	-87.222	12.814	-79.233	1.00	42.85	B	N
ATOM	10115	CA	ALA	B	31	-87.137	14.277	-79.227	1.00	39.34	B	C
ATOM	10117	CB	ALA	B	31	-87.389	14.805	-77.833	1.00	34.87	B	C
ATOM	10121	C	ALA	B	31	-85.774	14.750	-79.718	1.00	38.47	B	C
ATOM	10122	O	ALA	B	31	-84.766	14.049	-79.556	1.00	41.02	B	O
ATOM	10124	N	SER	B	32	-85.743	15.933	-80.326	1.00	39.32	B	N
ATOM	10125	CA	SER	B	32	-84.485	16.616	-80.617	1.00	40.35	B	C
ATOM	10127	CB	SER	B	32	-84.397	17.060	-82.081	1.00	41.78	B	C
ATOM	10130	OG	SER	B	32	-83.143	17.691	-82.329	1.00	44.67	B	O
ATOM	10132	C	SER	B	32	-84.334	17.823	-79.699	1.00	41.54	B	C
ATOM	10133	O	SER	B	32	-85.059	18.815	-79.818	1.00	43.57	B	O
ATOM	10135	N	VAL	B	33	-83.394	17.741	-78.773	1.00	43.38	B	N
ATOM	10136	CA	VAL	B	33	-83.100	18.882	-77.928	1.00	43.16	B	C
ATOM	10138	CB	VAL	B	33	-82.443	18.456	-76.631	1.00	38.83	B	C
ATOM	10140	CG1	VAL	B	33	-82.029	19.681	-75.840	1.00	40.64	B	C
ATOM	10144	CG2	VAL	B	33	-83.408	17.584	-75.850	1.00	37.04	B	C
ATOM	10148	C	VAL	B	33	-82.200	19.839	-78.720	1.00	44.86	B	C
ATOM	10149	O	VAL	B	33	-81.082	19.466	-79.131	1.00	39.83	B	O
ATOM	10151	N	GLN	B	34	-82.701	21.064	-78.928	1.00	48.41	B	N
ATOM	10152	CA	GLN	B	34	-82.047	22.050	-79.801	1.00	48.40	B	C
ATOM	10154	CB	GLN	B	34	-83.009	22.484	-80.918	1.00	50.36	B	C
ATOM	10157	CG	GLN	B	34	-82.985	21.515	-82.091	1.00	52.82	B	C
ATOM	10160	CD	GLN	B	34	-84.000	21.826	-83.174	1.00	53.90	B	C
ATOM	10161	OE1	GLN	B	34	-84.379	22.983	-83.391	1.00	58.91	B	O

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ATOM	10162	NE2	GLN	B	34	-84.432	20.783	-83.884	1.00	54.63	B	N
ATOM	10165	C	GLN	B	34	-81.492	23.282	-79.075	1.00	45.48	B	C
ATOM	10166	O	GLN	B	34	-82.034	23.716	-78.056	1.00	41.29	B	O
ATOM	10168	N	LEU	B	35	-80.385	23.804	-79.607	1.00	48.46	B	N
ATOM	10169	CA	LEU	B	35	-79.781	25.065	-79.160	1.00	48.29	B	C
ATOM	10171	CB	LEU	B	35	-78.368	24.820	-78.616	1.00	49.90	B	C
ATOM	10174	CG	LEU	B	35	-77.504	26.038	-78.243	1.00	49.38	B	C
ATOM	10176	CD1	LEU	B	35	-77.975	26.665	-76.926	1.00	48.13	B	C
ATOM	10180	CD2	LEU	B	35	-76.025	25.661	-78.173	1.00	45.28	B	C
ATOM	10184	C	LEU	B	35	-79.704	26.019	-80.352	1.00	50.97	B	C
ATOM	10185	O	LEU	B	35	-78.909	25.807	-81.268	1.00	49.29	B	O
ATOM	10187	N	ASN	B	36	-80.529	27.065	-80.331	1.00	52.77	B	N
ATOM	10188	CA	ASN	B	36	-80.609	28.046	-81.425	1.00	52.86	B	C
ATOM	10190	CB	ASN	B	36	-79.304	28.861	-81.535	1.00	55.15	B	C
ATOM	10193	CG	ASN	B	36	-78.935	29.587	-80.231	1.00	56.84	B	C
ATOM	10194	OD1	ASN	B	36	-79.801	30.010	-79.461	1.00	57.57	B	O
ATOM	10195	ND2	ASN	B	36	-77.640	29.744	-79.996	1.00	56.03	B	N
ATOM	10198	C	ASN	B	36	-80.976	27.400	-82.776	1.00	53.97	B	C
ATOM	10199	O	ASN	B	36	-80.361	27.685	-83.812	1.00	52.73	B	O
ATOM	10201	N	GLY	B	37	-81.983	26.527	-82.754	1.00	54.32	B	N
ATOM	10202	CA	GLY	B	37	-82.469	25.864	-83.968	1.00	52.72	B	C
ATOM	10205	C	GLY	B	37	-81.535	24.816	-84.563	1.00	52.53	B	C
ATOM	10206	O	GLY	B	37	-81.720	24.410	-85.707	1.00	54.84	B	O
ATOM	10208	N	ALA	B	38	-80.545	24.367	-83.795	1.00	51.74	B	N
ATOM	10209	CA	ALA	B	38	-79.574	23.372	-84.255	1.00	50.90	B	C
ATOM	10211	CB	ALA	B	38	-78.168	23.984	-84.268	1.00	50.03	B	C
ATOM	10215	C	ALA	B	38	-79.612	22.161	-83.325	1.00	50.69	B	C
ATOM	10216	O	ALA	B	38	-79.582	22.319	-82.099	1.00	49.28	B	O
ATOM	10218	N	HIS	B	39	-79.692	20.959	-83.901	1.00	47.66	B	N
ATOM	10219	CA	HIS	B	39	-79.728	19.725	-83.107	1.00	45.72	B	C
ATOM	10221	CB	HIS	B	39	-79.743	18.486	-84.007	1.00	48.76	B	C
ATOM	10224	CG	HIS	B	39	-79.523	17.203	-83.265	1.00	51.31	B	C
ATOM	10225	ND1	HIS	B	39	-80.423	16.710	-82.342	1.00	52.79	B	N
ATOM	10227	CE1	HIS	B	39	-79.961	15.575	-81.845	1.00	52.42	B	C
ATOM	10229	NE2	HIS	B	39	-78.796	15.311	-82.414	1.00	51.75	B	N
ATOM	10231	CD2	HIS	B	39	-78.498	16.314	-83.304	1.00	52.11	B	C
ATOM	10233	C	HIS	B	39	-78.533	19.660	-82.172	1.00	42.52	B	C
ATOM	10234	O	HIS	B	39	-77.382	19.735	-82.611	1.00	42.94	B	O
ATOM	10236	N	LEU	B	40	-78.809	19.527	-80.878	1.00	42.05	B	N
ATOM	10237	CA	LEU	B	40	-77.756	19.422	-79.879	1.00	42.81	B	C
ATOM	10239	CB	LEU	B	40	-78.004	20.414	-78.747	1.00	42.75	B	C
ATOM	10242	CG	LEU	B	40	-76.780	20.725	-77.890	1.00	45.06	B	C
ATOM	10244	CD1	LEU	B	40	-75.822	21.649	-78.644	1.00	46.76	B	C
ATOM	10248	CD2	LEU	B	40	-77.211	21.337	-76.567	1.00	45.00	B	C
ATOM	10252	C	LEU	B	40	-77.685	18.007	-79.316	1.00	40.85	B	C
ATOM	10253	O	LEU	B	40	-76.605	17.397	-79.266	1.00	38.41	B	O
ATOM	10255	N	CYS	B	41	-78.837	17.493	-78.885	1.00	40.75	B	N
ATOM	10256	CA	CYS	B	41	-78.904	16.201	-78.200	1.00	41.79	B	C
ATOM	10258	CB	CYS	B	41	-78.809	16.410	-76.699	1.00	47.25	B	C
ATOM	10261	SG	CYS	B	41	-77.158	16.739	-76.149	1.00	57.13	B	S
ATOM	10263	C	CYS	B	41	-80.188	15.462	-78.481	1.00	39.20	B	C
ATOM	10264	O	CYS	B	41	-81.196	16.059	-78.878	1.00	36.48	B	O
ATOM	10266	N	GLY	B	42	-80.137	14.152	-78.271	1.00	37.42	B	N
ATOM	10267	CA	GLY	B	42	-81.326	13.316	-78.292	1.00	36.78	B	C
ATOM	10270	C	GLY	B	42	-82.087	13.500	-76.994	1.00	36.21	B	C
ATOM	10271	O	GLY	B	42	-81.603	14.120	-76.050	1.00	36.19	B	O
ATOM	10273	N	GLY	B	43	-83.294	12.961	-76.962	1.00	33.76	B	N
ATOM	10274	CA	GLY	B	43	-84.178	13.103	-75.814	1.00	36.52	B	C
ATOM	10277	C	GLY	B	43	-85.320	12.117	-75.937	1.00	37.04	B	C
ATOM	10278	O	GLY	B	43	-85.591	11.594	-77.035	1.00	33.64	B	O
ATOM	10280	N	VAL	B	44	-85.982	11.844	-74.819	1.00	40.39	B	N
ATOM	10281	CA	VAL	B	44	-87.075	10.871	-74.813	1.00	42.74	B	C
ATOM	10283	CB	VAL	B	44	-86.616	9.453	-74.304	1.00	43.97	B	C
ATOM	10285	CG1	VAL	B	44	-85.746	9.550	-73.070	1.00	46.45	B	C
ATOM	10289	CG2	VAL	B	44	-87.813	8.557	-74.028	1.00	43.73	B	C
ATOM	10293	C	VAL	B	44	-88.249	11.420	-74.010	1.00	43.45	B	C
ATOM	10294	O	VAL	B	44	-88.136	11.654	-72.801	1.00	45.29	B	O
ATOM	10296	N	LEU	B	45	-89.357	11.668	-74.706	1.00	44.44	B	N
ATOM	10297	CA	LEU	B	45	-90.601	12.082	-74.059	1.00	44.85	B	C
ATOM	10299	CB	LEU	B	45	-91.713	12.333	-75.090	1.00	45.62	B	C
ATOM	10302	CG	LEU	B	45	-92.981	13.025	-74.570	1.00	45.74	B	C
ATOM	10304	CD1	LEU	B	45	-92.812	14.537	-74.598	1.00	45.10	B	C
ATOM	10308	CD2	LEU	B	45	-94.217	12.623	-75.368	1.00	43.32	B	C
ATOM	10312	C	LEU	B	45	-90.992	10.950	-73.114	1.00	44.24	B	C
ATOM	10313	O	LEU	B	45	-91.144	9.806	-73.545	1.00	43.68	B	O

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ATOM	10315	N	VAL	B	46	-91.075	11.268	-71.824	1.00	46.07	B	N
ATOM	10316	CA	VAL	B	46	-91.443	10.294	-70.787	1.00	47.91	B	C
ATOM	10318	CB	VAL	B	46	-90.314	10.129	-69.707	1.00	45.43	B	C
ATOM	10320	CG1	VAL	B	46	-89.095	9.434	-70.309	1.00	40.42	B	C
ATOM	10324	CG2	VAL	B	46	-89.926	11.470	-69.092	1.00	43.89	B	C
ATOM	10328	C	VAL	B	46	-92.775	10.637	-70.115	1.00	51.26	B	C
ATOM	10329	O	VAL	B	46	-93.393	9.783	-69.479	1.00	50.88	B	O
ATOM	10331	N	ALA	B	47	-93.200	11.892	-70.243	1.00	52.58	B	N
ATOM	10332	CA	ALA	B	47	-94.534	12.319	-69.825	1.00	52.29	B	C
ATOM	10334	CB	ALA	B	47	-94.502	12.914	-68.407	1.00	52.96	B	C
ATOM	10338	C	ALA	B	47	-95.073	13.328	-70.834	1.00	55.08	B	C
ATOM	10339	O	ALA	B	47	-94.381	13.710	-71.780	1.00	53.02	B	O
ATOM	10341	N	GLU	B	48	-96.311	13.757	-70.618	1.00	58.78	B	N
ATOM	10342	CA	GLU	B	48	-97.014	14.639	-71.552	1.00	57.45	B	C
ATOM	10344	CB	GLU	B	48	-98.443	14.896	-71.054	1.00	60.48	B	C
ATOM	10347	CG	GLU	B	48	-99.492	15.106	-72.153	1.00	60.99	B	C
ATOM	10350	CD	GLU	B	48	-100.913	15.222	-71.593	1.00	62.65	B	C
ATOM	10351	OE1	GLU	B	48	-101.840	15.568	-72.356	1.00	67.63	B	O
ATOM	10352	OE2	GLU	B	48	-101.115	14.958	-70.388	1.00	63.24	B	O
ATOM	10353	C	GLU	B	48	-96.266	15.960	-71.794	1.00	53.57	B	C
ATOM	10354	O	GLU	B	48	-96.218	16.436	-72.928	1.00	49.62	B	O
ATOM	10356	N	GLN	B	49	-95.668	16.541	-70.754	1.00	53.32	B	N
ATOM	10357	CA	GLN	B	49	-94.899	17.778	-70.937	1.00	53.42	B	C
ATOM	10359	CB	GLN	B	49	-95.657	18.989	-70.363	1.00	54.59	B	C
ATOM	10362	CG	GLN	B	49	-95.779	19.089	-68.850	1.00	56.37	B	C
ATOM	10365	CD	GLN	B	49	-96.721	20.226	-68.427	1.00	55.46	B	C
ATOM	10366	OE1	GLN	B	49	-97.263	20.954	-69.268	1.00	52.57	B	O
ATOM	10367	NE2	GLN	B	49	-96.909	20.380	-67.121	1.00	55.21	B	N
ATOM	10370	C	GLN	B	49	-93.472	17.711	-70.413	1.00	49.44	B	C
ATOM	10371	O	GLN	B	49	-92.874	18.752	-70.150	1.00	44.95	B	O
ATOM	10373	N	TRP	B	50	-92.923	16.496	-70.312	1.00	49.78	B	N
ATOM	10374	CA	TRP	B	50	-91.547	16.268	-69.810	1.00	49.37	B	C
ATOM	10376	CB	TRP	B	50	-91.563	15.629	-68.414	1.00	52.02	B	C
ATOM	10379	CG	TRP	B	50	-91.925	16.565	-67.298	1.00	53.16	B	C
ATOM	10380	CD1	TRP	B	50	-93.166	16.751	-66.758	1.00	52.93	B	C
ATOM	10382	NE1	TRP	B	50	-93.109	17.685	-65.755	1.00	53.46	B	N
ATOM	10384	CE2	TRP	B	50	-91.816	18.124	-65.623	1.00	54.14	B	C
ATOM	10385	CD2	TRP	B	50	-91.039	17.438	-66.581	1.00	53.45	B	C
ATOM	10386	CE3	TRP	B	50	-89.667	17.713	-66.658	1.00	53.18	B	C
ATOM	10388	CZ3	TRP	B	50	-89.121	18.649	-65.781	1.00	52.84	B	C
ATOM	10390	CH2	TRP	B	50	-89.918	19.310	-64.837	1.00	52.47	B	C
ATOM	10392	CZ2	TRP	B	50	-91.263	19.065	-64.742	1.00	53.06	B	C
ATOM	10394	C	TRP	B	50	-90.724	15.367	-70.736	1.00	44.89	B	C
ATOM	10395	O	TRP	B	50	-91.117	14.241	-71.022	1.00	42.00	B	O
ATOM	10397	N	VAL	B	51	-89.562	15.861	-71.158	1.00	44.99	B	N
ATOM	10398	CA	VAL	B	51	-88.601	15.077	-71.945	1.00	45.43	B	C
ATOM	10400	CB	VAL	B	51	-88.218	15.815	-73.241	1.00	48.19	B	C
ATOM	10402	CG1	VAL	B	51	-86.896	15.268	-73.805	1.00	49.93	B	C
ATOM	10406	CG2	VAL	B	51	-89.352	15.710	-74.261	1.00	47.33	B	C
ATOM	10410	C	VAL	B	51	-87.330	14.763	-71.130	1.00	42.56	B	C
ATOM	10411	O	VAL	B	51	-86.783	15.642	-70.475	1.00	44.96	B	O
ATOM	10413	N	LEU	B	52	-86.874	13.510	-71.175	1.00	40.64	B	N
ATOM	10414	CA	LEU	B	52	-85.622	13.106	-70.512	1.00	39.74	B	C
ATOM	10416	CB	LEU	B	52	-85.716	11.676	-69.946	1.00	40.61	B	C
ATOM	10419	CG	LEU	B	52	-84.542	11.139	-69.105	1.00	38.29	B	C
ATOM	10421	CD1	LEU	B	52	-84.124	12.113	-68.024	1.00	40.09	B	C
ATOM	10425	CD2	LEU	B	52	-84.880	9.808	-68.470	1.00	34.66	B	C
ATOM	10429	C	LEU	B	52	-84.460	13.192	-71.494	1.00	39.41	B	C
ATOM	10430	O	LEU	B	52	-84.582	12.771	-72.644	1.00	38.70	B	O
ATOM	10432	N	SER	B	53	-83.349	13.758	-71.040	1.00	38.98	B	N
ATOM	10433	CA	SER	B	53	-82.136	13.871	-71.851	1.00	36.98	B	C
ATOM	10435	CB	SER	B	53	-82.148	15.190	-72.643	1.00	38.97	B	C
ATOM	10438	OG	SER	B	53	-81.188	15.188	-73.693	1.00	38.82	B	O
ATOM	10440	C	SER	B	53	-80.929	13.761	-70.915	1.00	33.00	B	C
ATOM	10441	O	SER	B	53	-81.052	13.221	-69.813	1.00	28.94	B	O
ATOM	10443	N	ALA	B	54	-79.775	14.259	-71.352	1.00	36.11	B	N
ATOM	10444	CA	ALA	B	54	-78.562	14.227	-70.552	1.00	36.23	B	C
ATOM	10446	CB	ALA	B	54	-77.418	13.636	-71.361	1.00	38.05	B	C
ATOM	10450	C	ALA	B	54	-78.207	15.630	-70.062	1.00	36.56	B	C
ATOM	10451	O	ALA	B	54	-78.401	16.602	-70.778	1.00	36.22	B	O
ATOM	10453	N	ALA	B	55	-77.666	15.710	-68.847	1.00	40.47	B	N
ATOM	10454	CA	ALA	B	55	-77.331	16.975	-68.191	1.00	42.13	B	C
ATOM	10456	CB	ALA	B	55	-76.909	16.715	-66.744	1.00	37.66	B	C
ATOM	10460	C	ALA	B	55	-76.250	17.781	-68.915	1.00	44.24	B	C
ATOM	10461	O	ALA	B	55	-76.427	18.967	-69.167	1.00	47.85	B	O

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ATOM	10463	N	HIS	B	56	-75.135	17.149	-69.265	1.00	47.71	B	N
ATOM	10464	CA	HIS	B	56	-74.037	17.880	-69.918	1.00	52.79	B	C
ATOM	10466	CB	HIS	B	56	-72.716	17.100	-69.862	1.00	63.14	B	C
ATOM	10469	CG	HIS	B	56	-72.805	15.713	-70.403	1.00	69.54	B	C
ATOM	10470	ND1	HIS	B	56	-73.581	15.390	-71.497	1.00	72.32	B	N
ATOM	10472	CE1	HIS	B	56	-73.462	14.099	-71.754	1.00	72.69	B	C
ATOM	10474	NE2	HIS	B	56	-72.627	13.575	-70.873	1.00	75.40	B	N
ATOM	10476	CD2	HIS	B	56	-72.202	14.563	-70.016	1.00	73.79	B	C
ATOM	10478	C	HIS	B	56	-74.345	18.338	-71.356	1.00	51.53	B	C
ATOM	10479	O	HIS	B	56	-73.509	18.981	-71.999	1.00	47.24	B	O
ATOM	10481	N	CYS	B	57	-75.535	18.013	-71.856	1.00	52.60	B	N
ATOM	10482	CA	CYS	B	57	-76.032	18.602	-73.096	1.00	57.47	B	C
ATOM	10484	CB	CYS	B	57	-77.391	18.015	-73.477	1.00	57.83	B	C
ATOM	10487	SG	CYS	B	57	-77.259	16.377	-74.157	1.00	58.53	B	S
ATOM	10489	C	CYS	B	57	-76.185	20.108	-72.976	1.00	59.71	B	C
ATOM	10490	O	CYS	B	57	-76.081	20.826	-73.970	1.00	59.61	B	O
ATOM	10492	N	LEU	B	58	-76.456	20.580	-71.763	1.00	63.29	B	N
ATOM	10493	CA	LEU	B	58	-76.716	21.998	-71.539	1.00	66.80	B	C
ATOM	10495	CB	LEU	B	58	-77.932	22.164	-70.613	1.00	67.56	B	C
ATOM	10498	CG	LEU	B	58	-79.276	22.321	-71.345	1.00	66.67	B	C
ATOM	10500	CD1	LEU	B	58	-79.515	21.208	-72.360	1.00	65.43	B	C
ATOM	10504	CD2	LEU	B	58	-80.429	22.395	-70.345	1.00	67.49	B	C
ATOM	10508	C	LEU	B	58	-75.503	22.781	-71.013	1.00	70.20	B	C
ATOM	10509	O	LEU	B	58	-75.606	23.986	-70.773	1.00	69.71	B	O
ATOM	10511	N	GLU	B	59	-74.351	22.122	-70.884	1.00	75.48	B	N
ATOM	10512	CA	GLU	B	59	-73.207	22.706	-70.153	1.00	79.97	B	C
ATOM	10514	CB	GLU	B	59	-72.061	21.694	-70.005	1.00	80.07	B	C
ATOM	10517	CG	GLU	B	59	-72.004	21.065	-68.629	1.00	81.66	B	C
ATOM	10520	CD	GLU	B	59	-71.054	19.889	-68.547	1.00	82.00	B	C
ATOM	10521	OE1	GLU	B	59	-70.073	19.837	-69.325	1.00	82.21	B	O
ATOM	10522	OE2	GLU	B	59	-71.298	19.012	-67.692	1.00	82.80	B	O
ATOM	10523	C	GLU	B	59	-72.659	24.025	-70.712	1.00	84.72	B	C
ATOM	10524	O	GLU	B	59	-72.497	24.990	-69.961	1.00	86.66	B	O
ATOM	10526	N	ASP	B	60	-72.361	24.070	-72.008	1.00	87.60	B	N
ATOM	10527	CA	ASP	B	60	-71.862	25.309	-72.630	1.00	87.93	B	C
ATOM	10529	CB	ASP	B	60	-70.439	25.150	-73.216	1.00	90.38	B	C
ATOM	10532	CG	ASP	B	60	-70.191	23.788	-73.869	1.00	91.47	B	C
ATOM	10533	OD1	ASP	B	60	-71.125	22.962	-73.968	1.00	92.21	B	O
ATOM	10534	OD2	ASP	B	60	-69.035	23.546	-74.281	1.00	91.46	B	O
ATOM	10535	C	ASP	B	60	-72.867	25.853	-73.652	1.00	87.61	B	C
ATOM	10536	O	ASP	B	60	-72.519	26.142	-74.797	1.00	86.75	B	O
ATOM	10538	N	ALA	B	61	-74.118	25.998	-73.214	1.00	88.06	B	N
ATOM	10539	CA	ALA	B	61	-75.204	26.508	-74.070	1.00	89.30	B	C
ATOM	10541	CB	ALA	B	61	-76.425	25.601	-73.977	1.00	89.72	B	C
ATOM	10545	C	ALA	B	61	-75.551	27.929	-73.625	1.00	91.55	B	C
ATOM	10546	O	ALA	B	61	-75.618	28.868	-74.430	1.00	90.83	B	O
ATOM	10548	N	ALA	B	62	-75.801	28.007	-72.304	1.00	93.94	B	N
ATOM	10549	CA	ALA	B	62	-75.671	29.227	-71.471	1.00	94.09	B	C
ATOM	10551	CB	ALA	B	62	-74.145	29.570	-71.242	1.00	93.99	B	C
ATOM	10555	C	ALA	B	62	-76.426	30.448	-71.976	1.00	93.47	B	C
ATOM	10556	O	ALA	B	62	-77.502	30.768	-71.472	1.00	92.48	B	O
ATOM	10558	N	ASP	B	63	-75.852	31.138	-72.954	1.00	93.70	B	N
ATOM	10559	CA	ASP	B	63	-76.489	32.317	-73.514	1.00	93.17	B	C
ATOM	10561	CB	ASP	B	63	-75.493	33.485	-73.605	1.00	93.55	B	C
ATOM	10564	CG	ASP	B	63	-76.166	34.846	-73.451	1.00	93.56	B	C
ATOM	10565	OD1	ASP	B	63	-77.141	35.123	-74.186	1.00	92.99	B	O
ATOM	10566	OD2	ASP	B	63	-75.715	35.640	-72.594	1.00	91.79	B	O
ATOM	10567	C	ASP	B	63	-77.068	31.914	-74.870	1.00	93.18	B	C
ATOM	10568	O	ASP	B	63	-76.612	32.365	-75.924	1.00	94.31	B	O
ATOM	10570	N	GLY	B	64	-78.068	31.036	-74.824	1.00	89.93	B	N
ATOM	10571	CA	GLY	B	64	-78.677	30.495	-76.035	1.00	85.63	B	C
ATOM	10574	C	GLY	B	64	-80.085	29.972	-75.834	1.00	81.26	B	C
ATOM	10575	O	GLY	B	64	-80.497	29.657	-74.716	1.00	81.08	B	O
ATOM	10577	N	LYS	B	65	-80.807	29.867	-76.945	1.00	77.68	B	N
ATOM	10578	CA	LYS	B	65	-82.216	29.478	-76.961	1.00	77.23	B	C
ATOM	10580	CB	LYS	B	65	-82.885	30.073	-78.205	1.00	76.65	B	C
ATOM	10583	CG	LYS	B	65	-84.372	29.785	-78.359	1.00	77.19	B	C
ATOM	10586	CD	LYS	B	65	-85.201	31.011	-78.046	1.00	76.86	B	C
ATOM	10589	CE	LYS	B	65	-86.670	30.721	-78.172	1.00	76.82	B	C
ATOM	10592	NZ	LYS	B	65	-87.471	31.786	-77.514	1.00	77.36	B	N
ATOM	10596	C	LYS	B	65	-82.342	27.962	-77.005	1.00	76.03	B	C
ATOM	10597	O	LYS	B	65	-82.005	27.346	-78.014	1.00	76.97	B	O
ATOM	10599	N	VAL	B	66	-82.838	27.365	-75.922	1.00	73.30	B	N
ATOM	10600	CA	VAL	B	66	-82.993	25.912	-75.851	1.00	70.60	B	C
ATOM	10602	CB	VAL	B	66	-82.549	25.354	-74.474	1.00	70.48	B	C

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ATOM  10604  CG1 VAL B  66     -82.499  23.826 -74.510  1.00 69.36      B    C
ATOM  10608  CG2 VAL B  66     -81.188  25.932 -74.068  1.00 68.20      B    C
ATOM  10612  C   VAL B  66     -84.442  25.504 -76.133  1.00 68.74      B    C
ATOM  10613  O   VAL B  66     -85.364  26.008 -75.500  1.00 69.27      B    O
ATOM  10615  N   GLN B  67     -84.619  24.583 -77.083  1.00 64.72      B    N
ATOM  10616  CA  GLN B  67     -85.940  24.090 -77.496  1.00 61.06      B    C
ATOM  10618  CB  GLN B  67     -86.358  24.750 -78.816  1.00 62.47      B    C
ATOM  10621  CG  GLN B  67     -86.316  26.274 -78.820  1.00 62.64      B    C
ATOM  10624  CD  GLN B  67     -86.944  26.853 -80.075  1.00 63.74      B    C
ATOM  10625  OE1 GLN B  67     -86.310  26.912 -81.137  1.00 63.70      B    O
ATOM  10626  NE2 GLN B  67     -88.206  27.279 -79.961  1.00 65.31      B    N
ATOM  10629  C   GLN B  67     -85.948  22.569 -77.691  1.00 57.56      B    C
ATOM  10630  O   GLN B  67     -84.899  21.961 -77.932  1.00 55.58      B    O
ATOM  10632  N   VAL B  68     -87.134  21.963 -77.597  1.00 54.63      B    N
ATOM  10633  CA  VAL B  68     -87.313  20.523 -77.855  1.00 51.29      B    C
ATOM  10635  CB  VAL B  68     -87.897  19.779 -76.620  1.00 50.83      B    C
ATOM  10637  CG1 VAL B  68     -88.257  18.335 -76.978  1.00 50.08      B    C
ATOM  10641  CG2 VAL B  68     -86.924  19.832 -75.443  1.00 45.22      B    C
ATOM  10645  C   VAL B  68     -88.263  20.313 -79.024  1.00 48.09      B    C
ATOM  10646  O   VAL B  68     -89.373  20.821 -79.009  1.00 47.07      B    O
ATOM  10648  N   LEU B  69     -87.826  19.549 -80.018  1.00 45.01      B    N
ATOM  10649  CA  LEU B  69     -88.612  19.302 -81.228  1.00 44.58      B    C
ATOM  10651  CB  LEU B  69     -87.730  19.529 -82.464  1.00 46.79      B    C
ATOM  10654  CG  LEU B  69     -88.305  19.230 -83.846  1.00 44.96      B    C
ATOM  10656  CD1 LEU B  69     -89.453  20.182 -84.153  1.00 45.17      B    C
ATOM  10660  CD2 LEU B  69     -87.197  19.339 -84.891  1.00 45.01      B    C
ATOM  10664  C   LEU B  69     -89.189  17.877 -81.238  1.00 44.66      B    C
ATOM  10665  O   LEU B  69     -88.447  16.887 -81.370  1.00 41.12      B    O
ATOM  10667  N   LEU B  70     -90.511  17.785 -81.122  1.00 44.63      B    N
ATOM  10668  CA  LEU B  70     -91.223  16.500 -81.126  1.00 44.29      B    C
ATOM  10670  CB  LEU B  70     -92.319  16.509 -80.053  1.00 45.97      B    C
ATOM  10673  CG  LEU B  70     -91.874  16.094 -78.647  1.00 46.22      B    C
ATOM  10675  CD1 LEU B  70     -92.427  17.037 -77.576  1.00 43.62      B    C
ATOM  10679  CD2 LEU B  70     -92.269  14.636 -78.373  1.00 45.99      B    C
ATOM  10683  C   LEU B  70     -91.839  16.157 -82.494  1.00 44.84      B    C
ATOM  10684  O   LEU B  70     -91.997  17.032 -83.358  1.00 44.19      B    O
ATOM  10686  N   GLY B  71     -92.170  14.873 -82.671  1.00 45.19      B    N
ATOM  10687  CA  GLY B  71     -92.788  14.351 -83.892  1.00 43.99      B    C
ATOM  10690  C   GLY B  71     -91.944  14.459 -85.151  1.00 47.61      B    C
ATOM  10691  O   GLY B  71     -92.466  14.357 -86.266  1.00 52.66      B    O
ATOM  10693  N   ALA B  72     -90.640  14.657 -84.994  1.00 48.99      B    N
ATOM  10694  CA  ALA B  72     -89.775  14.884 -86.150  1.00 45.51      B    C
ATOM  10696  CB  ALA B  72     -88.653  15.884 -85.817  1.00 42.58      B    C
ATOM  10700  C   ALA B  72     -89.197  13.583 -86.685  1.00 43.65      B    C
ATOM  10701  O   ALA B  72     -89.023  12.598 -85.956  1.00 43.64      B    O
ATOM  10703  N   HIS B  73     -88.935  13.582 -87.982  1.00 42.84      B    N
ATOM  10704  CA  HIS B  73     -88.101  12.565 -88.601  1.00 44.68      B    C
ATOM  10706  CB  HIS B  73     -88.895  11.735 -89.610  1.00 47.97      B    C
ATOM  10709  CG  HIS B  73     -88.151  10.540 -90.115  1.00 50.40      B    C
ATOM  10710  ND1 HIS B  73     -87.449   9.701 -89.279  1.00 52.16      B    N
ATOM  10712  CE1 HIS B  73     -86.890   8.740 -89.992  1.00 51.61      B    C
ATOM  10714  NE2 HIS B  73     -87.209   8.920 -91.260  1.00 52.75      B    N
ATOM  10716  CD2 HIS B  73     -88.003  10.037 -91.364  1.00 54.54      B    C
ATOM  10718  C   HIS B  73     -86.922  13.281 -89.262  1.00 44.82      B    C
ATOM  10719  O   HIS B  73     -85.760  13.001 -88.944  1.00 41.94      B    O
ATOM  10721  N   SER B  74     -87.232  14.213 -90.165  1.00 44.47      B    N
ATOM  10722  CA  SER B  74     -86.231  15.093 -90.773  1.00 43.35      B    C
ATOM  10724  CB  SER B  74     -86.654  15.478 -92.199  1.00 47.59      B    C
ATOM  10727  OG  SER B  74     -85.695  16.321 -92.824  1.00 49.46      B    O
ATOM  10729  C   SER B  74     -86.083  16.354 -89.926  1.00 43.36      B    C
ATOM  10730  O   SER B  74     -87.073  16.904 -89.446  1.00 43.42      B    O
ATOM  10732  N   LEU B  75     -84.848  16.814 -89.745  1.00 44.98      B    N
ATOM  10733  CA  LEU B  75     -84.594  18.047 -88.993  1.00 45.22      B    C
ATOM  10735  CB  LEU B  75     -83.130  18.126 -88.549  1.00 47.78      B    C
ATOM  10738  CG  LEU B  75     -82.804  17.495 -87.194  1.00 46.82      B    C
ATOM  10740  CD1 LEU B  75     -81.301  17.323 -87.040  1.00 46.65      B    C
ATOM  10744  CD2 LEU B  75     -83.381  18.338 -86.075  1.00 46.00      B    C
ATOM  10748  C   LEU B  75     -84.953  19.312 -89.779  1.00 46.72      B    C
ATOM  10749  O   LEU B  75     -85.489  20.263 -89.206  1.00 47.71      B    O
ATOM  10751  N   SER B  76     -84.659  19.317 -91.081  1.00 47.72      B    N
ATOM  10752  CA  SER B  76     -84.805  20.515 -91.923  1.00 47.68      B    C
ATOM  10754  CB  SER B  76     -83.716  20.545 -92.998  1.00 49.41      B    C
ATOM  10757  OG  SER B  76     -83.799  19.401 -93.832  1.00 50.45      B    O
ATOM  10759  C   SER B  76     -86.168  20.602 -92.604  1.00 49.40      B    C
ATOM  10760  O   SER B  76     -86.724  21.696 -92.770  1.00 45.92      B    O
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ATOM	10762	N	GLN	B	77	-86.705	19.451	-93.006	1.00	52.99	B	N
ATOM	10763	CA	GLN	B	77	-87.902	19.430	-93.852	1.00	53.19	B	C
ATOM	10765	CB	GLN	B	77	-87.980	18.145	-94.692	1.00	57.76	B	C
ATOM	10768	CG	GLN	B	77	-87.907	18.370	-96.202	1.00	61.99	B	C
ATOM	10771	CD	GLN	B	77	-86.522	18.768	-96.685	1.00	64.19	B	C
ATOM	10772	OE1	GLN	B	77	-86.060	18.279	-97.713	1.00	65.90	B	O
ATOM	10773	NE2	GLN	B	77	-85.854	19.657	-95.950	1.00	63.59	B	N
ATOM	10776	C	GLN	B	77	-89.173	19.582	-93.028	1.00	53.90	B	C
ATOM	10777	O	GLN	B	77	-89.234	19.111	-91.887	1.00	50.34	B	O
ATOM	10779	N	PRO	B	78	-90.198	20.242	-93.610	1.00	56.71	B	N
ATOM	10780	CA	PRO	B	78	-91.476	20.345	-92.918	1.00	56.73	B	C
ATOM	10782	CB	PRO	B	78	-92.244	21.397	-93.733	1.00	59.59	B	C
ATOM	10785	CG	PRO	B	78	-91.652	21.336	-95.104	1.00	59.70	B	C
ATOM	10788	CD	PRO	B	78	-90.217	20.920	-94.926	1.00	58.18	B	C
ATOM	10791	C	PRO	B	78	-92.230	19.017	-92.909	1.00	55.23	B	C
ATOM	10792	O	PRO	B	78	-92.250	18.295	-93.912	1.00	50.24	B	O
ATOM	10793	N	GLU	B	79	-92.829	18.712	-91.760	1.00	55.38	B	N
ATOM	10794	CA	GLU	B	79	-93.652	17.520	-91.575	1.00	55.00	B	C
ATOM	10796	CB	GLU	B	79	-92.838	16.426	-90.890	1.00	57.94	B	C
ATOM	10799	CG	GLU	B	79	-91.471	16.189	-91.511	1.00	58.05	B	C
ATOM	10802	CD	GLU	B	79	-90.740	15.021	-90.881	1.00	59.64	B	C
ATOM	10803	OE1	GLU	B	79	-91.110	14.624	-89.746	1.00	59.59	B	O
ATOM	10804	OE2	GLU	B	79	-89.788	14.516	-91.525	1.00	59.88	B	O
ATOM	10805	C	GLU	B	79	-94.858	17.905	-90.711	1.00	56.30	B	C
ATOM	10806	O	GLU	B	79	-94.756	18.820	-89.883	1.00	55.14	B	O
ATOM	10808	N	PRO	B	80	-95.999	17.207	-90.886	1.00	56.51	B	N
ATOM	10809	CA	PRO	B	80	-97.227	17.616	-90.180	1.00	55.47	B	C
ATOM	10811	CB	PRO	B	80	-98.321	16.729	-90.799	1.00	55.76	B	C
ATOM	10814	CG	PRO	B	80	-97.618	15.578	-91.411	1.00	56.15	B	C
ATOM	10817	CD	PRO	B	80	-96.197	15.995	-91.705	1.00	57.02	B	C
ATOM	10820	C	PRO	B	80	-97.129	17.417	-88.662	1.00	54.97	B	C
ATOM	10821	O	PRO	B	80	-97.624	18.251	-87.903	1.00	53.17	B	O
ATOM	10822	N	SER	B	81	-96.483	16.330	-88.239	1.00	55.10	B	N
ATOM	10823	CA	SER	B	81	-96.278	16.027	-86.806	1.00	52.08	B	C
ATOM	10825	CB	SER	B	81	-95.875	14.555	-86.619	1.00	52.18	B	C
ATOM	10828	OG	SER	B	81	-95.329	14.015	-87.823	1.00	52.84	B	O
ATOM	10830	C	SER	B	81	-95.242	16.938	-86.131	1.00	50.19	B	C
ATOM	10831	O	SER	B	81	-95.315	17.189	-84.925	1.00	47.91	B	O
ATOM	10833	N	LYS	B	82	-94.296	17.430	-86.930	1.00	48.85	B	N
ATOM	10834	CA	LYS	B	82	-93.168	18.238	-86.461	1.00	48.69	B	C
ATOM	10836	CB	LYS	B	82	-92.269	18.614	-87.666	1.00	49.45	B	C
ATOM	10839	CG	LYS	B	82	-90.777	18.351	-87.472	1.00	48.84	B	C
ATOM	10842	CD	LYS	B	82	-89.951	18.678	-88.731	1.00	48.36	B	C
ATOM	10845	CE	LYS	B	82	-89.259	20.053	-88.636	1.00	49.09	B	C
ATOM	10848	NZ	LYS	B	82	-88.200	20.270	-89.680	1.00	47.71	B	N
ATOM	10852	C	LYS	B	82	-93.612	19.515	-85.748	1.00	50.32	B	C
ATOM	10853	O	LYS	B	82	-94.167	20.413	-86.378	1.00	56.26	B	O
ATOM	10855	N	ARG	B	83	-93.367	19.593	-84.443	1.00	51.92	B	N
ATOM	10856	CA	ARG	B	83	-93.568	20.837	-83.701	1.00	51.51	B	C
ATOM	10858	CB	ARG	B	83	-94.888	20.809	-82.929	1.00	55.50	B	C
ATOM	10861	CG	ARG	B	83	-95.176	22.130	-82.226	1.00	56.36	B	C
ATOM	10864	CD	ARG	B	83	-96.571	22.221	-81.634	1.00	56.39	B	C
ATOM	10867	NE	ARG	B	83	-96.568	23.192	-80.541	1.00	58.22	B	N
ATOM	10869	CZ	ARG	B	83	-97.559	23.378	-79.671	1.00	59.21	B	C
ATOM	10870	NH1	ARG	B	83	-98.685	22.666	-79.749	1.00	57.85	B	N
ATOM	10873	NH2	ARG	B	83	-97.416	24.291	-78.710	1.00	58.24	B	N
ATOM	10876	C	ARG	B	83	-92.389	21.148	-82.766	1.00	50.83	B	C
ATOM	10877	O	ARG	B	83	-91.919	20.274	-82.028	1.00	47.03	B	O
ATOM	10879	N	LEU	B	84	-91.925	22.399	-82.825	1.00	50.29	B	N
ATOM	10880	CA	LEU	B	84	-90.818	22.907	-82.004	1.00	51.40	B	C
ATOM	10882	CB	LEU	B	84	-90.004	23.917	-82.834	1.00	52.15	B	C
ATOM	10885	CG	LEU	B	84	-88.729	24.584	-82.294	1.00	51.96	B	C
ATOM	10887	CD1	LEU	B	84	-87.567	23.596	-82.161	1.00	48.49	B	C
ATOM	10891	CD2	LEU	B	84	-88.342	25.746	-83.220	1.00	51.60	B	C
ATOM	10895	C	LEU	B	84	-91.380	23.573	-80.743	1.00	52.61	B	C
ATOM	10896	O	LEU	B	84	-92.144	24.534	-80.843	1.00	52.90	B	O
ATOM	10898	N	TYR	B	85	-91.008	23.060	-79.568	1.00	52.62	B	N
ATOM	10899	CA	TYR	B	85	-91.532	23.559	-78.280	1.00	53.35	B	C
ATOM	10901	CB	TYR	B	85	-92.008	22.405	-77.389	1.00	52.50	B	C
ATOM	10904	CG	TYR	B	85	-93.171	21.602	-77.927	1.00	51.32	B	C
ATOM	10905	CD1	TYR	B	85	-94.395	21.580	-77.261	1.00	52.24	B	C
ATOM	10907	CE1	TYR	B	85	-95.462	20.831	-77.740	1.00	52.75	B	C
ATOM	10909	CZ	TYR	B	85	-95.309	20.095	-78.903	1.00	53.14	B	C
ATOM	10910	OH	TYR	B	85	-96.361	19.354	-79.401	1.00	52.53	B	O
ATOM	10912	CE2	TYR	B	85	-94.100	20.101	-79.575	1.00	52.39	B	C

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ATOM	10914	CD2	TYR	B	85	-93.042	20.849	-79.085	1.00	50.34	B	C
ATOM	10916	C	TYR	B	85	-90.465	24.326	-77.515	1.00	55.13	B	C
ATOM	10917	O	TYR	B	85	-89.303	23.910	-77.481	1.00	57.61	B	O
ATOM	10919	N	ASP	B	86	-90.861	25.428	-76.884	1.00	57.16	B	N
ATOM	10920	CA	ASP	B	86	-89.970	26.145	-75.965	1.00	58.44	B	C
ATOM	10922	CB	ASP	B	86	-90.426	27.594	-75.766	1.00	63.08	B	C
ATOM	10925	CG	ASP	B	86	-89.868	28.522	-76.823	1.00	65.70	B	C
ATOM	10926	OD1	ASP	B	86	-90.413	28.557	-77.952	1.00	63.76	B	O
ATOM	10927	OD2	ASP	B	86	-88.867	29.208	-76.512	1.00	67.49	B	O
ATOM	10928	C	ASP	B	86	-89.907	25.417	-74.623	1.00	56.72	B	C
ATOM	10929	O	ASP	B	86	-90.754	24.561	-74.331	1.00	52.66	B	O
ATOM	10931	N	VAL	B	87	-88.899	25.751	-73.821	1.00	54.97	B	N
ATOM	10932	CA	VAL	B	87	-88.651	25.049	-72.565	1.00	58.25	B	C
ATOM	10934	CB	VAL	B	87	-87.177	24.529	-72.492	1.00	57.28	B	C
ATOM	10936	CG1	VAL	B	87	-86.849	24.004	-71.105	1.00	56.39	B	C
ATOM	10940	CG2	VAL	B	87	-86.936	23.444	-73.541	1.00	55.90	B	C
ATOM	10944	C	VAL	B	87	-88.967	25.942	-71.365	1.00	59.58	B	C
ATOM	10945	O	VAL	B	87	-88.310	26.967	-71.151	1.00	58.95	B	O
ATOM	10947	N	LEU	B	88	-89.966	25.532	-70.584	1.00	61.74	B	N
ATOM	10948	CA	LEU	B	88	-90.378	26.268	-69.385	1.00	61.68	B	C
ATOM	10950	CB	LEU	B	88	-91.826	25.922	-69.009	1.00	63.99	B	C
ATOM	10953	CG	LEU	B	88	-92.401	26.568	-67.739	1.00	64.77	B	C
ATOM	10955	CD1	LEU	B	88	-92.224	28.091	-67.765	1.00	64.30	B	C
ATOM	10959	CD2	LEU	B	88	-93.873	26.178	-67.542	1.00	63.20	B	C
ATOM	10963	C	LEU	B	88	-89.458	26.024	-68.186	1.00	61.02	B	C
ATOM	10964	O	LEU	B	88	-89.323	26.901	-67.331	1.00	60.87	B	O
ATOM	10966	N	ARG	B	89	-88.838	24.842	-68.117	1.00	62.37	B	N
ATOM	10967	CA	ARG	B	89	-87.984	24.481	-66.973	1.00	61.62	B	C
ATOM	10969	CB	ARG	B	89	-88.855	23.958	-65.823	1.00	63.06	B	C
ATOM	10972	CG	ARG	B	89	-88.522	24.554	-64.462	1.00	65.03	B	C
ATOM	10975	CD	ARG	B	89	-89.480	24.048	-63.379	1.00	65.42	B	C
ATOM	10978	NE	ARG	B	89	-88.859	23.058	-62.491	1.00	65.61	B	N
ATOM	10980	CZ	ARG	B	89	-89.520	22.128	-61.799	1.00	65.03	B	C
ATOM	10981	NH1	ARG	B	89	-90.843	22.019	-61.881	1.00	64.97	B	N
ATOM	10984	NH2	ARG	B	89	-88.849	21.286	-61.021	1.00	65.29	B	N
ATOM	10987	C	ARG	B	89	-86.949	23.416	-67.333	1.00	58.80	B	C
ATOM	10988	O	ARG	B	89	-87.290	22.417	-67.964	1.00	56.55	B	O
ATOM	10990	N	ALA	B	90	-85.698	23.627	-66.918	1.00	57.48	B	N
ATOM	10991	CA	ALA	B	90	-84.624	22.625	-67.080	1.00	55.53	B	C
ATOM	10993	CB	ALA	B	90	-83.466	23.213	-67.869	1.00	58.54	B	C
ATOM	10997	C	ALA	B	90	-84.124	22.101	-65.730	1.00	52.58	B	C
ATOM	10998	O	ALA	B	90	-83.453	22.822	-64.986	1.00	49.36	B	O
ATOM	11000	N	VAL	B	91	-84.439	20.842	-65.427	1.00	52.61	B	N
ATOM	11001	CA	VAL	B	91	-84.057	20.227	-64.148	1.00	51.47	B	C
ATOM	11003	CB	VAL	B	91	-85.271	19.607	-63.419	1.00	50.48	B	C
ATOM	11005	CG1	VAL	B	91	-84.842	19.050	-62.050	1.00	49.03	B	C
ATOM	11009	CG2	VAL	B	91	-86.365	20.639	-63.245	1.00	52.98	B	C
ATOM	11013	C	VAL	B	91	-82.984	19.133	-64.302	1.00	48.93	B	C
ATOM	11014	O	VAL	B	91	-83.315	17.953	-64.446	1.00	48.49	B	O
ATOM	11016	N	PRO	B	92	-81.690	19.512	-64.277	1.00	47.45	B	N
ATOM	11017	CA	PRO	B	92	-80.677	18.459	-64.201	1.00	48.88	B	C
ATOM	11019	CB	PRO	B	92	-79.348	19.220	-64.349	1.00	49.37	B	C
ATOM	11022	CG	PRO	B	92	-79.649	20.605	-63.938	1.00	50.41	B	C
ATOM	11025	CD	PRO	B	92	-81.078	20.853	-64.349	1.00	50.15	B	C
ATOM	11028	C	PRO	B	92	-80.702	17.718	-62.874	1.00	50.45	B	C
ATOM	11029	O	PRO	B	92	-81.141	18.270	-61.862	1.00	53.12	B	O
ATOM	11030	N	HIS	B	93	-80.225	16.475	-62.881	1.00	48.33	B	N
ATOM	11031	CA	HIS	B	93	-80.074	15.713	-61.640	1.00	47.34	B	C
ATOM	11033	CB	HIS	B	93	-79.428	14.343	-61.909	1.00	42.80	B	C
ATOM	11036	CG	HIS	B	93	-79.419	13.425	-60.719	1.00	42.60	B	C
ATOM	11037	ND1	HIS	B	93	-78.470	13.503	-59.720	1.00	38.99	B	N
ATOM	11039	CE1	HIS	B	93	-78.713	12.575	-58.810	1.00	38.06	B	C
ATOM	11041	NE2	HIS	B	93	-79.784	11.896	-59.179	1.00	34.18	B	N
ATOM	11043	CD2	HIS	B	93	-80.241	12.404	-60.373	1.00	38.75	B	C
ATOM	11045	C	HIS	B	93	-79.218	16.551	-60.684	1.00	47.62	B	C
ATOM	11046	O	HIS	B	93	-78.200	17.095	-61.105	1.00	45.35	B	O
ATOM	11048	N	PRO	B	94	-79.640	16.676	-59.404	1.00	51.76	B	N
ATOM	11049	CA	PRO	B	94	-78.928	17.561	-58.467	1.00	51.47	B	C
ATOM	11051	CB	PRO	B	94	-79.632	17.306	-57.120	1.00	52.26	B	C
ATOM	11054	CG	PRO	B	94	-80.406	16.050	-57.297	1.00	54.13	B	C
ATOM	11057	CD	PRO	B	94	-80.784	16.018	-58.748	1.00	52.39	B	C
ATOM	11060	C	PRO	B	94	-77.435	17.259	-58.344	1.00	51.09	B	C
ATOM	11061	O	PRO	B	94	-76.629	18.185	-58.198	1.00	52.18	B	O
ATOM	11062	N	ASP	B	95	-77.082	15.974	-58.407	1.00	48.72	B	N
ATOM	11063	CA	ASP	B	95	-75.693	15.525	-58.231	1.00	50.35	B	C

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ATOM  11065  CB  ASP B  95     -75.650  14.126 -57.606  1.00 48.55      B    C
ATOM  11068  CG  ASP B  95     -76.159  14.112 -56.193  1.00 50.54      B    C
ATOM  11069  OD1 ASP B  95     -75.421  14.597 -55.312  1.00 51.54      B    O
ATOM  11070  OD2 ASP B  95     -77.291  13.628 -55.962  1.00 51.71      B    O
ATOM  11071  C   ASP B  95     -74.890  15.482 -59.533  1.00 50.98      B    C
ATOM  11072  O   ASP B  95     -73.707  15.118 -59.528  1.00 50.32      B    O
ATOM  11074  N   SER B  96     -75.519  15.835 -60.652  1.00 50.35      B    N
ATOM  11075  CA  SER B  96     -74.784  15.901 -61.922  1.00 53.75      B    C
ATOM  11077  CB  SER B  96     -75.725  15.935 -63.139  1.00 52.88      B    C
ATOM  11080  OG  SER B  96     -76.268  17.220 -63.372  1.00 54.36      B    O
ATOM  11082  C   SER B  96     -73.853  17.109 -61.930  1.00 55.31      B    C
ATOM  11083  O   SER B  96     -74.104  18.119 -61.260  1.00 50.72      B    O
ATOM  11085  N   GLN B  97     -72.771  17.004 -62.687  1.00 60.60      B    N
ATOM  11086  CA  GLN B  97     -71.782  18.067 -62.717  1.00 64.11      B    C
ATOM  11088  CB  GLN B  97     -71.061  18.134 -61.353  1.00 67.47      B    C
ATOM  11091  CG  GLN B  97     -69.681  17.496 -61.293  1.00 68.83      B    C
ATOM  11094  CD  GLN B  97     -69.143  17.453 -59.876  1.00 70.75      B    C
ATOM  11095  OE1 GLN B  97     -68.367  18.321 -59.471  1.00 74.81      B    O
ATOM  11096  NE2 GLN B  97     -69.567  16.454 -59.107  1.00 70.54      B    N
ATOM  11099  C   GLN B  97     -70.775  17.871 -63.854  1.00 64.92      B    C
ATOM  11100  O   GLN B  97     -70.645  16.764 -64.363  1.00 66.22      B    O
ATOM  11102  N   PRO B  98     -70.042  18.942 -64.227  1.00 65.76      B    N
ATOM  11103  CA  PRO B  98     -69.207  19.000 -65.438  1.00 67.03      B    C
ATOM  11105  CB  PRO B  98     -68.620  20.418 -65.391  1.00 69.03      B    C
ATOM  11108  CG  PRO B  98     -69.529  21.182 -64.510  1.00 69.86      B    C
ATOM  11111  CD  PRO B  98     -69.959  20.205 -63.473  1.00 68.91      B    C
ATOM  11114  C   PRO B  98     -68.068  17.972 -65.569  1.00 68.85      B    C
ATOM  11115  O   PRO B  98     -67.731  17.590 -66.688  1.00 69.69      B    O
ATOM  11116  N   ASP B  99     -67.479  17.543 -64.453  1.00 67.50      B    N
ATOM  11117  CA  ASP B  99     -66.301  16.661 -64.488  1.00 67.34      B    C
ATOM  11119  CB  ASP B  99     -65.188  17.201 -63.573  1.00 71.82      B    C
ATOM  11122  CG  ASP B  99     -64.911  18.674 -63.787  1.00 77.57      B    C
ATOM  11123  OD1 ASP B  99     -63.755  19.015 -64.129  1.00 80.43      B    O
ATOM  11124  OD2 ASP B  99     -65.844  19.491 -63.609  1.00 79.27      B    O
ATOM  11125  C   ASP B  99     -66.594  15.213 -64.071  1.00 66.28      B    C
ATOM  11126  O   ASP B  99     -65.716  14.538 -63.517  1.00 65.18      B    O
ATOM  11128  N   THR B 100     -67.818  14.746 -64.316  1.00 63.79      B    N
ATOM  11129  CA  THR B 100     -68.205  13.363 -64.019  1.00 61.55      B    C
ATOM  11131  CB  THR B 100     -68.750  13.150 -62.580  1.00 62.00      B    C
ATOM  11133  OG1 THR B 100     -69.912  13.965 -62.356  1.00 63.14      B    O
ATOM  11135  CG2 THR B 100     -67.686  13.446 -61.524  1.00 62.61      B    C
ATOM  11139  C   THR B 100     -69.285  12.937 -64.993  1.00 59.09      B    C
ATOM  11140  O   THR B 100     -70.160  13.734 -65.350  1.00 61.10      B    O
ATOM  11142  N   ILE B 101     -69.236  11.679 -65.411  1.00 57.50      B    N
ATOM  11143  CA  ILE B 101     -70.316  11.102 -66.218  1.00 56.65      B    C
ATOM  11145  CB  ILE B 101     -69.812  10.018 -67.223  1.00 57.53      B    C
ATOM  11147  CG1 ILE B 101     -69.033   8.898 -66.521  1.00 55.34      B    C
ATOM  11150  CD1 ILE B 101     -68.848   7.676 -67.389  1.00 54.69      B    C
ATOM  11154  CG2 ILE B 101     -68.962  10.658 -68.324  1.00 57.41      B    C
ATOM  11158  C   ILE B 101     -71.454  10.548 -65.345  1.00 54.12      B    C
ATOM  11159  O   ILE B 101     -72.443  10.020 -65.854  1.00 55.10      B    O
ATOM  11161  N   ASP B 102     -71.323  10.709 -64.034  1.00 53.33      B    N
ATOM  11162  CA  ASP B 102     -72.312  10.228 -63.095  1.00 50.87      B    C
ATOM  11164  CB  ASP B 102     -71.624  10.016 -61.747  1.00 48.15      B    C
ATOM  11167  CG  ASP B 102     -70.392   9.160 -61.880  1.00 44.88      B    C
ATOM  11168  OD1 ASP B 102     -70.502   8.067 -62.453  1.00 44.48      B    O
ATOM  11169  OD2 ASP B 102     -69.306   9.589 -61.457  1.00 49.04      B    O
ATOM  11170  C   ASP B 102     -73.533  11.158 -63.030  1.00 47.91      B    C
ATOM  11171  O   ASP B 102     -73.415  12.385 -63.188  1.00 45.45      B    O
ATOM  11173  N   HIS B 103     -74.700  10.536 -62.842  1.00 45.74      B    N
ATOM  11174  CA  HIS B 103     -75.986  11.231 -62.664  1.00 44.61      B    C
ATOM  11176  CB  HIS B 103     -75.937  11.982 -61.336  1.00 42.70      B    C
ATOM  11179  CG  HIS B 103     -75.035  11.326 -60.339  1.00 38.07      B    C
ATOM  11180  ND1 HIS B 103     -75.187  10.012 -59.963  1.00 37.88      B    N
ATOM  11182  CE1 HIS B 103     -74.245   9.694 -59.094  1.00 41.34      B    C
ATOM  11184  NE2 HIS B 103     -73.469  10.748 -58.918  1.00 40.14      B    N
ATOM  11186  CD2 HIS B 103     -73.935  11.778 -59.695  1.00 38.29      B    C
ATOM  11188  C   HIS B 103     -76.340  12.139 -63.841  1.00 43.08      B    C
ATOM  11189  O   HIS B 103     -76.933  13.189 -63.671  1.00 40.28      B    O
ATOM  11191  N   ASP B 104     -76.003  11.688 -65.045  1.00 44.63      B    N
ATOM  11192  CA  ASP B 104     -76.053  12.523 -66.249  1.00 42.78      B    C
ATOM  11194  CB  ASP B 104     -74.973  12.062 -67.243  1.00 41.39      B    C
ATOM  11197  CG  ASP B 104     -74.974  12.852 -68.543  1.00 43.53      B    C
ATOM  11198  OD1 ASP B 104     -75.396  14.025 -68.563  1.00 43.50      B    O
ATOM  11199  OD2 ASP B 104     -74.554  12.279 -69.564  1.00 45.73      B    O
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ATOM  11200  C   ASP B 104     -77.453  12.496 -66.878  1.00 43.12      B    C
ATOM  11201  O   ASP B 104     -77.645  12.092 -68.031  1.00 41.90      B    O
ATOM  11203  N   LEU B 105     -78.427  12.947 -66.096  1.00 42.61      B    N
ATOM  11204  CA  LEU B 105     -79.803  12.983 -66.516  1.00 43.80      B    C
ATOM  11206  CB  LEU B 105     -80.637  12.043 -65.644  1.00 39.70      B    C
ATOM  11209  CG  LEU B 105     -80.528  10.540 -65.891  1.00 37.49      B    C
ATOM  11211  CD1 LEU B 105     -81.518   9.803 -64.981  1.00 35.22      B    C
ATOM  11215  CD2 LEU B 105     -80.769  10.179 -67.371  1.00 34.03      B    C
ATOM  11219  C   LEU B 105     -80.342  14.408 -66.418  1.00 45.53      B    C
ATOM  11220  O   LEU B 105     -79.954  15.177 -65.549  1.00 47.30      B    O
ATOM  11222  N   LEU B 106     -81.245  14.751 -67.323  1.00 49.04      B    N
ATOM  11223  CA  LEU B 106     -81.839  16.077 -67.355  1.00 48.75      B    C
ATOM  11225  CB  LEU B 106     -81.082  16.971 -68.340  1.00 51.49      B    C
ATOM  11228  CG  LEU B 106     -81.481  18.441 -68.511  1.00 50.81      B    C
ATOM  11230  CD1 LEU B 106     -81.600  19.133 -67.176  1.00 49.67      B    C
ATOM  11234  CD2 LEU B 106     -80.445  19.150 -69.380  1.00 51.33      B    C
ATOM  11238  C   LEU B 106     -83.283  15.950 -67.777  1.00 47.63      B    C
ATOM  11239  O   LEU B 106     -83.586  15.302 -68.780  1.00 42.64      B    O
ATOM  11241  N   LEU B 107     -84.165  16.573 -67.001  1.00 48.66      B    N
ATOM  11242  CA  LEU B 107     -85.600  16.536 -67.250  1.00 50.21      B    C
ATOM  11244  CB  LEU B 107     -86.296  16.091 -65.947  1.00 49.03      B    C
ATOM  11247  CG  LEU B 107     -87.279  14.903 -65.896  1.00 47.89      B    C
ATOM  11249  CD1 LEU B 107     -86.986  14.056 -64.650  1.00 40.79      B    C
ATOM  11253  CD2 LEU B 107     -87.276  14.022 -67.152  1.00 46.84      B    C
ATOM  11257  C   LEU B 107     -86.066  17.930 -67.732  1.00 50.02      B    C
ATOM  11258  O   LEU B 107     -85.934  18.920 -67.012  1.00 51.00      B    O
ATOM  11260  N   LEU B 108     -86.573  18.000 -68.963  1.00 51.22      B    N
ATOM  11261  CA  LEU B 108     -87.039  19.261 -69.571  1.00 51.41      B    C
ATOM  11263  CB  LEU B 108     -86.643  19.335 -71.062  1.00 46.27      B    C
ATOM  11266  CG  LEU B 108     -85.237  19.687 -71.566  1.00 39.43      B    C
ATOM  11268  CD1 LEU B 108     -84.421  20.422 -70.505  1.00 34.88      B    C
ATOM  11272  CD2 LEU B 108     -84.530  18.442 -72.067  1.00 37.66      B    C
ATOM  11276  C   LEU B 108     -88.565  19.383 -69.503  1.00 51.91      B    C
ATOM  11277  O   LEU B 108     -89.273  18.494 -69.982  1.00 47.90      B    O
ATOM  11279  N   GLN B 109     -89.070  20.489 -68.955  1.00 54.25      B    N
ATOM  11280  CA  GLN B 109     -90.517  20.757 -68.955  1.00 55.79      B    C
ATOM  11282  CB  GLN B 109     -90.969  21.425 -67.651  1.00 56.88      B    C
ATOM  11285  CG  GLN B 109     -92.500  21.547 -67.521  1.00 57.05      B    C
ATOM  11288  CD  GLN B 109     -92.971  21.961 -66.126  1.00 55.71      B    C
ATOM  11289  OE1 GLN B 109     -92.328  22.761 -65.441  1.00 57.79      B    O
ATOM  11290  NE2 GLN B 109     -94.112  21.420 -65.709  1.00 52.33      B    N
ATOM  11293  C   GLN B 109     -90.895  21.632 -70.149  1.00 57.11      B    C
ATOM  11294  O   GLN B 109     -90.407  22.755 -70.286  1.00 55.49      B    O
ATOM  11296  N   LEU B 110     -91.771  21.116 -71.006  1.00 59.11      B    N
ATOM  11297  CA  LEU B 110     -92.167  21.818 -72.227  1.00 61.02      B    C
ATOM  11299  CB  LEU B 110     -92.901  20.862 -73.179  1.00 58.76      B    C
ATOM  11302  CG  LEU B 110     -92.141  19.612 -73.633  1.00 56.58      B    C
ATOM  11304  CD1 LEU B 110     -93.068  18.660 -74.371  1.00 54.86      B    C
ATOM  11308  CD2 LEU B 110     -90.946  19.989 -74.494  1.00 54.48      B    C
ATOM  11312  C   LEU B 110     -93.061  23.016 -71.902  1.00 63.40      B    C
ATOM  11313  O   LEU B 110     -93.645  23.091 -70.805  1.00 62.47      B    O
ATOM  11315  N   SER B 111     -93.171  23.934 -72.870  1.00 64.59      B    N
ATOM  11316  CA  SER B 111     -93.943  25.179 -72.712  1.00 63.42      B    C
ATOM  11318  CB  SER B 111     -93.911  26.014 -74.008  1.00 63.47      B    C
ATOM  11321  OG  SER B 111     -94.280  25.252 -75.147  1.00 62.00      B    O
ATOM  11323  C   SER B 111     -95.387  24.893 -72.288  1.00 62.76      B    C
ATOM  11324  O   SER B 111     -95.979  25.631 -71.495  1.00 63.38      B    O
ATOM  11326  N   GLU B 112     -95.935  23.812 -72.832  1.00 61.49      B    N
ATOM  11327  CA  GLU B 112     -97.228  23.282 -72.417  1.00 62.27      B    C
ATOM  11329  CB  GLU B 112     -98.367  23.958 -73.193  1.00 64.09      B    C
ATOM  11332  CG  GLU B 112     -98.189  23.930 -74.717  1.00 65.12      B    C
ATOM  11335  CD  GLU B 112     -99.502  23.798 -75.464  1.00 64.38      B    C
ATOM  11336  OE1 GLU B 112    -100.447  24.544 -75.138  1.00 65.16      B    O
ATOM  11337  OE2 GLU B 112     -99.582  22.946 -76.374  1.00 63.64      B    O
ATOM  11338  C   GLU B 112     -97.211  21.775 -72.684  1.00 58.81      B    C
ATOM  11339  O   GLU B 112     -96.255  21.263 -73.265  1.00 55.46      B    O
ATOM  11341  N   LYS B 113     -98.265  21.070 -72.282  1.00 59.73      B    N
ATOM  11342  CA  LYS B 113     -98.382  19.650 -72.606  1.00 61.54      B    C
ATOM  11344  CB  LYS B 113     -99.754  19.086 -72.200  1.00 64.42      B    C
ATOM  11347  CG  LYS B 113    -100.944  19.590 -73.039  1.00 66.84      B    C
ATOM  11350  CD  LYS B 113    -102.111  18.608 -73.007  1.00 67.03      B    C
ATOM  11353  CE  LYS B 113    -103.259  19.027 -73.925  1.00 66.41      B    C
ATOM  11356  NZ  LYS B 113    -103.014  18.636 -75.343  1.00 65.62      B    N
ATOM  11360  C   LYS B 113     -98.143  19.427 -74.100  1.00 61.42      B    C
ATOM  11361  O   LYS B 113     -98.523  20.258 -74.934  1.00 61.38      B    O
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ATOM	11363	N	ALA	B	114	-97.510	18.306	-74.432	1.00	61.36	B	N
ATOM	11364	CA	ALA	B	114	-97.228	17.974	-75.821	1.00	59.71	B	C
ATOM	11366	CB	ALA	B	114	-96.151	16.892	-75.915	1.00	60.31	B	C
ATOM	11370	C	ALA	B	114	-98.495	17.508	-76.526	1.00	57.52	B	C
ATOM	11371	O	ALA	B	114	-99.247	16.680	-76.002	1.00	57.41	B	O
ATOM	11373	N	THR	B	115	-98.723	18.054	-77.717	1.00	56.62	B	N
ATOM	11374	CA	THR	B	115	-99.827	17.628	-78.570	1.00	57.39	B	C
ATOM	11376	CB	THR	B	115	-99.973	18.547	-79.837	1.00	55.99	B	C
ATOM	11378	OG1	THR	B	115	-100.245	19.900	-79.438	1.00	51.25	B	O
ATOM	11380	CG2	THR	B	115	-101.092	18.055	-80.764	1.00	55.21	B	C
ATOM	11384	C	THR	B	115	-99.557	16.182	-78.980	1.00	59.05	B	C
ATOM	11385	O	THR	B	115	-98.685	15.918	-79.815	1.00	58.37	B	O
ATOM	11387	N	LEU	B	116	-100.291	15.257	-78.360	1.00	58.81	B	N
ATOM	11388	CA	LEU	B	116	-100.137	13.828	-78.617	1.00	57.77	B	C
ATOM	11390	CB	LEU	B	116	-100.797	12.998	-77.498	1.00	58.91	B	C
ATOM	11393	CG	LEU	B	116	-100.047	12.855	-76.167	1.00	57.12	B	C
ATOM	11395	CD1	LEU	B	116	-100.877	12.093	-75.132	1.00	56.49	B	C
ATOM	11399	CD2	LEU	B	116	-98.732	12.153	-76.399	1.00	56.46	B	C
ATOM	11403	C	LEU	B	116	-100.748	13.455	-79.959	1.00	56.47	B	C
ATOM	11404	O	LEU	B	116	-101.627	14.155	-80.467	1.00	57.53	B	O
ATOM	11406	N	GLY	B	117	-100.287	12.339	-80.516	1.00	57.78	B	N
ATOM	11407	CA	GLY	B	117	-100.760	11.856	-81.814	1.00	58.80	B	C
ATOM	11410	C	GLY	B	117	-100.096	10.537	-82.182	1.00	60.62	B	C
ATOM	11411	O	GLY	B	117	-99.468	9.901	-81.327	1.00	62.17	B	O
ATOM	11413	N	PRO	B	118	-100.223	10.111	-83.455	1.00	60.62	B	N
ATOM	11414	CA	PRO	B	118	-99.566	8.860	-83.873	1.00	60.67	B	C
ATOM	11416	CB	PRO	B	118	-100.104	8.635	-85.298	1.00	60.75	B	C
ATOM	11419	CG	PRO	B	118	-100.485	9.985	-85.781	1.00	60.79	B	C
ATOM	11422	CD	PRO	B	118	-100.956	10.745	-84.567	1.00	60.78	B	C
ATOM	11425	C	PRO	B	118	-98.031	8.953	-83.883	1.00	59.33	B	C
ATOM	11426	O	PRO	B	118	-97.352	7.938	-83.703	1.00	55.34	B	O
ATOM	11427	N	ALA	B	119	-97.517	10.170	-84.088	1.00	60.31	B	N
ATOM	11428	CA	ALA	B	119	-96.078	10.437	-84.194	1.00	57.34	B	C
ATOM	11430	CB	ALA	B	119	-95.806	11.299	-85.432	1.00	58.97	B	C
ATOM	11434	C	ALA	B	119	-95.467	11.107	-82.949	1.00	55.03	B	C
ATOM	11435	O	ALA	B	119	-94.265	11.389	-82.936	1.00	57.39	B	O
ATOM	11437	N	VAL	B	120	-96.282	11.365	-81.922	1.00	52.91	B	N
ATOM	11438	CA	VAL	B	120	-95.817	12.014	-80.680	1.00	55.41	B	C
ATOM	11440	CB	VAL	B	120	-96.171	13.523	-80.662	1.00	56.63	B	C
ATOM	11442	CG1	VAL	B	120	-96.160	14.075	-79.236	1.00	56.92	B	C
ATOM	11446	CG2	VAL	B	120	-95.209	14.303	-81.548	1.00	58.85	B	C
ATOM	11450	C	VAL	B	120	-96.440	11.342	-79.457	1.00	57.68	B	C
ATOM	11451	O	VAL	B	120	-97.658	11.373	-79.287	1.00	59.55	B	O
ATOM	11453	N	ARG	B	121	-95.603	10.748	-78.603	1.00	61.68	B	N
ATOM	11454	CA	ARG	B	121	-96.095	9.929	-77.492	1.00	62.38	B	C
ATOM	11456	CB	ARG	B	121	-96.642	8.629	-78.053	1.00	68.95	B	C
ATOM	11459	CG	ARG	B	121	-97.544	7.927	-77.105	1.00	73.56	B	C
ATOM	11462	CD	ARG	B	121	-97.496	6.466	-77.327	1.00	78.28	B	C
ATOM	11465	NE	ARG	B	121	-98.721	5.861	-76.849	1.00	80.78	B	N
ATOM	11467	CZ	ARG	B	121	-98.909	4.556	-76.726	1.00	82.60	B	C
ATOM	11468	NH1	ARG	B	121	-97.958	3.677	-77.040	1.00	82.61	B	N
ATOM	11471	NH2	ARG	B	121	-100.071	4.128	-76.301	1.00	83.06	B	N
ATOM	11474	C	ARG	B	121	-95.021	9.568	-76.452	1.00	60.97	B	C
ATOM	11475	O	ARG	B	121	-93.903	9.215	-76.827	1.00	59.73	B	O
ATOM	11477	N	PRO	B	122	-95.364	9.622	-75.143	1.00	60.19	B	N
ATOM	11478	CA	PRO	B	122	-94.394	9.206	-74.127	1.00	57.80	B	C
ATOM	11480	CB	PRO	B	122	-95.136	9.467	-72.807	1.00	59.14	B	C
ATOM	11483	CG	PRO	B	122	-96.572	9.450	-73.167	1.00	60.35	B	C
ATOM	11486	CD	PRO	B	122	-96.619	10.087	-74.518	1.00	61.00	B	C
ATOM	11489	C	PRO	B	122	-93.988	7.731	-74.209	1.00	55.47	B	C
ATOM	11490	O	PRO	B	122	-94.762	6.906	-74.706	1.00	53.86	B	O
ATOM	11491	N	LEU	B	123	-92.780	7.426	-73.724	1.00	53.68	B	N
ATOM	11492	CA	LEU	B	123	-92.264	6.055	-73.605	1.00	54.97	B	C
ATOM	11494	CB	LEU	B	123	-90.839	5.976	-74.165	1.00	55.02	B	C
ATOM	11497	CG	LEU	B	123	-90.263	4.657	-74.703	1.00	55.12	B	C
ATOM	11499	CD1	LEU	B	123	-88.832	4.885	-75.191	1.00	54.67	B	C
ATOM	11503	CD2	LEU	B	123	-90.279	3.541	-73.678	1.00	53.89	B	C
ATOM	11507	C	LEU	B	123	-92.248	5.644	-72.123	1.00	54.69	B	C
ATOM	11508	O	LEU	B	123	-91.752	6.395	-71.276	1.00	56.50	B	O
ATOM	11510	N	PRO	B	124	-92.804	4.462	-71.797	1.00	53.24	B	N
ATOM	11511	CA	PRO	B	124	-92.632	3.954	-70.437	1.00	53.16	B	C
ATOM	11513	CB	PRO	B	124	-93.514	2.693	-70.404	1.00	52.35	B	C
ATOM	11516	CG	PRO	B	124	-94.389	2.774	-71.597	1.00	52.61	B	C
ATOM	11519	CD	PRO	B	124	-93.631	3.556	-72.617	1.00	53.93	B	C
ATOM	11522	C	PRO	B	124	-91.160	3.626	-70.121	1.00	50.91	B	C

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ATOM	11523	O	PRO	B	124	-90.443	3.064	-70.958	1.00	45.58	B	O
ATOM	11524	N	TRP	B	125	-90.723	3.980	-68.919	1.00	49.61	B	N
ATOM	11525	CA	TRP	B	125	-89.331	3.808	-68.526	1.00	50.18	B	C
ATOM	11527	CB	TRP	B	125	-88.714	5.143	-68.099	1.00	50.09	B	C
ATOM	11530	CG	TRP	B	125	-89.436	5.897	-67.005	1.00	50.06	B	C
ATOM	11531	CD1	TRP	B	125	-90.404	6.856	-67.163	1.00	51.41	B	C
ATOM	11533	NE1	TRP	B	125	-90.799	7.342	-65.931	1.00	51.08	B	N
ATOM	11535	CE2	TRP	B	125	-90.080	6.704	-64.954	1.00	48.96	B	C
ATOM	11536	CD2	TRP	B	125	-89.209	5.790	-65.592	1.00	49.59	B	C
ATOM	11537	CE3	TRP	B	125	-88.360	5.005	-64.804	1.00	50.78	B	C
ATOM	11539	CZ3	TRP	B	125	-88.405	5.151	-63.416	1.00	50.64	B	C
ATOM	11541	CH2	TRP	B	125	-89.287	6.066	-62.815	1.00	50.32	B	C
ATOM	11543	CZ2	TRP	B	125	-90.130	6.847	-63.565	1.00	49.16	B	C
ATOM	11545	C	TRP	B	125	-89.207	2.773	-67.418	1.00	48.81	B	C
ATOM	11546	O	TRP	B	125	-90.137	2.593	-66.625	1.00	51.59	B	O
ATOM	11548	N	GLN	B	126	-88.062	2.089	-67.386	1.00	48.29	B	N
ATOM	11549	CA	GLN	B	126	-87.846	0.952	-66.487	1.00	50.80	B	C
ATOM	11551	CB	GLN	B	126	-86.544	0.217	-66.857	1.00	50.70	B	C
ATOM	11554	CG	GLN	B	126	-86.187	-0.978	-65.962	1.00	51.68	B	C
ATOM	11557	CD	GLN	B	126	-87.258	-2.058	-65.942	1.00	53.58	B	C
ATOM	11558	OE1	GLN	B	126	-87.751	-2.430	-64.876	1.00	52.35	B	O
ATOM	11559	NE2	GLN	B	126	-87.625	-2.565	-67.123	1.00	53.10	B	N
ATOM	11562	C	GLN	B	126	-87.818	1.392	-65.028	1.00	50.85	B	C
ATOM	11563	O	GLN	B	126	-87.001	2.217	-64.631	1.00	48.11	B	O
ATOM	11565	N	ARG	B	127	-88.719	0.827	-64.235	1.00	54.38	B	N
ATOM	11566	CA	ARG	B	127	-88.881	1.214	-62.837	1.00	56.27	B	C
ATOM	11568	CB	ARG	B	127	-90.374	1.261	-62.477	1.00	58.94	B	C
ATOM	11571	CG	ARG	B	127	-90.674	1.829	-61.082	1.00	58.79	B	C
ATOM	11574	CD	ARG	B	127	-92.167	2.107	-60.877	1.00	57.48	B	C
ATOM	11577	NE	ARG	B	127	-92.718	2.966	-61.926	1.00	57.14	B	N
ATOM	11579	CZ	ARG	B	127	-92.583	4.291	-61.993	1.00	55.70	B	C
ATOM	11580	NH1	ARG	B	127	-91.907	4.961	-61.065	1.00	53.14	B	N
ATOM	11583	NH2	ARG	B	127	-93.134	4.955	-63.008	1.00	55.80	B	N
ATOM	11586	C	ARG	B	127	-88.154	0.255	-61.907	1.00	56.08	B	C
ATOM	11587	O	ARG	B	127	-87.722	0.652	-60.819	1.00	57.18	B	O
ATOM	11589	N	VAL	B	128	-88.034	-1.003	-62.331	1.00	55.64	B	N
ATOM	11590	CA	VAL	B	128	-87.405	-2.039	-61.516	1.00	55.43	B	C
ATOM	11592	CB	VAL	B	128	-87.945	-3.455	-61.835	1.00	57.03	B	C
ATOM	11594	CG1	VAL	B	128	-87.310	-4.496	-60.909	1.00	54.72	B	C
ATOM	11598	CG2	VAL	B	128	-89.466	-3.485	-61.717	1.00	57.50	B	C
ATOM	11602	C	VAL	B	128	-85.894	-1.994	-61.727	1.00	57.44	B	C
ATOM	11603	O	VAL	B	128	-85.403	-2.075	-62.859	1.00	54.36	B	O
ATOM	11605	N	ASP	B	129	-85.173	-1.869	-60.618	1.00	57.78	B	N
ATOM	11606	CA	ASP	B	129	-83.736	-1.660	-60.643	1.00	56.51	B	C
ATOM	11608	CB	ASP	B	129	-83.291	-0.817	-59.425	1.00	57.96	B	C
ATOM	11611	CG	ASP	B	129	-81.811	-0.373	-59.490	1.00	57.89	B	C
ATOM	11612	OD1	ASP	B	129	-80.968	-1.050	-60.116	1.00	54.48	B	O
ATOM	11613	OD2	ASP	B	129	-81.486	0.662	-58.877	1.00	58.16	B	O
ATOM	11614	C	ASP	B	129	-83.041	-3.016	-60.679	1.00	55.29	B	C
ATOM	11615	O	ASP	B	129	-82.609	-3.545	-59.653	1.00	48.83	B	O
ATOM	11617	N	ARG	B	130	-82.966	-3.585	-61.875	1.00	57.48	B	N
ATOM	11618	CA	ARG	B	130	-82.086	-4.713	-62.112	1.00	58.30	B	C
ATOM	11620	CB	ARG	B	130	-82.792	-6.038	-61.729	1.00	66.44	B	C
ATOM	11623	CG	ARG	B	130	-83.060	-7.071	-62.824	1.00	74.66	B	C
ATOM	11626	CD	ARG	B	130	-84.101	-6.631	-63.859	1.00	82.57	B	C
ATOM	11629	NE	ARG	B	130	-85.480	-6.679	-63.369	1.00	85.90	B	N
ATOM	11631	CZ	ARG	B	130	-86.218	-7.785	-63.258	1.00	86.98	B	C
ATOM	11632	NH1	ARG	B	130	-85.722	-8.983	-63.582	1.00	87.05	B	N
ATOM	11635	NH2	ARG	B	130	-87.466	-7.689	-62.804	1.00	86.72	B	N
ATOM	11638	C	ARG	B	130	-81.558	-4.646	-63.547	1.00	54.92	B	C
ATOM	11639	O	ARG	B	130	-82.189	-4.056	-64.433	1.00	50.70	B	O
ATOM	11641	N	ASP	B	131	-80.365	-5.197	-63.745	1.00	50.54	B	N
ATOM	11642	CA	ASP	B	131	-79.663	-5.081	-65.014	1.00	48.70	B	C
ATOM	11644	CB	ASP	B	131	-78.289	-5.764	-64.926	1.00	47.57	B	C
ATOM	11647	CG	ASP	B	131	-77.264	-4.963	-64.129	1.00	46.61	B	C
ATOM	11648	OD1	ASP	B	131	-77.381	-3.718	-64.043	1.00	45.17	B	O
ATOM	11649	OD2	ASP	B	131	-76.321	-5.598	-63.603	1.00	42.10	B	O
ATOM	11650	C	ASP	B	131	-80.432	-5.713	-66.168	1.00	44.79	B	C
ATOM	11651	O	ASP	B	131	-81.080	-6.741	-66.008	1.00	48.07	B	O
ATOM	11653	N	VAL	B	132	-80.336	-5.088	-67.334	1.00	42.65	B	N
ATOM	11654	CA	VAL	B	132	-80.650	-5.763	-68.575	1.00	40.34	B	C
ATOM	11656	CB	VAL	B	132	-80.680	-4.784	-69.768	1.00	34.67	B	C
ATOM	11658	CG1	VAL	B	132	-80.910	-5.526	-71.096	1.00	32.86	B	C
ATOM	11662	CG2	VAL	B	132	-81.754	-3.726	-69.553	1.00	31.43	B	C
ATOM	11666	C	VAL	B	132	-79.597	-6.856	-68.771	1.00	41.76	B	C

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ATOM	11667	O	VAL	B	132	-78.398	-6.627	-68.615	1.00	43.96	B	O
ATOM	11669	N	ALA	B	133	-80.063	-8.057	-69.080	1.00	45.13	B	N
ATOM	11670	CA	ALA	B	133	-79.200	-9.212	-69.240	1.00	41.07	B	C
ATOM	11672	CB	ALA	B	133	-80.053	-10.457	-69.535	1.00	41.02	B	C
ATOM	11676	C	ALA	B	133	-78.178	-8.970	-70.356	1.00	38.15	B	C
ATOM	11677	O	ALA	B	133	-78.505	-8.327	-71.358	1.00	38.44	B	O
ATOM	11679	N	PRO	B	134	-76.935	-9.463	-70.173	1.00	36.48	B	N
ATOM	11680	CA	PRO	B	134	-75.892	-9.434	-71.210	1.00	37.35	B	C
ATOM	11682	CB	PRO	B	134	-74.762	-10.258	-70.594	1.00	37.67	B	C
ATOM	11685	CG	PRO	B	134	-74.976	-10.156	-69.118	1.00	38.52	B	C
ATOM	11688	CD	PRO	B	134	-76.454	-10.072	-68.921	1.00	36.70	B	C
ATOM	11691	C	PRO	B	134	-76.365	-10.098	-72.505	1.00	41.04	B	C
ATOM	11692	O	PRO	B	134	-77.054	-11.122	-72.459	1.00	44.48	B	O
ATOM	11693	N	GLY	B	135	-76.014	-9.514	-73.645	1.00	39.63	B	N
ATOM	11694	CA	GLY	B	135	-76.446	-10.037	-74.929	1.00	38.19	B	C
ATOM	11697	C	GLY	B	135	-77.808	-9.554	-75.389	1.00	39.74	B	C
ATOM	11698	O	GLY	B	135	-78.109	-9.636	-76.584	1.00	40.99	B	O
ATOM	11700	N	THR	B	136	-78.637	-9.050	-74.464	1.00	38.18	B	N
ATOM	11701	CA	THR	B	136	-79.969	-8.539	-74.809	1.00	39.24	B	C
ATOM	11703	CB	THR	B	136	-80.704	-8.017	-73.570	1.00	38.20	B	C
ATOM	11705	OG1	THR	B	136	-80.808	-9.073	-72.606	1.00	39.12	B	O
ATOM	11707	CG2	THR	B	136	-82.099	-7.509	-73.929	1.00	35.94	B	C
ATOM	11711	C	THR	B	136	-79.842	-7.443	-75.856	1.00	39.86	B	C
ATOM	11712	O	THR	B	136	-78.976	-6.590	-75.755	1.00	43.99	B	O
ATOM	11714	N	LEU	B	137	-80.693	-7.486	-76.872	1.00	42.83	B	N
ATOM	11715	CA	LEU	B	137	-80.529	-6.638	-78.052	1.00	43.42	B	C
ATOM	11717	CB	LEU	B	137	-80.874	-7.443	-79.314	1.00	45.20	B	C
ATOM	11720	CG	LEU	B	137	-80.150	-7.128	-80.628	1.00	45.64	B	C
ATOM	11722	CD1	LEU	B	137	-78.629	-7.071	-80.473	1.00	44.27	B	C
ATOM	11726	CD2	LEU	B	137	-80.536	-8.171	-81.675	1.00	44.43	B	C
ATOM	11730	C	LEU	B	137	-81.431	-5.415	-77.878	1.00	44.16	B	C
ATOM	11731	O	LEU	B	137	-82.640	-5.556	-77.722	1.00	45.91	B	O
ATOM	11733	N	CYS	B	138	-80.820	-4.227	-77.863	1.00	41.36	B	N
ATOM	11734	CA	CYS	B	138	-81.506	-2.968	-77.568	1.00	37.98	B	C
ATOM	11736	CB	CYS	B	138	-80.903	-2.329	-76.329	1.00	35.02	B	C
ATOM	11739	SG	CYS	B	138	-80.915	-3.414	-74.934	1.00	38.12	B	S
ATOM	11741	C	CYS	B	138	-81.399	-1.968	-78.697	1.00	35.71	B	C
ATOM	11742	O	CYS	B	138	-80.466	-1.998	-79.479	1.00	32.54	B	O
ATOM	11744	N	ASP	B	139	-82.339	-1.036	-78.729	1.00	39.31	B	N
ATOM	11745	CA	ASP	B	139	-82.448	-0.094	-79.827	1.00	38.89	B	C
ATOM	11747	CB	ASP	B	139	-83.877	-0.119	-80.360	1.00	38.98	B	C
ATOM	11750	CG	ASP	B	139	-84.032	0.648	-81.647	1.00	38.99	B	C
ATOM	11751	OD1	ASP	B	139	-83.330	0.318	-82.619	1.00	41.91	B	O
ATOM	11752	OD2	ASP	B	139	-84.862	1.578	-81.683	1.00	34.77	B	O
ATOM	11753	C	ASP	B	139	-82.092	1.300	-79.347	1.00	37.72	B	C
ATOM	11754	O	ASP	B	139	-82.741	1.813	-78.433	1.00	36.18	B	O
ATOM	11756	N	VAL	B	140	-81.049	1.894	-79.932	1.00	36.52	B	N
ATOM	11757	CA	VAL	B	140	-80.733	3.310	-79.705	1.00	36.92	B	C
ATOM	11759	CB	VAL	B	140	-79.309	3.533	-79.104	1.00	37.70	B	C
ATOM	11761	CG1	VAL	B	140	-78.212	3.055	-80.060	1.00	36.88	B	C
ATOM	11765	CG2	VAL	B	140	-79.110	5.006	-78.756	1.00	37.68	B	C
ATOM	11769	C	VAL	B	140	-80.921	4.104	-81.007	1.00	35.48	B	C
ATOM	11770	O	VAL	B	140	-80.501	3.665	-82.083	1.00	30.92	B	O
ATOM	11772	N	ALA	B	141	-81.580	5.260	-80.897	1.00	37.70	B	N
ATOM	11773	CA	ALA	B	141	-81.850	6.127	-82.047	1.00	37.88	B	C
ATOM	11775	CB	ALA	B	141	-83.327	6.171	-82.338	1.00	38.39	B	C
ATOM	11779	C	ALA	B	141	-81.323	7.532	-81.796	1.00	38.12	B	C
ATOM	11780	O	ALA	B	141	-81.138	7.941	-80.640	1.00	33.18	B	O
ATOM	11782	N	GLY	B	142	-81.071	8.265	-82.882	1.00	38.25	B	N
ATOM	11783	CA	GLY	B	142	-80.536	9.626	-82.764	1.00	39.96	B	C
ATOM	11786	C	GLY	B	142	-80.104	10.298	-84.056	1.00	40.04	B	C
ATOM	11787	O	GLY	B	142	-79.979	9.650	-85.103	1.00	34.84	B	O
ATOM	11789	N	TRP	B	143	-79.863	11.609	-83.955	1.00	41.03	B	N
ATOM	11790	CA	TRP	B	143	-79.400	12.444	-85.076	1.00	40.97	B	C
ATOM	11792	CB	TRP	B	143	-80.182	13.766	-85.134	1.00	47.60	B	C
ATOM	11795	CG	TRP	B	143	-81.582	13.693	-85.639	1.00	48.60	B	C
ATOM	11796	CD1	TRP	B	143	-81.988	13.740	-86.945	1.00	49.15	B	C
ATOM	11798	NE1	TRP	B	143	-83.357	13.676	-87.015	1.00	49.21	B	N
ATOM	11800	CE2	TRP	B	143	-83.866	13.605	-85.744	1.00	48.62	B	C
ATOM	11801	CD2	TRP	B	143	-82.771	13.625	-84.849	1.00	48.55	B	C
ATOM	11802	CE3	TRP	B	143	-83.018	13.565	-83.470	1.00	48.19	B	C
ATOM	11804	CZ3	TRP	B	143	-84.335	13.485	-83.032	1.00	49.03	B	C
ATOM	11806	CH2	TRP	B	143	-85.409	13.466	-83.948	1.00	49.31	B	C
ATOM	11808	CZ2	TRP	B	143	-85.194	13.526	-85.305	1.00	48.96	B	C
ATOM	11810	C	TRP	B	143	-77.917	12.799	-84.916	1.00	37.57	B	C

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ATOM  11811  O   TRP B 143     -77.460  13.834 -85.413  1.00 37.74      B    O
ATOM  11813  N   GLY B 144     -77.172  11.953 -84.207  1.00 39.23      B    N
ATOM  11814  CA  GLY B 144     -75.749  12.183 -83.990  1.00 39.27      B    C
ATOM  11817  C   GLY B 144     -74.954  11.759 -85.202  1.00 39.01      B    C
ATOM  11818  O   GLY B 144     -75.513  11.189 -86.145  1.00 37.19      B    O
ATOM  11820  N   ILE B 145     -73.646  12.015 -85.174  1.00 42.40      B    N
ATOM  11821  CA  ILE B 145     -72.803  11.750 -86.339  1.00 42.46      B    C
ATOM  11823  CB  ILE B 145     -71.339  12.242 -86.152  1.00 46.02      B    C
ATOM  11825  CG1 ILE B 145     -70.606  11.437 -85.075  1.00 47.50      B    C
ATOM  11828  CD1 ILE B 145     -69.234  12.010 -84.691  1.00 46.45      B    C
ATOM  11832  CG2 ILE B 145     -71.320  13.746 -85.822  1.00 46.04      B    C
ATOM  11836  C   ILE B 145     -72.878  10.277 -86.734  1.00 41.61      B    C
ATOM  11837  O   ILE B 145     -73.111   9.407 -85.891  1.00 39.28      B    O
ATOM  11839  N   VAL B 146     -72.726  10.033 -88.036  1.00 43.82      B    N
ATOM  11840  CA  VAL B 146     -72.927   8.715 -88.663  1.00 41.36      B    C
ATOM  11842  CB  VAL B 146     -74.039   8.811 -89.719  1.00 41.29      B    C
ATOM  11844  CG1 VAL B 146     -75.374   9.091 -89.050  1.00 40.86      B    C
ATOM  11848  CG2 VAL B 146     -73.725   9.908 -90.740  1.00 42.13      B    C
ATOM  11852  C   VAL B 146     -71.637   8.152 -89.298  1.00 44.20      B    C
ATOM  11853  O   VAL B 146     -71.643   7.040 -89.863  1.00 40.61      B    O
ATOM  11855  N   ASN B 147     -70.545   8.918 -89.185  1.00 42.75      B    N
ATOM  11856  CA  ASN B 147     -69.217   8.482 -89.615  1.00 45.26      B    C
ATOM  11858  CB  ASN B 147     -69.083   8.591 -91.134  1.00 48.77      B    C
ATOM  11861  CG  ASN B 147     -69.250  10.019 -91.650  1.00 50.62      B    C
ATOM  11862  OD1 ASN B 147     -68.492  10.929 -91.291  1.00 54.60      B    O
ATOM  11863  ND2 ASN B 147     -70.224  10.208 -92.525  1.00 46.39      B    N
ATOM  11866  C   ASN B 147     -68.113   9.280 -88.908  1.00 47.04      B    C
ATOM  11867  O   ASN B 147     -68.392  10.290 -88.258  1.00 48.73      B    O
ATOM  11869  N   HIS B 148     -66.865   8.835 -89.045  1.00 48.71      B    N
ATOM  11870  CA  HIS B 148     -65.732   9.484 -88.360  1.00 50.38      B    C
ATOM  11872  CB  HIS B 148     -64.497   8.582 -88.348  1.00 57.68      B    C
ATOM  11875  CG  HIS B 148     -64.676   7.340 -87.542  1.00 62.31      B    C
ATOM  11876  ND1 HIS B 148     -65.735   7.166 -86.677  1.00 64.15      B    N
ATOM  11878  CE1 HIS B 148     -65.640   5.981 -86.104  1.00 66.50      B    C
ATOM  11880  NE2 HIS B 148     -64.548   5.386 -86.554  1.00 68.58      B    N
ATOM  11882  CD2 HIS B 148     -63.925   6.217 -87.453  1.00 66.66      B    C
ATOM  11884  C   HIS B 148     -65.339  10.839 -88.935  1.00 49.41      B    C
ATOM  11885  O   HIS B 148     -64.560  11.567 -88.321  1.00 50.94      B    O
ATOM  11887  N   ALA B 149     -65.861  11.168 -90.112  1.00 48.74      B    N
ATOM  11888  CA  ALA B 149     -65.680  12.492 -90.706  1.00 51.20      B    C
ATOM  11890  CB  ALA B 149     -65.922  12.422 -92.223  1.00 52.48      B    C
ATOM  11894  C   ALA B 149     -66.612  13.532 -90.069  1.00 54.00      B    C
ATOM  11895  O   ALA B 149     -66.578  14.706 -90.441  1.00 56.94      B    O
ATOM  11897  N   GLY B 150     -67.444  13.091 -89.123  1.00 55.74      B    N
ATOM  11898  CA  GLY B 150     -68.348  13.967 -88.402  1.00 55.65      B    C
ATOM  11901  C   GLY B 150     -69.509  14.508 -89.223  1.00 55.01      B    C
ATOM  11902  O   GLY B 150     -69.939  15.643 -88.976  1.00 52.53      B    O
ATOM  11904  N   ARG B 151     -70.042  13.723 -90.172  1.00 57.39      B    N
ATOM  11905  CA  ARG B 151     -71.304  14.109 -90.850  1.00 58.49      B    C
ATOM  11907  CB  ARG B 151     -71.643  13.128 -91.987  1.00 61.07      B    C
ATOM  11910  CG  ARG B 151     -72.592  13.737 -93.019  1.00 63.83      B    C
ATOM  11913  CD  ARG B 151     -72.192  13.397 -94.455  1.00 68.13      B    C
ATOM  11916  NE  ARG B 151     -72.318  11.969 -94.746  1.00 70.83      B    N
ATOM  11918  CZ  ARG B 151     -73.475  11.310 -94.855  1.00 71.35      B    C
ATOM  11919  NH1 ARG B 151     -74.649  11.929 -94.685  1.00 69.11      B    N
ATOM  11922  NH2 ARG B 151     -73.459  10.006 -95.121  1.00 71.36      B    N
ATOM  11925  C   ARG B 151     -72.277  13.933 -89.663  1.00 57.96      B    C
ATOM  11926  O   ARG B 151     -71.816  14.531 -88.426  1.00 60.24      B    O
ATOM  11928  N   ARG B 152     -73.584  13.721 -89.870  1.00 59.61      B    N
ATOM  11929  CA  ARG B 152     -74.684  14.639 -89.516  1.00 57.17      B    C
ATOM  11931  CB  ARG B 152     -74.407  16.163 -89.692  1.00 64.82      B    C
ATOM  11934  CG  ARG B 152     -73.521  16.927 -88.655  1.00 70.05      B    C
ATOM  11937  CD  ARG B 152     -73.696  16.541 -87.139  1.00 73.03      B    C
ATOM  11940  NE  ARG B 152     -73.119  17.564 -86.251  1.00 72.57      B    N
ATOM  11942  CZ  ARG B 152     -73.103  17.497 -84.912  1.00 74.97      B    C
ATOM  11943  NH1 ARG B 152     -73.627  16.450 -84.272  1.00 75.90      B    N
ATOM  11946  NH2 ARG B 152     -72.554  18.483 -84.201  1.00 75.10      B    N
ATOM  11949  C   ARG B 152     -75.877  14.247 -90.345  1.00 50.51      B    C
ATOM  11950  O   ARG B 152     -76.043  14.765 -91.436  1.00 49.42      B    O
ATOM  11952  N   PRO B 153     -76.718  13.334 -89.843  1.00 48.76      B    N
ATOM  11953  CA  PRO B 153     -77.798  12.879 -90.701  1.00 47.73      B    C
ATOM  11955  CB  PRO B 153     -78.277  11.609 -90.005  1.00 46.95      B    C
ATOM  11958  CG  PRO B 153     -78.060  11.895 -88.585  1.00 48.52      B    C
ATOM  11961  CD  PRO B 153     -76.790  12.718 -88.510  1.00 48.79      B    C
ATOM  11964  C   PRO B 153     -78.893  13.939 -90.716  1.00 47.42      B    C
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ATOM  11965  O   PRO B 153     -78.991  14.731 -89.769  1.00 48.35      B    O
ATOM  11966  N   ASP B 154     -79.697  13.964 -91.778  1.00 45.83      B    N
ATOM  11967  CA  ASP B 154     -80.826  14.883 -91.835  1.00 44.80      B    C
ATOM  11969  CB  ASP B 154     -81.108  15.315 -93.287  1.00 49.25      B    C
ATOM  11972  CG  ASP B 154     -82.199  16.397 -93.395  1.00 50.99      B    C
ATOM  11973  OD1 ASP B 154     -81.966  17.537 -92.929  1.00 55.17      B    O
ATOM  11974  OD2 ASP B 154     -83.283  16.108 -93.966  1.00 46.51      B    O
ATOM  11975  C   ASP B 154     -82.038  14.219 -91.174  1.00 40.61      B    C
ATOM  11976  O   ASP B 154     -82.765  14.880 -90.427  1.00 37.13      B    O
ATOM  11978  N   SER B 155     -82.241  12.919 -91.425  1.00 41.53      B    N
ATOM  11979  CA  SER B 155     -83.307  12.150 -90.742  1.00 42.92      B    C
ATOM  11981  CB  SER B 155     -84.191  11.404 -91.751  1.00 46.15      B    C
ATOM  11984  OG  SER B 155     -83.450  10.418 -92.456  1.00 52.19      B    O
ATOM  11986  C   SER B 155     -82.777  11.177 -89.648  1.00 43.65      B    C
ATOM  11987  O   SER B 155     -81.594  10.811 -89.616  1.00 41.62      B    O
ATOM  11989  N   LEU B 156     -83.686  10.778 -88.758  1.00 42.02      B    N
ATOM  11990  CA  LEU B 156     -83.351   9.974 -87.578  1.00 43.01      B    C
ATOM  11992  CB  LEU B 156     -84.564   9.844 -86.647  1.00 45.42      B    C
ATOM  11995  CG  LEU B 156     -84.272   9.318 -85.235  1.00 44.68      B    C
ATOM  11997  CD1 LEU B 156     -83.617  10.393 -84.387  1.00 45.15      B    C
ATOM  12001  CD2 LEU B 156     -85.547   8.818 -84.574  1.00 46.20      B    C
ATOM  12005  C   LEU B 156     -82.850   8.589 -87.944  1.00 42.37      B    C
ATOM  12006  O   LEU B 156     -83.426   7.905 -88.800  1.00 38.46      B    O
ATOM  12008  N   GLN B 157     -81.776   8.181 -87.270  1.00 44.21      B    N
ATOM  12009  CA  GLN B 157     -81.138   6.881 -87.498  1.00 44.83      B    C
ATOM  12011  CB  GLN B 157     -79.666   7.048 -87.887  1.00 47.81      B    C
ATOM  12014  CG  GLN B 157     -79.441   8.104 -88.978  1.00 53.12      B    C
ATOM  12017  CD  GLN B 157     -78.661   7.610 -90.187  1.00 55.07      B    C
ATOM  12018  OE1 GLN B 157     -77.961   6.598 -90.139  1.00 58.56      B    O
ATOM  12019  NE2 GLN B 157     -78.784   8.339 -91.289  1.00 55.29      B    N
ATOM  12022  C   GLN B 157     -81.275   6.018 -86.249  1.00 42.99      B    C
ATOM  12023  O   GLN B 157     -81.669   6.509 -85.182  1.00 42.15      B    O
ATOM  12025  N   HIS B 158     -80.986   4.727 -86.399  1.00 42.24      B    N
ATOM  12026  CA  HIS B 158     -81.019   3.806 -85.271  1.00 45.10      B    C
ATOM  12028  CB  HIS B 158     -82.449   3.290 -85.020  1.00 49.81      B    C
ATOM  12031  CG  HIS B 158     -82.883   2.190 -85.942  1.00 54.85      B    C
ATOM  12032  ND1 HIS B 158     -83.287   2.418 -87.241  1.00 56.07      B    N
ATOM  12034  CE1 HIS B 158     -83.624   1.269 -87.802  1.00 57.01      B    C
ATOM  12036  NE2 HIS B 158     -83.461   0.305 -86.913  1.00 57.46      B    N
ATOM  12038  CD2 HIS B 158     -83.003   0.854 -85.740  1.00 57.24      B    C
ATOM  12040  C   HIS B 158     -80.021   2.655 -85.434  1.00 45.61      B    C
ATOM  12041  O   HIS B 158     -79.444   2.463 -86.511  1.00 46.12      B    O
ATOM  12043  N   VAL B 159     -79.797   1.918 -84.346  1.00 43.34      B    N
ATOM  12044  CA  VAL B 159     -78.960   0.725 -84.389  1.00 44.38      B    C
ATOM  12046  CB  VAL B 159     -77.474   1.102 -84.334  1.00 44.03      B    C
ATOM  12048  CG1 VAL B 159     -77.162   1.884 -83.071  1.00 45.24      B    C
ATOM  12052  CG2 VAL B 159     -76.617  -0.135 -84.428  1.00 46.69      B    C
ATOM  12056  C   VAL B 159     -79.309  -0.244 -83.258  1.00 43.23      B    C
ATOM  12057  O   VAL B 159     -79.563   0.172 -82.134  1.00 39.03      B    O
ATOM  12059  N   LEU B 160     -79.360  -1.537 -83.572  1.00 45.88      B    N
ATOM  12060  CA  LEU B 160     -79.568  -2.565 -82.546  1.00 47.19      B    C
ATOM  12062  CB  LEU B 160     -80.317  -3.781 -83.102  1.00 47.10      B    C
ATOM  12065  CG  LEU B 160     -81.770  -3.929 -82.647  1.00 48.50      B    C
ATOM  12067  CD1 LEU B 160     -82.596  -2.712 -83.056  1.00 51.12      B    C
ATOM  12071  CD2 LEU B 160     -82.373  -5.214 -83.216  1.00 48.62      B    C
ATOM  12075  C   LEU B 160     -78.216  -2.973 -81.957  1.00 45.51      B    C
ATOM  12076  O   LEU B 160     -77.284  -3.307 -82.693  1.00 45.25      B    O
ATOM  12078  N   LEU B 161     -78.118  -2.929 -80.630  1.00 43.05      B    N
ATOM  12079  CA  LEU B 161     -76.847  -3.128 -79.937  1.00 43.33      B    C
ATOM  12081  CB  LEU B 161     -76.320  -1.797 -79.370  1.00 40.66      B    C
ATOM  12084  CG  LEU B 161     -76.007  -0.670 -80.372  1.00 39.23      B    C
ATOM  12086  CD1 LEU B 161     -75.485   0.597 -79.698  1.00 35.33      B    C
ATOM  12090  CD2 LEU B 161     -75.021  -1.134 -81.426  1.00 41.94      B    C
ATOM  12094  C   LEU B 161     -77.040  -4.137 -78.815  1.00 43.38      B    C
ATOM  12095  O   LEU B 161     -78.004  -4.039 -78.060  1.00 44.08      B    O
ATOM  12097  N   PRO B 162     -76.134  -5.122 -78.706  1.00 42.97      B    N
ATOM  12098  CA  PRO B 162     -76.227  -6.044 -77.577  1.00 40.30      B    C
ATOM  12100  CB  PRO B 162     -75.410  -7.252 -78.043  1.00 42.85      B    C
ATOM  12103  CG  PRO B 162     -74.385  -6.667 -78.982  1.00 43.26      B    C
ATOM  12106  CD  PRO B 162     -74.999  -5.433 -79.596  1.00 42.14      B    C
ATOM  12109  C   PRO B 162     -75.636  -5.434 -76.303  1.00 40.85      B    C
ATOM  12110  O   PRO B 162     -74.555  -4.822 -76.345  1.00 36.46      B    O
ATOM  12111  N   VAL B 163     -76.356  -5.585 -75.189  1.00 40.16      B    N
ATOM  12112  CA  VAL B 163     -75.858  -5.159 -73.888  1.00 39.15      B    C
ATOM  12114  CB  VAL B 163     -76.860  -5.429 -72.758  1.00 39.42      B    C
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ATOM  12116  CG1 VAL B 163     -76.280  -4.992 -71.401  1.00 35.30      B    C
ATOM  12120  CG2 VAL B 163     -78.167  -4.704 -73.029  1.00 39.06      B    C
ATOM  12124  C   VAL B 163     -74.595  -5.924 -73.596  1.00 42.05      B    C
ATOM  12125  O   VAL B 163     -74.504  -7.120 -73.889  1.00 42.50      B    O
ATOM  12127  N   LEU B 164     -73.611  -5.211 -73.045  1.00 41.87      B    N
ATOM  12128  CA  LEU B 164     -72.334  -5.778 -72.648  1.00 37.07      B    C
ATOM  12130  CB  LEU B 164     -71.194  -4.940 -73.221  1.00 36.93      B    C
ATOM  12133  CG  LEU B 164     -69.805  -5.511 -73.007  1.00 39.92      B    C
ATOM  12135  CD1 LEU B 164     -69.614  -6.697 -73.952  1.00 42.50      B    C
ATOM  12139  CD2 LEU B 164     -68.710  -4.443 -73.208  1.00 40.56      B    C
ATOM  12143  C   LEU B 164     -72.292  -5.755 -71.130  1.00 37.23      B    C
ATOM  12144  O   LEU B 164     -72.620  -4.734 -70.525  1.00 38.87      B    O
ATOM  12146  N   ASP B 165     -71.882  -6.868 -70.517  1.00 38.23      B    N
ATOM  12147  CA  ASP B 165     -71.871  -6.977 -69.050  1.00 34.02      B    C
ATOM  12149  CB  ASP B 165     -71.655  -8.412 -68.570  1.00 36.03      B    C
ATOM  12152  CG  ASP B 165     -70.252  -8.923 -68.842  1.00 38.19      B    C
ATOM  12153  OD1 ASP B 165     -70.009  -9.394 -69.978  1.00 43.23      B    O
ATOM  12154  OD2 ASP B 165     -69.406  -8.881 -67.918  1.00 36.82      B    O
ATOM  12155  C   ASP B 165     -70.842  -6.063 -68.410  1.00 32.69      B    C
ATOM  12156  O   ASP B 165     -69.835  -5.723 -69.015  1.00 32.25      B    O
ATOM  12158  N   ARG B 166     -71.108  -5.686 -67.166  1.00 29.30      B    N
ATOM  12159  CA  ARG B 166     -70.377  -4.605 -66.513  1.00 30.62      B    C
ATOM  12161  CB  ARG B 166     -71.082  -4.180 -65.219  1.00 30.40      B    C
ATOM  12164  CG  ARG B 166     -70.631  -2.810 -64.728  1.00 29.09      B    C
ATOM  12167  CD  ARG B 166     -71.502  -2.282 -63.605  1.00 27.01      B    C
ATOM  12170  NE  ARG B 166     -72.804  -1.876 -64.113  1.00 29.92      B    N
ATOM  12172  CZ  ARG B 166     -73.944  -2.557 -63.947  1.00 26.47      B    C
ATOM  12173  NH1 ARG B 166     -73.976  -3.695 -63.266  1.00 20.42      B    N
ATOM  12176  NH2 ARG B 166     -75.066  -2.083 -64.473  1.00 24.25      B    N
ATOM  12179  C   ARG B 166     -68.922  -4.944 -66.250  1.00 32.38      B    C
ATOM  12180  O   ARG B 166     -68.064  -4.085 -66.363  1.00 33.39      B    O
ATOM  12182  N   ALA B 167     -68.663  -6.206 -65.933  1.00 30.31      B    N
ATOM  12183  CA  ALA B 167     -67.320  -6.674 -65.663  1.00 29.49      B    C
ATOM  12185  CB  ALA B 167     -67.355  -8.078 -65.107  1.00 26.57      B    C
ATOM  12189  C   ALA B 167     -66.424  -6.583 -66.907  1.00 30.01      B    C
ATOM  12190  O   ALA B 167     -65.313  -6.035 -66.824  1.00 35.75      B    O
ATOM  12192  N   THR B 168     -66.896  -7.090 -68.050  1.00 30.19      B    N
ATOM  12193  CA  THR B 168     -66.171  -6.890 -69.304  1.00 32.88      B    C
ATOM  12195  CB  THR B 168     -66.893  -7.539 -70.486  1.00 33.39      B    C
ATOM  12197  OG1 THR B 168     -67.160  -8.911 -70.175  1.00 38.53      B    O
ATOM  12199  CG2 THR B 168     -66.028  -7.446 -71.746  1.00 29.37      B    C
ATOM  12203  C   THR B 168     -65.985  -5.396 -69.606  1.00 35.71      B    C
ATOM  12204  O   THR B 168     -64.930  -4.978 -70.062  1.00 35.55      B    O
ATOM  12206  N   CYS B 169     -67.024  -4.605 -69.358  1.00 36.56      B    N
ATOM  12207  CA  CYS B 169     -66.978  -3.182 -69.645  1.00 35.15      B    C
ATOM  12209  CB  CYS B 169     -68.378  -2.581 -69.532  1.00 29.17      B    C
ATOM  12212  SG  CYS B 169     -68.513  -1.096 -70.505  1.00 32.36      B    S
ATOM  12214  C   CYS B 169     -65.974  -2.435 -68.744  1.00 36.04      B    C
ATOM  12215  O   CYS B 169     -65.404  -1.421 -69.143  1.00 35.14      B    O
ATOM  12217  N   ASN B 170     -65.748  -2.967 -67.549  1.00 36.17      B    N
ATOM  12218  CA  ASN B 170     -64.801  -2.405 -66.590  1.00 35.74      B    C
ATOM  12220  CB  ASN B 170     -65.352  -2.584 -65.164  1.00 31.91      B    C
ATOM  12223  CG  ASN B 170     -66.241  -1.419 -64.733  1.00 28.26      B    C
ATOM  12224  OD1 ASN B 170     -66.150  -0.340 -65.293  1.00 27.73      B    O
ATOM  12225  ND2 ASN B 170     -67.082  -1.632 -63.726  1.00 23.93      B    N
ATOM  12228  C   ASN B 170     -63.356  -2.945 -66.689  1.00 37.03      B    C
ATOM  12229  O   ASN B 170     -62.489  -2.523 -65.918  1.00 36.38      B    O
ATOM  12231  N   ARG B 171     -63.078  -3.829 -67.647  1.00 33.09      B    N
ATOM  12232  CA  ARG B 171     -61.693  -4.221 -67.921  1.00 35.21      B    C
ATOM  12234  CB  ARG B 171     -61.600  -5.254 -69.034  1.00 33.47      B    C
ATOM  12237  CG  ARG B 171     -62.351  -6.543 -68.747  1.00 33.92      B    C
ATOM  12240  CD  ARG B 171     -61.746  -7.768 -69.389  1.00 36.43      B    C
ATOM  12243  NE  ARG B 171     -60.897  -7.483 -70.547  1.00 37.04      B    N
ATOM  12245  CZ  ARG B 171     -61.125  -7.865 -71.798  1.00 40.52      B    C
ATOM  12246  NH1 ARG B 171     -60.245  -7.545 -72.738  1.00 43.31      B    N
ATOM  12249  NH2 ARG B 171     -62.206  -8.562 -72.129  1.00 44.51      B    N
ATOM  12252  C   ARG B 171     -60.871  -2.991 -68.273  1.00 35.84      B    C
ATOM  12253  O   ARG B 171     -61.411  -1.974 -68.715  1.00 33.94      B    O
ATOM  12255  N   ARG B 172     -59.566  -3.087 -68.070  1.00 35.33      B    N
ATOM  12256  CA  ARG B 172     -58.676  -1.943 -68.261  1.00 34.55      B    C
ATOM  12258  CB  ARG B 172     -57.303  -2.264 -67.668  1.00 33.46      B    C
ATOM  12261  CG  ARG B 172     -56.541  -3.397 -68.347  1.00 29.86      B    C
ATOM  12264  CD  ARG B 172     -55.317  -3.712 -67.563  1.00 30.99      B    C
ATOM  12267  NE  ARG B 172     -55.619  -4.506 -66.377  1.00 33.73      B    N
ATOM  12269  CZ  ARG B 172     -54.825  -4.628 -65.318  1.00 28.79      B    C
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ATOM	12270	NH1	ARG	B	172	-53.668	-3.979	-65.246	1.00	33.93	B	N
ATOM	12273	NH2	ARG	B	172	-55.199	-5.395	-64.313	1.00	27.90	B	N
ATOM	12276	C	ARG	B	172	-58.625	-1.510	-69.729	1.00	34.80	B	C
ATOM	12277	O	ARG	B	172	-58.479	-0.333	-70.026	1.00	32.28	B	O
ATOM	12279	N	THR	B	173	-58.811	-2.479	-70.620	1.00	34.58	B	N
ATOM	12280	CA	THR	B	173	-58.883	-2.293	-72.069	1.00	32.42	B	C
ATOM	12282	CB	THR	B	173	-59.075	-3.679	-72.716	1.00	29.64	B	C
ATOM	12284	OG1	THR	B	173	-58.385	-4.666	-71.932	1.00	30.92	B	O
ATOM	12286	CG2	THR	B	173	-58.582	-3.717	-74.148	1.00	24.42	B	C
ATOM	12290	C	THR	B	173	-60.044	-1.417	-72.500	1.00	36.72	B	C
ATOM	12291	O	THR	B	173	-59.983	-0.763	-73.543	1.00	39.83	B	O
ATOM	12293	N	HIS	B	174	-61.086	-1.422	-71.675	1.00	38.61	B	N
ATOM	12294	CA	HIS	B	174	-62.339	-0.734	-71.941	1.00	34.67	B	C
ATOM	12296	CB	HIS	B	174	-63.501	-1.735	-71.806	1.00	37.11	B	C
ATOM	12299	CG	HIS	B	174	-63.311	-2.970	-72.635	1.00	34.36	B	C
ATOM	12300	ND1	HIS	B	174	-63.763	-4.210	-72.245	1.00	36.67	B	N
ATOM	12302	CE1	HIS	B	174	-63.442	-5.107	-73.162	1.00	36.45	B	C
ATOM	12304	NE2	HIS	B	174	-62.773	-4.495	-74.124	1.00	37.93	B	N
ATOM	12306	CD2	HIS	B	174	-62.677	-3.159	-73.816	1.00	36.88	B	C
ATOM	12308	C	HIS	B	174	-62.464	0.493	-71.046	1.00	33.22	B	C
ATOM	12309	O	HIS	B	174	-61.731	1.450	-71.273	1.00	38.91	B	O
ATOM	12311	N	HIS	B	175	-63.347	0.487	-70.042	1.00	36.22	B	N
ATOM	12312	CA	HIS	B	175	-63.592	1.705	-69.223	1.00	34.60	B	C
ATOM	12314	CB	HIS	B	175	-65.073	2.038	-69.202	1.00	31.00	B	C
ATOM	12317	CG	HIS	B	175	-65.608	2.356	-70.553	1.00	25.30	B	C
ATOM	12318	ND1	HIS	B	175	-65.108	3.387	-71.315	1.00	19.59	B	N
ATOM	12320	CE1	HIS	B	175	-65.731	3.412	-72.474	1.00	25.74	B	C
ATOM	12322	NE2	HIS	B	175	-66.609	2.423	-72.496	1.00	27.94	B	N
ATOM	12324	CD2	HIS	B	175	-66.542	1.743	-71.307	1.00	25.09	B	C
ATOM	12326	C	HIS	B	175	-63.025	1.679	-67.806	1.00	35.94	B	C
ATOM	12327	O	HIS	B	175	-63.238	2.617	-67.010	1.00	30.61	B	O
ATOM	12329	N	ASP	B	176	-62.303	0.598	-67.514	1.00	35.25	B	N
ATOM	12330	CA	ASP	B	176	-61.358	0.550	-66.407	1.00	36.94	B	C
ATOM	12332	CB	ASP	B	176	-60.179	1.447	-66.760	1.00	33.23	B	C
ATOM	12335	CG	ASP	B	176	-58.987	1.238	-65.863	1.00	34.84	B	C
ATOM	12336	OD1	ASP	B	176	-58.915	0.242	-65.108	1.00	26.67	B	O
ATOM	12337	OD2	ASP	B	176	-58.109	2.108	-65.924	1.00	36.62	B	O
ATOM	12338	C	ASP	B	176	-61.961	0.937	-65.035	1.00	38.13	B	C
ATOM	12339	O	ASP	B	176	-61.390	1.746	-64.292	1.00	33.59	B	O
ATOM	12341	N	GLY	B	177	-63.101	0.337	-64.698	1.00	35.01	B	N
ATOM	12342	CA	GLY	B	177	-63.747	0.562	-63.404	1.00	33.82	B	C
ATOM	12345	C	GLY	B	177	-64.709	1.746	-63.345	1.00	34.35	B	C
ATOM	12346	O	GLY	B	177	-65.380	1.969	-62.335	1.00	35.17	B	O
ATOM	12348	N	ALA	B	178	-64.791	2.504	-64.439	1.00	34.01	B	N
ATOM	12349	CA	ALA	B	178	-65.620	3.705	-64.484	1.00	33.05	B	C
ATOM	12351	CB	ALA	B	178	-65.215	4.573	-65.645	1.00	26.36	B	C
ATOM	12355	C	ALA	B	178	-67.125	3.403	-64.562	1.00	34.79	B	C
ATOM	12356	O	ALA	B	178	-67.948	4.294	-64.348	1.00	34.67	B	O
ATOM	12358	N	ILE	B	179	-67.470	2.152	-64.873	1.00	34.11	B	N
ATOM	12359	CA	ILE	B	179	-68.863	1.748	-65.050	1.00	33.19	B	C
ATOM	12361	CB	ILE	B	179	-69.059	0.654	-66.173	1.00	29.54	B	C
ATOM	12363	CG1	ILE	B	179	-68.203	0.952	-67.420	1.00	27.31	B	C
ATOM	12366	CD1	ILE	B	179	-68.634	2.192	-68.236	1.00	20.12	B	C
ATOM	12370	CG2	ILE	B	179	-70.539	0.538	-66.562	1.00	20.08	B	C
ATOM	12374	C	ILE	B	179	-69.457	1.288	-63.707	1.00	31.94	B	C
ATOM	12375	O	ILE	B	179	-69.128	0.226	-63.187	1.00	30.77	B	O
ATOM	12377	N	THR	B	180	-70.314	2.139	-63.153	1.00	31.52	B	N
ATOM	12378	CA	THR	B	180	-70.964	1.894	-61.871	1.00	35.50	B	C
ATOM	12380	CB	THR	B	180	-71.390	3.219	-61.160	1.00	32.61	B	C
ATOM	12382	OG1	THR	B	180	-72.426	3.853	-61.920	1.00	35.70	B	O
ATOM	12384	CG2	THR	B	180	-70.196	4.198	-60.944	1.00	26.05	B	C
ATOM	12388	C	THR	B	180	-72.234	1.067	-62.054	1.00	40.34	B	C
ATOM	12389	O	THR	B	180	-72.652	0.754	-63.183	1.00	38.49	B	O
ATOM	12391	N	GLU	B	181	-72.883	0.759	-60.944	1.00	42.21	B	N
ATOM	12392	CA	GLU	B	181	-74.161	0.066	-61.004	1.00	45.87	B	C
ATOM	12394	CB	GLU	B	181	-74.551	-0.452	-59.619	1.00	48.59	B	C
ATOM	12397	CG	GLU	B	181	-73.815	-1.751	-59.260	1.00	56.25	B	C
ATOM	12400	CD	GLU	B	181	-74.201	-2.332	-57.893	1.00	58.77	B	C
ATOM	12401	OE1	GLU	B	181	-73.776	-1.754	-56.857	1.00	58.59	B	O
ATOM	12402	OE2	GLU	B	181	-74.905	-3.383	-57.868	1.00	61.60	B	O
ATOM	12403	C	GLU	B	181	-75.289	0.902	-61.634	1.00	42.30	B	C
ATOM	12404	O	GLU	B	181	-76.330	0.350	-61.965	1.00	39.41	B	O
ATOM	12406	N	ARG	B	182	-75.062	2.200	-61.858	1.00	41.47	B	N
ATOM	12407	CA	ARG	B	182	-76.084	3.091	-62.431	1.00	42.72	B	C
ATOM	12409	CB	ARG	B	182	-76.196	4.405	-61.633	1.00	43.22	B	C

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ATOM  12412  CG  ARG B 182     -75.718   4.301 -60.199  1.00 47.49      B    C
ATOM  12415  CD  ARG B 182     -76.538   5.084 -59.184  1.00 54.41      B    C
ATOM  12418  NE  ARG B 182     -76.541   4.375 -57.893  1.00 61.75      B    N
ATOM  12420  CZ  ARG B 182     -75.492   4.257 -57.061  1.00 63.81      B    C
ATOM  12421  NH1 ARG B 182     -74.309   4.810 -57.342  1.00 63.67      B    N
ATOM  12424  NH2 ARG B 182     -75.622   3.575 -55.922  1.00 62.00      B    N
ATOM  12427  C   ARG B 182     -75.800   3.401 -63.897  1.00 35.89      B    C
ATOM  12428  O   ARG B 182     -76.465   4.234 -64.499  1.00 36.81      B    O
ATOM  12430  N   LEU B 183     -74.784   2.745 -64.450  1.00 35.25      B    N
ATOM  12431  CA  LEU B 183     -74.434   2.866 -65.861  1.00 37.01      B    C
ATOM  12433  CB  LEU B 183     -72.997   3.407 -66.035  1.00 31.27      B    C
ATOM  12436  CG  LEU B 183     -72.694   4.858 -65.628  1.00 29.14      B    C
ATOM  12438  CD1 LEU B 183     -71.184   5.119 -65.671  1.00 28.88      B    C
ATOM  12442  CD2 LEU B 183     -73.426   5.859 -66.510  1.00 24.19      B    C
ATOM  12446  C   LEU B 183     -74.525   1.468 -66.453  1.00 35.75      B    C
ATOM  12447  O   LEU B 183     -74.328   0.489 -65.745  1.00 38.90      B    O
ATOM  12449  N   MET B 184     -74.832   1.382 -67.739  1.00 35.46      B    N
ATOM  12450  CA  MET B 184     -74.805   0.115 -68.457  1.00 36.84      B    C
ATOM  12452  CB  MET B 184     -76.225  -0.394 -68.745  1.00 36.86      B    C
ATOM  12455  CG  MET B 184     -77.106   0.569 -69.526  1.00 35.89      B    C
ATOM  12458  SD  MET B 184     -78.784  -0.044 -69.803  1.00 36.03      B    S
ATOM  12459  CE  MET B 184     -78.511  -1.456 -70.877  1.00 33.32      B    C
ATOM  12463  C   MET B 184     -74.020   0.308 -69.741  1.00 32.53      B    C
ATOM  12464  O   MET B 184     -73.827   1.423 -70.194  1.00 32.30      B    O
ATOM  12466  N   CYS B 185     -73.568  -0.791 -70.316  1.00 33.26      B    N
ATOM  12467  CA  CYS B 185     -72.748  -0.748 -71.518  1.00 36.64      B    C
ATOM  12469  CB  CYS B 185     -71.367  -1.357 -71.235  1.00 38.17      B    C
ATOM  12472  SG  CYS B 185     -70.348  -0.403 -70.093  1.00 36.22      B    S
ATOM  12474  C   CYS B 185     -73.400  -1.505 -72.666  1.00 35.20      B    C
ATOM  12475  O   CYS B 185     -74.161  -2.452 -72.447  1.00 35.95      B    O
ATOM  12477  N   ALA B 186     -73.100  -1.069 -73.885  1.00 34.74      B    N
ATOM  12478  CA  ALA B 186     -73.452  -1.821 -75.083  1.00 37.51      B    C
ATOM  12480  CB  ALA B 186     -74.584  -1.148 -75.844  1.00 38.12      B    C
ATOM  12484  C   ALA B 186     -72.216  -1.936 -75.961  1.00 40.78      B    C
ATOM  12485  O   ALA B 186     -71.304  -1.117 -75.875  1.00 43.21      B    O
ATOM  12487  N   GLU B 187     -72.182  -2.964 -76.800  1.00 41.62      B    N
ATOM  12488  CA  GLU B 187     -71.062  -3.155 -77.712  1.00 44.40      B    C
ATOM  12490  CB  GLU B 187     -71.150  -4.506 -78.442  1.00 47.65      B    C
ATOM  12493  CG  GLU B 187     -70.680  -5.694 -77.577  1.00 50.81      B    C
ATOM  12496  CD  GLU B 187     -70.902  -7.060 -78.223  1.00 51.21      B    C
ATOM  12497  OE1 GLU B 187     -70.622  -7.203 -79.437  1.00 55.99      B    O
ATOM  12498  OE2 GLU B 187     -71.355  -7.990 -77.508  1.00 49.28      B    O
ATOM  12499  C   GLU B 187     -70.961  -1.997 -78.698  1.00 43.03      B    C
ATOM  12500  O   GLU B 187     -71.956  -1.332 -79.015  1.00 39.30      B    O
ATOM  12502  N   SER B 188     -69.748  -1.758 -79.173  1.00 43.50      B    N
ATOM  12503  CA  SER B 188     -69.471  -0.595 -79.987  1.00 43.24      B    C
ATOM  12505  CB  SER B 188     -68.762   0.458 -79.137  1.00 37.43      B    C
ATOM  12508  OG  SER B 188     -67.499  -0.013 -78.729  1.00 35.54      B    O
ATOM  12510  C   SER B 188     -68.637  -0.904 -81.228  1.00 45.04      B    C
ATOM  12511  O   SER B 188     -68.133   0.022 -81.852  1.00 47.84      B    O
ATOM  12513  N   ASN B 189     -68.488  -2.176 -81.604  1.00 47.53      B    N
ATOM  12514  CA  ASN B 189     -67.661  -2.522 -82.766  1.00 49.22      B    C
ATOM  12516  CB  ASN B 189     -67.366  -4.026 -82.827  1.00 47.70      B    C
ATOM  12519  CG  ASN B 189     -66.282  -4.376 -83.852  1.00 47.91      B    C
ATOM  12520  OD1 ASN B 189     -65.480  -3.533 -84.260  1.00 44.43      B    O
ATOM  12521  ND2 ASN B 189     -66.257  -5.632 -84.262  1.00 53.53      B    N
ATOM  12524  C   ASN B 189     -68.309  -2.044 -84.071  1.00 49.58      B    C
ATOM  12525  O   ASN B 189     -69.210  -2.697 -84.610  1.00 45.38      B    O
ATOM  12527  N   ARG B 190     -67.854  -0.878 -84.539  1.00 51.66      B    N
ATOM  12528  CA  ARG B 190     -68.330  -0.238 -85.781  1.00 58.55      B    C
ATOM  12530  CB  ARG B 190     -67.776  -0.979 -87.000  1.00 64.58      B    C
ATOM  12533  CG  ARG B 190     -66.236  -1.136 -86.973  1.00 68.80      B    C
ATOM  12536  CD  ARG B 190     -65.720  -2.046 -88.090  1.00 70.00      B    C
ATOM  12539  NE  ARG B 190     -66.510  -3.277 -88.216  1.00 73.59      B    N
ATOM  12541  CZ  ARG B 190     -66.270  -4.241 -89.104  1.00 73.84      B    C
ATOM  12542  NH1 ARG B 190     -65.239  -4.148 -89.944  1.00 75.21      B    N
ATOM  12545  NH2 ARG B 190     -67.059  -5.316 -89.139  1.00 72.16      B    N
ATOM  12548  C   ARG B 190     -69.867  -0.043 -85.867  1.00 56.85      B    C
ATOM  12549  O   ARG B 190     -70.430   0.141 -86.948  1.00 56.83      B    O
ATOM  12551  N   ARG B 191     -70.515  -0.070 -84.705  1.00 55.94      B    N
ATOM  12552  CA  ARG B 191     -71.942   0.179 -84.555  1.00 56.94      B    C
ATOM  12554  CB  ARG B 191     -72.722  -1.131 -84.599  1.00 63.10      B    C
ATOM  12557  CG  ARG B 191     -72.895  -1.741 -85.984  1.00 68.85      B    C
ATOM  12560  CD  ARG B 191     -72.805  -3.252 -85.899  1.00 73.46      B    C
ATOM  12563  NE  ARG B 191     -73.602  -3.933 -86.913  1.00 78.73      B    N
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ATOM	12565	CZ	ARG	B	191	-73.714	-5.258	-87.007	1.00	80.89	B	C
ATOM	12566	NH1	ARG	B	191	-73.074	-6.058	-86.150	1.00	80.31	B	N
ATOM	12569	NH2	ARG	B	191	-74.469	-5.790	-87.965	1.00	80.66	B	N
ATOM	12572	C	ARG	B	191	-72.101	0.804	-83.178	1.00	51.03	B	C
ATOM	12573	O	ARG	B	191	-71.781	0.154	-82.179	1.00	53.18	B	O
ATOM	12575	N	ASP	B	192	-72.573	2.046	-83.095	1.00	45.22	B	N
ATOM	12576	CA	ASP	B	192	-72.477	2.760	-81.823	1.00	44.57	B	C
ATOM	12578	CB	ASP	B	192	-70.997	3.124	-81.584	1.00	43.63	B	C
ATOM	12581	CG	ASP	B	192	-70.655	3.415	-80.108	1.00	43.13	B	C
ATOM	12582	OD1	ASP	B	192	-71.399	3.023	-79.157	1.00	35.38	B	O
ATOM	12583	OD2	ASP	B	192	-69.586	4.043	-79.925	1.00	42.83	B	O
ATOM	12584	C	ASP	B	192	-73.338	4.024	-81.708	1.00	41.14	B	C
ATOM	12585	O	ASP	B	192	-73.794	4.595	-82.715	1.00	38.25	B	O
ATOM	12587	N	SER	B	193	-73.568	4.416	-80.451	1.00	41.64	B	N
ATOM	12588	CA	SER	B	193	-73.946	5.786	-80.082	1.00	44.01	B	C
ATOM	12590	CB	SER	B	193	-74.255	5.908	-78.581	1.00	46.21	B	C
ATOM	12593	OG	SER	B	193	-75.577	5.501	-78.287	1.00	50.05	B	O
ATOM	12595	C	SER	B	193	-72.771	6.682	-80.380	1.00	47.25	B	C
ATOM	12596	O	SER	B	193	-71.624	6.248	-80.374	1.00	47.84	B	O
ATOM	12598	N	CYS	B	194	-73.037	7.952	-80.596	1.00	52.09	B	N
ATOM	12599	CA	CYS	B	194	-72.009	8.805	-81.132	1.00	54.41	B	C
ATOM	12601	CB	CYS	B	194	-71.965	8.594	-82.646	1.00	58.20	B	C
ATOM	12604	SG	CYS	B	194	-70.337	8.642	-83.371	1.00	60.60	B	S
ATOM	12606	C	CYS	B	194	-72.296	10.259	-80.772	1.00	53.73	B	C
ATOM	12607	O	CYS	B	194	-73.331	10.563	-80.179	1.00	53.47	B	O
ATOM	12609	N	LYS	B	195	-71.373	11.146	-81.128	1.00	54.45	B	N
ATOM	12610	CA	LYS	B	195	-71.512	12.573	-80.853	1.00	51.86	B	C
ATOM	12612	CB	LYS	B	195	-70.304	13.338	-81.417	1.00	53.44	B	C
ATOM	12615	CG	LYS	B	195	-70.128	14.760	-80.867	1.00	56.86	B	C
ATOM	12618	CD	LYS	B	195	-68.651	15.092	-80.586	1.00	59.99	B	C
ATOM	12621	CE	LYS	B	195	-68.206	14.729	-79.134	1.00	64.78	B	C
ATOM	12624	NZ	LYS	B	195	-68.449	13.303	-78.703	1.00	65.86	B	N
ATOM	12628	C	LYS	B	195	-72.829	13.120	-81.432	1.00	46.35	B	C
ATOM	12629	O	LYS	B	195	-73.071	13.051	-82.636	1.00	42.38	B	O
ATOM	12631	N	GLY	B	196	-73.684	13.651	-80.564	1.00	41.90	B	N
ATOM	12632	CA	GLY	B	196	-74.995	14.128	-80.979	1.00	38.15	B	C
ATOM	12635	C	GLY	B	196	-76.130	13.172	-80.663	1.00	35.92	B	C
ATOM	12636	O	GLY	B	196	-77.305	13.543	-80.828	1.00	34.70	B	O
ATOM	12638	N	ASP	B	197	-75.802	11.955	-80.214	1.00	32.69	B	N
ATOM	12639	CA	ASP	B	197	-76.820	10.978	-79.787	1.00	35.79	B	C
ATOM	12641	CB	ASP	B	197	-76.453	9.571	-80.256	1.00	39.54	B	C
ATOM	12644	CG	ASP	B	197	-76.266	9.480	-81.776	1.00	42.63	B	C
ATOM	12645	OD1	ASP	B	197	-77.212	9.823	-82.515	1.00	40.35	B	O
ATOM	12646	OD2	ASP	B	197	-75.175	9.057	-82.230	1.00	43.94	B	O
ATOM	12647	C	ASP	B	197	-77.051	11.018	-78.261	1.00	32.06	B	C
ATOM	12648	O	ASP	B	197	-78.002	10.419	-77.759	1.00	31.68	B	O
ATOM	12650	N	SER	B	198	-76.204	11.753	-77.543	1.00	31.56	B	N
ATOM	12651	CA	SER	B	198	-76.363	11.980	-76.096	1.00	34.61	B	C
ATOM	12653	CB	SER	B	198	-75.455	13.115	-75.637	1.00	33.79	B	C
ATOM	12656	OG	SER	B	198	-74.147	12.957	-76.139	1.00	41.73	B	O
ATOM	12658	C	SER	B	198	-77.777	12.376	-75.728	1.00	34.86	B	C
ATOM	12659	O	SER	B	198	-78.417	13.126	-76.454	1.00	36.24	B	O
ATOM	12661	N	GLY	B	199	-78.261	11.893	-74.591	1.00	37.18	B	N
ATOM	12662	CA	GLY	B	199	-79.613	12.207	-74.147	1.00	36.50	B	C
ATOM	12665	C	GLY	B	199	-80.656	11.287	-74.738	1.00	34.86	B	C
ATOM	12666	O	GLY	B	199	-81.738	11.146	-74.173	1.00	33.48	B	O
ATOM	12668	N	GLY	B	200	-80.339	10.653	-75.866	1.00	36.89	B	N
ATOM	12669	CA	GLY	B	200	-81.287	9.800	-76.578	1.00	35.23	B	C
ATOM	12672	C	GLY	B	200	-81.527	8.471	-75.884	1.00	38.06	B	C
ATOM	12673	O	GLY	B	200	-80.829	8.142	-74.924	1.00	38.35	B	O
ATOM	12675	N	PRO	B	201	-82.503	7.685	-76.382	1.00	39.31	B	N
ATOM	12676	CA	PRO	B	201	-82.981	6.468	-75.732	1.00	37.22	B	C
ATOM	12678	CB	PRO	B	201	-84.413	6.379	-76.227	1.00	38.30	B	C
ATOM	12681	CG	PRO	B	201	-84.343	6.919	-77.609	1.00	39.39	B	C
ATOM	12684	CD	PRO	B	201	-83.224	7.925	-77.645	1.00	38.86	B	C
ATOM	12687	C	PRO	B	201	-82.245	5.171	-76.117	1.00	33.96	B	C
ATOM	12688	O	PRO	B	201	-81.924	4.956	-77.286	1.00	31.96	B	O
ATOM	12689	N	LEU	B	202	-81.958	4.343	-75.115	1.00	32.44	B	N
ATOM	12690	CA	LEU	B	202	-81.652	2.942	-75.330	1.00	34.89	B	C
ATOM	12692	CB	LEU	B	202	-80.398	2.502	-74.568	1.00	33.21	B	C
ATOM	12695	CG	LEU	B	202	-79.889	1.081	-74.836	1.00	31.27	B	C
ATOM	12697	CD1	LEU	B	202	-79.192	0.991	-76.188	1.00	29.13	B	C
ATOM	12701	CD2	LEU	B	202	-78.956	0.639	-73.727	1.00	32.36	B	C
ATOM	12705	C	LEU	B	202	-82.880	2.174	-74.860	1.00	34.34	B	C
ATOM	12706	O	LEU	B	202	-83.219	2.188	-73.673	1.00	31.58	B	O

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ATOM  12708  N   VAL B 203     -83.541   1.513 -75.810  1.00 38.47      B    N
ATOM  12709  CA  VAL B 203     -84.815   0.853 -75.585  1.00 37.22      B    C
ATOM  12711  CB  VAL B 203     -85.822   1.299 -76.667  1.00 36.35      B    C
ATOM  12713  CG1 VAL B 203     -87.144   0.508 -76.577  1.00 31.97      B    C
ATOM  12717  CG2 VAL B 203     -86.048   2.798 -76.581  1.00 32.51      B    C
ATOM  12721  C   VAL B 203     -84.609  -0.650 -75.685  1.00 38.44      B    C
ATOM  12722  O   VAL B 203     -84.228  -1.142 -76.753  1.00 39.33      B    O
ATOM  12724  N   CYS B 204     -84.843  -1.371 -74.586  1.00 41.39      B    N
ATOM  12725  CA  CYS B 204     -84.751  -2.841 -74.586  1.00 45.36      B    C
ATOM  12727  CB  CYS B 204     -83.666  -3.353 -73.620  1.00 45.09      B    C
ATOM  12730  SG  CYS B 204     -82.105  -2.433 -73.624  1.00 39.44      B    S
ATOM  12732  C   CYS B 204     -86.090  -3.479 -74.223  1.00 48.72      B    C
ATOM  12733  O   CYS B 204     -86.550  -3.363 -73.073  1.00 48.17      B    O
ATOM  12735  N   GLY B 205     -86.687  -4.160 -75.210  1.00 50.48      B    N
ATOM  12736  CA  GLY B 205     -87.989  -4.807 -75.065  1.00 51.77      B    C
ATOM  12739  C   GLY B 205     -89.138  -3.824 -74.940  1.00 53.16      B    C
ATOM  12740  O   GLY B 205     -90.004  -3.980 -74.067  1.00 51.62      B    O
ATOM  12742  N   GLY B 206     -89.130  -2.799 -75.794  1.00 53.35      B    N
ATOM  12743  CA  GLY B 206     -90.185  -1.776 -75.794  1.00 51.89      B    C
ATOM  12746  C   GLY B 206     -90.209  -0.785 -74.633  1.00 51.08      B    C
ATOM  12747  O   GLY B 206     -91.023   0.148 -74.649  1.00 49.75      B    O
ATOM  12749  N   VAL B 207     -89.334  -0.974 -73.639  1.00 50.58      B    N
ATOM  12750  CA  VAL B 207     -89.191  -0.052 -72.501  1.00 48.25      B    C
ATOM  12752  CB  VAL B 207     -89.258  -0.812 -71.153  1.00 49.39      B    C
ATOM  12754  CG1 VAL B 207     -89.030   0.141 -69.974  1.00 46.80      B    C
ATOM  12758  CG2 VAL B 207     -90.589  -1.540 -71.017  1.00 48.67      B    C
ATOM  12762  C   VAL B 207     -87.853   0.687 -72.584  1.00 45.96      B    C
ATOM  12763  O   VAL B 207     -86.867   0.116 -73.031  1.00 44.17      B    O
ATOM  12765  N   LEU B 208     -87.842   1.954 -72.164  1.00 42.89      B    N
ATOM  12766  CA  LEU B 208     -86.608   2.738 -72.004  1.00 41.47      B    C
ATOM  12768  CB  LEU B 208     -86.940   4.203 -71.727  1.00 39.60      B    C
ATOM  12771  CG  LEU B 208     -85.789   5.202 -71.618  1.00 38.74      B    C
ATOM  12773  CD1 LEU B 208     -85.295   5.668 -72.982  1.00 36.12      B    C
ATOM  12777  CD2 LEU B 208     -86.246   6.386 -70.793  1.00 40.17      B    C
ATOM  12781  C   LEU B 208     -85.796   2.179 -70.840  1.00 43.99      B    C
ATOM  12782  O   LEU B 208     -86.299   2.073 -69.716  1.00 46.50      B    O
ATOM  12784  N   GLU B 209     -84.544   1.818 -71.119  1.00 41.65      B    N
ATOM  12785  CA  GLU B 209     -83.639   1.279 -70.105  1.00 39.77      B    C
ATOM  12787  CB  GLU B 209     -83.127  -0.095 -70.544  1.00 41.67      B    C
ATOM  12790  CG  GLU B 209     -84.181  -1.205 -70.491  1.00 43.10      B    C
ATOM  12793  CD  GLU B 209     -84.478  -1.705 -69.082  1.00 43.79      B    C
ATOM  12794  OE1 GLU B 209     -83.726  -1.385 -68.141  1.00 38.71      B    O
ATOM  12795  OE2 GLU B 209     -85.470  -2.444 -68.919  1.00 49.82      B    O
ATOM  12796  C   GLU B 209     -82.455   2.206 -69.808  1.00 39.44      B    C
ATOM  12797  O   GLU B 209     -81.933   2.203 -68.689  1.00 37.61      B    O
ATOM  12799  N   GLY B 210     -82.033   2.976 -70.807  1.00 38.68      B    N
ATOM  12800  CA  GLY B 210     -80.891   3.860 -70.663  1.00 38.23      B    C
ATOM  12803  C   GLY B 210     -80.969   5.120 -71.501  1.00 35.44      B    C
ATOM  12804  O   GLY B 210     -81.697   5.190 -72.494  1.00 35.18      B    O
ATOM  12806  N   VAL B 211     -80.214   6.123 -71.066  1.00 36.90      B    N
ATOM  12807  CA  VAL B 211     -80.085   7.396 -71.766  1.00 35.87      B    C
ATOM  12809  CB  VAL B 211     -80.488   8.624 -70.867  1.00 31.92      B    C
ATOM  12811  CG1 VAL B 211     -80.375   9.929 -71.633  1.00 26.28      B    C
ATOM  12815  CG2 VAL B 211     -81.921   8.463 -70.311  1.00 27.99      B    C
ATOM  12819  C   VAL B 211     -78.627   7.468 -72.200  1.00 34.38      B    C
ATOM  12820  O   VAL B 211     -77.718   7.281 -71.390  1.00 31.06      B    O
ATOM  12822  N   VAL B 212     -78.410   7.677 -73.492  1.00 36.38      B    N
ATOM  12823  CA  VAL B 212     -77.068   7.769 -74.018  1.00 41.41      B    C
ATOM  12825  CB  VAL B 212     -77.051   8.196 -75.506  1.00 37.24      B    C
ATOM  12827  CG1 VAL B 212     -75.629   8.415 -75.977  1.00 36.89      B    C
ATOM  12831  CG2 VAL B 212     -77.749   7.155 -76.368  1.00 33.32      B    C
ATOM  12835  C   VAL B 212     -76.352   8.789 -73.169  1.00 46.37      B    C
ATOM  12836  O   VAL B 212     -76.777   9.948 -73.095  1.00 43.48      B    O
ATOM  12838  N   THR B 213     -75.299   8.337 -72.486  1.00 55.38      B    N
ATOM  12839  CA  THR B 213     -74.458   9.227 -71.700  1.00 61.39      B    C
ATOM  12841  CB  THR B 213     -73.608   8.469 -70.652  1.00 58.03      B    C
ATOM  12843  OG1 THR B 213     -74.434   7.548 -69.938  1.00 57.21      B    O
ATOM  12845  CG2 THR B 213     -72.980   9.452 -69.670  1.00 57.86      B    C
ATOM  12849  C   THR B 213     -73.613   9.920 -72.739  1.00 68.39      B    C
ATOM  12850  O   THR B 213     -74.175  10.569 -73.624  1.00 73.70      B    O
ATOM  12852  N   SER B 214     -72.293   9.784 -72.693  1.00 72.34      B    N
ATOM  12853  CA  SER B 214     -71.483  10.490 -73.655  1.00 76.63      B    C
ATOM  12855  CB  SER B 214     -72.244  11.782 -74.120  1.00 82.45      B    C
ATOM  12858  OG  SER B 214     -71.557  12.491 -75.146  1.00 86.44      B    O
ATOM  12860  C   SER B 214     -70.196  11.003 -73.065  1.00 80.05      B    C
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ATOM	12861	O	SER	B	214	-69.688	10.526	-72.048	1.00	82.25	B	O
ATOM	12863	N	GLY	B	215	-69.711	12.035	-73.739	1.00	77.92	B	N
ATOM	12864	CA	GLY	B	215	-68.498	12.706	-73.383	1.00	76.82	B	C
ATOM	12867	C	GLY	B	215	-67.669	12.774	-74.638	1.00	75.08	B	C
ATOM	12868	O	GLY	B	215	-68.188	12.971	-75.748	1.00	77.37	B	O
ATOM	12870	N	SER	B	216	-66.373	12.584	-74.457	1.00	72.90	B	N
ATOM	12871	CA	SER	B	216	-65.425	12.634	-75.553	1.00	70.77	B	C
ATOM	12873	CB	SER	B	216	-64.291	13.622	-75.219	1.00	73.92	B	C
ATOM	12876	OG	SER	B	216	-64.763	14.969	-75.215	1.00	74.90	B	O
ATOM	12878	C	SER	B	216	-64.890	11.223	-75.808	1.00	68.84	B	C
ATOM	12879	O	SER	B	216	-63.722	11.039	-76.167	1.00	69.50	B	O
ATOM	12881	N	ARG	B	217	-65.754	10.227	-75.615	1.00	65.27	B	N
ATOM	12882	CA	ARG	B	217	-65.435	8.852	-75.959	1.00	63.16	B	C
ATOM	12884	CB	ARG	B	217	-66.431	7.887	-75.295	1.00	63.89	B	C
ATOM	12887	CG	ARG	B	217	-66.066	6.399	-75.421	1.00	62.52	B	C
ATOM	12890	CD	ARG	B	217	-67.191	5.462	-74.945	1.00	60.25	B	C
ATOM	12893	NE	ARG	B	217	-68.497	5.742	-75.562	1.00	58.67	B	N
ATOM	12895	CZ	ARG	B	217	-68.845	5.448	-76.817	1.00	55.55	B	C
ATOM	12896	NH1	ARG	B	217	-67.991	4.862	-77.648	1.00	52.91	B	N
ATOM	12899	NH2	ARG	B	217	-70.066	5.752	-77.247	1.00	57.97	B	N
ATOM	12902	C	ARG	B	217	-65.472	8.709	-77.482	1.00	60.60	B	C
ATOM	12903	O	ARG	B	217	-66.413	9.166	-78.136	1.00	56.15	B	O
ATOM	12905	N	VAL	B	218	-64.435	8.087	-78.036	1.00	61.06	B	N
ATOM	12906	CA	VAL	B	218	-64.349	7.836	-79.476	1.00	60.42	B	C
ATOM	12908	CB	VAL	B	218	-62.934	7.291	-79.876	1.00	65.50	B	C
ATOM	12910	CG1	VAL	B	218	-62.784	7.218	-81.410	1.00	68.16	B	C
ATOM	12914	CG2	VAL	B	218	-62.646	5.925	-79.216	1.00	64.49	B	C
ATOM	12918	C	VAL	B	218	-65.463	6.870	-79.915	1.00	59.72	B	C
ATOM	12919	O	VAL	B	218	-65.848	5.961	-79.169	1.00	60.55	B	O
ATOM	12921	N	CYS	B	219	-65.962	7.076	-81.130	1.00	54.52	B	N
ATOM	12922	CA	CYS	B	219	-67.122	6.357	-81.644	1.00	53.57	B	C
ATOM	12924	CB	CYS	B	219	-67.877	7.308	-82.569	1.00	55.06	B	C
ATOM	12927	SG	CYS	B	219	-69.526	6.823	-83.034	1.00	52.70	B	S
ATOM	12929	C	CYS	B	219	-66.726	5.099	-82.427	1.00	49.52	B	C
ATOM	12930	O	CYS	B	219	-65.750	5.115	-83.172	1.00	48.13	B	O
ATOM	12932	N	GLY	B	220	-67.488	4.019	-82.255	1.00	45.27	B	N
ATOM	12933	CA	GLY	B	220	-67.331	2.828	-83.085	1.00	48.11	B	C
ATOM	12936	C	GLY	B	220	-66.055	2.020	-82.879	1.00	48.36	B	C
ATOM	12937	O	GLY	B	220	-65.661	1.240	-83.748	1.00	47.32	B	O
ATOM	12939	N	ASN	B	221	-65.416	2.204	-81.732	1.00	49.30	B	N
ATOM	12940	CA	ASN	B	221	-64.217	1.456	-81.351	1.00	49.61	B	C
ATOM	12942	CB	ASN	B	221	-63.203	2.411	-80.679	1.00	45.94	B	C
ATOM	12945	CG	ASN	B	221	-61.979	1.696	-80.064	1.00	49.67	B	C
ATOM	12946	OD1	ASN	B	221	-61.742	0.503	-80.268	1.00	49.93	B	O
ATOM	12947	ND2	ASN	B	221	-61.198	2.450	-79.295	1.00	50.61	B	N
ATOM	12950	C	ASN	B	221	-64.637	0.346	-80.400	1.00	49.23	B	C
ATOM	12951	O	ASN	B	221	-65.138	0.628	-79.314	1.00	49.31	B	O
ATOM	12953	N	ARG	B	222	-64.448	-0.908	-80.814	1.00	50.87	B	N
ATOM	12954	CA	ARG	B	222	-64.813	-2.073	-79.999	1.00	49.94	B	C
ATOM	12956	CB	ARG	B	222	-64.489	-3.377	-80.762	1.00	53.20	B	C
ATOM	12959	CG	ARG	B	222	-63.073	-3.915	-80.557	1.00	55.82	B	C
ATOM	12962	CD	ARG	B	222	-62.410	-4.395	-81.839	1.00	57.98	B	C
ATOM	12965	NE	ARG	B	222	-60.972	-4.136	-81.757	1.00	61.66	B	N
ATOM	12967	CZ	ARG	B	222	-60.062	-4.963	-81.238	1.00	62.48	B	C
ATOM	12968	NH1	ARG	B	222	-58.792	-4.584	-81.209	1.00	62.89	B	N
ATOM	12971	NH2	ARG	B	222	-60.399	-6.156	-80.750	1.00	62.25	B	N
ATOM	12974	C	ARG	B	222	-64.160	-2.068	-78.601	1.00	45.12	B	C
ATOM	12975	O	ARG	B	222	-64.676	-2.704	-77.679	1.00	40.80	B	O
ATOM	12977	N	LYS	B	223	-63.029	-1.361	-78.465	1.00	42.16	B	N
ATOM	12978	CA	LYS	B	223	-62.320	-1.249	-77.192	1.00	40.82	B	C
ATOM	12980	CB	LYS	B	223	-60.809	-1.058	-77.410	1.00	39.58	B	C
ATOM	12983	CG	LYS	B	223	-60.081	-2.368	-77.780	1.00	34.94	B	C
ATOM	12986	CD	LYS	B	223	-58.572	-2.195	-77.815	1.00	36.15	B	C
ATOM	12989	CE	LYS	B	223	-57.839	-3.531	-77.993	1.00	34.11	B	C
ATOM	12992	NZ	LYS	B	223	-56.421	-3.359	-78.404	1.00	27.07	B	N
ATOM	12996	C	LYS	B	223	-62.895	-0.189	-76.260	1.00	41.35	B	C
ATOM	12997	O	LYS	B	223	-62.513	-0.137	-75.104	1.00	42.47	B	O
ATOM	12999	N	LYS	B	224	-63.817	0.643	-76.740	1.00	39.50	B	N
ATOM	13000	CA	LYS	B	224	-64.518	1.588	-75.871	1.00	38.20	B	C
ATOM	13002	CB	LYS	B	224	-64.052	3.006	-76.162	1.00	39.50	B	C
ATOM	13005	CG	LYS	B	224	-62.607	3.232	-75.776	1.00	42.74	B	C
ATOM	13008	CD	LYS	B	224	-62.433	3.245	-74.258	1.00	42.38	B	C
ATOM	13011	CE	LYS	B	224	-60.990	3.159	-73.860	1.00	41.95	B	C
ATOM	13014	NZ	LYS	B	224	-60.519	1.794	-74.075	1.00	44.97	B	N
ATOM	13018	C	LYS	B	224	-66.032	1.466	-76.011	1.00	36.56	B	C

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ATOM	13019	O	LYS	B	224	-66.646	2.232	-76.754	1.00	36.70	B	O
ATOM	13021	N	PRO	B	225	-66.632	0.490	-75.301	1.00	34.97	B	N
ATOM	13022	CA	PRO	B	225	-68.070	0.254	-75.349	1.00	36.47	B	C
ATOM	13024	CB	PRO	B	225	-68.280	-0.845	-74.295	1.00	34.18	B	C
ATOM	13027	CG	PRO	B	225	-66.974	-1.568	-74.231	1.00	30.19	B	C
ATOM	13030	CD	PRO	B	225	-65.959	-0.482	-74.417	1.00	31.91	B	C
ATOM	13033	C	PRO	B	225	-68.900	1.492	-75.022	1.00	36.92	B	C
ATOM	13034	O	PRO	B	225	-68.424	2.401	-74.350	1.00	36.87	B	O
ATOM	13035	N	GLY	B	226	-70.124	1.527	-75.519	1.00	36.70	B	N
ATOM	13036	CA	GLY	B	226	-70.974	2.683	-75.334	1.00	35.53	B	C
ATOM	13039	C	GLY	B	226	-71.490	2.676	-73.921	1.00	31.50	B	C
ATOM	13040	O	GLY	B	226	-71.677	1.615	-73.351	1.00	29.72	B	O
ATOM	13042	N	ILE	B	227	-71.721	3.866	-73.368	1.00	33.86	B	N
ATOM	13043	CA	ILE	B	227	-72.140	4.026	-71.979	1.00	34.42	B	C
ATOM	13045	CB	ILE	B	227	-71.107	4.860	-71.184	1.00	29.67	B	C
ATOM	13047	CG1	ILE	B	227	-69.721	4.186	-71.265	1.00	31.36	B	C
ATOM	13050	CD1	ILE	B	227	-68.536	5.101	-70.921	1.00	33.46	B	C
ATOM	13054	CG2	ILE	B	227	-71.554	5.003	-69.751	1.00	23.84	B	C
ATOM	13058	C	ILE	B	227	-73.532	4.666	-71.958	1.00	31.46	B	C
ATOM	13059	O	ILE	B	227	-73.799	5.587	-72.718	1.00	27.65	B	O
ATOM	13061	N	TYR	B	228	-74.418	4.131	-71.117	1.00	32.62	B	N
ATOM	13062	CA	TYR	B	228	-75.823	4.576	-71.030	1.00	33.43	B	C
ATOM	13064	CB	TYR	B	228	-76.752	3.618	-71.797	1.00	27.94	B	C
ATOM	13067	CG	TYR	B	228	-76.270	3.417	-73.204	1.00	27.28	B	C
ATOM	13068	CD1	TYR	B	228	-76.741	4.215	-74.251	1.00	26.87	B	C
ATOM	13070	CE1	TYR	B	228	-76.265	4.056	-75.541	1.00	27.97	B	C
ATOM	13072	CZ	TYR	B	228	-75.290	3.096	-75.788	1.00	29.27	B	C
ATOM	13073	OH	TYR	B	228	-74.781	2.908	-77.043	1.00	28.97	B	O
ATOM	13075	CE2	TYR	B	228	-74.807	2.307	-74.765	1.00	27.69	B	C
ATOM	13077	CD2	TYR	B	228	-75.293	2.474	-73.482	1.00	26.53	B	C
ATOM	13079	C	TYR	B	228	-76.224	4.648	-69.574	1.00	31.93	B	C
ATOM	13080	O	TYR	B	228	-75.890	3.756	-68.792	1.00	30.88	B	O
ATOM	13082	N	THR	B	229	-76.926	5.721	-69.210	1.00	35.61	B	N
ATOM	13083	CA	THR	B	229	-77.360	5.918	-67.827	1.00	36.15	B	C
ATOM	13085	CB	THR	B	229	-77.662	7.393	-67.541	1.00	33.39	B	C
ATOM	13087	OG1	THR	B	229	-76.569	8.202	-68.001	1.00	31.14	B	O
ATOM	13089	CG2	THR	B	229	-77.891	7.614	-66.055	1.00	30.27	B	C
ATOM	13093	C	THR	B	229	-78.615	5.097	-67.605	1.00	36.51	B	C
ATOM	13094	O	THR	B	229	-79.566	5.247	-68.351	1.00	33.82	B	O
ATOM	13096	N	ARG	B	230	-78.596	4.225	-66.599	1.00	37.66	B	N
ATOM	13097	CA	ARG	B	230	-79.714	3.349	-66.297	1.00	38.32	B	C
ATOM	13099	CB	ARG	B	230	-79.260	2.205	-65.388	1.00	36.19	B	C
ATOM	13102	CG	ARG	B	230	-78.283	1.262	-66.042	1.00	34.29	B	C
ATOM	13105	CD	ARG	B	230	-77.791	0.203	-65.078	1.00	38.80	B	C
ATOM	13108	NE	ARG	B	230	-78.856	-0.710	-64.675	1.00	40.83	B	N
ATOM	13110	CZ	ARG	B	230	-79.497	-0.689	-63.506	1.00	45.89	B	C
ATOM	13111	NH1	ARG	B	230	-79.202	0.205	-62.560	1.00	47.53	B	N
ATOM	13114	NH2	ARG	B	230	-80.455	-1.579	-63.282	1.00	44.32	B	N
ATOM	13117	C	ARG	B	230	-80.828	4.129	-65.616	1.00	38.52	B	C
ATOM	13118	O	ARG	B	230	-80.672	4.576	-64.493	1.00	41.67	B	O
ATOM	13120	N	VAL	B	231	-81.959	4.270	-66.297	1.00	41.98	B	N
ATOM	13121	CA	VAL	B	231	-83.085	5.042	-65.770	1.00	39.40	B	C
ATOM	13123	CB	VAL	B	231	-84.194	5.220	-66.832	1.00	40.62	B	C
ATOM	13125	CG1	VAL	B	231	-83.638	5.962	-68.057	1.00	37.57	B	C
ATOM	13129	CG2	VAL	B	231	-84.813	3.875	-67.223	1.00	38.48	B	C
ATOM	13133	C	VAL	B	231	-83.658	4.456	-64.467	1.00	40.57	B	C
ATOM	13134	O	VAL	B	231	-84.074	5.203	-63.577	1.00	44.36	B	O
ATOM	13136	N	ALA	B	232	-83.638	3.130	-64.344	1.00	44.24	B	N
ATOM	13137	CA	ALA	B	232	-84.155	2.434	-63.156	1.00	41.32	B	C
ATOM	13139	CB	ALA	B	232	-84.119	0.924	-63.356	1.00	40.64	B	C
ATOM	13143	C	ALA	B	232	-83.410	2.817	-61.889	1.00	41.33	B	C
ATOM	13144	O	ALA	B	232	-83.996	2.810	-60.808	1.00	42.63	B	O
ATOM	13146	N	SER	B	233	-82.122	3.140	-62.021	1.00	41.75	B	N
ATOM	13147	CA	SER	B	233	-81.321	3.668	-60.894	1.00	39.46	B	C
ATOM	13149	CB	SER	B	233	-79.830	3.742	-61.232	1.00	36.50	B	C
ATOM	13152	OG	ASER	B	233	-79.133	2.647	-60.669	0.70	39.88	B	O
ATOM	13153	OG	BSER	B	233	-79.132	2.635	-60.691	0.30	38.56	B	O
ATOM	13156	C	SER	B	233	-81.767	5.034	-60.384	1.00	39.11	B	C
ATOM	13157	O	SER	B	233	-81.417	5.400	-59.272	1.00	38.58	B	O
ATOM	13159	N	TYR	B	234	-82.525	5.775	-61.193	1.00	41.57	B	N
ATOM	13160	CA	TYR	B	234	-82.943	7.133	-60.851	1.00	42.46	B	C
ATOM	13162	CB	TYR	B	234	-82.348	8.109	-61.880	1.00	38.68	B	C
ATOM	13165	CG	TYR	B	234	-80.826	8.128	-61.873	1.00	38.28	B	C
ATOM	13166	CD1	TYR	B	234	-80.130	9.011	-61.067	1.00	36.79	B	C
ATOM	13168	CE1	TYR	B	234	-78.735	9.025	-61.049	1.00	37.79	B	C

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ATOM  13170  CZ  TYR B 234     -78.028   8.147 -61.842  1.00 35.06      B    C
ATOM  13171  OH  TYR B 234     -76.655   8.171 -61.801  1.00 38.15      B    O
ATOM  13173  CE2 TYR B 234     -78.693   7.244 -62.642  1.00 34.31      B    C
ATOM  13175  CD2 TYR B 234     -80.085   7.239 -62.655  1.00 39.08      B    C
ATOM  13177  C   TYR B 234     -84.471   7.255 -60.756  1.00 44.56      B    C
ATOM  13178  O   TYR B 234     -85.027   8.339 -60.927  1.00 41.78      B    O
ATOM  13180  N   ALA B 235     -85.121   6.131 -60.444  1.00 46.08      B    N
ATOM  13181  CA  ALA B 235     -86.575   6.008 -60.342  1.00 46.01      B    C
ATOM  13183  CB  ALA B 235     -86.916   4.599 -59.817  1.00 44.15      B    C
ATOM  13187  C   ALA B 235     -87.228   7.061 -59.442  1.00 46.98      B    C
ATOM  13188  O   ALA B 235     -88.151   7.776 -59.859  1.00 46.99      B    O
ATOM  13190  N   ALA B 236     -86.742   7.129 -58.206  1.00 47.65      B    N
ATOM  13191  CA  ALA B 236     -87.254   8.054 -57.191  1.00 50.20      B    C
ATOM  13193  CB  ALA B 236     -86.527   7.829 -55.847  1.00 46.90      B    C
ATOM  13197  C   ALA B 236     -87.125   9.523 -57.599  1.00 52.72      B    C
ATOM  13198  O   ALA B 236     -88.024  10.332 -57.331  1.00 58.18      B    O
ATOM  13200  N   TRP B 237     -86.005   9.861 -58.233  1.00 51.02      B    N
ATOM  13201  CA  TRP B 237     -85.726  11.232 -58.653  1.00 51.73      B    C
ATOM  13203  CB  TRP B 237     -84.242  11.382 -59.020  1.00 52.99      B    C
ATOM  13206  CG  TRP B 237     -83.917  12.692 -59.647  1.00 52.33      B    C
ATOM  13207  CD1 TRP B 237     -83.765  13.873 -59.011  1.00 52.89      B    C
ATOM  13209  NE1 TRP B 237     -83.479  14.865 -59.917  1.00 54.15      B    N
ATOM  13211  CE2 TRP B 237     -83.436  14.327 -61.174  1.00 53.31      B    C
ATOM  13212  CD2 TRP B 237     -83.705  12.954 -61.046  1.00 53.76      B    C
ATOM  13213  CE3 TRP B 237     -83.713  12.158 -62.200  1.00 53.52      B    C
ATOM  13215  CZ3 TRP B 237     -83.459  12.761 -63.431  1.00 53.04      B    C
ATOM  13217  CH2 TRP B 237     -83.194  14.133 -63.524  1.00 52.83      B    C
ATOM  13219  CZ2 TRP B 237     -83.182  14.934 -62.411  1.00 53.82      B    C
ATOM  13221  C   TRP B 237     -86.625  11.666 -59.815  1.00 54.03      B    C
ATOM  13222  O   TRP B 237     -87.186  12.770 -59.799  1.00 57.03      B    O
ATOM  13224  N   ILE B 238     -86.779  10.800 -60.814  1.00 52.58      B    N
ATOM  13225  CA  ILE B 238     -87.666  11.098 -61.941  1.00 53.75      B    C
ATOM  13227  CB  ILE B 238     -87.643   9.979 -63.003  1.00 52.14      B    C
ATOM  13229  CG1 ILE B 238     -86.257   9.879 -63.647  1.00 53.14      B    C
ATOM  13232  CD1 ILE B 238     -86.079   8.648 -64.509  1.00 53.17      B    C
ATOM  13236  CG2 ILE B 238     -88.675  10.241 -64.080  1.00 49.65      B    C
ATOM  13240  C   ILE B 238     -89.096  11.300 -61.451  1.00 56.70      B    C
ATOM  13241  O   ILE B 238     -89.802  12.194 -61.923  1.00 58.39      B    O
ATOM  13243  N   ASP B 239     -89.517  10.466 -60.503  1.00 58.64      B    N
ATOM  13244  CA  ASP B 239     -90.854  10.561 -59.923  1.00 57.64      B    C
ATOM  13246  CB  ASP B 239     -91.081   9.411 -58.926  1.00 57.34      B    C
ATOM  13249  CG  ASP B 239     -91.491   8.107 -59.613  1.00 54.89      B    C
ATOM  13250  OD1 ASP B 239     -91.906   8.149 -60.796  1.00 52.51      B    O
ATOM  13251  OD2 ASP B 239     -91.414   7.043 -58.959  1.00 51.93      B    O
ATOM  13252  C   ASP B 239     -91.086  11.911 -59.250  1.00 58.18      B    C
ATOM  13253  O   ASP B 239     -92.120  12.538 -59.465  1.00 59.19      B    O
ATOM  13255  N   SER B 240     -90.112  12.357 -58.459  1.00 58.62      B    N
ATOM  13256  CA  SER B 240     -90.224  13.628 -57.734  1.00 59.18      B    C
ATOM  13258  CB  SER B 240     -89.015  13.858 -56.812  1.00 55.78      B    C
ATOM  13261  OG ASER B 240     -87.843  14.154 -57.547  0.60 53.57      B    O
ATOM  13262  OG BSER B 240     -87.843  14.149 -57.550  0.40 54.58      B    O
ATOM  13265  C   SER B 240     -90.418  14.820 -58.679  1.00 60.50      B    C
ATOM  13266  O   SER B 240     -91.229  15.713 -58.400  1.00 63.56      B    O
ATOM  13268  N   VAL B 241     -89.709  14.812 -59.805  1.00 60.37      B    N
ATOM  13269  CA  VAL B 241     -89.753  15.917 -60.769  1.00 59.54      B    C
ATOM  13271  CB  VAL B 241     -88.488  15.922 -61.671  1.00 59.50      B    C
ATOM  13273  CG1 VAL B 241     -88.539  17.076 -62.679  1.00 60.57      B    C
ATOM  13277  CG2 VAL B 241     -87.221  16.007 -60.822  1.00 54.74      B    C
ATOM  13281  C   VAL B 241     -91.032  15.893 -61.630  1.00 60.33      B    C
ATOM  13282  O   VAL B 241     -91.592  16.951 -61.959  1.00 61.50      B    O
ATOM  13284  N   LEU B 242     -91.492  14.694 -61.988  1.00 61.52      B    N
ATOM  13285  CA  LEU B 242     -92.744  14.538 -62.744  1.00 63.46      B    C
ATOM  13287  CB  LEU B 242     -92.825  13.139 -63.371  1.00 63.84      B    C
ATOM  13290  CG  LEU B 242     -92.150  12.962 -64.729  1.00 63.72      B    C
ATOM  13292  CD1 LEU B 242     -90.643  13.179 -64.620  1.00 64.91      B    C
ATOM  13296  CD2 LEU B 242     -92.472  11.577 -65.277  1.00 63.77      B    C
ATOM  13300  C   LEU B 242     -93.991  14.783 -61.884  1.00 67.37      B    C
ATOM  13301  O   LEU B 242     -94.967  15.374 -62.358  1.00 69.32      B    O
ATOM  13303  N   ALA B 243     -93.950  14.315 -60.634  1.00 68.78      B    N
ATOM  13304  CA  ALA B 243     -95.081  14.410 -59.704  1.00 68.22      B    C
ATOM  13306  CB  ALA B 243     -94.708  13.783 -58.360  1.00 67.63      B    C
ATOM  13310  C   ALA B 243     -95.541  15.850 -59.502  1.00 70.99      B    C
ATOM  13311  O   ALA B 243     -96.733  16.144 -59.556  1.00 69.68      B    O
ATOM  13313  OXT ALA B 243     -94.726  16.742 -59.271  1.00 73.33      B    O
ATOM  13314  N   GLU E   1     -63.843   1.238 -48.702  1.00 44.90      E    N
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ATOM  13315  CA  GLU E   1     -62.449   0.911 -49.127  1.00 46.44      E    C
ATOM  13317  CB  GLU E   1     -61.505   1.043 -47.911  1.00 44.70      E    C
ATOM  13320  CG  GLU E   1     -60.197   0.243 -47.970  1.00 47.83      E    C
ATOM  13323  CD  GLU E   1     -59.516   0.019 -46.595  1.00 51.68      E    C
ATOM  13324  OE1 GLU E   1     -60.216  -0.105 -45.554  1.00 51.25      E    O
ATOM  13325  OE2 GLU E   1     -58.259  -0.076 -46.569  1.00 54.21      E    O
ATOM  13326  C   GLU E   1     -62.374  -0.499 -49.694  1.00 46.62      E    C
ATOM  13327  O   GLU E   1     -62.901  -1.433 -49.106  1.00 46.85      E    O
ATOM  13331  N   VAL E   2     -61.715  -0.643 -50.839  1.00 47.91      E    N
ATOM  13332  CA  VAL E   2     -61.594  -1.936 -51.501  1.00 41.46      E    C
ATOM  13334  CB  VAL E   2     -61.124  -1.770 -52.952  1.00 36.19      E    C
ATOM  13336  CG1 VAL E   2     -60.805  -3.114 -53.567  1.00 32.27      E    C
ATOM  13340  CG2 VAL E   2     -62.187  -1.011 -53.752  1.00 32.30      E    C
ATOM  13344  C   VAL E   2     -60.598  -2.820 -50.756  1.00 41.16      E    C
ATOM  13345  O   VAL E   2     -59.507  -2.382 -50.382  1.00 37.55      E    O
ATOM  13347  N   GLN E   3     -60.980  -4.075 -50.546  1.00 40.03      E    N
ATOM  13348  CA  GLN E   3     -60.075  -5.058 -49.972  1.00 40.61      E    C
ATOM  13350  CB  GLN E   3     -60.222  -5.140 -48.442  1.00 45.32      E    C
ATOM  13353  CG  GLN E   3     -59.643  -3.924 -47.712  1.00 49.62      E    C
ATOM  13356  CD  GLN E   3     -59.601  -4.077 -46.197  1.00 51.05      E    C
ATOM  13357  OE1 GLN E   3     -60.523  -3.651 -45.483  1.00 54.26      E    O
ATOM  13358  NE2 GLN E   3     -58.520  -4.667 -45.695  1.00 55.82      E    N
ATOM  13361  C   GLN E   3     -60.269  -6.426 -50.603  1.00 36.70      E    C
ATOM  13362  O   GLN E   3     -61.369  -6.791 -50.978  1.00 36.67      E    O
ATOM  13364  N   LEU E   4     -59.158  -7.133 -50.774  1.00 33.76      E    N
ATOM  13365  CA  LEU E   4     -59.135  -8.474 -51.308  1.00 35.75      E    C
ATOM  13367  CB  LEU E   4     -58.460  -8.488 -52.683  1.00 34.19      E    C
ATOM  13370  CG  LEU E   4     -59.207  -7.861 -53.859  1.00 32.83      E    C
ATOM  13372  CD1 LEU E   4     -58.353  -7.911 -55.149  1.00 32.18      E    C
ATOM  13376  CD2 LEU E   4     -60.540  -8.553 -54.048  1.00 36.85      E    C
ATOM  13380  C   LEU E   4     -58.309  -9.301 -50.340  1.00 33.96      E    C
ATOM  13381  O   LEU E   4     -57.135  -9.071 -50.219  1.00 34.26      E    O
ATOM  13383  N   VAL E   5     -58.929 -10.252 -49.649  1.00 34.28      E    N
ATOM  13384  CA  VAL E   5     -58.248 -11.046 -48.618  1.00 34.95      E    C
ATOM  13386  CB  VAL E   5     -58.878 -10.895 -47.194  1.00 31.02      E    C
ATOM  13388  CG1 VAL E   5     -58.141 -11.768 -46.200  1.00 28.68      E    C
ATOM  13392  CG2 VAL E   5     -58.848  -9.454 -46.720  1.00 31.26      E    C
ATOM  13396  C   VAL E   5     -58.296 -12.532 -48.995  1.00 37.33      E    C
ATOM  13397  O   VAL E   5     -59.363 -13.126 -49.091  1.00 38.82      E    O
ATOM  13399  N   GLN E   6     -57.120 -13.114 -49.184  1.00 37.55      E    N
ATOM  13400  CA  GLN E   6     -56.979 -14.507 -49.558  1.00 39.16      E    C
ATOM  13402  CB  GLN E   6     -55.794 -14.689 -50.517  1.00 40.52      E    C
ATOM  13405  CG  GLN E   6     -55.825 -13.787 -51.749  1.00 41.74      E    C
ATOM  13408  CD  GLN E   6     -54.664 -14.036 -52.692  1.00 40.20      E    C
ATOM  13409  OE1 GLN E   6     -53.956 -13.100 -53.082  1.00 39.12      E    O
ATOM  13410  NE2 GLN E   6     -54.453 -15.297 -53.054  1.00 36.14      E    N
ATOM  13413  C   GLN E   6     -56.739 -15.407 -48.352  1.00 41.39      E    C
ATOM  13414  O   GLN E   6     -56.237 -14.962 -47.312  1.00 35.75      E    O
ATOM  13416  N   SER E   7     -57.082 -16.686 -48.518  1.00 44.52      E    N
ATOM  13417  CA  SER E   7     -56.833 -17.711 -47.493  1.00 41.39      E    C
ATOM  13419  CB  SER E   7     -57.489 -19.049 -47.865  1.00 36.37      E    C
ATOM  13422  OG  SER E   7     -57.061 -19.518 -49.132  1.00 37.05      E    O
ATOM  13424  C   SER E   7     -55.337 -17.929 -47.280  1.00 41.57      E    C
ATOM  13425  O   SER E   7     -54.512 -17.532 -48.096  1.00 41.69      E    O
ATOM  13427  N   GLY E   8     -55.010 -18.576 -46.171  1.00 38.39      E    N
ATOM  13428  CA  GLY E   8     -53.647 -18.675 -45.703  1.00 39.31      E    C
ATOM  13431  C   GLY E   8     -52.834 -19.710 -46.447  1.00 39.41      E    C
ATOM  13432  O   GLY E   8     -53.330 -20.357 -47.353  1.00 39.94      E    O
ATOM  13434  N   PRO E   9     -51.573 -19.902 -46.033  1.00 39.61      E    N
ATOM  13435  CA  PRO E   9     -50.695 -20.808 -46.752  1.00 41.44      E    C
ATOM  13437  CB  PRO E   9     -49.338 -20.583 -46.088  1.00 37.79      E    C
ATOM  13440  CG  PRO E   9     -49.683 -20.197 -44.697  1.00 36.61      E    C
ATOM  13443  CD  PRO E   9     -50.914 -19.342 -44.841  1.00 37.92      E    C
ATOM  13446  C   PRO E   9     -51.129 -22.240 -46.553  1.00 44.28      E    C
ATOM  13447  O   PRO E   9     -51.708 -22.582 -45.515  1.00 45.48      E    O
ATOM  13448  N   GLU E  10     -50.866 -23.081 -47.533  1.00 45.85      E    N
ATOM  13449  CA  GLU E  10     -51.288 -24.456 -47.429  1.00 47.59      E    C
ATOM  13451  CB  GLU E  10     -52.607 -24.647 -48.194  1.00 52.54      E    C
ATOM  13454  CG  GLU E  10     -53.753 -25.246 -47.332  1.00 51.72      E    C
ATOM  13457  CD  GLU E  10     -55.122 -24.820 -47.802  1.00 54.66      E    C
ATOM  13458  OE1 GLU E  10     -55.343 -23.607 -47.970  1.00 58.66      E    O
ATOM  13459  OE2 GLU E  10     -55.996 -25.693 -47.988  1.00 65.00      E    O
ATOM  13460  C   GLU E  10     -50.212 -25.413 -47.910  1.00 46.47      E    C
ATOM  13461  O   GLU E  10     -49.461 -25.105 -48.811  1.00 47.48      E    O
ATOM  13463  N   LEU E  11     -50.128 -26.565 -47.249  1.00 48.51      E    N
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ATOM  13464  CA  LEU E  11     -49.214 -27.639 -47.621  1.00 47.17      E    C
ATOM  13466  CB  LEU E  11     -48.386 -28.086 -46.421  1.00 45.98      E    C
ATOM  13469  CG  LEU E  11     -47.540 -29.361 -46.543  1.00 46.65      E    C
ATOM  13471  CD1 LEU E  11     -46.432 -29.228 -47.563  1.00 37.22      E    C
ATOM  13475  CD2 LEU E  11     -46.968 -29.750 -45.170  1.00 46.81      E    C
ATOM  13479  C   LEU E  11     -50.086 -28.778 -48.101  1.00 46.40      E    C
ATOM  13480  O   LEU E  11     -51.034 -29.173 -47.408  1.00 41.34      E    O
ATOM  13482  N   LYS E  12     -49.797 -29.272 -49.303  1.00 46.11      E    N
ATOM  13483  CA  LYS E  12     -50.527 -30.395 -49.880  1.00 45.68      E    C
ATOM  13485  CB  LYS E  12     -51.424 -29.953 -51.050  1.00 46.97      E    C
ATOM  13488  CG  LYS E  12     -52.568 -29.013 -50.695  1.00 47.84      E    C
ATOM  13491  CD  LYS E  12     -53.666 -29.663 -49.862  1.00 45.72      E    C
ATOM  13494  CE  LYS E  12     -54.431 -28.600 -49.087  1.00 47.15      E    C
ATOM  13497  NZ  LYS E  12     -55.503 -29.135 -48.165  1.00 47.92      E    N
ATOM  13501  C   LYS E  12     -49.550 -31.430 -50.398  1.00 44.26      E    C
ATOM  13502  O   LYS E  12     -48.413 -31.122 -50.716  1.00 41.42      E    O
ATOM  13504  N   LYS E  13     -50.013 -32.666 -50.504  1.00 46.16      E    N
ATOM  13505  CA  LYS E  13     -49.193 -33.737 -51.057  1.00 50.28      E    C
ATOM  13507  CB  LYS E  13     -49.688 -35.116 -50.586  1.00 55.37      E    C
ATOM  13510  CG  LYS E  13     -49.123 -35.574 -49.256  1.00 56.41      E    C
ATOM  13513  CD  LYS E  13     -49.702 -36.917 -48.846  1.00 58.04      E    C
ATOM  13516  CE  LYS E  13     -49.045 -37.453 -47.562  1.00 60.39      E    C
ATOM  13519  NZ  LYS E  13     -48.989 -36.448 -46.447  1.00 61.47      E    N
ATOM  13523  C   LYS E  13     -49.260 -33.688 -52.568  1.00 46.18      E    C
ATOM  13524  O   LYS E  13     -50.227 -33.162 -53.116  1.00 43.96      E    O
ATOM  13526  N   PRO E  14     -48.240 -34.247 -53.254  1.00 47.11      E    N
ATOM  13527  CA  PRO E  14     -48.357 -34.377 -54.698  1.00 49.79      E    C
ATOM  13529  CB  PRO E  14     -47.088 -35.128 -55.100  1.00 48.49      E    C
ATOM  13532  CG  PRO E  14     -46.150 -34.899 -53.985  1.00 48.39      E    C
ATOM  13535  CD  PRO E  14     -46.969 -34.798 -52.764  1.00 47.34      E    C
ATOM  13538  C   PRO E  14     -49.570 -35.217 -55.046  1.00 51.77      E    C
ATOM  13539  O   PRO E  14     -49.924 -36.134 -54.304  1.00 52.60      E    O
ATOM  13540  N   GLY E  15     -50.229 -34.880 -56.146  1.00 51.94      E    N
ATOM  13541  CA  GLY E  15     -51.422 -35.599 -56.567  1.00 49.18      E    C
ATOM  13544  C   GLY E  15     -52.693 -35.054 -55.952  1.00 46.49      E    C
ATOM  13545  O   GLY E  15     -53.762 -35.240 -56.524  1.00 51.61      E    O
ATOM  13547  N   ALA E  16     -52.596 -34.382 -54.805  1.00 43.60      E    N
ATOM  13548  CA  ALA E  16     -53.766 -33.793 -54.152  1.00 44.63      E    C
ATOM  13550  CB  ALA E  16     -53.444 -33.465 -52.693  1.00 43.14      E    C
ATOM  13554  C   ALA E  16     -54.255 -32.550 -54.896  1.00 43.69      E    C
ATOM  13555  O   ALA E  16     -53.785 -32.248 -55.995  1.00 45.77      E    O
ATOM  13557  N   SER E  17     -55.217 -31.855 -54.298  1.00 42.60      E    N
ATOM  13558  CA  SER E  17     -55.806 -30.656 -54.877  1.00 46.80      E    C
ATOM  13560  CB  SER E  17     -57.174 -30.975 -55.480  1.00 49.34      E    C
ATOM  13563  OG  SER E  17     -58.176 -30.943 -54.484  1.00 50.37      E    O
ATOM  13565  C   SER E  17     -55.960 -29.585 -53.801  1.00 47.19      E    C
ATOM  13566  O   SER E  17     -56.084 -29.894 -52.606  1.00 44.07      E    O
ATOM  13568  N   VAL E  18     -55.975 -28.327 -54.227  1.00 45.21      E    N
ATOM  13569  CA  VAL E  18     -56.062 -27.215 -53.292  1.00 45.32      E    C
ATOM  13571  CB  VAL E  18     -54.651 -26.593 -53.050  1.00 38.35      E    C
ATOM  13573  CG1 VAL E  18     -54.118 -25.861 -54.299  1.00 32.99      E    C
ATOM  13577  CG2 VAL E  18     -54.664 -25.706 -51.834  1.00 44.01      E    C
ATOM  13581  C   VAL E  18     -57.083 -26.192 -53.792  1.00 46.11      E    C
ATOM  13582  O   VAL E  18     -57.322 -26.082 -54.995  1.00 38.85      E    O
ATOM  13584  N   LYS E  19     -57.708 -25.491 -52.849  1.00 50.11      E    N
ATOM  13585  CA  LYS E  19     -58.702 -24.478 -53.157  1.00 47.77      E    C
ATOM  13587  CB  LYS E  19     -60.083 -25.022 -52.796  1.00 53.98      E    C
ATOM  13590  CG  LYS E  19     -61.285 -24.318 -53.432  1.00 55.16      E    C
ATOM  13593  CD  LYS E  19     -62.047 -23.499 -52.394  1.00 62.22      E    C
ATOM  13596  CE  LYS E  19     -62.644 -24.338 -51.235  1.00 64.40      E    C
ATOM  13599  NZ  LYS E  19     -62.332 -23.735 -49.892  1.00 64.90      E    N
ATOM  13603  C   LYS E  19     -58.367 -23.188 -52.397  1.00 44.25      E    C
ATOM  13604  O   LYS E  19     -58.426 -23.141 -51.173  1.00 43.85      E    O
ATOM  13606  N   VAL E  20     -57.974 -22.162 -53.149  1.00 43.55      E    N
ATOM  13607  CA  VAL E  20     -57.590 -20.853 -52.607  1.00 42.50      E    C
ATOM  13609  CB  VAL E  20     -56.334 -20.287 -53.381  1.00 38.25      E    C
ATOM  13611  CG1 VAL E  20     -55.985 -18.853 -52.946  1.00 37.69      E    C
ATOM  13615  CG2 VAL E  20     -55.131 -21.222 -53.201  1.00 36.25      E    C
ATOM  13619  C   VAL E  20     -58.785 -19.908 -52.734  1.00 41.32      E    C
ATOM  13620  O   VAL E  20     -59.469 -19.902 -53.746  1.00 41.59      E    O
ATOM  13622  N   SER E  21     -59.031 -19.125 -51.695  1.00 43.17      E    N
ATOM  13623  CA  SER E  21     -60.142 -18.201 -51.670  1.00 41.18      E    C
ATOM  13625  CB  SER E  21     -60.872 -18.351 -50.342  1.00 45.86      E    C
ATOM  13628  OG  SER E  21     -60.096 -17.787 -49.293  1.00 51.53      E    O
ATOM  13630  C   SER E  21     -59.642 -16.766 -51.803  1.00 42.70      E    C
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ATOM  13631  O   SER E  21     -58.568 -16.428 -51.317  1.00 40.78      E    O
ATOM  13633  N   CYS E  22     -60.439 -15.934 -52.466  1.00 42.67      E    N
ATOM  13634  CA  CYS E  22     -60.185 -14.507 -52.559  1.00 40.27      E    C
ATOM  13636  CB  CYS E  22     -59.581 -14.147 -53.932  1.00 38.82      E    C
ATOM  13639  SG  CYS E  22     -59.393 -12.382 -54.222  1.00 36.53      E    S
ATOM  13641  C   CYS E  22     -61.505 -13.783 -52.274  1.00 37.98      E    C
ATOM  13642  O   CYS E  22     -62.374 -13.661 -53.144  1.00 37.54      E    O
ATOM  13644  N   LYS E  23     -61.657 -13.365 -51.025  1.00 40.50      E    N
ATOM  13645  CA  LYS E  23     -62.840 -12.658 -50.559  1.00 43.95      E    C
ATOM  13647  CB  LYS E  23     -63.102 -12.950 -49.074  1.00 47.50      E    C
ATOM  13650  CG  LYS E  23     -64.177 -12.066 -48.464  1.00 46.67      E    C
ATOM  13653  CD  LYS E  23     -65.039 -12.794 -47.461  1.00 50.56      E    C
ATOM  13656  CE  LYS E  23     -66.204 -11.895 -47.003  1.00 52.57      E    C
ATOM  13659  NZ  LYS E  23     -67.430 -12.089 -47.848  1.00 53.40      E    N
ATOM  13663  C   LYS E  23     -62.693 -11.158 -50.790  1.00 41.62      E    C
ATOM  13664  O   LYS E  23     -61.756 -10.536 -50.291  1.00 41.16      E    O
ATOM  13666  N   ALA E  24     -63.658 -10.598 -51.516  1.00 39.43      E    N
ATOM  13667  CA  ALA E  24     -63.675  -9.200 -51.891  1.00 37.97      E    C
ATOM  13669  CB  ALA E  24     -64.116  -9.069 -53.341  1.00 34.62      E    C
ATOM  13673  C   ALA E  24     -64.624  -8.411 -51.000  1.00 37.99      E    C
ATOM  13674  O   ALA E  24     -65.722  -8.866 -50.693  1.00 36.02      E    O
ATOM  13676  N   SER E  25     -64.212  -7.207 -50.625  1.00 41.15      E    N
ATOM  13677  CA  SER E  25     -65.062  -6.290 -49.878  1.00 40.65      E    C
ATOM  13679  CB  SER E  25     -64.798  -6.446 -48.380  1.00 44.29      E    C
ATOM  13682  OG  SER E  25     -63.579  -5.834 -47.993  1.00 48.10      E    O
ATOM  13684  C   SER E  25     -64.824  -4.832 -50.302  1.00 39.08      E    C
ATOM  13685  O   SER E  25     -63.750  -4.501 -50.832  1.00 36.29      E    O
ATOM  13687  N   GLY E  26     -65.840  -3.984 -50.082  1.00 39.38      E    N
ATOM  13688  CA  GLY E  26     -65.745  -2.548 -50.318  1.00 38.43      E    C
ATOM  13691  C   GLY E  26     -66.167  -2.099 -51.693  1.00 39.54      E    C
ATOM  13692  O   GLY E  26     -65.964  -0.938 -52.041  1.00 43.17      E    O
ATOM  13694  N   TYR E  27     -66.772  -3.000 -52.468  1.00 36.40      E    N
ATOM  13695  CA  TYR E  27     -67.205  -2.681 -53.822  1.00 35.01      E    C
ATOM  13697  CB  TYR E  27     -65.956  -2.575 -54.714  1.00 25.41      E    C
ATOM  13700  CG  TYR E  27     -65.252  -3.887 -55.019  1.00 24.34      E    C
ATOM  13701  CD1 TYR E  27     -65.558  -4.589 -56.175  1.00 20.77      E    C
ATOM  13703  CE1 TYR E  27     -64.948  -5.761 -56.489  1.00 17.10      E    C
ATOM  13705  CZ  TYR E  27     -64.000  -6.287 -55.671  1.00 23.27      E    C
ATOM  13706  OH  TYR E  27     -63.441  -7.492 -56.061  1.00 24.75      E    O
ATOM  13708  CE2 TYR E  27     -63.627  -5.616 -54.496  1.00 26.15      E    C
ATOM  13710  CD2 TYR E  27     -64.267  -4.410 -54.177  1.00 27.15      E    C
ATOM  13712  C   TYR E  27     -68.187  -3.757 -54.273  1.00 34.60      E    C
ATOM  13713  O   TYR E  27     -68.331  -4.753 -53.585  1.00 31.39      E    O
ATOM  13715  N   THR E  28     -68.871  -3.545 -55.398  1.00 38.91      E    N
ATOM  13716  CA  THR E  28     -69.801  -4.516 -55.936  1.00 37.01      E    C
ATOM  13718  CB  THR E  28     -70.799  -3.829 -56.830  1.00 39.03      E    C
ATOM  13720  OG1 THR E  28     -71.411  -2.777 -56.083  1.00 39.54      E    O
ATOM  13722  CG2 THR E  28     -71.879  -4.823 -57.334  1.00 36.14      E    C
ATOM  13726  C   THR E  28     -69.021  -5.579 -56.691  1.00 37.90      E    C
ATOM  13727  O   THR E  28     -68.485  -5.349 -57.774  1.00 38.21      E    O
ATOM  13729  N   PHE E  29     -68.976  -6.755 -56.097  1.00 39.24      E    N
ATOM  13730  CA  PHE E  29     -68.215  -7.892 -56.598  1.00 38.41      E    C
ATOM  13732  CB  PHE E  29     -68.560  -9.086 -55.702  1.00 39.58      E    C
ATOM  13735  CG  PHE E  29     -67.725 -10.304 -55.940  1.00 38.46      E    C
ATOM  13736  CD1 PHE E  29     -66.421 -10.344 -55.524  1.00 36.15      E    C
ATOM  13738  CE1 PHE E  29     -65.657 -11.467 -55.730  1.00 37.54      E    C
ATOM  13740  CZ  PHE E  29     -66.201 -12.571 -56.348  1.00 38.88      E    C
ATOM  13742  CE2 PHE E  29     -67.517 -12.551 -56.749  1.00 38.77      E    C
ATOM  13744  CD2 PHE E  29     -68.270 -11.431 -56.549  1.00 36.53      E    C
ATOM  13746  C   PHE E  29     -68.431  -8.200 -58.096  1.00 38.36      E    C
ATOM  13747  O   PHE E  29     -67.487  -8.553 -58.798  1.00 36.25      E    O
ATOM  13749  N   THR E  30     -69.646  -8.016 -58.585  1.00 38.97      E    N
ATOM  13750  CA  THR E  30     -70.011  -8.370 -59.961  1.00 36.89      E    C
ATOM  13752  CB  THR E  30     -71.480  -8.813 -59.965  1.00 40.53      E    C
ATOM  13754  OG1 THR E  30     -71.623  -9.967 -59.115  1.00 35.48      E    O
ATOM  13756  CG2 THR E  30     -71.937  -9.180 -61.370  1.00 45.26      E    C
ATOM  13760  C   THR E  30     -69.721  -7.275 -61.004  1.00 34.69      E    C
ATOM  13761  O   THR E  30     -69.822  -7.521 -62.201  1.00 37.13      E    O
ATOM  13763  N   ASN E  31     -69.333  -6.084 -60.543  1.00 35.68      E    N
ATOM  13764  CA  ASN E  31     -68.880  -4.977 -61.420  1.00 37.12      E    C
ATOM  13766  CB  ASN E  31     -68.801  -3.657 -60.636  1.00 39.22      E    C
ATOM  13769  CG  ASN E  31     -70.170  -3.011 -60.364  1.00 41.42      E    C
ATOM  13770  OD1 ASN E  31     -71.235  -3.544 -60.725  1.00 35.04      E    O
ATOM  13771  ND2 ASN E  31     -70.126  -1.828 -59.716  1.00 34.94      E    N
ATOM  13774  C   ASN E  31     -67.485  -5.161 -62.023  1.00 33.52      E    C
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ATOM  13775  O   ASN E  31     -67.151  -4.549 -63.025  1.00 32.44      E    O
ATOM  13777  N   TYR E  32     -66.668  -5.981 -61.382  1.00 35.12      E    N
ATOM  13778  CA  TYR E  32     -65.281  -6.185 -61.779  1.00 35.69      E    C
ATOM  13780  CB  TYR E  32     -64.302  -5.585 -60.741  1.00 35.46      E    C
ATOM  13783  CG  TYR E  32     -64.455  -4.113 -60.437  1.00 35.64      E    C
ATOM  13784  CD1 TYR E  32     -63.585  -3.172 -60.983  1.00 34.14      E    C
ATOM  13786  CE1 TYR E  32     -63.733  -1.821 -60.700  1.00 34.43      E    C
ATOM  13788  CZ  TYR E  32     -64.758  -1.403 -59.874  1.00 35.69      E    C
ATOM  13789  OH  TYR E  32     -64.915  -0.066 -59.579  1.00 36.30      E    O
ATOM  13791  CE2 TYR E  32     -65.631  -2.316 -59.326  1.00 35.97      E    C
ATOM  13793  CD2 TYR E  32     -65.466  -3.662 -59.593  1.00 36.28      E    C
ATOM  13795  C   TYR E  32     -64.983  -7.662 -61.799  1.00 34.94      E    C
ATOM  13796  O   TYR E  32     -65.315  -8.359 -60.834  1.00 35.31      E    O
ATOM  13798  N   GLY E  33     -64.310  -8.134 -62.844  1.00 36.76      E    N
ATOM  13799  CA  GLY E  33     -63.832  -9.514 -62.868  1.00 33.85      E    C
ATOM  13802  C   GLY E  33     -62.684  -9.738 -61.909  1.00 33.55      E    C
ATOM  13803  O   GLY E  33     -62.289  -8.834 -61.185  1.00 35.55      E    O
ATOM  13805  N   MET E  34     -62.146 -10.952 -61.901  1.00 31.83      E    N
ATOM  13806  CA  MET E  34     -61.020 -11.293 -61.033  1.00 32.44      E    C
ATOM  13808  CB  MET E  34     -61.472 -12.138 -59.836  1.00 29.60      E    C
ATOM  13811  CG  MET E  34     -60.467 -12.219 -58.665  1.00 29.01      E    C
ATOM  13814  SD  MET E  34     -60.198 -10.681 -57.740  1.00 25.71      E    S
ATOM  13815  CE  MET E  34     -61.691 -10.621 -56.742  1.00 22.59      E    C
ATOM  13819  C   MET E  34     -59.957 -12.026 -61.830  1.00 32.14      E    C
ATOM  13820  O   MET E  34     -60.250 -13.050 -62.456  1.00 32.73      E    O
ATOM  13822  N   ASN E  35     -58.733 -11.473 -61.826  1.00 29.81      E    N
ATOM  13823  CA  ASN E  35     -57.575 -12.123 -62.455  1.00 30.69      E    C
ATOM  13825  CB  ASN E  35     -56.557 -11.088 -62.949  1.00 32.42      E    C
ATOM  13828  CG  ASN E  35     -57.154 -10.075 -63.892  1.00 28.96      E    C
ATOM  13829  OD1 ASN E  35     -58.179 -10.327 -64.537  1.00 27.19      E    O
ATOM  13830  ND2 ASN E  35     -56.498  -8.925 -64.004  1.00 20.76      E    N
ATOM  13833  C   ASN E  35     -56.890 -13.012 -61.449  1.00 28.73      E    C
ATOM  13834  O   ASN E  35     -56.956 -12.765 -60.258  1.00 29.20      E    O
ATOM  13836  N   TRP E  36     -56.234 -14.060 -61.926  1.00 33.58      E    N
ATOM  13837  CA  TRP E  36     -55.384 -14.908 -61.077  1.00 32.08      E    C
ATOM  13839  CB  TRP E  36     -55.909 -16.347 -61.017  1.00 33.67      E    C
ATOM  13842  CG  TRP E  36     -57.120 -16.447 -60.132  1.00 34.71      E    C
ATOM  13843  CD1 TRP E  36     -58.410 -16.360 -60.523  1.00 34.27      E    C
ATOM  13845  NE1 TRP E  36     -59.238 -16.466 -59.447  1.00 35.55      E    N
ATOM  13847  CE2 TRP E  36     -58.489 -16.601 -58.310  1.00 36.20      E    C
ATOM  13848  CD2 TRP E  36     -57.139 -16.588 -58.703  1.00 35.79      E    C
ATOM  13849  CE3 TRP E  36     -56.144 -16.716 -57.721  1.00 35.42      E    C
ATOM  13851  CZ3 TRP E  36     -56.532 -16.854 -56.387  1.00 34.73      E    C
ATOM  13853  CH2 TRP E  36     -57.897 -16.864 -56.021  1.00 36.73      E    C
ATOM  13855  CZ2 TRP E  36     -58.888 -16.734 -56.965  1.00 35.58      E    C
ATOM  13857  C   TRP E  36     -53.969 -14.878 -61.607  1.00 31.47      E    C
ATOM  13858  O   TRP E  36     -53.750 -15.026 -62.802  1.00 33.33      E    O
ATOM  13860  N   VAL E  37     -53.009 -14.694 -60.705  1.00 35.00      E    N
ATOM  13861  CA  VAL E  37     -51.603 -14.617 -61.076  1.00 32.67      E    C
ATOM  13863  CB  VAL E  37     -51.080 -13.168 -61.011  1.00 34.65      E    C
ATOM  13865  CG1 VAL E  37     -49.576 -13.112 -61.283  1.00 23.13      E    C
ATOM  13869  CG2 VAL E  37     -51.870 -12.272 -62.000  1.00 31.91      E    C
ATOM  13873  C   VAL E  37     -50.790 -15.531 -60.172  1.00 34.05      E    C
ATOM  13874  O   VAL E  37     -51.061 -15.647 -58.990  1.00 31.60      E    O
ATOM  13876  N   ARG E  38     -49.795 -16.183 -60.762  1.00 35.67      E    N
ATOM  13877  CA  ARG E  38     -48.882 -17.083 -60.062  1.00 35.50      E    C
ATOM  13879  CB  ARG E  38     -48.797 -18.370 -60.829  1.00 39.19      E    C
ATOM  13882  CG  ARG E  38     -48.263 -19.496 -60.063  1.00 41.34      E    C
ATOM  13885  CD  ARG E  38     -48.182 -20.692 -60.961  1.00 40.57      E    C
ATOM  13888  NE  ARG E  38     -46.834 -20.908 -61.413  1.00 42.44      E    N
ATOM  13890  CZ  ARG E  38     -46.381 -22.054 -61.911  1.00 51.83      E    C
ATOM  13891  NH1 ARG E  38     -47.211 -23.098 -62.053  1.00 54.55      E    N
ATOM  13894  NH2 ARG E  38     -45.089 -22.153 -62.272  1.00 48.12      E    N
ATOM  13897  C   ARG E  38     -47.479 -16.517 -60.043  1.00 33.86      E    C
ATOM  13898  O   ARG E  38     -47.053 -15.886 -61.014  1.00 29.58      E    O
ATOM  13900  N   GLN E  39     -46.776 -16.753 -58.934  1.00 32.55      E    N
ATOM  13901  CA  GLN E  39     -45.352 -16.519 -58.852  1.00 33.04      E    C
ATOM  13903  CB  GLN E  39     -45.069 -15.167 -58.217  1.00 34.40      E    C
ATOM  13906  CG  GLN E  39     -43.617 -14.765 -58.296  1.00 30.44      E    C
ATOM  13909  CD  GLN E  39     -43.397 -13.337 -57.918  1.00 28.61      E    C
ATOM  13910  OE1 GLN E  39     -44.069 -12.829 -57.035  1.00 30.50      E    O
ATOM  13911  NE2 GLN E  39     -42.457 -12.654 -58.611  1.00 27.68      E    N
ATOM  13914  C   GLN E  39     -44.621 -17.659 -58.109  1.00 36.74      E    C
ATOM  13915  O   GLN E  39     -44.648 -17.766 -56.882  1.00 38.72      E    O
ATOM  13917  N   ALA E  40     -43.961 -18.506 -58.891  1.00 38.76      E    N
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ATOM  13918  CA  ALA E  40     -43.091 -19.528 -58.359  1.00 39.86      E    C
ATOM  13920  CB  ALA E  40     -42.646 -20.466 -59.490  1.00 37.02      E    C
ATOM  13924  C   ALA E  40     -41.883 -18.865 -57.696  1.00 43.43      E    C
ATOM  13925  O   ALA E  40     -41.495 -17.746 -58.088  1.00 43.41      E    O
ATOM  13927  N   PRO E  41     -41.271 -19.548 -56.701  1.00 44.36      E    N
ATOM  13928  CA  PRO E  41     -40.203 -18.925 -55.882  1.00 48.11      E    C
ATOM  13930  CB  PRO E  41     -39.744 -20.068 -54.956  1.00 44.72      E    C
ATOM  13933  CG  PRO E  41     -40.878 -21.027 -54.942  1.00 43.71      E    C
ATOM  13936  CD  PRO E  41     -41.529 -20.939 -56.289  1.00 43.43      E    C
ATOM  13939  C   PRO E  41     -39.021 -18.392 -56.701  1.00 47.21      E    C
ATOM  13940  O   PRO E  41     -38.340 -19.161 -57.385  1.00 47.25      E    O
ATOM  13941  N   GLY E  42     -38.800 -17.082 -56.631  1.00 48.31      E    N
ATOM  13942  CA  GLY E  42     -37.699 -16.448 -57.356  1.00 49.39      E    C
ATOM  13945  C   GLY E  42     -37.946 -16.233 -58.841  1.00 51.01      E    C
ATOM  13946  O   GLY E  42     -37.054 -15.788 -59.560  1.00 54.21      E    O
ATOM  13948  N   GLN E  43     -39.154 -16.532 -59.308  1.00 48.15      E    N
ATOM  13949  CA  GLN E  43     -39.475 -16.409 -60.720  1.00 43.81      E    C
ATOM  13951  CB  GLN E  43     -40.217 -17.649 -61.220  1.00 52.72      E    C
ATOM  13954  CG  GLN E  43     -39.607 -18.984 -60.817  1.00 59.84      E    C
ATOM  13957  CD  GLN E  43     -38.241 -19.191 -61.403  1.00 63.71      E    C
ATOM  13958  OE1 GLN E  43     -38.092 -19.854 -62.427  1.00 71.25      E    O
ATOM  13959  NE2 GLN E  43     -37.229 -18.612 -60.771  1.00 63.85      E    N
ATOM  13962  C   GLN E  43     -40.345 -15.171 -60.945  1.00 40.18      E    C
ATOM  13963  O   GLN E  43     -40.694 -14.446 -59.990  1.00 39.51      E    O
ATOM  13965  N   GLY E  44     -40.702 -14.955 -62.209  1.00 34.84      E    N
ATOM  13966  CA  GLY E  44     -41.557 -13.858 -62.592  1.00 34.89      E    C
ATOM  13969  C   GLY E  44     -43.035 -14.087 -62.383  1.00 34.33      E    C
ATOM  13970  O   GLY E  44     -43.468 -15.183 -62.043  1.00 37.50      E    O
ATOM  13972  N   LEU E  45     -43.808 -13.030 -62.594  1.00 33.83      E    N
ATOM  13973  CA  LEU E  45     -45.251 -13.091 -62.518  1.00 32.37      E    C
ATOM  13975  CB  LEU E  45     -45.803 -11.672 -62.378  1.00 29.21      E    C
ATOM  13978  CG  LEU E  45     -45.415 -10.876 -61.111  1.00 28.09      E    C
ATOM  13980  CD1 LEU E  45     -45.797  -9.413 -61.285  1.00 22.70      E    C
ATOM  13984  CD2 LEU E  45     -46.057 -11.451 -59.831  1.00 26.91      E    C
ATOM  13988  C   LEU E  45     -45.833 -13.792 -63.771  1.00 31.87      E    C
ATOM  13989  O   LEU E  45     -45.308 -13.637 -64.875  1.00 32.32      E    O
ATOM  13991  N   GLU E  46     -46.888 -14.582 -63.577  1.00 35.22      E    N
ATOM  13992  CA  GLU E  46     -47.545 -15.340 -64.656  1.00 35.71      E    C
ATOM  13994  CB  GLU E  46     -47.256 -16.825 -64.570  1.00 36.76      E    C
ATOM  13997  CG  GLU E  46     -45.813 -17.201 -64.505  1.00 45.66      E    C
ATOM  14000  CD  GLU E  46     -45.639 -18.701 -64.351  1.00 46.79      E    C
ATOM  14001  OE1 GLU E  46     -45.417 -19.156 -63.208  1.00 47.33      E    O
ATOM  14002  OE2 GLU E  46     -45.757 -19.418 -65.369  1.00 51.41      E    O
ATOM  14003  C   GLU E  46     -49.055 -15.179 -64.572  1.00 34.79      E    C
ATOM  14004  O   GLU E  46     -49.676 -15.617 -63.610  1.00 31.02      E    O
ATOM  14006  N   TRP E  47     -49.625 -14.548 -65.593  1.00 31.92      E    N
ATOM  14007  CA  TRP E  47     -51.047 -14.326 -65.682  1.00 34.58      E    C
ATOM  14009  CB  TRP E  47     -51.324 -13.261 -66.748  1.00 32.25      E    C
ATOM  14012  CG  TRP E  47     -52.610 -12.501 -66.577  1.00 29.02      E    C
ATOM  14013  CD1 TRP E  47     -52.798 -11.361 -65.869  1.00 29.34      E    C
ATOM  14015  NE1 TRP E  47     -54.106 -10.964 -65.942  1.00 29.66      E    N
ATOM  14017  CE2 TRP E  47     -54.794 -11.859 -66.713  1.00 31.39      E    C
ATOM  14018  CD2 TRP E  47     -53.876 -12.843 -67.132  1.00 30.81      E    C
ATOM  14019  CE3 TRP E  47     -54.327 -13.886 -67.955  1.00 29.84      E    C
ATOM  14021  CZ3 TRP E  47     -55.651 -13.907 -68.330  1.00 30.31      E    C
ATOM  14023  CH2 TRP E  47     -56.549 -12.912 -67.904  1.00 29.93      E    C
ATOM  14025  CZ2 TRP E  47     -56.142 -11.883 -67.090  1.00 32.54      E    C
ATOM  14027  C   TRP E  47     -51.729 -15.694 -65.991  1.00 35.86      E    C
ATOM  14028  O   TRP E  47     -51.517 -16.296 -67.042  1.00 34.65      E    O
ATOM  14030  N   MET E  48     -52.501 -16.191 -65.029  1.00 33.14      E    N
ATOM  14031  CA  MET E  48     -53.079 -17.528 -65.124  1.00 36.95      E    C
ATOM  14033  CB  MET E  48     -53.347 -18.079 -63.727  1.00 38.46      E    C
ATOM  14036  CG  MET E  48     -52.102 -18.358 -62.904  1.00 37.63      E    C
ATOM  14039  SD  MET E  48     -52.536 -18.897 -61.248  1.00 37.21      E    S
ATOM  14040  CE  MET E  48     -53.515 -20.373 -61.557  1.00 37.28      E    C
ATOM  14044  C   MET E  48     -54.380 -17.529 -65.924  1.00 37.69      E    C
ATOM  14045  O   MET E  48     -54.620 -18.399 -66.769  1.00 38.59      E    O
ATOM  14047  N   GLY E  49     -55.232 -16.554 -65.631  1.00 37.63      E    N
ATOM  14048  CA  GLY E  49     -56.505 -16.436 -66.305  1.00 39.08      E    C
ATOM  14051  C   GLY E  49     -57.382 -15.400 -65.640  1.00 37.95      E    C
ATOM  14052  O   GLY E  49     -56.974 -14.766 -64.670  1.00 37.07      E    O
ATOM  14054  N   TRP E  50     -58.595 -15.243 -66.161  1.00 38.55      E    N
ATOM  14055  CA  TRP E  50     -59.601 -14.422 -65.491  1.00 39.15      E    C
ATOM  14057  CB  TRP E  50     -59.710 -13.054 -66.151  1.00 34.89      E    C
ATOM  14060  CG  TRP E  50     -60.967 -12.738 -66.833  1.00 34.40      E    C
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ATOM  14061  CD1 TRP E  50     -61.572 -13.464 -67.800  1.00 35.08      E    C
ATOM  14063  NE1 TRP E  50     -62.717 -12.835 -68.215  1.00 34.51      E    N
ATOM  14065  CE2 TRP E  50     -62.860 -11.659 -67.532  1.00 32.07      E    C
ATOM  14066  CD2 TRP E  50     -61.760 -11.555 -66.657  1.00 32.86      E    C
ATOM  14067  CE3 TRP E  50     -61.651 -10.426 -65.841  1.00 33.83      E    C
ATOM  14069  CZ3 TRP E  50     -62.641  -9.443 -65.931  1.00 35.21      E    C
ATOM  14071  CH2 TRP E  50     -63.732  -9.583 -66.814  1.00 33.73      E    C
ATOM  14073  CZ2 TRP E  50     -63.851 -10.672 -67.627  1.00 31.82      E    C
ATOM  14075  C   TRP E  50     -60.950 -15.152 -65.355  1.00 38.83      E    C
ATOM  14076  O   TRP E  50     -61.256 -16.076 -66.110  1.00 35.65      E    O
ATOM  14078  N   ILE E  51     -61.719 -14.771 -64.346  1.00 37.21      E    N
ATOM  14079  CA  ILE E  51     -63.109 -15.194 -64.253  1.00 38.56      E    C
ATOM  14081  CB  ILE E  51     -63.431 -16.063 -62.978  1.00 36.74      E    C
ATOM  14083  CG1 ILE E  51     -64.901 -16.524 -63.007  1.00 33.01      E    C
ATOM  14086  CD1 ILE E  51     -65.224 -17.695 -62.095  1.00 31.78      E    C
ATOM  14090  CG2 ILE E  51     -63.142 -15.299 -61.684  1.00 34.92      E    C
ATOM  14094  C   ILE E  51     -63.990 -13.947 -64.291  1.00 38.32      E    C
ATOM  14095  O   ILE E  51     -63.770 -13.008 -63.523  1.00 35.84      E    O
ATOM  14097  N   ASN E  52     -64.983 -13.941 -65.181  1.00 38.12      E    N
ATOM  14098  CA  ASN E  52     -65.980 -12.878 -65.179  1.00 35.83      E    C
ATOM  14100  CB  ASN E  52     -66.668 -12.781 -66.541  1.00 29.70      E    C
ATOM  14103  CG  ASN E  52     -67.566 -11.561 -66.667  1.00 27.49      E    C
ATOM  14104  OD1 ASN E  52     -68.252 -11.190 -65.722  1.00 22.69      E    O
ATOM  14105  ND2 ASN E  52     -67.604 -10.966 -67.863  1.00 20.79      E    N
ATOM  14108  C   ASN E  52     -66.953 -13.160 -64.033  1.00 35.19      E    C
ATOM  14109  O   ASN E  52     -67.612 -14.181 -64.028  1.00 31.67      E    O
ATOM  14111  N   THR E  53     -66.992 -12.259 -63.051  1.00 38.64      E    N
ATOM  14112  CA  THR E  53     -67.800 -12.417 -61.827  1.00 37.57      E    C
ATOM  14114  CB  THR E  53     -67.331 -11.467 -60.694  1.00 36.19      E    C
ATOM  14116  OG1 THR E  53     -67.376 -10.111 -61.158  1.00 33.71      E    O
ATOM  14118  CG2 THR E  53     -65.930 -11.815 -60.219  1.00 34.51      E    C
ATOM  14122  C   THR E  53     -69.279 -12.120 -62.009  1.00 38.16      E    C
ATOM  14123  O   THR E  53     -70.088 -12.383 -61.115  1.00 39.37      E    O
ATOM  14125  N   TYR E  54     -69.622 -11.558 -63.160  1.00 38.22      E    N
ATOM  14126  CA  TYR E  54     -71.004 -11.268 -63.516  1.00 36.95      E    C
ATOM  14128  CB  TYR E  54     -70.979 -10.053 -64.449  1.00 32.64      E    C
ATOM  14131  CG  TYR E  54     -72.284  -9.346 -64.620  1.00 30.68      E    C
ATOM  14132  CD1 TYR E  54     -72.566  -8.180 -63.922  1.00 28.96      E    C
ATOM  14134  CE1 TYR E  54     -73.763  -7.524 -64.090  1.00 32.48      E    C
ATOM  14136  CZ  TYR E  54     -74.698  -8.037 -64.970  1.00 34.50      E    C
ATOM  14137  OH  TYR E  54     -75.895  -7.408 -65.164  1.00 32.98      E    O
ATOM  14139  CE2 TYR E  54     -74.435  -9.191 -65.674  1.00 33.89      E    C
ATOM  14141  CD2 TYR E  54     -73.228  -9.828 -65.505  1.00 31.33      E    C
ATOM  14143  C   TYR E  54     -71.636 -12.491 -64.187  1.00 40.31      E    C
ATOM  14144  O   TYR E  54     -72.758 -12.895 -63.883  1.00 41.56      E    O
ATOM  14146  N   THR E  55     -70.843 -13.096 -65.053  1.00 40.75      E    N
ATOM  14147  CA  THR E  55     -71.260 -14.030 -66.054  1.00 39.42      E    C
ATOM  14149  CB  THR E  55     -70.686 -13.427 -67.349  1.00 37.28      E    C
ATOM  14151  OG1 THR E  55     -71.717 -12.662 -67.976  1.00 36.16      E    O
ATOM  14153  CG2 THR E  55     -70.105 -14.426 -68.269  1.00 37.74      E    C
ATOM  14157  C   THR E  55     -70.787 -15.458 -65.774  1.00 41.06      E    C
ATOM  14158  O   THR E  55     -71.422 -16.415 -66.217  1.00 43.21      E    O
ATOM  14160  N   GLY E  56     -69.692 -15.594 -65.031  1.00 39.93      E    N
ATOM  14161  CA  GLY E  56     -69.137 -16.896 -64.665  1.00 38.10      E    C
ATOM  14164  C   GLY E  56     -68.187 -17.446 -65.707  1.00 39.53      E    C
ATOM  14165  O   GLY E  56     -67.524 -18.451 -65.475  1.00 41.84      E    O
ATOM  14167  N   GLU E  57     -68.130 -16.786 -66.861  1.00 40.67      E    N
ATOM  14168  CA  GLU E  57     -67.199 -17.125 -67.922  1.00 40.79      E    C
ATOM  14170  CB  GLU E  57     -67.318 -16.118 -69.071  1.00 42.40      E    C
ATOM  14173  CG  GLU E  57     -68.354 -16.423 -70.128  1.00 47.09      E    C
ATOM  14176  CD  GLU E  57     -68.694 -15.208 -70.987  1.00 50.01      E    C
ATOM  14177  OE1 GLU E  57     -68.335 -14.072 -70.595  1.00 53.87      E    O
ATOM  14178  OE2 GLU E  57     -69.343 -15.385 -72.045  1.00 54.80      E    O
ATOM  14179  C   GLU E  57     -65.774 -17.050 -67.411  1.00 40.71      E    C
ATOM  14180  O   GLU E  57     -65.450 -16.215 -66.566  1.00 37.71      E    O
ATOM  14182  N   THR E  58     -64.924 -17.894 -67.978  1.00 40.47      E    N
ATOM  14183  CA  THR E  58     -63.537 -18.002 -67.579  1.00 40.12      E    C
ATOM  14185  CB  THR E  58     -63.311 -19.280 -66.757  1.00 38.93      E    C
ATOM  14187  OG1 THR E  58     -64.019 -20.356 -67.382  1.00 40.84      E    O
ATOM  14189  CG2 THR E  58     -63.813 -19.100 -65.311  1.00 29.97      E    C
ATOM  14193  C   THR E  58     -62.671 -18.019 -68.823  1.00 42.78      E    C
ATOM  14194  O   THR E  58     -63.108 -18.459 -69.890  1.00 40.66      E    O
ATOM  14196  N   THR E  59     -61.456 -17.495 -68.686  1.00 43.90      E    N
ATOM  14197  CA  THR E  59     -60.461 -17.536 -69.756  1.00 40.41      E    C
ATOM  14199  CB  THR E  59     -60.464 -16.216 -70.519  1.00 38.26      E    C
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ATOM	14201	OG1	THR	E	59	-61.819	-15.874	-70.846	1.00	36.03	E	O
ATOM	14203	CG2	THR	E	59	-59.610	-16.295	-71.791	1.00	35.03	E	C
ATOM	14207	C	THR	E	59	-59.097	-17.815	-69.137	1.00	42.26	E	C
ATOM	14208	O	THR	E	59	-58.681	-17.143	-68.207	1.00	44.61	E	O
ATOM	14210	N	TYR	E	60	-58.430	-18.835	-69.658	1.00	42.47	E	N
ATOM	14211	CA	TYR	E	60	-57.203	-19.340	-69.106	1.00	41.09	E	C
ATOM	14213	CB	TYR	E	60	-57.359	-20.838	-68.858	1.00	32.73	E	C
ATOM	14216	CG	TYR	E	60	-58.420	-21.158	-67.841	1.00	31.44	E	C
ATOM	14217	CD1	TYR	E	60	-58.151	-21.060	-66.484	1.00	26.72	E	C
ATOM	14219	CE1	TYR	E	60	-59.123	-21.340	-65.539	1.00	29.46	E	C
ATOM	14221	CZ	TYR	E	60	-60.374	-21.734	-65.942	1.00	29.17	E	C
ATOM	14222	OH	TYR	E	60	-61.311	-21.995	-65.000	1.00	29.82	E	O
ATOM	14224	CE2	TYR	E	60	-60.687	-21.834	-67.290	1.00	31.69	E	C
ATOM	14226	CD2	TYR	E	60	-59.706	-21.553	-68.237	1.00	31.73	E	C
ATOM	14228	C	TYR	E	60	-56.075	-19.097	-70.094	1.00	43.64	E	C
ATOM	14229	O	TYR	E	60	-56.258	-19.299	-71.303	1.00	48.36	E	O
ATOM	14231	N	ALA	E	61	-54.925	-18.650	-69.581	1.00	39.60	E	N
ATOM	14232	CA	ALA	E	61	-53.681	-18.671	-70.338	1.00	44.30	E	C
ATOM	14234	CB	ALA	E	61	-52.512	-18.100	-69.495	1.00	41.20	E	C
ATOM	14238	C	ALA	E	61	-53.399	-20.117	-70.740	1.00	43.61	E	C
ATOM	14239	O	ALA	E	61	-53.798	-21.023	-70.030	1.00	42.09	E	O
ATOM	14241	N	ASP	E	62	-52.707	-20.312	-71.866	1.00	47.34	E	N
ATOM	14242	CA	ASP	E	62	-52.482	-21.646	-72.448	1.00	49.74	E	C
ATOM	14244	CB	ASP	E	62	-51.625	-21.567	-73.709	1.00	53.16	E	C
ATOM	14247	CG	ASP	E	62	-52.415	-21.150	-74.930	1.00	59.02	E	C
ATOM	14248	OD1	ASP	E	62	-51.779	-20.679	-75.895	1.00	64.20	E	O
ATOM	14249	OD2	ASP	E	62	-53.660	-21.293	-74.936	1.00	60.48	E	O
ATOM	14250	C	ASP	E	62	-51.851	-22.644	-71.510	1.00	50.69	E	C
ATOM	14251	O	ASP	E	62	-52.212	-23.815	-71.543	1.00	52.81	E	O
ATOM	14253	N	ASP	E	63	-50.884	-22.215	-70.711	1.00	53.39	E	N
ATOM	14254	CA	ASP	E	63	-50.312	-23.122	-69.732	1.00	54.48	E	C
ATOM	14256	CB	ASP	E	63	-49.120	-22.491	-69.010	1.00	55.86	E	C
ATOM	14259	CG	ASP	E	63	-47.946	-22.247	-69.958	1.00	55.86	E	C
ATOM	14260	OD1	ASP	E	63	-47.974	-22.795	-71.083	1.00	55.72	E	O
ATOM	14261	OD2	ASP	E	63	-47.009	-21.503	-69.596	1.00	56.26	E	O
ATOM	14262	C	ASP	E	63	-51.476	-23.576	-68.857	1.00	55.89	E	C
ATOM	14263	O	ASP	E	63	-52.170	-24.493	-69.233	1.00	64.48	E	O
ATOM	14265	N	PHE	E	64	-51.718	-22.943	-67.730	1.00	53.80	E	N
ATOM	14266	CA	PHE	E	64	-52.923	-23.141	-66.874	1.00	48.72	E	C
ATOM	14268	CB	PHE	E	64	-53.149	-21.830	-66.133	1.00	38.75	E	C
ATOM	14271	CG	PHE	E	64	-51.880	-21.305	-65.554	1.00	39.65	E	C
ATOM	14272	CD1	PHE	E	64	-51.327	-21.907	-64.435	1.00	37.56	E	C
ATOM	14274	CE1	PHE	E	64	-50.111	-21.469	-63.929	1.00	37.84	E	C
ATOM	14276	CZ	PHE	E	64	-49.418	-20.459	-64.568	1.00	36.18	E	C
ATOM	14278	CE2	PHE	E	64	-49.933	-19.888	-65.717	1.00	38.04	E	C
ATOM	14280	CD2	PHE	E	64	-51.146	-20.323	-66.217	1.00	38.51	E	C
ATOM	14282	C	PHE	E	64	-54.266	-23.754	-67.371	1.00	45.07	E	C
ATOM	14283	O	PHE	E	64	-55.254	-23.737	-66.645	1.00	42.26	E	O
ATOM	14285	N	LYS	E	65	-54.299	-24.399	-68.527	1.00	49.62	E	N
ATOM	14286	CA	LYS	E	65	-55.527	-25.082	-68.960	1.00	51.97	E	C
ATOM	14288	CB	LYS	E	65	-55.725	-24.988	-70.468	1.00	49.49	E	C
ATOM	14291	CG	LYS	E	65	-56.444	-23.726	-70.905	1.00	49.30	E	C
ATOM	14294	CD	LYS	E	65	-56.300	-23.511	-72.401	1.00	49.43	E	C
ATOM	14297	CE	LYS	E	65	-57.026	-22.280	-72.878	1.00	46.67	E	C
ATOM	14300	NZ	LYS	E	65	-56.521	-21.878	-74.223	1.00	48.59	E	N
ATOM	14304	C	LYS	E	65	-55.516	-26.533	-68.488	1.00	51.18	E	C
ATOM	14305	O	LYS	E	65	-54.520	-27.231	-68.639	1.00	56.87	E	O
ATOM	14307	N	GLY	E	66	-56.608	-26.946	-67.857	1.00	52.46	E	N
ATOM	14308	CA	GLY	E	66	-56.788	-28.316	-67.380	1.00	51.54	E	C
ATOM	14311	C	GLY	E	66	-56.946	-28.418	-65.876	1.00	48.89	E	C
ATOM	14312	O	GLY	E	66	-58.059	-28.451	-65.367	1.00	49.09	E	O
ATOM	14314	N	ARG	E	67	-55.825	-28.443	-65.160	1.00	48.62	E	N
ATOM	14315	CA	ARG	E	67	-55.827	-28.650	-63.697	1.00	45.09	E	C
ATOM	14317	CB	ARG	E	67	-54.457	-29.127	-63.230	1.00	46.41	E	C
ATOM	14320	CG	ARG	E	67	-54.029	-30.436	-63.825	1.00	44.47	E	C
ATOM	14323	CD	ARG	E	67	-52.702	-30.869	-63.271	1.00	44.22	E	C
ATOM	14326	NE	ARG	E	67	-51.634	-29.902	-63.531	1.00	44.76	E	N
ATOM	14328	CZ	ARG	E	67	-50.983	-29.191	-62.601	1.00	44.19	E	C
ATOM	14329	NH1	ARG	E	67	-51.275	-29.298	-61.304	1.00	41.02	E	N
ATOM	14332	NH2	ARG	E	67	-50.008	-28.373	-62.981	1.00	41.64	E	N
ATOM	14335	C	ARG	E	67	-56.174	-27.426	-62.874	1.00	43.05	E	C
ATOM	14336	O	ARG	E	67	-56.204	-27.510	-61.650	1.00	43.25	E	O
ATOM	14338	N	PHE	E	68	-56.405	-26.290	-63.527	1.00	41.98	E	N
ATOM	14339	CA	PHE	E	68	-56.648	-25.027	-62.833	1.00	40.86	E	C
ATOM	14341	CB	PHE	E	68	-55.608	-23.982	-63.277	1.00	35.04	E	C

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ATOM  14344  CG  PHE E  68     -54.187 -24.378 -62.984  1.00 30.69      E    C
ATOM  14345  CD1 PHE E  68     -53.544 -23.914 -61.831  1.00 32.16      E    C
ATOM  14347  CE1 PHE E  68     -52.240 -24.285 -61.531  1.00 29.16      E    C
ATOM  14349  CZ  PHE E  68     -51.546 -25.121 -62.392  1.00 32.20      E    C
ATOM  14351  CE2 PHE E  68     -52.163 -25.586 -63.562  1.00 32.90      E    C
ATOM  14353  CD2 PHE E  68     -53.491 -25.213 -63.847  1.00 31.07      E    C
ATOM  14355  C   PHE E  68     -58.055 -24.547 -63.136  1.00 39.27      E    C
ATOM  14356  O   PHE E  68     -58.399 -24.352 -64.288  1.00 39.32      E    O
ATOM  14358  N   VAL E  69     -58.871 -24.376 -62.099  1.00 34.48      E    N
ATOM  14359  CA  VAL E  69     -60.259 -24.011 -62.281  1.00 34.18      E    C
ATOM  14361  CB  VAL E  69     -61.187 -25.211 -61.968  1.00 32.10      E    C
ATOM  14363  CG1 VAL E  69     -62.626 -24.815 -62.200  1.00 24.47      E    C
ATOM  14367  CG2 VAL E  69     -60.784 -26.464 -62.801  1.00 25.73      E    C
ATOM  14371  C   VAL E  69     -60.668 -22.838 -61.396  1.00 36.47      E    C
ATOM  14372  O   VAL E  69     -60.450 -22.851 -60.187  1.00 38.21      E    O
ATOM  14374  N   PHE E  70     -61.283 -21.831 -62.010  1.00 38.60      E    N
ATOM  14375  CA  PHE E  70     -61.809 -20.683 -61.286  1.00 36.75      E    C
ATOM  14377  CB  PHE E  70     -61.649 -19.379 -62.089  1.00 35.31      E    C
ATOM  14380  CG  PHE E  70     -60.245 -19.114 -62.609  1.00 31.20      E    C
ATOM  14381  CD1 PHE E  70     -59.123 -19.412 -61.852  1.00 33.19      E    C
ATOM  14383  CE1 PHE E  70     -57.843 -19.138 -62.328  1.00 34.59      E    C
ATOM  14385  CZ  PHE E  70     -57.685 -18.554 -63.570  1.00 33.48      E    C
ATOM  14387  CE2 PHE E  70     -58.813 -18.225 -64.318  1.00 35.51      E    C
ATOM  14389  CD2 PHE E  70     -60.074 -18.503 -63.835  1.00 29.56      E    C
ATOM  14391  C   PHE E  70     -63.284 -20.898 -60.990  1.00 39.33      E    C
ATOM  14392  O   PHE E  70     -63.991 -21.532 -61.758  1.00 42.75      E    O
ATOM  14394  N   SER E  71     -63.737 -20.364 -59.866  1.00 39.96      E    N
ATOM  14395  CA  SER E  71     -65.135 -20.428 -59.496  1.00 38.42      E    C
ATOM  14397  CB  SER E  71     -65.465 -21.781 -58.831  1.00 38.63      E    C
ATOM  14400  OG  SER E  71     -64.755 -22.007 -57.614  1.00 39.81      E    O
ATOM  14402  C   SER E  71     -65.514 -19.239 -58.587  1.00 38.93      E    C
ATOM  14403  O   SER E  71     -64.659 -18.480 -58.157  1.00 37.12      E    O
ATOM  14405  N   LEU E  72     -66.805 -19.094 -58.334  1.00 38.05      E    N
ATOM  14406  CA  LEU E  72     -67.380 -17.956 -57.617  1.00 41.54      E    C
ATOM  14408  CB  LEU E  72     -68.248 -17.093 -58.559  1.00 39.23      E    C
ATOM  14411  CG  LEU E  72     -67.686 -16.085 -59.570  1.00 40.33      E    C
ATOM  14413  CD1 LEU E  72     -66.309 -16.427 -60.036  1.00 36.90      E    C
ATOM  14417  CD2 LEU E  72     -68.625 -15.977 -60.774  1.00 39.55      E    C
ATOM  14421  C   LEU E  72     -68.305 -18.464 -56.517  1.00 44.32      E    C
ATOM  14422  O   LEU E  72     -68.911 -19.527 -56.638  1.00 43.50      E    O
ATOM  14424  N   ASP E  73     -68.416 -17.687 -55.454  1.00 44.97      E    N
ATOM  14425  CA  ASP E  73     -69.580 -17.718 -54.583  1.00 47.54      E    C
ATOM  14427  CB  ASP E  73     -69.231 -18.359 -53.225  1.00 50.00      E    C
ATOM  14430  CG  ASP E  73     -70.442 -18.480 -52.280  1.00 48.17      E    C
ATOM  14431  OD1 ASP E  73     -71.534 -17.959 -52.582  1.00 45.01      E    O
ATOM  14432  OD2 ASP E  73     -70.297 -19.111 -51.214  1.00 48.37      E    O
ATOM  14433  C   ASP E  73     -70.009 -16.264 -54.415  1.00 47.12      E    C
ATOM  14434  O   ASP E  73     -69.557 -15.589 -53.492  1.00 45.12      E    O
ATOM  14436  N   THR E  74     -70.880 -15.795 -55.310  1.00 48.86      E    N
ATOM  14437  CA  THR E  74     -71.311 -14.384 -55.321  1.00 50.38      E    C
ATOM  14439  CB  THR E  74     -72.150 -14.030 -56.566  1.00 47.36      E    C
ATOM  14441  OG1 THR E  74     -73.352 -14.802 -56.581  1.00 49.80      E    O
ATOM  14443  CG2 THR E  74     -71.365 -14.302 -57.839  1.00 46.79      E    C
ATOM  14447  C   THR E  74     -72.052 -13.966 -54.039  1.00 54.37      E    C
ATOM  14448  O   THR E  74     -71.999 -12.798 -53.654  1.00 55.42      E    O
ATOM  14450  N   SER E  75     -72.707 -14.921 -53.373  1.00 55.61      E    N
ATOM  14451  CA  SER E  75     -73.390 -14.668 -52.091  1.00 54.10      E    C
ATOM  14453  CB  SER E  75     -74.097 -15.935 -51.597  1.00 55.62      E    C
ATOM  14456  OG  SER E  75     -73.156 -16.860 -51.073  1.00 55.54      E    O
ATOM  14458  C   SER E  75     -72.447 -14.171 -50.983  1.00 53.26      E    C
ATOM  14459  O   SER E  75     -72.851 -13.378 -50.132  1.00 55.95      E    O
ATOM  14461  N   VAL E  76     -71.207 -14.654 -50.982  1.00 52.67      E    N
ATOM  14462  CA  VAL E  76     -70.182 -14.194 -50.032  1.00 49.63      E    C
ATOM  14464  CB  VAL E  76     -69.563 -15.382 -49.245  1.00 51.83      E    C
ATOM  14466  CG1 VAL E  76     -70.619 -16.060 -48.371  1.00 52.23      E    C
ATOM  14470  CG2 VAL E  76     -68.896 -16.395 -50.193  1.00 50.94      E    C
ATOM  14474  C   VAL E  76     -69.060 -13.368 -50.724  1.00 50.30      E    C
ATOM  14475  O   VAL E  76     -68.001 -13.110 -50.139  1.00 48.02      E    O
ATOM  14477  N   SER E  77     -69.314 -12.950 -51.966  1.00 48.54      E    N
ATOM  14478  CA  SER E  77     -68.359 -12.172 -52.764  1.00 42.48      E    C
ATOM  14480  CB  SER E  77     -68.292 -10.724 -52.254  1.00 43.10      E    C
ATOM  14483  OG  SER E  77     -69.557 -10.077 -52.293  1.00 46.06      E    O
ATOM  14485  C   SER E  77     -66.947 -12.772 -52.766  1.00 38.18      E    C
ATOM  14486  O   SER E  77     -65.948 -12.056 -52.580  1.00 33.62      E    O
ATOM  14488  N   THR E  78     -66.852 -14.082 -52.984  1.00 36.07      E    N
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ATOM	14489	CA	THR	E	78	-65.541	-14.761	-52.958	1.00	36.13	E	C
ATOM	14491	CB	THR	E	78	-65.421	-15.788	-51.817	1.00	31.40	E	C
ATOM	14493	OG1	THR	E	78	-65.679	-15.131	-50.569	1.00	29.81	E	O
ATOM	14495	CG2	THR	E	78	-64.020	-16.464	-51.784	1.00	28.20	E	C
ATOM	14499	C	THR	E	78	-65.271	-15.437	-54.274	1.00	35.17	E	C
ATOM	14500	O	THR	E	78	-66.188	-15.960	-54.888	1.00	37.01	E	O
ATOM	14502	N	ALA	E	79	-64.017	-15.372	-54.721	1.00	34.93	E	N
ATOM	14503	CA	ALA	E	79	-63.550	-16.091	-55.901	1.00	35.73	E	C
ATOM	14505	CB	ALA	E	79	-62.847	-15.145	-56.872	1.00	34.07	E	C
ATOM	14509	C	ALA	E	79	-62.596	-17.178	-55.450	1.00	35.37	E	C
ATOM	14510	O	ALA	E	79	-61.887	-17.028	-54.444	1.00	33.85	E	O
ATOM	14512	N	TYR	E	80	-62.558	-18.267	-56.208	1.00	37.57	E	N
ATOM	14513	CA	TYR	E	80	-61.775	-19.437	-55.828	1.00	37.96	E	C
ATOM	14515	CB	TYR	E	80	-62.702	-20.604	-55.421	1.00	39.43	E	C
ATOM	14518	CG	TYR	E	80	-63.570	-20.287	-54.224	1.00	39.80	E	C
ATOM	14519	CD1	TYR	E	80	-63.094	-20.454	-52.932	1.00	39.74	E	C
ATOM	14521	CE1	TYR	E	80	-63.893	-20.153	-51.832	1.00	41.06	E	C
ATOM	14523	CZ	TYR	E	80	-65.164	-19.662	-52.036	1.00	39.50	E	C
ATOM	14524	OH	TYR	E	80	-65.959	-19.339	-50.958	1.00	42.12	E	O
ATOM	14526	CE2	TYR	E	80	-65.645	-19.484	-53.309	1.00	36.33	E	C
ATOM	14528	CD2	TYR	E	80	-64.856	-19.778	-54.386	1.00	35.56	E	C
ATOM	14530	C	TYR	E	80	-60.866	-19.889	-56.946	1.00	36.32	E	C
ATOM	14531	O	TYR	E	80	-61.174	-19.735	-58.117	1.00	39.34	E	O
ATOM	14533	N	LEU	E	81	-59.736	-20.456	-56.570	1.00	41.21	E	N
ATOM	14534	CA	LEU	E	81	-58.854	-21.121	-57.525	1.00	41.17	E	C
ATOM	14536	CB	LEU	E	81	-57.500	-20.421	-57.593	1.00	40.03	E	C
ATOM	14539	CG	LEU	E	81	-56.354	-21.133	-58.314	1.00	42.20	E	C
ATOM	14541	CD1	LEU	E	81	-56.746	-21.493	-59.749	1.00	40.83	E	C
ATOM	14545	CD2	LEU	E	81	-55.106	-20.248	-58.291	1.00	40.29	E	C
ATOM	14549	C	LEU	E	81	-58.689	-22.541	-57.034	1.00	42.62	E	C
ATOM	14550	O	LEU	E	81	-58.222	-22.757	-55.920	1.00	41.20	E	O
ATOM	14552	N	GLN	E	82	-59.110	-23.497	-57.857	1.00	49.03	E	N
ATOM	14553	CA	GLN	E	82	-58.985	-24.917	-57.551	1.00	45.41	E	C
ATOM	14555	CB	GLN	E	82	-60.336	-25.634	-57.816	1.00	57.07	E	C
ATOM	14558	CG	GLN	E	82	-60.311	-27.087	-58.423	1.00	60.15	E	C
ATOM	14561	CD	GLN	E	82	-60.228	-28.221	-57.392	1.00	66.10	E	C
ATOM	14562	OE1	GLN	E	82	-60.321	-27.999	-56.175	1.00	67.78	E	O
ATOM	14563	NE2	GLN	E	82	-60.052	-29.455	-57.890	1.00	64.18	E	N
ATOM	14566	C	GLN	E	82	-57.858	-25.447	-58.417	1.00	41.20	E	C
ATOM	14567	O	GLN	E	82	-57.908	-25.298	-59.638	1.00	41.12	E	O
ATOM	14569	N	ILE	E	83	-56.830	-26.015	-57.786	1.00	38.48	E	N
ATOM	14570	CA	ILE	E	83	-55.720	-26.665	-58.509	1.00	43.11	E	C
ATOM	14572	CB	ILE	E	83	-54.289	-26.113	-58.147	1.00	43.13	E	C
ATOM	14574	CG1	ILE	E	83	-54.252	-24.585	-58.012	1.00	41.96	E	C
ATOM	14577	CD1	ILE	E	83	-52.895	-24.067	-57.494	1.00	41.44	E	C
ATOM	14581	CG2	ILE	E	83	-53.263	-26.597	-59.183	1.00	38.32	E	C
ATOM	14585	C	ILE	E	83	-55.732	-28.146	-58.154	1.00	44.91	E	C
ATOM	14586	O	ILE	E	83	-55.727	-28.504	-56.972	1.00	46.38	E	O
ATOM	14588	N	SER	E	84	-55.727	-29.005	-59.166	1.00	47.61	E	N
ATOM	14589	CA	SER	E	84	-55.842	-30.444	-58.926	1.00	50.09	E	C
ATOM	14591	CB	SER	E	84	-57.138	-31.007	-59.544	1.00	52.24	E	C
ATOM	14594	OG	SER	E	84	-57.114	-31.013	-60.974	1.00	54.10	E	O
ATOM	14596	C	SER	E	84	-54.611	-31.171	-59.448	1.00	50.02	E	C
ATOM	14597	O	SER	E	84	-53.852	-30.628	-60.250	1.00	48.72	E	O
ATOM	14599	N	SER	E	85	-54.409	-32.400	-58.973	1.00	52.61	E	N
ATOM	14600	CA	SER	E	85	-53.263	-33.213	-59.385	1.00	50.91	E	C
ATOM	14602	CB	SER	E	85	-53.438	-33.647	-60.857	1.00	55.63	E	C
ATOM	14605	OG	SER	E	85	-52.234	-34.121	-61.439	1.00	62.22	E	O
ATOM	14607	C	SER	E	85	-51.952	-32.458	-59.136	1.00	50.28	E	C
ATOM	14608	O	SER	E	85	-51.069	-32.401	-59.987	1.00	45.42	E	O
ATOM	14610	N	LEU	E	86	-51.844	-31.912	-57.926	1.00	50.81	E	N
ATOM	14611	CA	LEU	E	86	-50.721	-31.063	-57.523	1.00	46.89	E	C
ATOM	14613	CB	LEU	E	86	-50.865	-30.697	-56.037	1.00	44.22	E	C
ATOM	14616	CG	LEU	E	86	-51.415	-29.317	-55.674	1.00	44.35	E	C
ATOM	14618	CD1	LEU	E	86	-52.055	-28.588	-56.842	1.00	41.59	E	C
ATOM	14622	CD2	LEU	E	86	-52.350	-29.381	-54.478	1.00	42.03	E	C
ATOM	14626	C	LEU	E	86	-49.355	-31.705	-57.773	1.00	48.62	E	C
ATOM	14627	O	LEU	E	86	-49.159	-32.892	-57.513	1.00	49.33	E	O
ATOM	14629	N	LYS	E	87	-48.424	-30.892	-58.281	1.00	51.22	E	N
ATOM	14630	CA	LYS	E	87	-47.028	-31.277	-58.475	1.00	52.55	E	C
ATOM	14632	CB	LYS	E	87	-46.669	-31.317	-59.970	1.00	52.12	E	C
ATOM	14635	CG	LYS	E	87	-47.865	-31.471	-60.892	1.00	54.13	E	C
ATOM	14638	CD	LYS	E	87	-47.483	-31.696	-62.353	1.00	54.32	E	C
ATOM	14641	CE	LYS	E	87	-48.699	-32.178	-63.179	1.00	57.56	E	C
ATOM	14644	NZ	LYS	E	87	-49.545	-33.242	-62.493	1.00	55.90	E	N

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ATOM  14648  C   LYS E  87     -46.117 -30.274 -57.770  1.00 53.53      E    C
ATOM  14649  O   LYS E  87     -46.536 -29.150 -57.476  1.00 50.55      E    O
ATOM  14651  N   ALA E  88     -44.881 -30.704 -57.512  1.00 49.97      E    N
ATOM  14652  CA  ALA E  88     -43.857 -29.922 -56.814  1.00 48.83      E    C
ATOM  14654  CB  ALA E  88     -42.521 -30.679 -56.845  1.00 45.57      E    C
ATOM  14658  C   ALA E  88     -43.683 -28.549 -57.433  1.00 48.67      E    C
ATOM  14659  O   ALA E  88     -43.478 -27.561 -56.724  1.00 50.91      E    O
ATOM  14661  N   GLU E  89     -43.782 -28.505 -58.759  1.00 47.99      E    N
ATOM  14662  CA  GLU E  89     -43.601 -27.280 -59.541  1.00 46.76      E    C
ATOM  14664  CB  GLU E  89     -43.358 -27.645 -61.011  1.00 53.20      E    C
ATOM  14667  CG  GLU E  89     -42.012 -28.393 -61.288  1.00 62.65      E    C
ATOM  14670  CD  GLU E  89     -42.033 -29.929 -61.027  1.00 66.49      E    C
ATOM  14671  OE1 GLU E  89     -43.075 -30.591 -61.252  1.00 68.00      E    O
ATOM  14672  OE2 GLU E  89     -40.983 -30.477 -60.610  1.00 68.43      E    O
ATOM  14673  C   GLU E  89     -44.761 -26.265 -59.433  1.00 44.50      E    C
ATOM  14674  O   GLU E  89     -44.672 -25.163 -59.970  1.00 47.36      E    O
ATOM  14676  N   ASP E  90     -45.837 -26.642 -58.746  1.00 39.67      E    N
ATOM  14677  CA  ASP E  90     -46.972 -25.760 -58.506  1.00 40.34      E    C
ATOM  14679  CB  ASP E  90     -48.284 -26.562 -58.459  1.00 38.92      E    C
ATOM  14682  CG  ASP E  90     -48.674 -27.121 -59.799  1.00 39.21      E    C
ATOM  14683  OD1 ASP E  90     -48.430 -26.455 -60.823  1.00 46.00      E    O
ATOM  14684  OD2 ASP E  90     -49.261 -28.218 -59.830  1.00 39.91      E    O
ATOM  14685  C   ASP E  90     -46.808 -24.969 -57.217  1.00 35.89      E    C
ATOM  14686  O   ASP E  90     -47.631 -24.111 -56.931  1.00 36.06      E    O
ATOM  14688  N   THR E  91     -45.768 -25.298 -56.448  1.00 36.99      E    N
ATOM  14689  CA  THR E  91     -45.336 -24.519 -55.290  1.00 40.24      E    C
ATOM  14691  CB  THR E  91     -44.064 -25.173 -54.623  1.00 41.15      E    C
ATOM  14693  OG1 THR E  91     -44.406 -26.470 -54.098  1.00 37.34      E    O
ATOM  14695  CG2 THR E  91     -43.472 -24.283 -53.510  1.00 33.61      E    C
ATOM  14699  C   THR E  91     -45.054 -23.070 -55.739  1.00 40.83      E    C
ATOM  14700  O   THR E  91     -44.135 -22.815 -56.530  1.00 37.31      E    O
ATOM  14702  N   ALA E  92     -45.874 -22.145 -55.251  1.00 38.52      E    N
ATOM  14703  CA  ALA E  92     -45.863 -20.797 -55.740  1.00 37.15      E    C
ATOM  14705  CB  ALA E  92     -46.258 -20.788 -57.221  1.00 32.36      E    C
ATOM  14709  C   ALA E  92     -46.815 -19.960 -54.907  1.00 38.29      E    C
ATOM  14710  O   ALA E  92     -47.651 -20.503 -54.184  1.00 41.95      E    O
ATOM  14712  N   VAL E  93     -46.663 -18.639 -54.974  1.00 42.19      E    N
ATOM  14713  CA  VAL E  93     -47.653 -17.723 -54.400  1.00 35.38      E    C
ATOM  14715  CB  VAL E  93     -47.033 -16.387 -53.965  1.00 30.41      E    C
ATOM  14717  CG1 VAL E  93     -48.129 -15.376 -53.512  1.00 24.07      E    C
ATOM  14721  CG2 VAL E  93     -46.006 -16.631 -52.841  1.00 25.96      E    C
ATOM  14725  C   VAL E  93     -48.704 -17.509 -55.474  1.00 36.78      E    C
ATOM  14726  O   VAL E  93     -48.374 -17.304 -56.647  1.00 37.05      E    O
ATOM  14728  N   TYR E  94     -49.967 -17.573 -55.067  1.00 37.05      E    N
ATOM  14729  CA  TYR E  94     -51.064 -17.297 -55.953  1.00 34.57      E    C
ATOM  14731  CB  TYR E  94     -52.018 -18.515 -56.044  1.00 32.33      E    C
ATOM  14734  CG  TYR E  94     -51.368 -19.719 -56.650  1.00 26.57      E    C
ATOM  14735  CD1 TYR E  94     -51.471 -19.987 -58.013  1.00 31.40      E    C
ATOM  14737  CE1 TYR E  94     -50.837 -21.097 -58.578  1.00 30.94      E    C
ATOM  14739  CZ  TYR E  94     -50.096 -21.935 -57.762  1.00 28.98      E    C
ATOM  14740  OH  TYR E  94     -49.454 -23.037 -58.266  1.00 32.20      E    O
ATOM  14742  CE2 TYR E  94     -49.983 -21.674 -56.419  1.00 27.72      E    C
ATOM  14744  CD2 TYR E  94     -50.621 -20.574 -55.876  1.00 26.74      E    C
ATOM  14746  C   TYR E  94     -51.788 -16.047 -55.468  1.00 35.47      E    C
ATOM  14747  O   TYR E  94     -52.208 -15.974 -54.322  1.00 33.58      E    O
ATOM  14749  N   TYR E  95     -51.938 -15.088 -56.377  1.00 35.87      E    N
ATOM  14750  CA  TYR E  95     -52.624 -13.842 -56.123  1.00 34.70      E    C
ATOM  14752  CB  TYR E  95     -51.774 -12.655 -56.634  1.00 34.79      E    C
ATOM  14755  CG  TYR E  95     -50.404 -12.515 -55.989  1.00 31.59      E    C
ATOM  14756  CD1 TYR E  95     -50.232 -11.788 -54.820  1.00 33.27      E    C
ATOM  14758  CE1 TYR E  95     -48.992 -11.663 -54.231  1.00 35.33      E    C
ATOM  14760  CZ  TYR E  95     -47.894 -12.271 -54.818  1.00 35.34      E    C
ATOM  14761  OH  TYR E  95     -46.640 -12.157 -54.251  1.00 34.91      E    O
ATOM  14763  CE2 TYR E  95     -48.041 -12.970 -55.985  1.00 34.39      E    C
ATOM  14765  CD2 TYR E  95     -49.287 -13.094 -56.560  1.00 34.44      E    C
ATOM  14767  C   TYR E  95     -53.926 -13.818 -56.867  1.00 34.24      E    C
ATOM  14768  O   TYR E  95     -54.034 -14.379 -57.935  1.00 30.86      E    O
ATOM  14770  N   CYS E  96     -54.915 -13.136 -56.297  1.00 39.15      E    N
ATOM  14771  CA  CYS E  96     -56.054 -12.634 -57.056  1.00 36.84      E    C
ATOM  14773  CB  CYS E  96     -57.347 -12.894 -56.305  1.00 34.36      E    C
ATOM  14776  SG  CYS E  96     -57.469 -12.112 -54.703  1.00 30.90      E    S
ATOM  14778  C   CYS E  96     -55.837 -11.149 -57.270  1.00 35.76      E    C
ATOM  14779  O   CYS E  96     -55.327 -10.474 -56.398  1.00 34.26      E    O
ATOM  14781  N   GLU E  97     -56.168 -10.665 -58.458  1.00 35.16      E    N
ATOM  14782  CA  GLU E  97     -56.138  -9.248 -58.776  1.00 34.01      E    C
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ATOM  14784  CB  GLU E  97     -55.032  -8.931 -59.782  1.00 32.55      E    C
ATOM  14787  CG  GLU E  97     -54.969  -7.472 -60.235  1.00 28.75      E    C
ATOM  14790  CD  GLU E  97     -54.193  -7.272 -61.526  1.00 30.95      E    C
ATOM  14791  OE1 GLU E  97     -54.283  -8.124 -62.413  1.00 33.45      E    O
ATOM  14792  OE2 GLU E  97     -53.493  -6.249 -61.670  1.00 35.22      E    O
ATOM  14793  C   GLU E  97     -57.473  -8.895 -59.371  1.00 29.38      E    C
ATOM  14794  O   GLU E  97     -57.901  -9.511 -60.344  1.00 30.20      E    O
ATOM  14796  N   ARG E  98     -58.135  -7.920 -58.775  1.00 26.13      E    N
ATOM  14797  CA  ARG E  98     -59.344  -7.367 -59.325  1.00 31.32      E    C
ATOM  14799  CB  ARG E  98     -59.960  -6.473 -58.255  1.00 29.42      E    C
ATOM  14802  CG  ARG E  98     -61.218  -5.720 -58.636  1.00 25.79      E    C
ATOM  14805  CD  ARG E  98     -60.959  -4.254 -58.396  1.00 30.55      E    C
ATOM  14808  NE  ARG E  98     -62.023  -3.624 -57.670  1.00 31.90      E    N
ATOM  14810  CZ  ARG E  98     -62.065  -2.347 -57.321  1.00 29.65      E    C
ATOM  14811  NH1 ARG E  98     -61.076  -1.501 -57.612  1.00 29.20      E    N
ATOM  14814  NH2 ARG E  98     -63.132  -1.927 -56.669  1.00 30.50      E    N
ATOM  14817  C   ARG E  98     -59.061  -6.591 -60.630  1.00 32.85      E    C
ATOM  14818  O   ARG E  98     -58.128  -5.762 -60.698  1.00 32.22      E    O
ATOM  14820  N   GLU E  99     -59.879  -6.869 -61.652  1.00 35.14      E    N
ATOM  14821  CA  GLU E  99     -59.702  -6.335 -63.021  1.00 36.06      E    C
ATOM  14823  CB  GLU E  99     -60.130  -7.399 -64.035  1.00 30.28      E    C
ATOM  14826  CG  GLU E  99     -60.001  -6.984 -65.476  1.00 27.31      E    C
ATOM  14829  CD  GLU E  99     -58.652  -6.394 -65.796  1.00 26.54      E    C
ATOM  14830  OE1 GLU E  99     -57.632  -6.732 -65.126  1.00 31.02      E    O
ATOM  14831  OE2 GLU E  99     -58.608  -5.606 -66.744  1.00 24.43      E    O
ATOM  14832  C   GLU E  99     -60.561  -5.078 -63.011  1.00 39.92      E    C
ATOM  14833  O   GLU E  99     -61.768  -5.129 -63.258  1.00 46.26      E    O
ATOM  14835  N   GLY E 100     -59.897  -3.931 -62.880  1.00 44.00      E    N
ATOM  14836  CA  GLY E 100     -60.090  -2.709 -63.615  1.00 41.67      E    C
ATOM  14839  C   GLY E 100     -60.326  -1.775 -62.401  1.00 42.26      E    C
ATOM  14840  O   GLY E 100     -60.464  -2.226 -61.251  1.00 47.60      E    O
ATOM  14842  N   GLY E 101     -60.355  -0.475 -62.620  1.00 40.74      E    N
ATOM  14843  CA  GLY E 101     -60.479   0.469 -61.512  1.00 38.89      E    C
ATOM  14846  C   GLY E 101     -59.158   0.669 -60.789  1.00 39.72      E    C
ATOM  14847  O   GLY E 101     -58.113   0.242 -61.282  1.00 37.01      E    O
ATOM  14849  N   VAL E 108     -59.217   1.339 -59.629  1.00 36.57      E    N
ATOM  14850  CA  VAL E 108     -58.059   1.498 -58.762  1.00 33.15      E    C
ATOM  14852  CB  VAL E 108     -58.370   2.226 -57.395  1.00 27.55      E    C
ATOM  14854  CG1 VAL E 108     -57.192   2.078 -56.380  1.00 24.81      E    C
ATOM  14858  CG2 VAL E 108     -58.635   3.681 -57.606  1.00 25.71      E    C
ATOM  14862  C   VAL E 108     -57.524   0.106 -58.493  1.00 32.43      E    C
ATOM  14863  O   VAL E 108     -58.220  -0.745 -57.970  1.00 35.21      E    O
ATOM  14865  N   ASN E 109     -56.284  -0.126 -58.872  1.00 32.21      E    N
ATOM  14866  CA  ASN E 109     -55.751  -1.498 -58.991  1.00 33.12      E    C
ATOM  14868  CB  ASN E 109     -54.472  -1.489 -59.830  1.00 21.29      E    C
ATOM  14871  CG  ASN E 109     -54.026  -2.864 -60.237  1.00 25.00      E    C
ATOM  14872  OD1 ASN E 109     -54.638  -3.485 -61.107  1.00 29.36      E    O
ATOM  14873  ND2 ASN E 109     -52.944  -3.353 -59.632  1.00 17.36      E    N
ATOM  14876  C   ASN E 109     -55.493  -2.157 -57.636  1.00 34.60      E    C
ATOM  14877  O   ASN E 109     -54.688  -1.689 -56.863  1.00 28.84      E    O
ATOM  14879  N   ASN E 110     -56.200  -3.252 -57.367  1.00 37.92      E    N
ATOM  14880  CA  ASN E 110     -56.147  -3.904 -56.082  1.00 35.37      E    C
ATOM  14882  CB  ASN E 110     -57.473  -3.754 -55.345  1.00 36.56      E    C
ATOM  14885  CG  ASN E 110     -57.565  -2.459 -54.565  1.00 32.82      E    C
ATOM  14886  OD1 ASN E 110     -57.090  -2.377 -53.443  1.00 34.22      E    O
ATOM  14887  ND2 ASN E 110     -58.187  -1.445 -55.157  1.00 30.04      E    N
ATOM  14890  C   ASN E 110     -55.785  -5.372 -56.212  1.00 34.33      E    C
ATOM  14891  O   ASN E 110     -56.334  -6.074 -57.033  1.00 35.55      E    O
ATOM  14893  N   TRP E 111     -54.862  -5.804 -55.353  1.00 34.26      E    N
ATOM  14894  CA  TRP E 111     -54.376  -7.168 -55.287  1.00 34.54      E    C
ATOM  14896  CB  TRP E 111     -52.862  -7.231 -55.499  1.00 27.98      E    C
ATOM  14899  CG  TRP E 111     -52.417  -7.018 -56.901  1.00 25.99      E    C
ATOM  14900  CD1 TRP E 111     -52.573  -5.892 -57.646  1.00 25.54      E    C
ATOM  14902  NE1 TRP E 111     -52.048  -6.073 -58.889  1.00 25.21      E    N
ATOM  14904  CE2 TRP E 111     -51.527  -7.331 -58.971  1.00 20.53      E    C
ATOM  14905  CD2 TRP E 111     -51.740  -7.955 -57.729  1.00 25.45      E    C
ATOM  14906  CE3 TRP E 111     -51.304  -9.275 -57.548  1.00 22.78      E    C
ATOM  14908  CZ3 TRP E 111     -50.674  -9.898 -58.582  1.00 24.49      E    C
ATOM  14910  CH2 TRP E 111     -50.472  -9.242 -59.820  1.00 25.46      E    C
ATOM  14912  CZ2 TRP E 111     -50.894  -7.966 -60.026  1.00 22.46      E    C
ATOM  14914  C   TRP E 111     -54.674  -7.753 -53.910  1.00 37.06      E    C
ATOM  14915  O   TRP E 111     -54.642  -7.042 -52.894  1.00 31.60      E    O
ATOM  14917  N   GLY E 112     -54.994  -9.042 -53.896  1.00 35.05      E    N
ATOM  14918  CA  GLY E 112     -54.944  -9.828 -52.674  1.00 37.99      E    C
ATOM  14921  C   GLY E 112     -53.503  -9.972 -52.194  1.00 37.92      E    C
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ATOM	14922	O	GLY	E	112	-52.560	-9.660	-52.924	1.00	36.55	E	O
ATOM	14924	N	GLN	E	113	-53.330	-10.439	-50.963	1.00	35.53	E	N
ATOM	14925	CA	GLN	E	113	-52.000	-10.499	-50.354	1.00	33.00	E	C
ATOM	14927	CB	GLN	E	113	-52.082	-10.474	-48.813	1.00	32.94	E	C
ATOM	14930	CG	GLN	E	113	-52.224	-11.851	-48.078	1.00	32.86	E	C
ATOM	14933	CD	GLN	E	113	-53.648	-12.373	-48.036	1.00	31.15	E	C
ATOM	14934	OE1	GLN	E	113	-54.494	-11.960	-48.813	1.00	31.61	E	O
ATOM	14935	NE2	GLN	E	113	-53.917	-13.290	-47.115	1.00	33.20	E	N
ATOM	14938	C	GLN	E	113	-51.161	-11.707	-50.826	1.00	36.26	E	C
ATOM	14939	O	GLN	E	113	-49.972	-11.802	-50.536	1.00	35.38	E	O
ATOM	14941	N	GLY	E	114	-51.791	-12.642	-51.529	1.00	37.44	E	N
ATOM	14942	CA	GLY	E	114	-51.108	-13.856	-51.940	1.00	36.56	E	C
ATOM	14945	C	GLY	E	114	-51.358	-15.040	-50.996	1.00	39.49	E	C
ATOM	14946	O	GLY	E	114	-51.578	-14.865	-49.783	1.00	38.63	E	O
ATOM	14948	N	THR	E	115	-51.341	-16.242	-51.580	1.00	35.01	E	N
ATOM	14949	CA	THR	E	115	-51.414	-17.502	-50.854	1.00	37.30	E	C
ATOM	14951	CB	THR	E	115	-52.741	-18.266	-51.171	1.00	35.88	E	C
ATOM	14953	OG1	THR	E	115	-53.867	-17.469	-50.784	1.00	40.55	E	O
ATOM	14955	CG2	THR	E	115	-52.808	-19.623	-50.456	1.00	29.52	E	C
ATOM	14959	C	THR	E	115	-50.210	-18.366	-51.273	1.00	35.14	E	C
ATOM	14960	O	THR	E	115	-50.033	-18.655	-52.454	1.00	34.05	E	O
ATOM	14962	N	LEU	E	116	-49.362	-18.765	-50.331	1.00	39.33	E	N
ATOM	14963	CA	LEU	E	116	-48.267	-19.693	-50.679	1.00	39.29	E	C
ATOM	14965	CB	LEU	E	116	-47.018	-19.524	-49.797	1.00	35.73	E	C
ATOM	14968	CG	LEU	E	116	-45.782	-20.438	-50.008	1.00	35.92	E	C
ATOM	14970	CD1	LEU	E	116	-45.211	-20.456	-51.438	1.00	31.15	E	C
ATOM	14974	CD2	LEU	E	116	-44.677	-20.010	-49.046	1.00	34.91	E	C
ATOM	14978	C	LEU	E	116	-48.789	-21.108	-50.569	1.00	41.42	E	C
ATOM	14979	O	LEU	E	116	-49.171	-21.546	-49.501	1.00	44.68	E	O
ATOM	14981	N	VAL	E	117	-48.827	-21.814	-51.690	1.00	43.77	E	N
ATOM	14982	CA	VAL	E	117	-49.128	-23.225	-51.684	1.00	39.78	E	C
ATOM	14984	CB	VAL	E	117	-50.098	-23.629	-52.833	1.00	39.32	E	C
ATOM	14986	CG1	VAL	E	117	-50.198	-25.160	-52.973	1.00	35.09	E	C
ATOM	14990	CG2	VAL	E	117	-51.476	-23.029	-52.612	1.00	33.99	E	C
ATOM	14994	C	VAL	E	117	-47.813	-23.950	-51.847	1.00	41.25	E	C
ATOM	14995	O	VAL	E	117	-47.117	-23.733	-52.822	1.00	41.92	E	O
ATOM	14997	N	THR	E	118	-47.452	-24.781	-50.872	1.00	44.17	E	N
ATOM	14998	CA	THR	E	118	-46.302	-25.690	-51.014	1.00	43.92	E	C
ATOM	15000	CB	THR	E	118	-45.457	-25.744	-49.743	1.00	39.82	E	C
ATOM	15002	OG1	THR	E	118	-45.150	-24.411	-49.347	1.00	41.89	E	O
ATOM	15004	CG2	THR	E	118	-44.171	-26.519	-49.979	1.00	34.11	E	C
ATOM	15008	C	THR	E	118	-46.765	-27.122	-51.327	1.00	44.43	E	C
ATOM	15009	O	THR	E	118	-47.655	-27.657	-50.661	1.00	41.73	E	O
ATOM	15011	N	VAL	E	119	-46.139	-27.739	-52.334	1.00	47.80	E	N
ATOM	15012	CA	VAL	E	119	-46.458	-29.110	-52.703	1.00	47.06	E	C
ATOM	15014	CB	VAL	E	119	-46.756	-29.236	-54.222	1.00	45.63	E	C
ATOM	15016	CG1	VAL	E	119	-46.876	-30.691	-54.640	1.00	44.86	E	C
ATOM	15020	CG2	VAL	E	119	-48.033	-28.496	-54.577	1.00	47.38	E	C
ATOM	15024	C	VAL	E	119	-45.305	-30.042	-52.316	1.00	47.73	E	C
ATOM	15025	O	VAL	E	119	-44.262	-30.054	-52.969	1.00	46.38	E	O
ATOM	15027	N	SER	E	120	-45.506	-30.821	-51.251	1.00	49.15	E	N
ATOM	15028	CA	SER	E	120	-44.473	-31.728	-50.733	1.00	49.42	E	C
ATOM	15030	CB	SER	E	120	-43.504	-30.984	-49.784	1.00	47.54	E	C
ATOM	15033	OG	SER	E	120	-42.550	-31.865	-49.174	1.00	41.99	E	O
ATOM	15035	C	SER	E	120	-45.060	-32.940	-50.009	1.00	46.37	E	C
ATOM	15036	O	SER	E	120	-46.167	-32.891	-49.462	1.00	46.44	E	O
ATOM	15038	N	SER	E	121	-44.291	-34.027	-49.998	1.00	49.64	E	N
ATOM	15039	CA	SER	E	121	-44.607	-35.191	-49.150	1.00	49.71	E	C
ATOM	15041	CB	SER	E	121	-44.002	-36.486	-49.716	1.00	51.18	E	C
ATOM	15044	OG	SER	E	121	-42.582	-36.461	-49.741	1.00	49.64	E	O
ATOM	15046	C	SER	E	121	-44.177	-34.991	-47.694	1.00	46.18	E	C
ATOM	15047	O	SER	E	121	-44.596	-35.747	-46.842	1.00	46.66	E	O
ATOM	15049	N	ALA	E	122	-43.373	-33.969	-47.395	1.00	46.06	E	N
ATOM	15050	CA	ALA	E	122	-42.976	-33.700	-46.013	1.00	45.55	E	C
ATOM	15052	CB	ALA	E	122	-41.806	-32.751	-45.971	1.00	38.99	E	C
ATOM	15056	C	ALA	E	122	-44.136	-33.148	-45.163	1.00	48.52	E	C
ATOM	15057	O	ALA	E	122	-45.089	-32.520	-45.672	1.00	50.81	E	O
ATOM	15059	N	SER	E	123	-44.033	-33.365	-43.857	1.00	48.54	E	N
ATOM	15060	CA	SER	E	123	-45.051	-32.914	-42.923	1.00	47.58	E	C
ATOM	15062	CB	SER	E	123	-45.196	-33.925	-41.763	1.00	52.59	E	C
ATOM	15065	OG	SER	E	123	-45.569	-35.217	-42.225	1.00	51.67	E	O
ATOM	15067	C	SER	E	123	-44.767	-31.533	-42.325	1.00	47.84	E	C
ATOM	15068	O	SER	E	123	-43.621	-31.073	-42.292	1.00	46.20	E	O
ATOM	15070	N	THR	E	124	-45.834	-30.903	-41.831	1.00	45.49	E	N
ATOM	15071	CA	THR	E	124	-45.761	-29.639	-41.104	1.00	45.71	E	C

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ATOM  15073  CB  THR E 124     -47.157 -29.117 -40.701  1.00 44.96      E    C
ATOM  15075  OG1 THR E 124     -47.999 -29.013 -41.854  1.00 51.69      E    O
ATOM  15077  CG2 THR E 124     -47.046 -27.762 -40.045  1.00 46.06      E    C
ATOM  15081  C   THR E 124     -44.978 -29.758 -39.793  1.00 45.90      E    C
ATOM  15082  O   THR E 124     -45.248 -30.642 -38.979  1.00 42.71      E    O
ATOM  15084  N   LYS E 125     -44.043 -28.831 -39.594  1.00 46.29      E    N
ATOM  15085  CA  LYS E 125     -43.340 -28.668 -38.336  1.00 44.38      E    C
ATOM  15087  CB  LYS E 125     -41.917 -29.252 -38.421  1.00 50.21      E    C
ATOM  15090  CG  LYS E 125     -41.441 -29.922 -37.114  1.00 53.82      E    C
ATOM  15093  CD  LYS E 125     -39.992 -29.555 -36.714  1.00 53.81      E    C
ATOM  15096  CE  LYS E 125     -39.871 -29.173 -35.209  1.00 55.45      E    C
ATOM  15099  NZ  LYS E 125     -38.860 -28.081 -34.950  1.00 53.92      E    N
ATOM  15103  C   LYS E 125     -43.274 -27.179 -38.001  1.00 42.78      E    C
ATOM  15104  O   LYS E 125     -42.865 -26.360 -38.836  1.00 42.26      E    O
ATOM  15106  N   GLY E 126     -43.681 -26.838 -36.779  1.00 42.44      E    N
ATOM  15107  CA  GLY E 126     -43.591 -25.479 -36.272  1.00 41.40      E    C
ATOM  15110  C   GLY E 126     -42.166 -25.155 -35.848  1.00 39.81      E    C
ATOM  15111  O   GLY E 126     -41.406 -26.042 -35.465  1.00 41.35      E    O
ATOM  15113  N   PRO E 127     -41.794 -23.876 -35.900  1.00 39.16      E    N
ATOM  15114  CA  PRO E 127     -40.442 -23.466 -35.596  1.00 40.96      E    C
ATOM  15116  CB  PRO E 127     -40.413 -22.044 -36.133  1.00 37.18      E    C
ATOM  15119  CG  PRO E 127     -41.748 -21.562 -35.901  1.00 35.16      E    C
ATOM  15122  CD  PRO E 127     -42.639 -22.717 -36.221  1.00 39.03      E    C
ATOM  15125  C   PRO E 127     -40.157 -23.434 -34.105  1.00 43.12      E    C
ATOM  15126  O   PRO E 127     -41.058 -23.203 -33.315  1.00 45.66      E    O
ATOM  15127  N   SER E 128     -38.897 -23.638 -33.741  1.00 44.39      E    N
ATOM  15128  CA  SER E 128     -38.395 -23.296 -32.411  1.00 43.86      E    C
ATOM  15130  CB  SER E 128     -37.286 -24.242 -31.939  1.00 47.47      E    C
ATOM  15133  OG  SER E 128     -37.761 -25.541 -31.642  1.00 51.43      E    O
ATOM  15135  C   SER E 128     -37.822 -21.893 -32.541  1.00 42.79      E    C
ATOM  15136  O   SER E 128     -37.161 -21.585 -33.534  1.00 46.06      E    O
ATOM  15138  N   VAL E 129     -38.063 -21.049 -31.540  1.00 44.43      E    N
ATOM  15139  CA  VAL E 129     -37.590 -19.664 -31.561  1.00 44.41      E    C
ATOM  15141  CB  VAL E 129     -38.762 -18.649 -31.434  1.00 39.90      E    C
ATOM  15143  CG1 VAL E 129     -38.262 -17.237 -31.682  1.00 36.35      E    C
ATOM  15147  CG2 VAL E 129     -39.852 -18.986 -32.421  1.00 33.72      E    C
ATOM  15151  C   VAL E 129     -36.551 -19.453 -30.460  1.00 47.66      E    C
ATOM  15152  O   VAL E 129     -36.792 -19.801 -29.296  1.00 54.26      E    O
ATOM  15154  N   PHE E 130     -35.385 -18.931 -30.843  1.00 47.05      E    N
ATOM  15155  CA  PHE E 130     -34.258 -18.772 -29.928  1.00 43.47      E    C
ATOM  15157  CB  PHE E 130     -33.126 -19.752 -30.261  1.00 40.82      E    C
ATOM  15160  CG  PHE E 130     -33.563 -21.179 -30.267  1.00 41.74      E    C
ATOM  15161  CD1 PHE E 130     -34.246 -21.708 -29.172  1.00 40.97      E    C
ATOM  15163  CE1 PHE E 130     -34.681 -23.020 -29.171  1.00 39.80      E    C
ATOM  15165  CZ  PHE E 130     -34.430 -23.820 -30.277  1.00 41.73      E    C
ATOM  15167  CE2 PHE E 130     -33.763 -23.294 -31.389  1.00 39.75      E    C
ATOM  15169  CD2 PHE E 130     -33.328 -21.989 -31.373  1.00 41.27      E    C
ATOM  15171  C   PHE E 130     -33.757 -17.355 -30.011  1.00 44.94      E    C
ATOM  15172  O   PHE E 130     -33.666 -16.805 -31.105  1.00 45.85      E    O
ATOM  15174  N   PRO E 131     -33.425 -16.752 -28.858  1.00 46.44      E    N
ATOM  15175  CA  PRO E 131     -32.928 -15.392 -28.922  1.00 45.89      E    C
ATOM  15177  CB  PRO E 131     -32.941 -14.944 -27.462  1.00 46.30      E    C
ATOM  15180  CG  PRO E 131     -32.762 -16.187 -26.697  1.00 45.97      E    C
ATOM  15183  CD  PRO E 131     -33.497 -17.241 -27.469  1.00 47.14      E    C
ATOM  15186  C   PRO E 131     -31.524 -15.309 -29.468  1.00 45.70      E    C
ATOM  15187  O   PRO E 131     -30.707 -16.190 -29.213  1.00 50.59      E    O
ATOM  15188  N   LEU E 132     -31.266 -14.251 -30.223  1.00 42.84      E    N
ATOM  15189  CA  LEU E 132     -29.920 -13.833 -30.540  1.00 42.31      E    C
ATOM  15191  CB  LEU E 132     -29.808 -13.438 -32.015  1.00 40.68      E    C
ATOM  15194  CG  LEU E 132     -29.990 -14.520 -33.073  1.00 37.84      E    C
ATOM  15196  CD1 LEU E 132     -30.056 -13.861 -34.416  1.00 37.81      E    C
ATOM  15200  CD2 LEU E 132     -28.858 -15.538 -33.022  1.00 39.85      E    C
ATOM  15204  C   LEU E 132     -29.647 -12.636 -29.647  1.00 42.83      E    C
ATOM  15205  O   LEU E 132     -29.867 -11.507 -30.050  1.00 44.11      E    O
ATOM  15207  N   ALA E 133     -29.172 -12.889 -28.425  1.00 48.49      E    N
ATOM  15208  CA  ALA E 133     -29.076 -11.830 -27.396  1.00 48.74      E    C
ATOM  15210  CB  ALA E 133     -28.726 -12.416 -26.042  1.00 49.33      E    C
ATOM  15214  C   ALA E 133     -28.070 -10.771 -27.797  1.00 47.53      E    C
ATOM  15215  O   ALA E 133     -27.074 -11.080 -28.430  1.00 49.29      E    O
ATOM  15217  N   PRO E 134     -28.343  -9.509 -27.458  1.00 50.85      E    N
ATOM  15218  CA  PRO E 134     -27.299  -8.491 -27.644  1.00 56.04      E    C
ATOM  15220  CB  PRO E 134     -28.057  -7.172 -27.473  1.00 50.36      E    C
ATOM  15223  CG  PRO E 134     -29.269  -7.525 -26.655  1.00 49.31      E    C
ATOM  15226  CD  PRO E 134     -29.601  -8.952 -26.922  1.00 46.01      E    C
ATOM  15229  C   PRO E 134     -26.146  -8.653 -26.630  1.00 60.89      E    C
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ATOM  15230  O   PRO E 134     -26.395  -8.896 -25.449  1.00 64.77      E    O
ATOM  15231  N   SER E 135     -24.905  -8.562 -27.104  1.00 65.06      E    N
ATOM  15232  CA  SER E 135     -23.722  -8.676 -26.245  1.00 69.53      E    C
ATOM  15234  CB  SER E 135     -23.103 -10.084 -26.356  1.00 72.75      E    C
ATOM  15237  OG  SER E 135     -22.746 -10.426 -27.694  1.00 71.54      E    O
ATOM  15239  C   SER E 135     -22.706  -7.608 -26.625  1.00 73.24      E    C
ATOM  15240  O   SER E 135     -22.943  -6.810 -27.538  1.00 72.72      E    O
ATOM  15242  N   SER E 136     -21.581  -7.585 -25.915  1.00 78.71      E    N
ATOM  15243  CA  SER E 136     -20.420  -6.791 -26.322  1.00 78.29      E    C
ATOM  15245  CB  SER E 136     -19.301  -6.917 -25.282  1.00 74.84      E    C
ATOM  15248  OG  SER E 136     -18.845  -8.252 -25.153  1.00 65.34      E    O
ATOM  15250  C   SER E 136     -19.914  -7.237 -27.695  1.00 81.40      E    C
ATOM  15251  O   SER E 136     -19.412  -6.428 -28.472  1.00 83.26      E    O
ATOM  15253  N   LYS E 137     -20.056  -8.529 -27.986  1.00 81.50      E    N
ATOM  15254  CA  LYS E 137     -19.713  -9.075 -29.306  1.00 79.99      E    C
ATOM  15256  CB  LYS E 137     -19.438 -10.587 -29.231  1.00 77.51      E    C
ATOM  15259  CG  LYS E 137     -18.103 -10.967 -28.583  1.00 75.44      E    C
ATOM  15262  CD  LYS E 137     -16.902 -10.609 -29.459  1.00 76.29      E    C
ATOM  15265  CE  LYS E 137     -15.562 -10.983 -28.784  1.00 77.03      E    C
ATOM  15268  NZ  LYS E 137     -15.238 -10.202 -27.549  1.00 80.28      E    N
ATOM  15272  C   LYS E 137     -20.792  -8.768 -30.362  1.00 77.56      E    C
ATOM  15273  O   LYS E 137     -20.709  -9.251 -31.484  1.00 70.92      E    O
ATOM  15275  N   SER E 138     -21.798  -7.970 -29.995  1.00 78.95      E    N
ATOM  15276  CA  SER E 138     -22.789  -7.457 -30.957  1.00 79.48      E    C
ATOM  15278  CB  SER E 138     -24.072  -8.307 -30.937  1.00 75.67      E    C
ATOM  15281  OG  SER E 138     -25.002  -7.849 -29.969  1.00 73.04      E    O
ATOM  15283  C   SER E 138     -23.117  -5.956 -30.777  1.00 79.89      E    C
ATOM  15284  O   SER E 138     -24.074  -5.462 -31.361  1.00 77.34      E    O
ATOM  15286  N   THR E 139     -22.322  -5.239 -29.982  1.00 81.72      E    N
ATOM  15287  CA  THR E 139     -22.452  -3.789 -29.861  1.00 82.85      E    C
ATOM  15289  CB  THR E 139     -22.123  -3.308 -28.432  1.00 81.69      E    C
ATOM  15291  OG1 THR E 139     -23.089  -3.857 -27.527  1.00 77.64      E    O
ATOM  15293  CG2 THR E 139     -22.154  -1.773 -28.328  1.00 80.18      E    C
ATOM  15297  C   THR E 139     -21.544  -3.132 -30.902  1.00 83.85      E    C
ATOM  15298  O   THR E 139     -20.576  -3.737 -31.352  1.00 83.96      E    O
ATOM  15300  N   SER E 140     -21.885  -1.913 -31.309  1.00 83.58      E    N
ATOM  15301  CA  SER E 140     -21.084  -1.160 -32.284  1.00 83.87      E    C
ATOM  15303  CB  SER E 140     -21.441  -1.521 -33.717  1.00 85.00      E    C
ATOM  15306  OG  SER E 140     -20.587  -0.840 -34.617  1.00 84.84      E    O
ATOM  15308  C   SER E 140     -21.238   0.342 -32.070  1.00 83.43      E    C
ATOM  15309  O   SER E 140     -22.184   0.965 -32.556  1.00 81.43      E    O
ATOM  15311  N   GLY E 141     -20.284   0.913 -31.341  1.00 84.21      E    N
ATOM  15312  CA  GLY E 141     -20.394   2.280 -30.862  1.00 82.92      E    C
ATOM  15315  C   GLY E 141     -21.543   2.348 -29.872  1.00 84.25      E    C
ATOM  15316  O   GLY E 141     -21.506   1.701 -28.812  1.00 87.79      E    O
ATOM  15318  N   GLY E 142     -22.569   3.116 -30.236  1.00 79.54      E    N
ATOM  15319  CA  GLY E 142     -23.799   3.216 -29.456  1.00 76.02      E    C
ATOM  15322  C   GLY E 142     -24.920   2.316 -29.962  1.00 73.04      E    C
ATOM  15323  O   GLY E 142     -26.035   2.383 -29.451  1.00 72.54      E    O
ATOM  15325  N   THR E 143     -24.616   1.456 -30.940  1.00 70.21      E    N
ATOM  15326  CA  THR E 143     -25.605   0.558 -31.575  1.00 67.06      E    C
ATOM  15328  CB  THR E 143     -25.472   0.577 -33.126  1.00 68.59      E    C
ATOM  15330  OG1 THR E 143     -25.777   1.880 -33.639  1.00 69.29      E    O
ATOM  15332  CG2 THR E 143     -26.396  -0.439 -33.760  1.00 69.57      E    C
ATOM  15336  C   THR E 143     -25.426  -0.907 -31.179  1.00 64.60      E    C
ATOM  15337  O   THR E 143     -24.351  -1.461 -31.371  1.00 65.39      E    O
ATOM  15339  N   ALA E 144     -26.476  -1.538 -30.655  1.00 61.00      E    N
ATOM  15340  CA  ALA E 144     -26.475  -2.985 -30.397  1.00 56.86      E    C
ATOM  15342  CB  ALA E 144     -27.022  -3.269 -29.009  1.00 53.02      E    C
ATOM  15346  C   ALA E 144     -27.306  -3.747 -31.446  1.00 54.46      E    C
ATOM  15347  O   ALA E 144     -28.407  -3.326 -31.800  1.00 55.06      E    O
ATOM  15349  N   ALA E 145     -26.791  -4.877 -31.929  1.00 50.81      E    N
ATOM  15350  CA  ALA E 145     -27.599  -5.789 -32.745  1.00 47.46      E    C
ATOM  15352  CB  ALA E 145     -26.782  -6.382 -33.889  1.00 43.01      E    C
ATOM  15356  C   ALA E 145     -28.187  -6.903 -31.879  1.00 48.05      E    C
ATOM  15357  O   ALA E 145     -27.512  -7.424 -30.992  1.00 49.14      E    O
ATOM  15359  N   LEU E 146     -29.444  -7.267 -32.144  1.00 45.85      E    N
ATOM  15360  CA  LEU E 146     -30.081  -8.423 -31.503  1.00 45.13      E    C
ATOM  15362  CB  LEU E 146     -30.861  -7.989 -30.253  1.00 44.95      E    C
ATOM  15365  CG  LEU E 146     -31.945  -6.916 -30.478  1.00 46.29      E    C
ATOM  15367  CD1 LEU E 146     -33.361  -7.538 -30.463  1.00 45.25      E    C
ATOM  15371  CD2 LEU E 146     -31.844  -5.784 -29.464  1.00 47.71      E    C
ATOM  15375  C   LEU E 146     -31.028  -9.073 -32.504  1.00 43.61      E    C
ATOM  15376  O   LEU E 146     -31.269  -8.522 -33.567  1.00 43.98      E    O
ATOM  15378  N   GLY E 147     -31.572 -10.240 -32.170  1.00 44.19      E    N
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ATOM  15379  CA  GLY E 147     -32.478 -10.909 -33.084  1.00 42.51      E    C
ATOM  15382  C   GLY E 147     -33.207 -12.113 -32.536  1.00 41.50      E    C
ATOM  15383  O   GLY E 147     -33.342 -12.260 -31.333  1.00 37.47      E    O
ATOM  15385  N   CYS E 148     -33.690 -12.957 -33.453  1.00 44.40      E    N
ATOM  15386  CA  CYS E 148     -34.356 -14.235 -33.147  1.00 42.56      E    C
ATOM  15388  CB  CYS E 148     -35.874 -14.038 -33.051  1.00 50.28      E    C
ATOM  15391  SG  CYS E 148     -36.481 -13.383 -31.472  1.00 55.64      E    S
ATOM  15393  C   CYS E 148     -34.056 -15.262 -34.255  1.00 39.89      E    C
ATOM  15394  O   CYS E 148     -34.200 -14.954 -35.436  1.00 39.62      E    O
ATOM  15396  N   LEU E 149     -33.610 -16.453 -33.868  1.00 36.49      E    N
ATOM  15397  CA  LEU E 149     -33.436 -17.541 -34.784  1.00 36.54      E    C
ATOM  15399  CB  LEU E 149     -32.252 -18.410 -34.334  1.00 39.13      E    C
ATOM  15402  CG  LEU E 149     -31.945 -19.675 -35.139  1.00 37.71      E    C
ATOM  15404  CD1 LEU E 149     -31.556 -19.344 -36.572  1.00 34.43      E    C
ATOM  15408  CD2 LEU E 149     -30.851 -20.497 -34.450  1.00 39.33      E    C
ATOM  15412  C   LEU E 149     -34.745 -18.344 -34.796  1.00 40.43      E    C
ATOM  15413  O   LEU E 149     -35.142 -18.935 -33.763  1.00 37.84      E    O
ATOM  15415  N   VAL E 150     -35.404 -18.368 -35.962  1.00 39.08      E    N
ATOM  15416  CA  VAL E 150     -36.653 -19.125 -36.167  1.00 36.48      E    C
ATOM  15418  CB  VAL E 150     -37.765 -18.335 -36.953  1.00 35.71      E    C
ATOM  15420  CG1 VAL E 150     -39.095 -19.108 -36.914  1.00 27.11      E    C
ATOM  15424  CG2 VAL E 150     -37.945 -16.898 -36.411  1.00 23.78      E    C
ATOM  15428  C   VAL E 150     -36.274 -20.360 -36.940  1.00 37.23      E    C
ATOM  15429  O   VAL E 150     -35.995 -20.304 -38.130  1.00 38.84      E    O
ATOM  15431  N   LYS E 151     -36.226 -21.472 -36.230  1.00 39.70      E    N
ATOM  15432  CA  LYS E 151     -35.446 -22.622 -36.629  1.00 40.10      E    C
ATOM  15434  CB  LYS E 151     -34.339 -22.752 -35.565  1.00 41.90      E    C
ATOM  15437  CG  LYS E 151     -33.622 -24.064 -35.399  1.00 41.48      E    C
ATOM  15440  CD  LYS E 151     -32.480 -24.211 -36.315  1.00 41.11      E    C
ATOM  15443  CE  LYS E 151     -31.499 -25.198 -35.756  1.00 40.01      E    C
ATOM  15446  NZ  LYS E 151     -30.737 -25.814 -36.841  1.00 40.23      E    N
ATOM  15450  C   LYS E 151     -36.345 -23.867 -36.783  1.00 42.38      E    C
ATOM  15451  O   LYS E 151     -37.292 -24.077 -36.023  1.00 42.48      E    O
ATOM  15453  N   ASP E 152     -36.068 -24.645 -37.830  1.00 42.90      E    N
ATOM  15454  CA  ASP E 152     -36.657 -25.963 -38.027  1.00 42.45      E    C
ATOM  15456  CB  ASP E 152     -36.269 -26.876 -36.865  1.00 46.08      E    C
ATOM  15459  CG  ASP E 152     -34.838 -27.268 -36.915  1.00 44.31      E    C
ATOM  15460  OD1 ASP E 152     -34.277 -27.234 -38.032  1.00 44.66      E    O
ATOM  15461  OD2 ASP E 152     -34.292 -27.628 -35.849  1.00 48.26      E    O
ATOM  15462  C   ASP E 152     -38.156 -25.990 -38.211  1.00 41.34      E    C
ATOM  15463  O   ASP E 152     -38.855 -26.656 -37.463  1.00 45.48      E    O
ATOM  15465  N   TYR E 153     -38.639 -25.291 -39.231  1.00 42.31      E    N
ATOM  15466  CA  TYR E 153     -40.063 -25.291 -39.561  1.00 42.33      E    C
ATOM  15468  CB  TYR E 153     -40.697 -23.916 -39.333  1.00 35.78      E    C
ATOM  15471  CG  TYR E 153     -40.133 -22.805 -40.204  1.00 36.28      E    C
ATOM  15472  CD1 TYR E 153     -40.695 -22.510 -41.442  1.00 35.52      E    C
ATOM  15474  CE1 TYR E 153     -40.193 -21.495 -42.224  1.00 35.55      E    C
ATOM  15476  CZ  TYR E 153     -39.108 -20.740 -41.773  1.00 35.22      E    C
ATOM  15477  OH  TYR E 153     -38.593 -19.716 -42.549  1.00 34.94      E    O
ATOM  15479  CE2 TYR E 153     -38.546 -21.004 -40.552  1.00 32.65      E    C
ATOM  15481  CD2 TYR E 153     -39.053 -22.033 -39.774  1.00 36.08      E    C
ATOM  15483  C   TYR E 153     -40.308 -25.728 -40.997  1.00 44.98      E    C
ATOM  15484  O   TYR E 153     -39.433 -25.614 -41.862  1.00 42.97      E    O
ATOM  15486  N   PHE E 154     -41.516 -26.227 -41.234  1.00 46.39      E    N
ATOM  15487  CA  PHE E 154     -41.933 -26.599 -42.565  1.00 44.10      E    C
ATOM  15489  CB  PHE E 154     -41.472 -28.027 -42.878  1.00 44.72      E    C
ATOM  15492  CG  PHE E 154     -41.554 -28.374 -44.334  1.00 45.45      E    C
ATOM  15493  CD1 PHE E 154     -40.665 -27.813 -45.242  1.00 44.39      E    C
ATOM  15495  CE1 PHE E 154     -40.749 -28.109 -46.588  1.00 45.60      E    C
ATOM  15497  CZ  PHE E 154     -41.731 -28.974 -47.052  1.00 43.70      E    C
ATOM  15499  CE2 PHE E 154     -42.619 -29.537 -46.165  1.00 45.70      E    C
ATOM  15501  CD2 PHE E 154     -42.533 -29.231 -44.806  1.00 45.80      E    C
ATOM  15503  C   PHE E 154     -43.434 -26.492 -42.632  1.00 40.75      E    C
ATOM  15504  O   PHE E 154     -44.083 -26.826 -41.675  1.00 43.98      E    O
ATOM  15506  N   PRO E 155     -43.994 -25.974 -43.740  1.00 40.44      E    N
ATOM  15507  CA  PRO E 155     -43.353 -25.371 -44.906  1.00 39.76      E    C
ATOM  15509  CB  PRO E 155     -44.367 -25.641 -46.018  1.00 35.25      E    C
ATOM  15512  CG  PRO E 155     -45.684 -25.505 -45.323  1.00 35.78      E    C
ATOM  15515  CD  PRO E 155     -45.464 -25.978 -43.893  1.00 41.17      E    C
ATOM  15518  C   PRO E 155     -43.163 -23.878 -44.673  1.00 40.84      E    C
ATOM  15519  O   PRO E 155     -43.330 -23.416 -43.558  1.00 38.73      E    O
ATOM  15520  N   GLU E 156     -42.798 -23.133 -45.710  1.00 44.32      E    N
ATOM  15521  CA  GLU E 156     -42.853 -21.687 -45.655  1.00 41.10      E    C
ATOM  15523  CB  GLU E 156     -42.109 -21.096 -46.846  1.00 40.35      E    C
ATOM  15526  CG  GLU E 156     -40.612 -21.136 -46.753  1.00 40.17      E    C
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ATOM  15529  CD  GLU E 156     -40.029 -19.842 -46.202  1.00 45.92      E    C
ATOM  15530  OE1 GLU E 156     -40.206 -19.548 -44.971  1.00 37.91      E    O
ATOM  15531  OE2 GLU E 156     -39.397 -19.120 -47.020  1.00 45.84      E    O
ATOM  15532  C   GLU E 156     -44.338 -21.308 -45.708  1.00 39.25      E    C
ATOM  15533  O   GLU E 156     -45.146 -22.096 -46.174  1.00 40.68      E    O
ATOM  15535  N   PRO E 157     -44.704 -20.092 -45.264  1.00 39.96      E    N
ATOM  15536  CA  PRO E 157     -43.912 -19.039 -44.673  1.00 38.16      E    C
ATOM  15538  CB  PRO E 157     -44.522 -17.798 -45.325  1.00 36.51      E    C
ATOM  15541  CG  PRO E 157     -45.966 -18.131 -45.495  1.00 35.12      E    C
ATOM  15544  CD  PRO E 157     -46.091 -19.632 -45.463  1.00 37.74      E    C
ATOM  15547  C   PRO E 157     -44.027 -18.936 -43.149  1.00 38.17      E    C
ATOM  15548  O   PRO E 157     -44.887 -19.598 -42.533  1.00 40.68      E    O
ATOM  15549  N   VAL E 158     -43.136 -18.130 -42.566  1.00 38.69      E    N
ATOM  15550  CA  VAL E 158     -43.309 -17.544 -41.231  1.00 42.27      E    C
ATOM  15552  CB  VAL E 158     -42.185 -17.911 -40.195  1.00 38.54      E    C
ATOM  15554  CG1 VAL E 158     -42.262 -19.359 -39.782  1.00 37.42      E    C
ATOM  15558  CG2 VAL E 158     -40.820 -17.588 -40.734  1.00 36.49      E    C
ATOM  15562  C   VAL E 158     -43.274 -16.038 -41.409  1.00 44.56      E    C
ATOM  15563  O   VAL E 158     -42.601 -15.548 -42.307  1.00 46.50      E    O
ATOM  15565  N   THR E 159     -43.988 -15.321 -40.545  1.00 46.33      E    N
ATOM  15566  CA  THR E 159     -43.831 -13.875 -40.416  1.00 45.55      E    C
ATOM  15568  CB  THR E 159     -45.183 -13.155 -40.477  1.00 47.59      E    C
ATOM  15570  OG1 THR E 159     -46.057 -13.693 -39.477  1.00 50.73      E    O
ATOM  15572  CG2 THR E 159     -45.811 -13.329 -41.845  1.00 44.74      E    C
ATOM  15576  C   THR E 159     -43.140 -13.540 -39.096  1.00 45.28      E    C
ATOM  15577  O   THR E 159     -43.339 -14.231 -38.098  1.00 44.13      E    O
ATOM  15579  N   VAL E 160     -42.292 -12.511 -39.125  1.00 44.66      E    N
ATOM  15580  CA  VAL E 160     -41.637 -12.015 -37.930  1.00 43.72      E    C
ATOM  15582  CB  VAL E 160     -40.124 -12.213 -37.931  1.00 43.08      E    C
ATOM  15584  CG1 VAL E 160     -39.578 -11.839 -36.547  1.00 35.94      E    C
ATOM  15588  CG2 VAL E 160     -39.764 -13.667 -38.322  1.00 41.76      E    C
ATOM  15592  C   VAL E 160     -41.902 -10.531 -37.812  1.00 44.86      E    C
ATOM  15593  O   VAL E 160     -41.585  -9.768 -38.724  1.00 47.59      E    O
ATOM  15595  N   SER E 161     -42.479 -10.116 -36.690  1.00 43.97      E    N
ATOM  15596  CA  SER E 161     -42.518  -8.702 -36.367  1.00 45.11      E    C
ATOM  15598  CB  SER E 161     -43.960  -8.143 -36.352  1.00 41.96      E    C
ATOM  15601  OG  SER E 161     -44.757  -8.675 -35.311  1.00 41.78      E    O
ATOM  15603  C   SER E 161     -41.755  -8.459 -35.067  1.00 43.65      E    C
ATOM  15604  O   SER E 161     -41.366  -9.405 -34.373  1.00 44.94      E    O
ATOM  15606  N   TRP E 162     -41.470  -7.189 -34.804  1.00 45.22      E    N
ATOM  15607  CA  TRP E 162     -40.768  -6.775 -33.603  1.00 47.80      E    C
ATOM  15609  CB  TRP E 162     -39.457  -6.118 -34.005  1.00 45.82      E    C
ATOM  15612  CG  TRP E 162     -38.440  -7.130 -34.396  1.00 44.18      E    C
ATOM  15613  CD1 TRP E 162     -38.133  -7.556 -35.659  1.00 44.68      E    C
ATOM  15615  NE1 TRP E 162     -37.150  -8.517 -35.606  1.00 44.58      E    N
ATOM  15617  CE2 TRP E 162     -36.807  -8.724 -34.295  1.00 43.42      E    C
ATOM  15618  CD2 TRP E 162     -37.607  -7.868 -33.507  1.00 44.16      E    C
ATOM  15619  CE3 TRP E 162     -37.458  -7.891 -32.116  1.00 43.69      E    C
ATOM  15621  CZ3 TRP E 162     -36.541  -8.753 -31.562  1.00 45.12      E    C
ATOM  15623  CH2 TRP E 162     -35.751  -9.589 -32.370  1.00 45.12      E    C
ATOM  15625  CZ2 TRP E 162     -35.873  -9.589 -33.737  1.00 43.92      E    C
ATOM  15627  C   TRP E 162     -41.660  -5.835 -32.798  1.00 49.68      E    C
ATOM  15628  O   TRP E 162     -42.232  -4.892 -33.349  1.00 51.16      E    O
ATOM  15630  N   ASN E 163     -41.801  -6.106 -31.500  1.00 53.01      E    N
ATOM  15631  CA  ASN E 163     -42.675  -5.297 -30.648  1.00 53.97      E    C
ATOM  15633  CB  ASN E 163     -42.037  -3.937 -30.313  1.00 51.87      E    C
ATOM  15636  CG  ASN E 163     -40.787  -4.071 -29.460  1.00 49.18      E    C
ATOM  15637  OD1 ASN E 163     -40.501  -5.142 -28.916  1.00 49.55      E    O
ATOM  15638  ND2 ASN E 163     -40.035  -2.984 -29.338  1.00 49.41      E    N
ATOM  15641  C   ASN E 163     -44.014  -5.087 -31.336  1.00 56.38      E    C
ATOM  15642  O   ASN E 163     -44.478  -3.964 -31.499  1.00 58.81      E    O
ATOM  15644  N   SER E 164     -44.600  -6.199 -31.771  1.00 60.40      E    N
ATOM  15645  CA  SER E 164     -45.935  -6.243 -32.373  1.00 56.68      E    C
ATOM  15647  CB  SER E 164     -46.989  -5.994 -31.290  1.00 58.39      E    C
ATOM  15650  OG  SER E 164     -46.728  -6.806 -30.158  1.00 58.46      E    O
ATOM  15652  C   SER E 164     -46.127  -5.266 -33.533  1.00 57.53      E    C
ATOM  15653  O   SER E 164     -47.212  -4.734 -33.722  1.00 59.61      E    O
ATOM  15655  N   GLY E 165     -45.072  -5.040 -34.309  1.00 58.86      E    N
ATOM  15656  CA  GLY E 165     -45.126  -4.115 -35.442  1.00 56.23      E    C
ATOM  15659  C   GLY E 165     -44.628  -2.717 -35.134  1.00 54.50      E    C
ATOM  15660  O   GLY E 165     -44.381  -1.941 -36.053  1.00 54.64      E    O
ATOM  15662  N   ALA E 166     -44.469  -2.395 -33.850  1.00 54.00      E    N
ATOM  15663  CA  ALA E 166     -44.033  -1.054 -33.417  1.00 55.32      E    C
ATOM  15665  CB  ALA E 166     -44.158  -0.915 -31.905  1.00 53.26      E    C
ATOM  15669  C   ALA E 166     -42.604  -0.720 -33.868  1.00 56.02      E    C
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ATOM	15670	O	ALA	E	166	-42.345	0.385	-34.319	1.00	56.90	E	O
ATOM	15672	N	LEU	E	167	-41.693	-1.689	-33.746	1.00	56.61	E	N
ATOM	15673	CA	LEU	E	167	-40.311	-1.537	-34.176	1.00	52.46	E	C
ATOM	15675	CB	LEU	E	167	-39.376	-2.311	-33.246	1.00	52.74	E	C
ATOM	15678	CG	LEU	E	167	-37.891	-2.313	-33.620	1.00	53.74	E	C
ATOM	15680	CD1	LEU	E	167	-37.341	-0.893	-33.643	1.00	53.52	E	C
ATOM	15684	CD2	LEU	E	167	-37.094	-3.190	-32.669	1.00	51.10	E	C
ATOM	15688	C	LEU	E	167	-40.172	-2.060	-35.593	1.00	52.53	E	C
ATOM	15689	O	LEU	E	167	-40.277	-3.262	-35.826	1.00	54.01	E	O
ATOM	15691	N	THR	E	168	-39.932	-1.151	-36.533	1.00	53.19	E	N
ATOM	15692	CA	THR	E	168	-39.698	-1.514	-37.933	1.00	53.39	E	C
ATOM	15694	CB	THR	E	168	-40.872	-1.021	-38.868	1.00	52.69	E	C
ATOM	15696	OG1	THR	E	168	-41.050	0.396	-38.765	1.00	47.07	E	O
ATOM	15698	CG2	THR	E	168	-42.206	-1.726	-38.511	1.00	49.67	E	C
ATOM	15702	C	THR	E	168	-38.335	-1.028	-38.453	1.00	54.70	E	C
ATOM	15703	O	THR	E	168	-37.783	-1.609	-39.387	1.00	52.98	E	O
ATOM	15705	N	SER	E	169	-37.774	0.013	-37.833	1.00	56.76	E	N
ATOM	15706	CA	SER	E	169	-36.515	0.593	-38.299	1.00	56.00	E	C
ATOM	15708	CB	SER	E	169	-36.395	2.039	-37.839	1.00	58.97	E	C
ATOM	15711	OG	SER	E	169	-35.263	2.649	-38.431	1.00	60.57	E	O
ATOM	15713	C	SER	E	169	-35.297	-0.214	-37.833	1.00	57.29	E	C
ATOM	15714	O	SER	E	169	-35.180	-0.543	-36.650	1.00	60.54	E	O
ATOM	15716	N	GLY	E	170	-34.406	-0.534	-38.775	1.00	53.64	E	N
ATOM	15717	CA	GLY	E	170	-33.215	-1.352	-38.505	1.00	50.32	E	C
ATOM	15720	C	GLY	E	170	-33.398	-2.848	-38.708	1.00	48.46	E	C
ATOM	15721	O	GLY	E	170	-32.427	-3.590	-38.679	1.00	47.40	E	O
ATOM	15723	N	VAL	E	171	-34.636	-3.291	-38.928	1.00	49.17	E	N
ATOM	15724	CA	VAL	E	171	-34.965	-4.718	-38.990	1.00	43.48	E	C
ATOM	15726	CB	VAL	E	171	-36.486	-4.970	-38.781	1.00	41.83	E	C
ATOM	15728	CG1	VAL	E	171	-36.825	-6.445	-39.002	1.00	36.93	E	C
ATOM	15732	CG2	VAL	E	171	-36.955	-4.502	-37.395	1.00	38.07	E	C
ATOM	15736	C	VAL	E	171	-34.551	-5.353	-40.325	1.00	42.91	E	C
ATOM	15737	O	VAL	E	171	-34.893	-4.848	-41.393	1.00	41.82	E	O
ATOM	15739	N	HIS	E	172	-33.806	-6.456	-40.239	1.00	42.78	E	N
ATOM	15740	CA	HIS	E	172	-33.438	-7.271	-41.385	1.00	40.35	E	C
ATOM	15742	CB	HIS	E	172	-31.935	-7.251	-41.622	1.00	41.85	E	C
ATOM	15745	CG	HIS	E	172	-31.412	-5.939	-42.123	1.00	45.68	E	C
ATOM	15746	ND1	HIS	E	172	-31.881	-5.333	-43.272	1.00	45.82	E	N
ATOM	15748	CE1	HIS	E	172	-31.214	-4.207	-43.475	1.00	48.77	E	C
ATOM	15750	NE2	HIS	E	172	-30.332	-4.058	-42.500	1.00	44.13	E	N
ATOM	15752	CD2	HIS	E	172	-30.433	-5.131	-41.646	1.00	47.57	E	C
ATOM	15754	C	HIS	E	172	-33.892	-8.685	-41.083	1.00	39.09	E	C
ATOM	15755	O	HIS	E	172	-33.325	-9.353	-40.222	1.00	45.19	E	O
ATOM	15757	N	THR	E	173	-34.951	-9.117	-41.762	1.00	40.29	E	N
ATOM	15758	CA	THR	E	173	-35.514	-10.456	-41.619	1.00	38.82	E	C
ATOM	15760	CB	THR	E	173	-37.050	-10.404	-41.556	1.00	41.76	E	C
ATOM	15762	OG1	THR	E	173	-37.459	-9.839	-40.299	1.00	46.80	E	O
ATOM	15764	CG2	THR	E	173	-37.696	-11.803	-41.743	1.00	34.32	E	C
ATOM	15768	C	THR	E	173	-35.050	-11.200	-42.842	1.00	38.84	E	C
ATOM	15769	O	THR	E	173	-35.458	-10.862	-43.945	1.00	40.60	E	O
ATOM	15771	N	PHE	E	174	-34.168	-12.178	-42.638	1.00	39.82	E	N
ATOM	15772	CA	PHE	E	174	-33.458	-12.837	-43.722	1.00	38.87	E	C
ATOM	15774	CB	PHE	E	174	-32.173	-13.464	-43.188	1.00	38.65	E	C
ATOM	15777	CG	PHE	E	174	-31.150	-12.445	-42.842	1.00	39.32	E	C
ATOM	15778	CD1	PHE	E	174	-30.379	-11.885	-43.829	1.00	38.16	E	C
ATOM	15780	CE1	PHE	E	174	-29.469	-10.917	-43.540	1.00	38.52	E	C
ATOM	15782	CZ	PHE	E	174	-29.343	-10.456	-42.253	1.00	39.61	E	C
ATOM	15784	CE2	PHE	E	174	-30.111	-10.997	-41.248	1.00	40.02	E	C
ATOM	15786	CD2	PHE	E	174	-31.025	-11.975	-41.548	1.00	40.75	E	C
ATOM	15788	C	PHE	E	174	-34.306	-13.867	-44.422	1.00	40.16	E	C
ATOM	15789	O	PHE	E	174	-35.165	-14.509	-43.786	1.00	43.48	E	O
ATOM	15791	N	PRO	E	175	-34.094	-14.024	-45.740	1.00	40.39	E	N
ATOM	15792	CA	PRO	E	175	-34.791	-15.104	-46.452	1.00	39.78	E	C
ATOM	15794	CB	PRO	E	175	-34.222	-15.037	-47.890	1.00	34.25	E	C
ATOM	15797	CG	PRO	E	175	-33.398	-13.791	-47.981	1.00	30.23	E	C
ATOM	15800	CD	PRO	E	175	-33.228	-13.203	-46.614	1.00	33.76	E	C
ATOM	15803	C	PRO	E	175	-34.513	-16.476	-45.824	1.00	42.09	E	C
ATOM	15804	O	PRO	E	175	-33.398	-16.735	-45.372	1.00	43.99	E	O
ATOM	15805	N	ALA	E	176	-35.532	-17.329	-45.776	1.00	41.68	E	N
ATOM	15806	CA	ALA	E	176	-35.382	-18.667	-45.247	1.00	41.93	E	C
ATOM	15808	CB	ALA	E	176	-36.738	-19.366	-45.191	1.00	44.98	E	C
ATOM	15812	C	ALA	E	176	-34.419	-19.471	-46.097	1.00	43.76	E	C
ATOM	15813	O	ALA	E	176	-34.403	-19.334	-47.333	1.00	43.53	E	O
ATOM	15815	N	VAL	E	177	-33.608	-20.304	-45.435	1.00	46.19	E	N
ATOM	15816	CA	VAL	E	177	-32.763	-21.290	-46.119	1.00	43.01	E	C

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ATOM  15818  CB  VAL E 177     -31.275 -21.215 -45.699  1.00 44.44      E    C
ATOM  15820  CG1 VAL E 177     -30.623 -19.933 -46.169  1.00 44.14      E    C
ATOM  15824  CG2 VAL E 177     -31.108 -21.385 -44.186  1.00 49.71      E    C
ATOM  15828  C   VAL E 177     -33.271 -22.661 -45.770  1.00 44.43      E    C
ATOM  15829  O   VAL E 177     -33.632 -22.915 -44.623  1.00 47.79      E    O
ATOM  15831  N   LEU E 178     -33.295 -23.546 -46.761  1.00 47.70      E    N
ATOM  15832  CA  LEU E 178     -33.649 -24.945 -46.552  1.00 46.87      E    C
ATOM  15834  CB  LEU E 178     -34.227 -25.525 -47.838  1.00 45.36      E    C
ATOM  15837  CG  LEU E 178     -34.770 -26.943 -47.750  1.00 43.40      E    C
ATOM  15839  CD1 LEU E 178     -35.871 -27.046 -46.732  1.00 40.87      E    C
ATOM  15843  CD2 LEU E 178     -35.239 -27.326 -49.145  1.00 46.66      E    C
ATOM  15847  C   LEU E 178     -32.421 -25.748 -46.091  1.00 49.24      E    C
ATOM  15848  O   LEU E 178     -31.450 -25.941 -46.842  1.00 51.73      E    O
ATOM  15850  N   GLN E 179     -32.491 -26.238 -44.854  1.00 49.44      E    N
ATOM  15851  CA  GLN E 179     -31.408 -27.019 -44.270  1.00 47.40      E    C
ATOM  15853  CB  GLN E 179     -31.574 -27.118 -42.751  1.00 50.25      E    C
ATOM  15856  CG  GLN E 179     -31.584 -25.753 -42.017  1.00 52.28      E    C
ATOM  15859  CD  GLN E 179     -32.158 -25.846 -40.598  1.00 52.34      E    C
ATOM  15860  OE1 GLN E 179     -33.296 -26.283 -40.394  1.00 50.09      E    O
ATOM  15861  NE2 GLN E 179     -31.369 -25.433 -39.621  1.00 54.31      E    N
ATOM  15864  C   GLN E 179     -31.393 -28.398 -44.880  1.00 46.38      E    C
ATOM  15865  O   GLN E 179     -32.368 -28.818 -45.500  1.00 47.93      E    O
ATOM  15867  N   SER E 180     -30.303 -29.126 -44.668  1.00 48.62      E    N
ATOM  15868  CA  SER E 180     -30.142 -30.469 -45.239  1.00 51.02      E    C
ATOM  15870  CB  SER E 180     -28.714 -30.985 -45.008  1.00 52.13      E    C
ATOM  15873  OG  SER E 180     -28.365 -30.989 -43.633  1.00 54.71      E    O
ATOM  15875  C   SER E 180     -31.189 -31.467 -44.703  1.00 51.80      E    C
ATOM  15876  O   SER E 180     -31.413 -32.532 -45.298  1.00 49.23      E    O
ATOM  15878  N   SER E 181     -31.845 -31.088 -43.603  1.00 53.37      E    N
ATOM  15879  CA  SER E 181     -32.919 -31.872 -42.997  1.00 50.93      E    C
ATOM  15881  CB  SER E 181     -32.994 -31.555 -41.500  1.00 47.21      E    C
ATOM  15884  OG  SER E 181     -33.195 -30.164 -41.288  1.00 44.29      E    O
ATOM  15886  C   SER E 181     -34.285 -31.647 -43.656  1.00 52.16      E    C
ATOM  15887  O   SER E 181     -35.248 -32.311 -43.292  1.00 51.44      E    O
ATOM  15889  N   GLY E 182     -34.364 -30.728 -44.624  1.00 51.77      E    N
ATOM  15890  CA  GLY E 182     -35.631 -30.409 -45.279  1.00 49.13      E    C
ATOM  15893  C   GLY E 182     -36.536 -29.552 -44.410  1.00 47.59      E    C
ATOM  15894  O   GLY E 182     -37.755 -29.536 -44.606  1.00 49.30      E    O
ATOM  15896  N   LEU E 183     -35.923 -28.853 -43.449  1.00 45.18      E    N
ATOM  15897  CA  LEU E 183     -36.621 -27.918 -42.557  1.00 46.88      E    C
ATOM  15899  CB  LEU E 183     -36.479 -28.319 -41.089  1.00 45.17      E    C
ATOM  15902  CG  LEU E 183     -37.085 -29.671 -40.660  1.00 43.52      E    C
ATOM  15904  CD1 LEU E 183     -36.721 -30.030 -39.216  1.00 39.13      E    C
ATOM  15908  CD2 LEU E 183     -38.601 -29.688 -40.867  1.00 37.65      E    C
ATOM  15912  C   LEU E 183     -36.035 -26.543 -42.763  1.00 46.90      E    C
ATOM  15913  O   LEU E 183     -34.821 -26.396 -42.924  1.00 45.66      E    O
ATOM  15915  N   TYR E 184     -36.907 -25.535 -42.776  1.00 44.10      E    N
ATOM  15916  CA  TYR E 184     -36.476 -24.155 -42.975  1.00 43.11      E    C
ATOM  15918  CB  TYR E 184     -37.623 -23.310 -43.518  1.00 39.07      E    C
ATOM  15921  CG  TYR E 184     -37.931 -23.663 -44.935  1.00 39.14      E    C
ATOM  15922  CD1 TYR E 184     -37.152 -23.164 -45.970  1.00 39.59      E    C
ATOM  15924  CE1 TYR E 184     -37.405 -23.498 -47.274  1.00 40.25      E    C
ATOM  15926  CZ  TYR E 184     -38.451 -24.355 -47.559  1.00 42.02      E    C
ATOM  15927  OH  TYR E 184     -38.720 -24.689 -48.864  1.00 43.93      E    O
ATOM  15929  CE2 TYR E 184     -39.234 -24.868 -46.550  1.00 39.10      E    C
ATOM  15931  CD2 TYR E 184     -38.963 -24.527 -45.241  1.00 37.79      E    C
ATOM  15933  C   TYR E 184     -35.907 -23.518 -41.718  1.00 39.68      E    C
ATOM  15934  O   TYR E 184     -36.291 -23.841 -40.606  1.00 38.41      E    O
ATOM  15936  N   SER E 185     -34.976 -22.598 -41.922  1.00 39.51      E    N
ATOM  15937  CA  SER E 185     -34.478 -21.788 -40.840  1.00 42.68      E    C
ATOM  15939  CB  SER E 185     -33.253 -22.414 -40.194  1.00 38.93      E    C
ATOM  15942  OG  SER E 185     -32.982 -21.775 -38.967  1.00 44.46      E    O
ATOM  15944  C   SER E 185     -34.203 -20.368 -41.304  1.00 41.56      E    C
ATOM  15945  O   SER E 185     -33.850 -20.112 -42.457  1.00 42.36      E    O
ATOM  15947  N   LEU E 186     -34.387 -19.442 -40.374  1.00 43.89      E    N
ATOM  15948  CA  LEU E 186     -34.361 -18.025 -40.670  1.00 43.11      E    C
ATOM  15950  CB  LEU E 186     -35.764 -17.637 -41.194  1.00 42.80      E    C
ATOM  15953  CG  LEU E 186     -36.299 -16.192 -41.271  1.00 45.18      E    C
ATOM  15955  CD1 LEU E 186     -37.274 -16.048 -42.436  1.00 46.65      E    C
ATOM  15959  CD2 LEU E 186     -36.976 -15.717 -39.997  1.00 39.14      E    C
ATOM  15963  C   LEU E 186     -34.024 -17.224 -39.419  1.00 44.26      E    C
ATOM  15964  O   LEU E 186     -34.491 -17.543 -38.340  1.00 43.11      E    O
ATOM  15966  N   SER E 187     -33.205 -16.189 -39.580  1.00 46.72      E    N
ATOM  15967  CA  SER E 187     -32.925 -15.242 -38.518  1.00 40.15      E    C
ATOM  15969  CB  SER E 187     -31.421 -15.137 -38.335  1.00 45.47      E    C
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ATOM  15972  OG  SER E 187     -30.939 -16.321 -37.706  1.00 49.51      E    O
ATOM  15974  C   SER E 187     -33.539 -13.877 -38.850  1.00 38.06      E    C
ATOM  15975  O   SER E 187     -33.574 -13.470 -40.008  1.00 36.45      E    O
ATOM  15977  N   SER E 188     -34.081 -13.213 -37.834  1.00 40.03      E    N
ATOM  15978  CA  SER E 188     -34.499 -11.815 -37.936  1.00 40.19      E    C
ATOM  15980  CB  SER E 188     -35.993 -11.647 -37.621  1.00 41.28      E    C
ATOM  15983  OG  SER E 188     -36.536 -10.428 -38.156  1.00 42.04      E    O
ATOM  15985  C   SER E 188     -33.648 -11.004 -36.958  1.00 40.33      E    C
ATOM  15986  O   SER E 188     -33.587 -11.335 -35.778  1.00 39.03      E    O
ATOM  15988  N   VAL E 189     -32.964  -9.972 -37.456  1.00 42.77      E    N
ATOM  15989  CA  VAL E 189     -32.134  -9.120 -36.604  1.00 43.52      E    C
ATOM  15991  CB  VAL E 189     -30.670  -9.174 -36.993  1.00 40.39      E    C
ATOM  15993  CG1 VAL E 189     -30.158 -10.626 -36.973  1.00 37.95      E    C
ATOM  15997  CG2 VAL E 189     -30.458  -8.498 -38.349  1.00 43.37      E    C
ATOM  16001  C   VAL E 189     -32.585  -7.661 -36.641  1.00 45.29      E    C
ATOM  16002  O   VAL E 189     -33.235  -7.209 -37.582  1.00 46.21      E    O
ATOM  16004  N   VAL E 190     -32.246  -6.937 -35.586  1.00 45.19      E    N
ATOM  16005  CA  VAL E 190     -32.530  -5.508 -35.496  1.00 46.38      E    C
ATOM  16007  CB  VAL E 190     -33.926  -5.248 -34.826  1.00 46.10      E    C
ATOM  16009  CG1 VAL E 190     -33.939  -5.677 -33.376  1.00 39.76      E    C
ATOM  16013  CG2 VAL E 190     -34.338  -3.789 -34.954  1.00 46.87      E    C
ATOM  16017  C   VAL E 190     -31.373  -4.828 -34.745  1.00 48.83      E    C
ATOM  16018  O   VAL E 190     -30.897  -5.322 -33.719  1.00 46.31      E    O
ATOM  16020  N   THR E 191     -30.874  -3.739 -35.313  1.00 49.89      E    N
ATOM  16021  CA  THR E 191     -29.853  -2.922 -34.679  1.00 51.57      E    C
ATOM  16023  CB  THR E 191     -28.869  -2.396 -35.744  1.00 53.79      E    C
ATOM  16025  OG1 THR E 191     -29.600  -1.788 -36.825  1.00 57.97      E    O
ATOM  16027  CG2 THR E 191     -28.016  -3.546 -36.284  1.00 45.86      E    C
ATOM  16031  C   THR E 191     -30.537  -1.774 -33.932  1.00 51.33      E    C
ATOM  16032  O   THR E 191     -31.350  -1.072 -34.514  1.00 51.93      E    O
ATOM  16034  N   VAL E 192     -30.230  -1.615 -32.643  1.00 54.56      E    N
ATOM  16035  CA  VAL E 192     -30.857  -0.591 -31.775  1.00 57.53      E    C
ATOM  16037  CB  VAL E 192     -31.825  -1.216 -30.732  1.00 53.04      E    C
ATOM  16039  CG1 VAL E 192     -33.122  -1.700 -31.387  1.00 49.92      E    C
ATOM  16043  CG2 VAL E 192     -31.140  -2.346 -29.983  1.00 51.65      E    C
ATOM  16047  C   VAL E 192     -29.774   0.211 -31.029  1.00 62.01      E    C
ATOM  16048  O   VAL E 192     -28.611  -0.184 -31.030  1.00 62.45      E    O
ATOM  16050  N   PRO E 193     -30.143   1.352 -30.405  1.00 66.85      E    N
ATOM  16051  CA  PRO E 193     -29.224   2.010 -29.461  1.00 65.53      E    C
ATOM  16053  CB  PRO E 193     -30.010   3.258 -29.013  1.00 68.00      E    C
ATOM  16056  CG  PRO E 193     -31.041   3.482 -30.076  1.00 68.49      E    C
ATOM  16059  CD  PRO E 193     -31.406   2.107 -30.547  1.00 69.60      E    C
ATOM  16062  C   PRO E 193     -28.879   1.121 -28.247  1.00 67.49      E    C
ATOM  16063  O   PRO E 193     -29.729   0.358 -27.768  1.00 65.45      E    O
ATOM  16064  N   SER E 194     -27.642   1.223 -27.760  1.00 69.91      E    N
ATOM  16065  CA  SER E 194     -27.185   0.409 -26.628  1.00 70.98      E    C
ATOM  16067  CB  SER E 194     -25.655   0.480 -26.481  1.00 72.74      E    C
ATOM  16070  OG  SER E 194     -24.975   0.064 -27.660  1.00 71.73      E    O
ATOM  16072  C   SER E 194     -27.862   0.865 -25.328  1.00 71.93      E    C
ATOM  16073  O   SER E 194     -28.322   0.039 -24.528  1.00 68.54      E    O
ATOM  16075  N   SER E 195     -27.935   2.184 -25.134  1.00 74.66      E    N
ATOM  16076  CA  SER E 195     -28.593   2.775 -23.951  1.00 76.11      E    C
ATOM  16078  CB  SER E 195     -28.617   4.306 -24.059  1.00 76.98      E    C
ATOM  16081  OG  SER E 195     -29.537   4.743 -25.050  1.00 75.27      E    O
ATOM  16083  C   SER E 195     -30.026   2.257 -23.739  1.00 77.62      E    C
ATOM  16084  O   SER E 195     -30.494   2.145 -22.598  1.00 76.58      E    O
ATOM  16086  N   SER E 196     -30.701   1.937 -24.846  1.00 78.37      E    N
ATOM  16087  CA  SER E 196     -32.089   1.459 -24.828  1.00 78.61      E    C
ATOM  16089  CB  SER E 196     -32.638   1.370 -26.254  1.00 80.46      E    C
ATOM  16092  OG  SER E 196     -32.214   0.172 -26.891  1.00 82.63      E    O
ATOM  16094  C   SER E 196     -32.283   0.101 -24.141  1.00 78.18      E    C
ATOM  16095  O   SER E 196     -33.376  -0.186 -23.644  1.00 77.20      E    O
ATOM  16097  N   LEU E 197     -31.239  -0.730 -24.132  1.00 78.71      E    N
ATOM  16098  CA  LEU E 197     -31.301  -2.048 -23.490  1.00 78.92      E    C
ATOM  16100  CB  LEU E 197     -30.001  -2.824 -23.708  1.00 76.86      E    C
ATOM  16103  CG  LEU E 197     -29.780  -3.441 -25.094  1.00 77.79      E    C
ATOM  16105  CD1 LEU E 197     -29.481  -2.386 -26.139  1.00 77.33      E    C
ATOM  16109  CD2 LEU E 197     -28.648  -4.452 -25.044  1.00 78.58      E    C
ATOM  16113  C   LEU E 197     -31.572  -1.895 -22.000  1.00 80.77      E    C
ATOM  16114  O   LEU E 197     -31.360  -0.817 -21.430  1.00 83.03      E    O
ATOM  16116  N   GLY E 198     -32.061  -2.958 -21.367  1.00 81.03      E    N
ATOM  16117  CA  GLY E 198     -32.360  -2.915 -19.931  1.00 82.88      E    C
ATOM  16120  C   GLY E 198     -33.615  -2.131 -19.551  1.00 84.83      E    C
ATOM  16121  O   GLY E 198     -34.313  -2.505 -18.601  1.00 84.21      E    O
ATOM  16123  N   THR E 199     -33.888  -1.041 -20.279  1.00 84.86      E    N
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ATOM  16124  CA  THR E 199     -35.095  -0.220 -20.095  1.00 83.16      E    C
ATOM  16126  CB  THR E 199     -34.777   1.302 -20.297  1.00 82.11      E    C
ATOM  16128  OG1 THR E 199     -34.628   1.605 -21.694  1.00 76.53      E    O
ATOM  16130  CG2 THR E 199     -33.497   1.698 -19.560  1.00 83.04      E    C
ATOM  16134  C   THR E 199     -36.213  -0.634 -21.071  1.00 83.45      E    C
ATOM  16135  O   THR E 199     -37.265  -1.130 -20.651  1.00 84.58      E    O
ATOM  16137  N   GLN E 200     -35.965  -0.408 -22.368  1.00 80.52      E    N
ATOM  16138  CA  GLN E 200     -36.880  -0.777 -23.460  1.00 77.13      E    C
ATOM  16140  CB  GLN E 200     -36.551   0.058 -24.708  1.00 76.07      E    C
ATOM  16143  CG  GLN E 200     -37.165  -0.401 -26.036  1.00 76.05      E    C
ATOM  16146  CD  GLN E 200     -38.647  -0.089 -26.163  1.00 72.58      E    C
ATOM  16147  OE1 GLN E 200     -39.493  -0.854 -25.702  1.00 69.01      E    O
ATOM  16148  NE2 GLN E 200     -38.967   1.028 -26.821  1.00 69.57      E    N
ATOM  16151  C   GLN E 200     -36.801  -2.273 -23.786  1.00 75.12      E    C
ATOM  16152  O   GLN E 200     -35.738  -2.781 -24.131  1.00 74.83      E    O
ATOM  16154  N   THR E 201     -37.942  -2.954 -23.690  1.00 72.40      E    N
ATOM  16155  CA  THR E 201     -38.069  -4.391 -23.949  1.00 70.94      E    C
ATOM  16157  CB  THR E 201     -39.354  -4.925 -23.246  1.00 71.08      E    C
ATOM  16159  OG1 THR E 201     -39.103  -5.082 -21.842  1.00 72.73      E    O
ATOM  16161  CG2 THR E 201     -39.829  -6.253 -23.840  1.00 70.44      E    C
ATOM  16165  C   THR E 201     -38.169  -4.717 -25.452  1.00 69.66      E    C
ATOM  16166  O   THR E 201     -38.828  -3.992 -26.198  1.00 68.68      E    O
ATOM  16168  N   TYR E 202     -37.528  -5.812 -25.883  1.00 65.91      E    N
ATOM  16169  CA  TYR E 202     -37.556  -6.234 -27.297  1.00 60.83      E    C
ATOM  16171  CB  TYR E 202     -36.177  -6.133 -27.953  1.00 60.60      E    C
ATOM  16174  CG  TYR E 202     -35.683  -4.707 -28.135  1.00 59.45      E    C
ATOM  16175  CD1 TYR E 202     -36.281  -3.856 -29.058  1.00 59.31      E    C
ATOM  16177  CE1 TYR E 202     -35.832  -2.534 -29.221  1.00 62.00      E    C
ATOM  16179  CZ  TYR E 202     -34.770  -2.064 -28.450  1.00 61.79      E    C
ATOM  16180  OH  TYR E 202     -34.321  -0.771 -28.607  1.00 59.24      E    O
ATOM  16182  CE2 TYR E 202     -34.162  -2.896 -27.525  1.00 60.21      E    C
ATOM  16184  CD2 TYR E 202     -34.618  -4.209 -27.372  1.00 61.08      E    C
ATOM  16186  C   TYR E 202     -38.100  -7.652 -27.429  1.00 56.05      E    C
ATOM  16187  O   TYR E 202     -37.538  -8.589 -26.869  1.00 50.90      E    O
ATOM  16189  N   ILE E 203     -39.214  -7.781 -28.156  1.00 56.20      E    N
ATOM  16190  CA  ILE E 203     -39.892  -9.059 -28.392  1.00 55.87      E    C
ATOM  16192  CB  ILE E 203     -41.372  -9.064 -27.859  1.00 59.63      E    C
ATOM  16194  CG1 ILE E 203     -41.508  -8.365 -26.500  1.00 62.86      E    C
ATOM  16197  CD1 ILE E 203     -42.108  -6.947 -26.602  1.00 64.93      E    C
ATOM  16201  CG2 ILE E 203     -41.935 -10.484 -27.806  1.00 55.53      E    C
ATOM  16205  C   ILE E 203     -39.999  -9.326 -29.900  1.00 52.16      E    C
ATOM  16206  O   ILE E 203     -40.398  -8.435 -30.668  1.00 49.44      E    O
ATOM  16208  N   CYS E 204     -39.673 -10.546 -30.326  1.00 50.57      E    N
ATOM  16209  CA  CYS E 204     -39.965 -10.955 -31.701  1.00 48.79      E    C
ATOM  16211  CB  CYS E 204     -38.837 -11.783 -32.340  1.00 49.89      E    C
ATOM  16214  SG  CYS E 204     -38.492 -13.348 -31.588  1.00 49.68      E    S
ATOM  16216  C   CYS E 204     -41.274 -11.716 -31.708  1.00 45.55      E    C
ATOM  16217  O   CYS E 204     -41.485 -12.621 -30.899  1.00 41.41      E    O
ATOM  16219  N   ASN E 205     -42.168 -11.331 -32.617  1.00 43.33      E    N
ATOM  16220  CA  ASN E 205     -43.442 -12.024 -32.761  1.00 44.35      E    C
ATOM  16222  CB  ASN E 205     -44.637 -11.047 -32.844  1.00 47.83      E    C
ATOM  16225  CG  ASN E 205     -44.422  -9.783 -32.041  1.00 44.26      E    C
ATOM  16226  OD1 ASN E 205     -44.085  -8.736 -32.593  1.00 40.27      E    O
ATOM  16227  ND2 ASN E 205     -44.582  -9.883 -30.735  1.00 40.14      E    N
ATOM  16230  C   ASN E 205     -43.394 -12.892 -34.014  1.00 41.52      E    C
ATOM  16231  O   ASN E 205     -43.392 -12.391 -35.130  1.00 40.35      E    O
ATOM  16233  N   VAL E 206     -43.331 -14.194 -33.800  1.00 39.78      E    N
ATOM  16234  CA  VAL E 206     -43.178 -15.156 -34.862  1.00 40.15      E    C
ATOM  16236  CB  VAL E 206     -42.091 -16.196 -34.499  1.00 38.34      E    C
ATOM  16238  CG1 VAL E 206     -41.990 -17.283 -35.578  1.00 31.39      E    C
ATOM  16242  CG2 VAL E 206     -40.737 -15.480 -34.241  1.00 36.57      E    C
ATOM  16246  C   VAL E 206     -44.507 -15.852 -35.054  1.00 38.50      E    C
ATOM  16247  O   VAL E 206     -45.077 -16.360 -34.100  1.00 37.28      E    O
ATOM  16249  N   ASN E 207     -45.017 -15.851 -36.279  1.00 40.09      E    N
ATOM  16250  CA  ASN E 207     -46.214 -16.636 -36.613  1.00 41.76      E    C
ATOM  16252  CB  ASN E 207     -47.436 -15.776 -37.009  1.00 44.52      E    C
ATOM  16255  CG  ASN E 207     -48.762 -16.591 -37.020  1.00 46.51      E    C
ATOM  16256  OD1 ASN E 207     -48.834 -17.719 -36.515  1.00 50.24      E    O
ATOM  16257  ND2 ASN E 207     -49.802 -16.013 -37.596  1.00 46.55      E    N
ATOM  16260  C   ASN E 207     -45.911 -17.617 -37.729  1.00 43.47      E    C
ATOM  16261  O   ASN E 207     -45.300 -17.273 -38.739  1.00 42.50      E    O
ATOM  16263  N   HIS E 208     -46.349 -18.849 -37.528  1.00 43.40      E    N
ATOM  16264  CA  HIS E 208     -46.232 -19.889 -38.536  1.00 40.37      E    C
ATOM  16266  CB  HIS E 208     -45.188 -20.930 -38.113  1.00 39.47      E    C
ATOM  16269  CG  HIS E 208     -45.003 -22.041 -39.098  1.00 40.52      E    C
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ATOM  16270  ND1 HIS E 208     -44.390 -21.862 -40.316  1.00 41.16      E    N
ATOM  16272  CE1 HIS E 208     -44.367 -23.010 -40.968  1.00 36.57      E    C
ATOM  16274  NE2 HIS E 208     -44.930 -23.931 -40.214  1.00 33.68      E    N
ATOM  16276  CD2 HIS E 208     -45.346 -23.347 -39.044  1.00 41.03      E    C
ATOM  16278  C   HIS E 208     -47.609 -20.515 -38.716  1.00 39.74      E    C
ATOM  16279  O   HIS E 208     -47.991 -21.429 -37.996  1.00 42.76      E    O
ATOM  16281  N   LYS E 209     -48.358 -20.015 -39.689  1.00 39.37      E    N
ATOM  16282  CA  LYS E 209     -49.765 -20.406 -39.846  1.00 42.63      E    C
ATOM  16284  CB  LYS E 209     -50.439 -19.573 -40.932  1.00 43.39      E    C
ATOM  16287  CG  LYS E 209     -50.328 -18.071 -40.697  1.00 47.27      E    C
ATOM  16290  CD  LYS E 209     -51.673 -17.402 -40.541  1.00 50.06      E    C
ATOM  16293  CE  LYS E 209     -51.626 -15.965 -41.075  1.00 51.31      E    C
ATOM  16296  NZ  LYS E 209     -51.447 -15.931 -42.558  1.00 51.12      E    N
ATOM  16300  C   LYS E 209     -49.991 -21.878 -40.159  1.00 43.44      E    C
ATOM  16301  O   LYS E 209     -50.961 -22.464 -39.665  1.00 44.93      E    O
ATOM  16303  N   PRO E 210     -49.137 -22.482 -41.010  1.00 43.10      E    N
ATOM  16304  CA  PRO E 210     -49.374 -23.891 -41.314  1.00 44.49      E    C
ATOM  16306  CB  PRO E 210     -48.209 -24.267 -42.230  1.00 43.18      E    C
ATOM  16309  CG  PRO E 210     -47.727 -22.996 -42.777  1.00 44.11      E    C
ATOM  16312  CD  PRO E 210     -47.966 -21.966 -41.737  1.00 43.79      E    C
ATOM  16315  C   PRO E 210     -49.401 -24.800 -40.078  1.00 45.33      E    C
ATOM  16316  O   PRO E 210     -50.112 -25.792 -40.098  1.00 46.92      E    O
ATOM  16317  N   SER E 211     -48.643 -24.473 -39.024  1.00 46.26      E    N
ATOM  16318  CA  SER E 211     -48.668 -25.271 -37.798  1.00 45.86      E    C
ATOM  16320  CB  SER E 211     -47.253 -25.568 -37.312  1.00 49.88      E    C
ATOM  16323  OG  SER E 211     -46.699 -24.479 -36.585  1.00 53.17      E    O
ATOM  16325  C   SER E 211     -49.470 -24.620 -36.672  1.00 44.90      E    C
ATOM  16326  O   SER E 211     -49.497 -25.148 -35.557  1.00 44.62      E    O
ATOM  16328  N   ASN E 212     -50.137 -23.503 -36.972  1.00 47.88      E    N
ATOM  16329  CA  ASN E 212     -50.809 -22.683 -35.976  1.00 49.47      E    C
ATOM  16331  CB  ASN E 212     -52.078 -23.389 -35.491  1.00 57.80      E    C
ATOM  16334  CG  ASN E 212     -52.992 -23.807 -36.638  1.00 62.14      E    C
ATOM  16335  OD1 ASN E 212     -53.684 -22.975 -37.226  1.00 64.96      E    O
ATOM  16336  ND2 ASN E 212     -52.998 -25.103 -36.958  1.00 62.35      E    N
ATOM  16339  C   ASN E 212     -49.890 -22.337 -34.797  1.00 49.53      E    C
ATOM  16340  O   ASN E 212     -50.338 -22.283 -33.649  1.00 50.43      E    O
ATOM  16342  N   THR E 213     -48.609 -22.095 -35.095  1.00 50.21      E    N
ATOM  16343  CA  THR E 213     -47.600 -21.745 -34.083  1.00 51.40      E    C
ATOM  16345  CB  THR E 213     -46.205 -22.356 -34.426  1.00 52.68      E    C
ATOM  16347  OG1 THR E 213     -46.203 -23.771 -34.195  1.00 53.98      E    O
ATOM  16349  CG2 THR E 213     -45.095 -21.711 -33.591  1.00 50.79      E    C
ATOM  16353  C   THR E 213     -47.407 -20.245 -33.990  1.00 49.98      E    C
ATOM  16354  O   THR E 213     -47.065 -19.618 -34.971  1.00 48.94      E    O
ATOM  16356  N   LYS E 214     -47.626 -19.682 -32.808  1.00 54.80      E    N
ATOM  16357  CA  LYS E 214     -47.356 -18.274 -32.532  1.00 54.83      E    C
ATOM  16359  CB  LYS E 214     -48.678 -17.561 -32.265  1.00 53.80      E    C
ATOM  16362  CG  LYS E 214     -48.602 -16.069 -32.290  1.00 58.18      E    C
ATOM  16365  CD  LYS E 214     -50.006 -15.461 -32.405  1.00 63.88      E    C
ATOM  16368  CE  LYS E 214     -50.526 -15.438 -33.849  1.00 68.16      E    C
ATOM  16371  NZ  LYS E 214     -49.784 -14.462 -34.723  1.00 71.33      E    N
ATOM  16375  C   LYS E 214     -46.436 -18.179 -31.313  1.00 55.18      E    C
ATOM  16376  O   LYS E 214     -46.785 -18.643 -30.230  1.00 56.04      E    O
ATOM  16378  N   VAL E 215     -45.251 -17.607 -31.494  1.00 54.83      E    N
ATOM  16379  CA  VAL E 215     -44.337 -17.439 -30.385  1.00 53.31      E    C
ATOM  16381  CB  VAL E 215     -43.073 -18.283 -30.563  1.00 54.42      E    C
ATOM  16383  CG1 VAL E 215     -42.072 -18.002 -29.440  1.00 55.46      E    C
ATOM  16387  CG2 VAL E 215     -43.445 -19.763 -30.591  1.00 54.22      E    C
ATOM  16391  C   VAL E 215     -44.007 -15.975 -30.249  1.00 53.37      E    C
ATOM  16392  O   VAL E 215     -43.828 -15.286 -31.257  1.00 53.02      E    O
ATOM  16394  N   ASP E 216     -43.968 -15.509 -28.997  1.00 53.54      E    N
ATOM  16395  CA  ASP E 216     -43.490 -14.169 -28.668  1.00 55.24      E    C
ATOM  16397  CB  ASP E 216     -44.598 -13.347 -27.993  1.00 58.70      E    C
ATOM  16400  CG  ASP E 216     -45.693 -12.928 -28.965  1.00 58.52      E    C
ATOM  16401  OD1 ASP E 216     -45.387 -12.168 -29.912  1.00 52.67      E    O
ATOM  16402  OD2 ASP E 216     -46.856 -13.359 -28.776  1.00 62.66      E    O
ATOM  16403  C   ASP E 216     -42.301 -14.358 -27.749  1.00 54.53      E    C
ATOM  16404  O   ASP E 216     -42.455 -14.920 -26.669  1.00 56.17      E    O
ATOM  16406  N   LYS E 217     -41.118 -13.925 -28.182  1.00 52.83      E    N
ATOM  16407  CA  LYS E 217     -39.896 -14.209 -27.446  1.00 53.38      E    C
ATOM  16409  CB  LYS E 217     -38.953 -15.050 -28.317  1.00 56.80      E    C
ATOM  16412  CG  LYS E 217     -37.964 -15.905 -27.551  1.00 59.81      E    C
ATOM  16415  CD  LYS E 217     -38.686 -16.959 -26.695  1.00 65.55      E    C
ATOM  16418  CE  LYS E 217     -37.793 -18.168 -26.439  1.00 64.97      E    C
ATOM  16421  NZ  LYS E 217     -38.280 -19.024 -25.323  1.00 65.51      E    N
ATOM  16425  C   LYS E 217     -39.232 -12.914 -27.037  1.00 51.71      E    C
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ATOM  16426  O   LYS E 217     -38.926 -12.076 -27.885  1.00 48.71      E    O
ATOM  16428  N   LYS E 218     -39.021 -12.732 -25.736  1.00 56.70      E    N
ATOM  16429  CA  LYS E 218     -38.284 -11.561 -25.249  1.00 58.32      E    C
ATOM  16431  CB  LYS E 218     -38.607 -11.243 -23.785  1.00 61.97      E    C
ATOM  16434  CG  LYS E 218     -38.118  -9.846 -23.324  1.00 62.61      E    C
ATOM  16437  CD  LYS E 218     -38.562  -9.553 -21.889  1.00 63.90      E    C
ATOM  16440  CE  LYS E 218     -37.693  -8.507 -21.193  1.00 64.46      E    C
ATOM  16443  NZ  LYS E 218     -38.039  -8.363 -19.732  1.00 62.97      E    N
ATOM  16447  C   LYS E 218     -36.798 -11.812 -25.449  1.00 58.16      E    C
ATOM  16448  O   LYS E 218     -36.280 -12.867 -25.073  1.00 58.94      E    O
ATOM  16450  N   VAL E 219     -36.129 -10.851 -26.077  1.00 55.99      E    N
ATOM  16451  CA  VAL E 219     -34.708 -10.953 -26.355  1.00 56.34      E    C
ATOM  16453  CB  VAL E 219     -34.356 -10.486 -27.816  1.00 51.58      E    C
ATOM  16455  CG1 VAL E 219     -32.854 -10.553 -28.048  1.00 40.20      E    C
ATOM  16459  CG2 VAL E 219     -35.088 -11.316 -28.849  1.00 47.73      E    C
ATOM  16463  C   VAL E 219     -33.972 -10.057 -25.373  1.00 56.23      E    C
ATOM  16464  O   VAL E 219     -33.918  -8.843 -25.567  1.00 55.92      E    O
ATOM  16466  N   GLU E 220     -33.392 -10.651 -24.332  1.00 59.40      E    N
ATOM  16467  CA  GLU E 220     -32.670  -9.869 -23.330  1.00 62.60      E    C
ATOM  16469  CB  GLU E 220     -33.336  -9.938 -21.954  1.00 65.31      E    C
ATOM  16472  CG  GLU E 220     -33.886 -11.279 -21.507  1.00 65.62      E    C
ATOM  16475  CD  GLU E 220     -34.891 -11.093 -20.411  1.00 67.44      E    C
ATOM  16476  OE1 GLU E 220     -34.886  -9.998 -19.824  1.00 70.23      E    O
ATOM  16477  OE2 GLU E 220     -35.700 -12.009 -20.145  1.00 71.88      E    O
ATOM  16478  C   GLU E 220     -31.186 -10.221 -23.251  1.00 63.25      E    C
ATOM  16479  O   GLU E 220     -30.800 -11.372 -23.521  1.00 60.83      E    O
ATOM  16481  N   PRO E 221     -30.351  -9.226 -22.877  1.00 63.87      E    N
ATOM  16482  CA  PRO E 221     -28.906  -9.430 -22.677  1.00 66.31      E    C
ATOM  16484  CB  PRO E 221     -28.395  -8.062 -22.229  1.00 64.87      E    C
ATOM  16487  CG  PRO E 221     -29.495  -7.088 -22.497  1.00 65.30      E    C
ATOM  16490  CD  PRO E 221     -30.775  -7.836 -22.619  1.00 62.83      E    C
ATOM  16493  C   PRO E 221     -28.574 -10.494 -21.622  1.00 69.59      E    C
ATOM  16494  O   PRO E 221     -29.358 -10.708 -20.688  1.00 69.89      E    O
ATOM  16495  N   LYS E 222     -27.411 -11.139 -21.783  1.00 73.55      E    N
ATOM  16496  CA  LYS E 222     -26.940 -12.216 -20.885  1.00 74.71      E    C
ATOM  16498  CB  LYS E 222     -26.621 -13.494 -21.693  1.00 78.51      E    C
ATOM  16501  CG  LYS E 222     -27.563 -13.761 -22.882  1.00 79.79      E    C
ATOM  16504  CD  LYS E 222     -27.561 -15.240 -23.313  1.00 78.90      E    C
ATOM  16507  CE  LYS E 222     -28.829 -15.619 -24.108  1.00 78.37      E    C
ATOM  16510  NZ  LYS E 222     -29.402 -16.937 -23.669  1.00 75.74      E    N
ATOM  16514  C   LYS E 222     -25.684 -11.786 -20.125  1.00 75.22      E    C
ATOM  16515  O   LYS E 222     -24.893 -10.970 -20.624  1.00 76.21      E    O
ATOM  16518  CA  ASP D   1     -52.112 -16.021 -76.658  1.00 45.76      D    C
ATOM  16520  CB  ASP D   1     -51.455 -16.830 -75.535  1.00 48.98      D    C
ATOM  16523  CG  ASP D   1     -52.464 -17.516 -74.635  1.00 52.75      D    C
ATOM  16524  OD1 ASP D   1     -53.589 -17.792 -75.119  1.00 54.18      D    O
ATOM  16525  OD2 ASP D   1     -52.118 -17.788 -73.452  1.00 51.71      D    O
ATOM  16526  C   ASP D   1     -51.066 -15.048 -77.219  1.00 44.89      D    C
ATOM  16527  O   ASP D   1     -50.159 -15.449 -77.931  1.00 49.36      D    O
ATOM  16528  N   ILE D   2     -51.172 -13.777 -76.854  1.00 42.94      D    N
ATOM  16529  CA  ILE D   2     -50.150 -12.776 -77.194  1.00 41.01      D    C
ATOM  16531  CB  ILE D   2     -50.684 -11.337 -76.998  1.00 35.46      D    C
ATOM  16533  CG1 ILE D   2     -51.889 -11.091 -77.920  1.00 35.57      D    C
ATOM  16536  CD1 ILE D   2     -52.607  -9.743 -77.701  1.00 34.85      D    C
ATOM  16540  CG2 ILE D   2     -49.596 -10.327 -77.255  1.00 32.35      D    C
ATOM  16544  C   ILE D   2     -48.857 -12.958 -76.377  1.00 43.16      D    C
ATOM  16545  O   ILE D   2     -48.893 -13.222 -75.170  1.00 46.09      D    O
ATOM  16547  N   GLN D   3     -47.718 -12.824 -77.057  1.00 46.33      D    N
ATOM  16548  CA  GLN D   3     -46.406 -13.005 -76.436  1.00 45.44      D    C
ATOM  16550  CB  GLN D   3     -45.416 -13.787 -77.321  1.00 52.61      D    C
ATOM  16553  CG  GLN D   3     -45.999 -14.633 -78.437  1.00 59.09      D    C
ATOM  16556  CD  GLN D   3     -46.833 -15.749 -77.923  1.00 60.95      D    C
ATOM  16557  OE1 GLN D   3     -46.544 -16.310 -76.865  1.00 63.22      D    O
ATOM  16558  NE2 GLN D   3     -47.884 -16.091 -78.664  1.00 63.18      D    N
ATOM  16561  C   GLN D   3     -45.802 -11.641 -76.206  1.00 41.99      D    C
ATOM  16562  O   GLN D   3     -46.034 -10.729 -76.977  1.00 40.91      D    O
ATOM  16564  N   VAL D   4     -45.005 -11.527 -75.153  1.00 41.30      D    N
ATOM  16565  CA  VAL D   4     -44.338 -10.287 -74.812  1.00 41.54      D    C
ATOM  16567  CB  VAL D   4     -44.961  -9.611 -73.560  1.00 39.07      D    C
ATOM  16569  CG1 VAL D   4     -44.385  -8.227 -73.376  1.00 33.94      D    C
ATOM  16573  CG2 VAL D   4     -46.482  -9.547 -73.668  1.00 42.19      D    C
ATOM  16577  C   VAL D   4     -42.926 -10.664 -74.491  1.00 39.69      D    C
ATOM  16578  O   VAL D   4     -42.695 -11.703 -73.888  1.00 39.55      D    O
ATOM  16580  N   THR D   5     -41.984  -9.829 -74.915  1.00 39.77      D    N
ATOM  16581  CA  THR D   5     -40.581 -10.070 -74.660  1.00 39.61      D    C
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ATOM	16583	CB	THR	D	5	-39.833	-10.517	-75.954	1.00	40.46	D	C
ATOM	16585	OG1	THR	D	5	-38.467	-10.807	-75.637	1.00	49.32	D	O
ATOM	16587	CG2	THR	D	5	-39.895	-9.478	-77.027	1.00	41.92	D	C
ATOM	16591	C	THR	D	5	-40.013	-8.828	-73.989	1.00	34.02	D	C
ATOM	16592	O	THR	D	5	-39.915	-7.773	-74.604	1.00	28.83	D	O
ATOM	16594	N	GLN	D	6	-39.680	-8.975	-72.701	1.00	33.46	D	N
ATOM	16595	CA	GLN	D	6	-39.178	-7.876	-71.866	1.00	33.72	D	C
ATOM	16597	CB	GLN	D	6	-39.677	-7.988	-70.405	1.00	28.74	D	C
ATOM	16600	CG	GLN	D	6	-39.311	-6.776	-69.554	1.00	31.16	D	C
ATOM	16603	CD	GLN	D	6	-40.178	-6.547	-68.315	1.00	26.09	D	C
ATOM	16604	OE1	GLN	D	6	-41.232	-7.129	-68.159	1.00	23.29	D	O
ATOM	16605	NE2	GLN	D	6	-39.720	-5.671	-67.438	1.00	24.43	D	N
ATOM	16608	C	GLN	D	6	-37.660	-7.876	-71.879	1.00	34.70	D	C
ATOM	16609	O	GLN	D	6	-37.037	-8.927	-71.909	1.00	34.47	D	O
ATOM	16611	N	SER	D	7	-37.079	-6.684	-71.813	1.00	33.82	D	N
ATOM	16612	CA	SER	D	7	-35.626	-6.536	-71.804	1.00	32.43	D	C
ATOM	16614	CB	SER	D	7	-35.120	-6.593	-73.250	1.00	35.43	D	C
ATOM	16617	OG	SER	D	7	-33.718	-6.445	-73.326	1.00	40.13	D	O
ATOM	16619	C	SER	D	7	-35.208	-5.220	-71.106	1.00	31.31	D	C
ATOM	16620	O	SER	D	7	-35.920	-4.226	-71.154	1.00	34.38	D	O
ATOM	16622	N	PRO	D	8	-34.066	-5.221	-70.415	1.00	31.16	D	N
ATOM	16623	CA	PRO	D	8	-33.188	-6.355	-70.147	1.00	33.46	D	C
ATOM	16625	CB	PRO	D	8	-31.872	-5.677	-69.740	1.00	32.48	D	C
ATOM	16628	CG	PRO	D	8	-32.309	-4.388	-69.103	1.00	23.95	D	C
ATOM	16631	CD	PRO	D	8	-33.572	-3.979	-69.792	1.00	28.00	D	C
ATOM	16634	C	PRO	D	8	-33.727	-7.227	-69.007	1.00	32.19	D	C
ATOM	16635	O	PRO	D	8	-34.779	-6.950	-68.432	1.00	36.14	D	O
ATOM	16636	N	SER	D	9	-32.991	-8.265	-68.669	1.00	35.24	D	N
ATOM	16637	CA	SER	D	9	-33.374	-9.106	-67.556	1.00	33.15	D	C
ATOM	16639	CB	SER	D	9	-32.801	-10.497	-67.747	1.00	37.14	D	C
ATOM	16642	OG	SER	D	9	-31.449	-10.492	-67.439	1.00	46.99	D	O
ATOM	16644	C	SER	D	9	-32.966	-8.503	-66.204	1.00	31.51	D	C
ATOM	16645	O	SER	D	9	-33.666	-8.678	-65.184	1.00	29.10	D	O
ATOM	16647	N	SER	D	10	-31.838	-7.790	-66.193	1.00	33.95	D	N
ATOM	16648	CA	SER	D	10	-31.394	-7.045	-65.018	1.00	30.90	D	C
ATOM	16650	CB	SER	D	10	-30.657	-7.939	-64.008	1.00	36.72	D	C
ATOM	16653	OG	SER	D	10	-29.499	-8.551	-64.560	1.00	39.79	D	O
ATOM	16655	C	SER	D	10	-30.500	-5.908	-65.444	1.00	34.81	D	C
ATOM	16656	O	SER	D	10	-29.937	-5.909	-66.546	1.00	38.94	D	O
ATOM	16658	N	LEU	D	11	-30.420	-4.911	-64.576	1.00	36.91	D	N
ATOM	16659	CA	LEU	D	11	-29.573	-3.768	-64.789	1.00	34.54	D	C
ATOM	16661	CB	LEU	D	11	-30.264	-2.719	-65.693	1.00	36.11	D	C
ATOM	16664	CG	LEU	D	11	-31.416	-1.836	-65.164	1.00	31.73	D	C
ATOM	16666	CD1	LEU	D	11	-30.954	-0.630	-64.365	1.00	26.78	D	C
ATOM	16670	CD2	LEU	D	11	-32.314	-1.361	-66.322	1.00	22.55	D	C
ATOM	16674	C	LEU	D	11	-29.209	-3.152	-63.451	1.00	33.59	D	C
ATOM	16675	O	LEU	D	11	-29.850	-3.416	-62.448	1.00	30.13	D	O
ATOM	16677	N	SER	D	12	-28.189	-2.308	-63.478	1.00	36.30	D	N
ATOM	16678	CA	SER	D	12	-27.687	-1.602	-62.313	1.00	37.59	D	C
ATOM	16680	CB	SER	D	12	-26.418	-2.289	-61.802	1.00	41.83	D	C
ATOM	16683	OG	SER	D	12	-25.822	-1.555	-60.763	1.00	48.18	D	O
ATOM	16685	C	SER	D	12	-27.386	-0.171	-62.724	1.00	36.59	D	C
ATOM	16686	O	SER	D	12	-26.781	0.067	-63.755	1.00	38.68	D	O
ATOM	16688	N	ALA	D	13	-27.831	0.784	-61.928	1.00	35.81	D	N
ATOM	16689	CA	ALA	D	13	-27.606	2.180	-62.231	1.00	35.53	D	C
ATOM	16691	CB	ALA	D	13	-28.742	2.725	-63.098	1.00	36.06	D	C
ATOM	16695	C	ALA	D	13	-27.491	2.968	-60.938	1.00	36.27	D	C
ATOM	16696	O	ALA	D	13	-27.801	2.454	-59.868	1.00	40.65	D	O
ATOM	16698	N	SER	D	14	-27.060	4.217	-61.042	1.00	37.59	D	N
ATOM	16699	CA	SER	D	14	-26.875	5.084	-59.876	1.00	38.04	D	C
ATOM	16701	CB	SER	D	14	-25.645	5.999	-60.083	1.00	42.14	D	C
ATOM	16704	OG	SER	D	14	-24.562	5.260	-60.614	1.00	47.41	D	O
ATOM	16706	C	SER	D	14	-28.083	5.971	-59.583	1.00	38.35	D	C
ATOM	16707	O	SER	D	14	-28.859	6.313	-60.474	1.00	36.85	D	O
ATOM	16709	N	VAL	D	15	-28.182	6.416	-58.340	1.00	37.69	D	N
ATOM	16710	CA	VAL	D	15	-29.196	7.398	-57.977	1.00	37.29	D	C
ATOM	16712	CB	VAL	D	15	-29.042	7.888	-56.535	1.00	32.29	D	C
ATOM	16714	CG1	VAL	D	15	-30.064	8.977	-56.225	1.00	26.98	D	C
ATOM	16718	CG2	VAL	D	15	-29.190	6.719	-55.579	1.00	35.14	D	C
ATOM	16722	C	VAL	D	15	-29.094	8.575	-58.907	1.00	38.60	D	C
ATOM	16723	O	VAL	D	15	-28.002	9.118	-59.116	1.00	42.18	D	O
ATOM	16725	N	GLY	D	16	-30.223	8.951	-59.494	1.00	40.11	D	N
ATOM	16726	CA	GLY	D	16	-30.285	10.090	-60.411	1.00	38.90	D	C
ATOM	16729	C	GLY	D	16	-30.241	9.690	-61.866	1.00	37.21	D	C
ATOM	16730	O	GLY	D	16	-30.608	10.474	-62.719	1.00	40.27	D	O

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ATOM  16732  N   ASP D  17     -29.784   8.479 -62.159  1.00 39.98        D    N
ATOM  16733  CA  ASP D  17     -29.714   7.990 -63.537  1.00 40.64        D    C
ATOM  16735  CB  ASP D  17     -28.886   6.710 -63.615  1.00 46.54        D    C
ATOM  16738  CG  ASP D  17     -27.397   6.948 -63.409  1.00 50.99        D    C
ATOM  16739  OD1 ASP D  17     -26.895   8.050 -63.747  1.00 55.50        D    O
ATOM  16740  OD2 ASP D  17     -26.724   6.002 -62.937  1.00 46.59        D    O
ATOM  16741  C   ASP D  17     -31.090   7.698 -64.146  1.00 44.06        D    C
ATOM  16742  O   ASP D  17     -32.088   7.510 -63.428  1.00 43.56        D    O
ATOM  16744  N   ARG D  18     -31.117   7.635 -65.475  1.00 40.59        D    N
ATOM  16745  CA  ARG D  18     -32.311   7.277 -66.202  1.00 39.07        D    C
ATOM  16747  CB  ARG D  18     -32.433   8.071 -67.480  1.00 40.84        D    C
ATOM  16750  CG  ARG D  18     -33.500   7.518 -68.398  1.00 41.87        D    C
ATOM  16753  CD  ARG D  18     -33.730   8.409 -69.541  1.00 42.69        D    C
ATOM  16756  NE  ARG D  18     -34.020   9.763 -69.115  1.00 41.66        D    N
ATOM  16758  CZ  ARG D  18     -34.224  10.759 -69.960  1.00 42.99        D    C
ATOM  16759  NH1 ARG D  18     -34.174  10.539 -71.266  1.00 44.44        D    N
ATOM  16762  NH2 ARG D  18     -34.484  11.968 -69.494  1.00 43.84        D    N
ATOM  16765  C   ARG D  18     -32.284   5.808 -66.554  1.00 41.80        D    C
ATOM  16766  O   ARG D  18     -31.356   5.351 -67.222  1.00 43.13        D    O
ATOM  16768  N   VAL D  19     -33.339   5.096 -66.148  1.00 41.89        D    N
ATOM  16769  CA  VAL D  19     -33.504   3.671 -66.420  1.00 37.52        D    C
ATOM  16771  CB  VAL D  19     -33.984   2.960 -65.168  1.00 32.80        D    C
ATOM  16773  CG1 VAL D  19     -34.429   1.534 -65.461  1.00 26.89        D    C
ATOM  16777  CG2 VAL D  19     -32.882   3.007 -64.106  1.00 28.37        D    C
ATOM  16781  C   VAL D  19     -34.505   3.486 -67.541  1.00 37.40        D    C
ATOM  16782  O   VAL D  19     -35.558   4.120 -67.542  1.00 43.15        D    O
ATOM  16784  N   THR D  20     -34.164   2.625 -68.496  1.00 37.47        D    N
ATOM  16785  CA  THR D  20     -34.985   2.385 -69.665  1.00 36.22        D    C
ATOM  16787  CB  THR D  20     -34.352   3.032 -70.925  1.00 39.26        D    C
ATOM  16789  OG1 THR D  20     -34.152   4.432 -70.705  1.00 36.42        D    O
ATOM  16791  CG2 THR D  20     -35.257   2.844 -72.170  1.00 39.50        D    C
ATOM  16795  C   THR D  20     -35.184   0.879 -69.875  1.00 37.81        D    C
ATOM  16796  O   THR D  20     -34.229   0.142 -70.084  1.00 38.10        D    O
ATOM  16798  N   ILE D  21     -36.447   0.457 -69.839  1.00 36.44        D    N
ATOM  16799  CA  ILE D  21     -36.858  -0.935 -69.951  1.00 35.58        D    C
ATOM  16801  CB  ILE D  21     -37.529  -1.380 -68.636  1.00 35.26        D    C
ATOM  16803  CG1 ILE D  21     -36.546  -1.265 -67.473  1.00 32.63        D    C
ATOM  16806  CD1 ILE D  21     -37.226  -1.263 -66.124  1.00 35.70        D    C
ATOM  16810  CG2 ILE D  21     -38.091  -2.800 -68.743  1.00 36.28        D    C
ATOM  16814  C   ILE D  21     -37.861  -1.049 -71.105  1.00 32.56        D    C
ATOM  16815  O   ILE D  21     -38.755  -0.221 -71.236  1.00 31.36        D    O
ATOM  16817  N   THR D  22     -37.726  -2.078 -71.928  1.00 32.64        D    N
ATOM  16818  CA  THR D  22     -38.580  -2.222 -73.103  1.00 39.99        D    C
ATOM  16820  CB  THR D  22     -37.784  -2.031 -74.465  1.00 40.12        D    C
ATOM  16822  OG1 THR D  22     -36.723  -2.981 -74.568  1.00 41.12        D    O
ATOM  16824  CG2 THR D  22     -37.208  -0.639 -74.578  1.00 40.07        D    C
ATOM  16828  C   THR D  22     -39.345  -3.543 -73.124  1.00 40.51        D    C
ATOM  16829  O   THR D  22     -38.843  -4.554 -72.638  1.00 41.06        D    O
ATOM  16831  N   CYS D  23     -40.560  -3.499 -73.687  1.00 43.14        D    N
ATOM  16832  CA  CYS D  23     -41.371  -4.694 -73.996  1.00 42.54        D    C
ATOM  16834  CB  CYS D  23     -42.593  -4.811 -73.079  1.00 41.73        D    C
ATOM  16837  SG  CYS D  23     -42.105  -5.668 -71.602  1.00 49.84        D    S
ATOM  16839  C   CYS D  23     -41.822  -4.668 -75.433  1.00 39.03        D    C
ATOM  16840  O   CYS D  23     -42.260  -3.645 -75.921  1.00 38.84        D    O
ATOM  16842  N   ILE D  24     -41.702  -5.804 -76.106  1.00 39.91        D    N
ATOM  16843  CA  ILE D  24     -42.093  -5.919 -77.500  1.00 42.16        D    C
ATOM  16845  CB  ILE D  24     -40.862  -6.119 -78.414  1.00 41.46        D    C
ATOM  16847  CG1 ILE D  24     -39.856  -4.983 -78.192  1.00 41.31        D    C
ATOM  16850  CD1 ILE D  24     -38.471  -5.304 -78.647  1.00 43.89        D    C
ATOM  16854  CG2 ILE D  24     -41.293  -6.145 -79.873  1.00 41.33        D    C
ATOM  16858  C   ILE D  24     -43.104  -7.063 -77.622  1.00 43.17        D    C
ATOM  16859  O   ILE D  24     -42.843  -8.178 -77.187  1.00 41.39        D    O
ATOM  16861  N   THR D  25     -44.269  -6.755 -78.187  1.00 44.58        D    N
ATOM  16862  CA  THR D  25     -45.370  -7.716 -78.297  1.00 40.51        D    C
ATOM  16864  CB  THR D  25     -46.763  -7.039 -78.017  1.00 39.20        D    C
ATOM  16866  OG1 THR D  25     -46.990  -5.950 -78.928  1.00 35.42        D    O
ATOM  16868  CG2 THR D  25     -46.837  -6.510 -76.579  1.00 34.65        D    C
ATOM  16872  C   THR D  25     -45.353  -8.405 -79.663  1.00 37.04        D    C
ATOM  16873  O   THR D  25     -44.762  -7.903 -80.616  1.00 35.11        D    O
ATOM  16875  N   SER D  26     -45.994  -9.567 -79.734  1.00 41.69        D    N
ATOM  16876  CA  SER D  26     -46.031 -10.392 -80.950  1.00 43.80        D    C
ATOM  16878  CB  SER D  26     -46.441 -11.809 -80.579  1.00 39.47        D    C
ATOM  16881  OG  SER D  26     -47.677 -11.771 -79.890  1.00 37.43        D    O
ATOM  16883  C   SER D  26     -47.018  -9.884 -81.987  1.00 46.46        D    C
ATOM  16884  O   SER D  26     -47.036 -10.345 -83.120  1.00 48.60        D    O
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ATOM  16886  N   THR D  27     -47.868  -8.960 -81.576  1.00 47.41      D    N
ATOM  16887  CA  THR D  27     -48.888  -8.409 -82.441  1.00 45.05      D    C
ATOM  16889  CB  THR D  27     -50.197  -9.187 -82.336  1.00 44.82      D    C
ATOM  16891  OG1 THR D  27     -51.134  -8.662 -83.285  1.00 44.14      D    O
ATOM  16893  CG2 THR D  27     -50.786  -9.102 -80.907  1.00 42.26      D    C
ATOM  16897  C   THR D  27     -49.150  -6.981 -82.049  1.00 44.63      D    C
ATOM  16898  O   THR D  27     -48.829  -6.568 -80.953  1.00 47.84      D    O
ATOM  16900  N   ASP D  28     -49.716  -6.219 -82.969  1.00 47.67      D    N
ATOM  16901  CA  ASP D  28     -50.107  -4.848 -82.692  1.00 47.49      D    C
ATOM  16903  CB  ASP D  28     -50.684  -4.200 -83.952  1.00 44.80      D    C
ATOM  16906  CG  ASP D  28     -51.179  -2.801 -83.711  1.00 46.92      D    C
ATOM  16907  OD1 ASP D  28     -50.358  -1.873 -83.696  1.00 49.51      D    O
ATOM  16908  OD2 ASP D  28     -52.401  -2.618 -83.544  1.00 54.29      D    O
ATOM  16909  C   ASP D  28     -51.152  -4.863 -81.570  1.00 46.18      D    C
ATOM  16910  O   ASP D  28     -52.211  -5.494 -81.722  1.00 47.34      D    O
ATOM  16912  N   ILE D  29     -50.851  -4.193 -80.454  1.00 41.93      D    N
ATOM  16913  CA  ILE D  29     -51.779  -4.145 -79.304  1.00 41.67      D    C
ATOM  16915  CB  ILE D  29     -51.200  -4.702 -77.969  1.00 34.63      D    C
ATOM  16917  CG1 ILE D  29     -49.934  -3.955 -77.543  1.00 38.01      D    C
ATOM  16920  CD1 ILE D  29     -49.771  -3.861 -76.024  1.00 37.63      D    C
ATOM  16924  CG2 ILE D  29     -51.007  -6.186 -78.053  1.00 27.55      D    C
ATOM  16928  C   ILE D  29     -52.296  -2.736 -79.018  1.00 39.51      D    C
ATOM  16929  O   ILE D  29     -52.732  -2.447 -77.902  1.00 39.60      D    O
ATOM  16931  N   ASP D  30     -52.239  -1.861 -80.014  1.00 39.32      D    N
ATOM  16932  CA  ASP D  30     -52.558  -0.457 -79.822  1.00 41.42      D    C
ATOM  16934  CB  ASP D  30     -54.078  -0.246 -79.588  1.00 40.38      D    C
ATOM  16937  CG  ASP D  30     -54.934  -0.671 -80.786  1.00 42.75      D    C
ATOM  16938  OD1 ASP D  30     -54.669  -0.174 -81.910  1.00 41.44      D    O
ATOM  16939  OD2 ASP D  30     -55.886  -1.478 -80.594  1.00 41.57      D    O
ATOM  16940  C   ASP D  30     -51.728   0.130 -78.675  1.00 40.15      D    C
ATOM  16941  O   ASP D  30     -50.503   0.135 -78.728  1.00 41.22      D    O
ATOM  16943  N   ASP D  31     -52.400   0.600 -77.634  1.00 43.42      D    N
ATOM  16944  CA  ASP D  31     -51.728   1.279 -76.527  1.00 41.01      D    C
ATOM  16946  CB  ASP D  31     -52.088   2.766 -76.468  1.00 45.24      D    C
ATOM  16949  CG  ASP D  31     -53.571   3.022 -76.352  1.00 49.62      D    C
ATOM  16950  OD1 ASP D  31     -54.375   2.061 -76.377  1.00 57.10      D    O
ATOM  16951  OD2 ASP D  31     -53.928   4.215 -76.248  1.00 48.01      D    O
ATOM  16952  C   ASP D  31     -51.988   0.558 -75.207  1.00 36.28      D    C
ATOM  16953  O   ASP D  31     -51.739   1.101 -74.154  1.00 32.60      D    O
ATOM  16955  N   ASP D  32     -52.415  -0.703 -75.283  1.00 34.95      D    N
ATOM  16956  CA  ASP D  32     -52.873  -1.451 -74.103  1.00 38.03      D    C
ATOM  16958  CB  ASP D  32     -53.997  -2.410 -74.493  1.00 38.41      D    C
ATOM  16961  CG  ASP D  32     -55.248  -1.675 -74.976  1.00 38.53      D    C
ATOM  16962  OD1 ASP D  32     -55.770  -0.830 -74.225  1.00 37.63      D    O
ATOM  16963  OD2 ASP D  32     -55.703  -1.932 -76.110  1.00 42.67      D    O
ATOM  16964  C   ASP D  32     -51.733  -2.183 -73.408  1.00 36.60      D    C
ATOM  16965  O   ASP D  32     -51.759  -3.394 -73.234  1.00 34.38      D    O
ATOM  16967  N   MET D  33     -50.726  -1.399 -73.026  1.00 34.54      D    N
ATOM  16968  CA  MET D  33     -49.574  -1.868 -72.279  1.00 33.73      D    C
ATOM  16970  CB  MET D  33     -48.299  -1.398 -72.969  1.00 35.54      D    C
ATOM  16973  CG  MET D  33     -47.024  -1.894 -72.316  1.00 35.05      D    C
ATOM  16976  SD  MET D  33     -47.103  -3.637 -72.053  1.00 32.83      D    S
ATOM  16977  CE  MET D  33     -46.752  -4.307 -73.684  1.00 34.79      D    C
ATOM  16981  C   MET D  33     -49.599  -1.323 -70.858  1.00 35.06      D    C
ATOM  16982  O   MET D  33     -49.919  -0.163 -70.635  1.00 34.55      D    O
ATOM  16984  N   ASN D  34     -49.256  -2.175 -69.900  1.00 37.22      D    N
ATOM  16985  CA  ASN D  34     -49.210  -1.791 -68.498  1.00 34.26      D    C
ATOM  16987  CB  ASN D  34     -50.226  -2.594 -67.675  1.00 30.41      D    C
ATOM  16990  CG  ASN D  34     -51.609  -2.559 -68.246  1.00 26.95      D    C
ATOM  16991  OD1 ASN D  34     -52.438  -1.753 -67.832  1.00 28.43      D    O
ATOM  16992  ND2 ASN D  34     -51.876  -3.440 -69.204  1.00 25.17      D    N
ATOM  16995  C   ASN D  34     -47.832  -2.061 -67.937  1.00 31.22      D    C
ATOM  16996  O   ASN D  34     -47.124  -2.937 -68.419  1.00 31.75      D    O
ATOM  16998  N   TRP D  35     -47.479  -1.330 -66.887  1.00 30.31      D    N
ATOM  16999  CA  TRP D  35     -46.231  -1.576 -66.166  1.00 30.31      D    C
ATOM  17001  CB  TRP D  35     -45.226  -0.434 -66.400  1.00 27.99      D    C
ATOM  17004  CG  TRP D  35     -44.787  -0.331 -67.795  1.00 23.87      D    C
ATOM  17005  CD1 TRP D  35     -45.316   0.473 -68.777  1.00 27.48      D    C
ATOM  17007  NE1 TRP D  35     -44.647   0.275 -69.957  1.00 28.03      D    N
ATOM  17009  CE2 TRP D  35     -43.670  -0.667 -69.752  1.00 25.79      D    C
ATOM  17010  CD2 TRP D  35     -43.739  -1.072 -68.403  1.00 22.90      D    C
ATOM  17011  CE3 TRP D  35     -42.835  -2.034 -67.934  1.00 26.25      D    C
ATOM  17013  CZ3 TRP D  35     -41.935  -2.550 -68.791  1.00 27.80      D    C
ATOM  17015  CH2 TRP D  35     -41.881  -2.126 -70.136  1.00 26.87      D    C
ATOM  17017  CZ2 TRP D  35     -42.745  -1.191 -70.628  1.00 26.43      D    C
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ATOM  17019  C   TRP D  35     -46.490  -1.735 -64.688  1.00 29.47      D    C
ATOM  17020  O   TRP D  35     -47.255  -0.972 -64.116  1.00 27.85      D    O
ATOM  17022  N   TYR D  36     -45.827  -2.722 -64.084  1.00 33.75      D    N
ATOM  17023  CA  TYR D  36     -45.935  -3.014 -62.663  1.00 32.31      D    C
ATOM  17025  CB  TYR D  36     -46.441  -4.436 -62.437  1.00 32.68      D    C
ATOM  17028  CG  TYR D  36     -47.883  -4.710 -62.756  1.00 31.85      D    C
ATOM  17029  CD1 TYR D  36     -48.869  -4.561 -61.785  1.00 32.56      D    C
ATOM  17031  CE1 TYR D  36     -50.190  -4.854 -62.063  1.00 31.43      D    C
ATOM  17033  CZ  TYR D  36     -50.537  -5.325 -63.317  1.00 31.13      D    C
ATOM  17034  OH  TYR D  36     -51.839  -5.615 -63.591  1.00 31.78      D    O
ATOM  17036  CE2 TYR D  36     -49.578  -5.499 -64.298  1.00 32.62      D    C
ATOM  17038  CD2 TYR D  36     -48.257  -5.199 -64.010  1.00 33.48      D    C
ATOM  17040  C   TYR D  36     -44.582  -2.942 -61.986  1.00 33.48      D    C
ATOM  17041  O   TYR D  36     -43.559  -3.209 -62.599  1.00 31.99      D    O
ATOM  17043  N   GLN D  37     -44.609  -2.636 -60.692  1.00 33.21      D    N
ATOM  17044  CA  GLN D  37     -43.426  -2.663 -59.843  1.00 35.05      D    C
ATOM  17046  CB  GLN D  37     -43.157  -1.268 -59.274  1.00 28.05      D    C
ATOM  17049  CG  GLN D  37     -41.974  -1.162 -58.293  1.00 28.49      D    C
ATOM  17052  CD  GLN D  37     -41.958   0.176 -57.562  1.00 35.08      D    C
ATOM  17053  OE1 GLN D  37     -41.051   1.025 -57.748  1.00 35.60      D    O
ATOM  17054  NE2 GLN D  37     -42.982   0.391 -56.747  1.00 30.68      D    N
ATOM  17057  C   GLN D  37     -43.643  -3.676 -58.718  1.00 36.19      D    C
ATOM  17058  O   GLN D  37     -44.680  -3.660 -58.065  1.00 35.65      D    O
ATOM  17060  N   GLN D  38     -42.666  -4.551 -58.494  1.00 38.65      D    N
ATOM  17061  CA  GLN D  38     -42.695  -5.429 -57.333  1.00 40.45      D    C
ATOM  17063  CB  GLN D  38     -42.903  -6.871 -57.738  1.00 40.55      D    C
ATOM  17066  CG  GLN D  38     -43.346  -7.719 -56.574  1.00 36.60      D    C
ATOM  17069  CD  GLN D  38     -43.530  -9.124 -56.960  1.00 38.22      D    C
ATOM  17070  OE1 GLN D  38     -42.947  -9.574 -57.954  1.00 38.62      D    O
ATOM  17071  NE2 GLN D  38     -44.330  -9.863 -56.176  1.00 33.38      D    N
ATOM  17074  C   GLN D  38     -41.437  -5.360 -56.478  1.00 40.74      D    C
ATOM  17075  O   GLN D  38     -40.358  -5.761 -56.910  1.00 40.11      D    O
ATOM  17077  N   LYS D  39     -41.611  -4.902 -55.239  1.00 45.57      D    N
ATOM  17078  CA  LYS D  39     -40.513  -4.847 -54.277  1.00 49.68      D    C
ATOM  17080  CB  LYS D  39     -40.688  -3.674 -53.298  1.00 48.49      D    C
ATOM  17083  CG  LYS D  39     -40.313  -2.320 -53.902  1.00 49.06      D    C
ATOM  17086  CD  LYS D  39     -40.700  -1.111 -53.036  1.00 50.81      D    C
ATOM  17089  CE  LYS D  39     -40.925   0.153 -53.901  1.00 51.33      D    C
ATOM  17092  NZ  LYS D  39     -41.271   1.446 -53.170  1.00 48.14      D    N
ATOM  17096  C   LYS D  39     -40.414  -6.189 -53.551  1.00 55.21      D    C
ATOM  17097  O   LYS D  39     -41.406  -6.931 -53.475  1.00 56.26      D    O
ATOM  17099  N   PRO D  40     -39.211  -6.522 -53.038  1.00 62.05      D    N
ATOM  17100  CA  PRO D  40     -38.889  -7.775 -52.360  1.00 62.70      D    C
ATOM  17102  CB  PRO D  40     -37.899  -7.320 -51.274  1.00 68.80      D    C
ATOM  17105  CG  PRO D  40     -37.405  -5.912 -51.724  1.00 68.23      D    C
ATOM  17108  CD  PRO D  40     -38.009  -5.667 -53.075  1.00 66.28      D    C
ATOM  17111  C   PRO D  40     -40.049  -8.603 -51.754  1.00 64.72      D    C
ATOM  17112  O   PRO D  40     -40.291  -9.716 -52.216  1.00 67.84      D    O
ATOM  17113  N   GLY D  41     -40.743  -8.099 -50.736  1.00 60.81      D    N
ATOM  17114  CA  GLY D  41     -41.824  -8.880 -50.104  1.00 61.13      D    C
ATOM  17117  C   GLY D  41     -43.178  -8.202 -50.190  1.00 62.86      D    C
ATOM  17118  O   GLY D  41     -43.844  -8.018 -49.177  1.00 62.55      D    O
ATOM  17120  N   LYS D  42     -43.580  -7.824 -51.405  1.00 59.84      D    N
ATOM  17121  CA  LYS D  42     -44.774  -7.003 -51.602  1.00 54.31      D    C
ATOM  17123  CB  LYS D  42     -44.346  -5.550 -51.857  1.00 59.34      D    C
ATOM  17126  CG  LYS D  42     -43.352  -4.965 -50.832  1.00 64.55      D    C
ATOM  17129  CD  LYS D  42     -44.031  -4.101 -49.771  1.00 68.76      D    C
ATOM  17132  CE  LYS D  42     -44.077  -2.621 -50.192  1.00 71.41      D    C
ATOM  17135  NZ  LYS D  42     -45.084  -1.787 -49.438  1.00 69.98      D    N
ATOM  17139  C   LYS D  42     -45.647  -7.499 -52.759  1.00 46.47      D    C
ATOM  17140  O   LYS D  42     -45.206  -8.274 -53.607  1.00 43.15      D    O
ATOM  17142  N   VAL D  43     -46.906  -7.070 -52.762  1.00 46.91      D    N
ATOM  17143  CA  VAL D  43     -47.781  -7.313 -53.907  1.00 45.27      D    C
ATOM  17145  CB  VAL D  43     -49.290  -7.118 -53.587  1.00 42.88      D    C
ATOM  17147  CG1 VAL D  43     -49.777  -8.226 -52.666  1.00 47.92      D    C
ATOM  17151  CG2 VAL D  43     -49.566  -5.763 -52.964  1.00 38.10      D    C
ATOM  17155  C   VAL D  43     -47.322  -6.400 -55.055  1.00 40.73      D    C
ATOM  17156  O   VAL D  43     -46.735  -5.325 -54.826  1.00 36.31      D    O
ATOM  17158  N   PRO D  44     -47.506  -6.857 -56.302  1.00 37.70      D    N
ATOM  17159  CA  PRO D  44     -47.237  -5.917 -57.373  1.00 37.73      D    C
ATOM  17161  CB  PRO D  44     -47.387  -6.767 -58.636  1.00 35.99      D    C
ATOM  17164  CG  PRO D  44     -47.226  -8.170 -58.167  1.00 35.89      D    C
ATOM  17167  CD  PRO D  44     -47.856  -8.187 -56.826  1.00 37.78      D    C
ATOM  17170  C   PRO D  44     -48.145  -4.658 -57.350  1.00 33.22      D    C
ATOM  17171  O   PRO D  44     -49.252  -4.671 -56.807  1.00 30.46      D    O
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ATOM  17172  N   LYS D  45     -47.577  -3.586 -57.908  1.00 36.13      D    N
ATOM  17173  CA  LYS D  45     -48.092  -2.245 -57.903  1.00 34.90      D    C
ATOM  17175  CB  LYS D  45     -47.117  -1.387 -57.087  1.00 33.30      D    C
ATOM  17178  CG  LYS D  45     -47.384   0.103 -57.071  1.00 34.78      D    C
ATOM  17181  CD  LYS D  45     -48.734   0.424 -56.457  1.00 35.10      D    C
ATOM  17184  CE  LYS D  45     -49.129   1.883 -56.720  1.00 36.17      D    C
ATOM  17187  NZ  LYS D  45     -50.562   2.127 -56.397  1.00 33.12      D    N
ATOM  17191  C   LYS D  45     -48.148  -1.778 -59.351  1.00 32.75      D    C
ATOM  17192  O   LYS D  45     -47.126  -1.711 -60.021  1.00 31.69      D    O
ATOM  17194  N   LEU D  46     -49.342  -1.473 -59.831  1.00 33.92      D    N
ATOM  17195  CA  LEU D  46     -49.527  -0.944 -61.167  1.00 31.60      D    C
ATOM  17197  CB  LEU D  46     -50.995  -1.056 -61.563  1.00 25.10      D    C
ATOM  17200  CG  LEU D  46     -51.328  -0.684 -62.995  1.00 26.28      D    C
ATOM  17202  CD1 LEU D  46     -50.766  -1.744 -63.983  1.00 19.78      D    C
ATOM  17206  CD2 LEU D  46     -52.828  -0.530 -63.083  1.00 20.73      D    C
ATOM  17210  C   LEU D  46     -49.080   0.501 -61.201  1.00 34.09      D    C
ATOM  17211  O   LEU D  46     -49.657   1.352 -60.495  1.00 34.55      D    O
ATOM  17213  N   LEU D  47     -48.051   0.770 -62.017  1.00 34.89      D    N
ATOM  17214  CA  LEU D  47     -47.491   2.129 -62.185  1.00 34.06      D    C
ATOM  17216  CB  LEU D  47     -45.982   2.056 -62.405  1.00 33.90      D    C
ATOM  17219  CG  LEU D  47     -45.112   1.325 -61.375  1.00 31.98      D    C
ATOM  17221  CD1 LEU D  47     -43.731   1.209 -61.924  1.00 30.26      D    C
ATOM  17225  CD2 LEU D  47     -45.099   2.023 -60.017  1.00 27.87      D    C
ATOM  17229  C   LEU D  47     -48.105   2.882 -63.362  1.00 33.92      D    C
ATOM  17230  O   LEU D  47     -48.419   4.055 -63.246  1.00 34.67      D    O
ATOM  17232  N   ILE D  48     -48.264   2.188 -64.486  1.00 33.43      D    N
ATOM  17233  CA  ILE D  48     -48.694   2.778 -65.757  1.00 34.40      D    C
ATOM  17235  CB  ILE D  48     -47.514   2.969 -66.751  1.00 31.56      D    C
ATOM  17237  CG1 ILE D  48     -46.427   3.911 -66.179  1.00 31.94      D    C
ATOM  17240  CD1 ILE D  48     -46.760   5.404 -66.289  1.00 32.59      D    C
ATOM  17244  CG2 ILE D  48     -48.027   3.483 -68.086  1.00 27.10      D    C
ATOM  17248  C   ILE D  48     -49.716   1.848 -66.418  1.00 36.17      D    C
ATOM  17249  O   ILE D  48     -49.492   0.639 -66.489  1.00 29.66      D    O
ATOM  17251  N   SER D  49     -50.841   2.419 -66.864  1.00 37.17      D    N
ATOM  17252  CA  SER D  49     -51.838   1.663 -67.603  1.00 39.71      D    C
ATOM  17254  CB  SER D  49     -53.217   1.703 -66.928  1.00 35.81      D    C
ATOM  17257  OG  SER D  49     -53.808   2.994 -66.925  1.00 34.88      D    O
ATOM  17259  C   SER D  49     -51.880   2.173 -69.023  1.00 40.18      D    C
ATOM  17260  O   SER D  49     -51.267   3.182 -69.327  1.00 39.63      D    O
ATOM  17262  N   GLY D  50     -52.590   1.444 -69.877  1.00 47.29      D    N
ATOM  17263  CA  GLY D  50     -52.633   1.693 -71.297  1.00 50.45      D    C
ATOM  17266  C   GLY D  50     -52.791   3.147 -71.633  1.00 56.73      D    C
ATOM  17267  O   GLY D  50     -53.459   3.888 -70.915  1.00 64.25      D    O
ATOM  17269  N   GLY D  51     -52.168   3.559 -72.728  1.00 57.11      D    N
ATOM  17270  CA  GLY D  51     -52.112   4.974 -73.092  1.00 56.80      D    C
ATOM  17273  C   GLY D  51     -50.997   5.690 -72.347  1.00 59.03      D    C
ATOM  17274  O   GLY D  51     -50.876   6.924 -72.424  1.00 60.10      D    O
ATOM  17276  N   ASN D  52     -50.183   4.902 -71.634  1.00 54.22      D    N
ATOM  17277  CA  ASN D  52     -49.074   5.404 -70.833  1.00 50.11      D    C
ATOM  17279  CB  ASN D  52     -47.993   5.894 -71.772  1.00 49.44      D    C
ATOM  17282  CG  ASN D  52     -47.510   4.764 -72.684  1.00 51.75      D    C
ATOM  17283  OD1 ASN D  52     -47.080   3.710 -72.186  1.00 42.13      D    O
ATOM  17284  ND2 ASN D  52     -47.634   4.947 -74.016  1.00 49.68      D    N
ATOM  17287  C   ASN D  52     -49.545   6.410 -69.792  1.00 44.27      D    C
ATOM  17288  O   ASN D  52     -49.001   7.500 -69.617  1.00 39.54      D    O
ATOM  17290  N   THR D  53     -50.598   5.986 -69.105  1.00 43.15      D    N
ATOM  17291  CA  THR D  53     -51.260   6.784 -68.097  1.00 43.77      D    C
ATOM  17293  CB  THR D  53     -52.777   6.495 -68.073  1.00 41.11      D    C
ATOM  17295  OG1 THR D  53     -53.299   6.630 -69.396  1.00 39.66      D    O
ATOM  17297  CG2 THR D  53     -53.519   7.442 -67.109  1.00 34.90      D    C
ATOM  17301  C   THR D  53     -50.672   6.450 -66.742  1.00 39.58      D    C
ATOM  17302  O   THR D  53     -50.795   5.328 -66.255  1.00 38.47      D    O
ATOM  17304  N   LEU D  54     -50.036   7.443 -66.139  1.00 40.49      D    N
ATOM  17305  CA  LEU D  54     -49.534   7.325 -64.795  1.00 41.11      D    C
ATOM  17307  CB  LEU D  54     -48.761   8.584 -64.437  1.00 36.74      D    C
ATOM  17310  CG  LEU D  54     -47.930   8.611 -63.163  1.00 35.52      D    C
ATOM  17312  CD1 LEU D  54     -46.904   7.506 -63.167  1.00 31.70      D    C
ATOM  17316  CD2 LEU D  54     -47.269   9.997 -63.050  1.00 36.39      D    C
ATOM  17320  C   LEU D  54     -50.706   7.126 -63.850  1.00 44.45      D    C
ATOM  17321  O   LEU D  54     -51.739   7.791 -63.981  1.00 45.88      D    O
ATOM  17323  N   ARG D  55     -50.545   6.215 -62.898  1.00 45.28      D    N
ATOM  17324  CA  ARG D  55     -51.611   5.899 -61.951  1.00 43.82      D    C
ATOM  17326  CB  ARG D  55     -51.563   4.436 -61.518  1.00 38.35      D    C
ATOM  17329  CG  ARG D  55     -51.536   3.461 -62.675  1.00 36.89      D    C
ATOM  17332  CD  ARG D  55     -52.819   3.536 -63.488  1.00 35.01      D    C
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ATOM	17335	NE	ARG	D	55	-53.909	2.894	-62.769	1.00	32.16	D	N
ATOM	17337	CZ	ARG	D	55	-55.043	2.518	-63.332	1.00	30.74	D	C
ATOM	17338	NH1	ARG	D	55	-55.227	2.742	-64.611	1.00	30.81	D	N
ATOM	17341	NH2	ARG	D	55	-55.987	1.916	-62.613	1.00	29.27	D	N
ATOM	17344	C	ARG	D	55	-51.531	6.778	-60.729	1.00	46.70	D	C
ATOM	17345	O	ARG	D	55	-50.476	7.326	-60.431	1.00	47.48	D	O
ATOM	17347	N	PRO	D	56	-52.672	6.958	-60.046	1.00	51.21	D	N
ATOM	17348	CA	PRO	D	56	-52.758	7.650	-58.764	1.00	50.30	D	C
ATOM	17350	CB	PRO	D	56	-54.130	7.221	-58.255	1.00	53.21	D	C
ATOM	17353	CG	PRO	D	56	-54.944	7.156	-59.506	1.00	52.73	D	C
ATOM	17356	CD	PRO	D	56	-54.011	6.547	-60.523	1.00	49.72	D	C
ATOM	17359	C	PRO	D	56	-51.649	7.313	-57.761	1.00	51.06	D	C
ATOM	17360	O	PRO	D	56	-51.457	6.150	-57.403	1.00	49.12	D	O
ATOM	17361	N	GLY	D	57	-50.915	8.350	-57.350	1.00	51.01	D	N
ATOM	17362	CA	GLY	D	57	-49.930	8.250	-56.279	1.00	49.74	D	C
ATOM	17365	C	GLY	D	57	-48.654	7.557	-56.691	1.00	48.20	D	C
ATOM	17366	O	GLY	D	57	-47.962	6.954	-55.852	1.00	50.72	D	O
ATOM	17368	N	VAL	D	58	-48.359	7.621	-57.985	1.00	44.93	D	N
ATOM	17369	CA	VAL	D	58	-47.138	7.053	-58.524	1.00	45.49	D	C
ATOM	17371	CB	VAL	D	58	-47.456	6.088	-59.729	1.00	42.99	D	C
ATOM	17373	CG1	VAL	D	58	-46.186	5.499	-60.332	1.00	40.31	D	C
ATOM	17377	CG2	VAL	D	58	-48.396	4.937	-59.281	1.00	39.31	D	C
ATOM	17381	C	VAL	D	58	-46.296	8.274	-58.906	1.00	43.15	D	C
ATOM	17382	O	VAL	D	58	-46.792	9.155	-59.598	1.00	47.44	D	O
ATOM	17384	N	PRO	D	59	-45.045	8.359	-58.423	1.00	42.17	D	N
ATOM	17385	CA	PRO	D	59	-44.238	9.532	-58.770	1.00	44.09	D	C
ATOM	17387	CB	PRO	D	59	-42.874	9.232	-58.143	1.00	38.38	D	C
ATOM	17390	CG	PRO	D	59	-43.130	8.245	-57.085	1.00	39.16	D	C
ATOM	17393	CD	PRO	D	59	-44.309	7.429	-57.547	1.00	42.40	D	C
ATOM	17396	C	PRO	D	59	-44.117	9.758	-60.284	1.00	47.18	D	C
ATOM	17397	O	PRO	D	59	-44.098	8.804	-61.072	1.00	46.90	D	O
ATOM	17398	N	SER	D	60	-44.050	11.030	-60.667	1.00	49.68	D	N
ATOM	17399	CA	SER	D	60	-43.988	11.441	-62.066	1.00	46.46	D	C
ATOM	17401	CB	SER	D	60	-44.247	12.938	-62.154	1.00	43.76	D	C
ATOM	17404	OG	SER	D	60	-43.384	13.605	-61.248	1.00	50.04	D	O
ATOM	17406	C	SER	D	60	-42.653	11.096	-62.739	1.00	44.56	D	C
ATOM	17407	O	SER	D	60	-42.542	11.207	-63.956	1.00	40.72	D	O
ATOM	17409	N	ARG	D	61	-41.652	10.680	-61.953	1.00	44.17	D	N
ATOM	17410	CA	ARG	D	61	-40.384	10.166	-62.499	1.00	40.43	D	C
ATOM	17412	CB	ARG	D	61	-39.329	9.997	-61.387	1.00	38.02	D	C
ATOM	17415	CG	ARG	D	61	-39.632	8.969	-60.306	1.00	39.70	D	C
ATOM	17418	CD	ARG	D	61	-38.426	8.708	-59.378	1.00	39.65	D	C
ATOM	17421	NE	ARG	D	61	-38.745	7.742	-58.320	1.00	38.21	D	N
ATOM	17423	CZ	ARG	D	61	-39.349	8.062	-57.171	1.00	41.51	D	C
ATOM	17424	NH1	ARG	D	61	-39.727	9.315	-56.917	1.00	44.27	D	N
ATOM	17427	NH2	ARG	D	61	-39.606	7.127	-56.262	1.00	38.54	D	N
ATOM	17430	C	ARG	D	61	-40.587	8.872	-63.326	1.00	39.80	D	C
ATOM	17431	O	ARG	D	61	-39.771	8.541	-64.184	1.00	37.69	D	O
ATOM	17433	N	PHE	D	62	-41.695	8.170	-63.075	1.00	39.86	D	N
ATOM	17434	CA	PHE	D	62	-42.136	7.057	-63.903	1.00	35.79	D	C
ATOM	17436	CB	PHE	D	62	-42.968	6.089	-63.075	1.00	28.77	D	C
ATOM	17439	CG	PHE	D	62	-42.208	5.447	-61.962	1.00	27.76	D	C
ATOM	17440	CD1	PHE	D	62	-41.388	4.349	-62.210	1.00	26.83	D	C
ATOM	17442	CE1	PHE	D	62	-40.655	3.767	-61.180	1.00	25.90	D	C
ATOM	17444	CZ	PHE	D	62	-40.748	4.265	-59.904	1.00	24.27	D	C
ATOM	17446	CE2	PHE	D	62	-41.568	5.343	-59.640	1.00	26.74	D	C
ATOM	17448	CD2	PHE	D	62	-42.288	5.940	-60.666	1.00	26.76	D	C
ATOM	17450	C	PHE	D	62	-42.977	7.542	-65.090	1.00	38.99	D	C
ATOM	17451	O	PHE	D	62	-43.862	8.384	-64.935	1.00	40.31	D	O
ATOM	17453	N	SER	D	63	-42.686	7.007	-66.273	1.00	39.17	D	N
ATOM	17454	CA	SER	D	63	-43.438	7.317	-67.474	1.00	36.38	D	C
ATOM	17456	CB	SER	D	63	-42.955	8.630	-68.093	1.00	36.88	D	C
ATOM	17459	OG	SER	D	63	-41.639	8.510	-68.580	1.00	40.53	D	O
ATOM	17461	C	SER	D	63	-43.348	6.199	-68.498	1.00	35.84	D	C
ATOM	17462	O	SER	D	63	-42.360	5.502	-68.584	1.00	35.92	D	O
ATOM	17464	N	GLY	D	64	-44.401	6.040	-69.283	1.00	38.54	D	N
ATOM	17465	CA	GLY	D	64	-44.443	5.041	-70.344	1.00	36.67	D	C
ATOM	17468	C	GLY	D	64	-44.557	5.685	-71.714	1.00	38.04	D	C
ATOM	17469	O	GLY	D	64	-44.996	6.821	-71.849	1.00	38.33	D	O
ATOM	17471	N	SER	D	65	-44.150	4.943	-72.732	1.00	38.46	D	N
ATOM	17472	CA	SER	D	65	-44.244	5.401	-74.104	1.00	38.82	D	C
ATOM	17474	CB	SER	D	65	-43.104	6.372	-74.438	1.00	40.82	D	C
ATOM	17477	OG	SER	D	65	-41.835	5.803	-74.180	1.00	45.84	D	O
ATOM	17479	C	SER	D	65	-44.263	4.207	-75.057	1.00	41.29	D	C
ATOM	17480	O	SER	D	65	-43.881	3.091	-74.688	1.00	37.98	D	O

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ATOM  17482  N   GLY D  66     -44.717   4.462 -76.278  1.00 43.31      D    N
ATOM  17483  CA  GLY D  66     -44.832   3.435 -77.289  1.00 41.05      D    C
ATOM  17486  C   GLY D  66     -46.264   3.125 -77.632  1.00 41.45      D    C
ATOM  17487  O   GLY D  66     -47.178   3.485 -76.915  1.00 42.06      D    O
ATOM  17489  N   SER D  67     -46.446   2.456 -78.757  1.00 42.39      D    N
ATOM  17490  CA  SER D  67     -47.760   2.131 -79.270  1.00 42.75      D    C
ATOM  17492  CB  SER D  67     -48.488   3.376 -79.766  1.00 43.07      D    C
ATOM  17495  OG  SER D  67     -49.648   2.999 -80.473  1.00 45.00      D    O
ATOM  17497  C   SER D  67     -47.571   1.157 -80.408  1.00 43.19      D    C
ATOM  17498  O   SER D  67     -46.577   1.224 -81.124  1.00 48.13      D    O
ATOM  17500  N   GLY D  68     -48.519   0.241 -80.556  1.00 44.00      D    N
ATOM  17501  CA  GLY D  68     -48.408  -0.842 -81.519  1.00 41.75      D    C
ATOM  17504  C   GLY D  68     -47.724  -2.055 -80.913  1.00 44.43      D    C
ATOM  17505  O   GLY D  68     -48.373  -2.868 -80.259  1.00 42.18      D    O
ATOM  17507  N   THR D  69     -46.409  -2.165 -81.105  1.00 43.95      D    N
ATOM  17508  CA  THR D  69     -45.671  -3.358 -80.674  1.00 40.40      D    C
ATOM  17510  CB  THR D  69     -45.160  -4.222 -81.859  1.00 41.35      D    C
ATOM  17512  OG1 THR D  69     -44.059  -3.580 -82.504  1.00 42.22      D    O
ATOM  17514  CG2 THR D  69     -46.267  -4.495 -82.882  1.00 42.62      D    C
ATOM  17518  C   THR D  69     -44.506  -3.078 -79.720  1.00 36.97      D    C
ATOM  17519  O   THR D  69     -44.123  -3.974 -78.980  1.00 38.90      D    O
ATOM  17521  N   ASP D  70     -44.004  -1.838 -79.694  1.00 35.57      D    N
ATOM  17522  CA  ASP D  70     -42.734  -1.474 -79.052  1.00 37.06      D    C
ATOM  17524  CB  ASP D  70     -41.826  -0.755 -80.068  1.00 38.45      D    C
ATOM  17527  CG  ASP D  70     -41.124  -1.705 -81.060  1.00 43.59      D    C
ATOM  17528  OD1 ASP D  70     -41.464  -2.912 -81.207  1.00 40.00      D    O
ATOM  17529  OD2 ASP D  70     -40.185  -1.201 -81.713  1.00 48.32      D    O
ATOM  17530  C   ASP D  70     -42.964  -0.511 -77.878  1.00 36.49      D    C
ATOM  17531  O   ASP D  70     -43.244   0.654 -78.097  1.00 37.09      D    O
ATOM  17533  N   PHE D  71     -42.787  -0.981 -76.641  1.00 38.41      D    N
ATOM  17534  CA  PHE D  71     -43.106  -0.183 -75.446  1.00 35.81      D    C
ATOM  17536  CB  PHE D  71     -44.277  -0.818 -74.677  1.00 30.00      D    C
ATOM  17539  CG  PHE D  71     -45.506  -0.954 -75.503  1.00 25.69      D    C
ATOM  17540  CD1 PHE D  71     -46.491  -0.001 -75.456  1.00 23.97      D    C
ATOM  17542  CE1 PHE D  71     -47.602  -0.103 -76.240  1.00 24.56      D    C
ATOM  17544  CZ  PHE D  71     -47.734  -1.151 -77.101  1.00 23.65      D    C
ATOM  17546  CE2 PHE D  71     -46.767  -2.098 -77.169  1.00 23.88      D    C
ATOM  17548  CD2 PHE D  71     -45.641  -2.002 -76.384  1.00 27.39      D    C
ATOM  17550  C   PHE D  71     -41.928   0.013 -74.513  1.00 35.56      D    C
ATOM  17551  O   PHE D  71     -41.070  -0.861 -74.377  1.00 37.95      D    O
ATOM  17553  N   THR D  72     -41.903   1.174 -73.873  1.00 33.23      D    N
ATOM  17554  CA  THR D  72     -40.794   1.571 -73.021  1.00 37.46      D    C
ATOM  17556  CB  THR D  72     -39.918   2.640 -73.741  1.00 34.53      D    C
ATOM  17558  OG1 THR D  72     -39.376   2.072 -74.941  1.00 37.40      D    O
ATOM  17560  CG2 THR D  72     -38.785   3.119 -72.865  1.00 27.41      D    C
ATOM  17564  C   THR D  72     -41.271   2.146 -71.688  1.00 36.64      D    C
ATOM  17565  O   THR D  72     -42.141   3.018 -71.665  1.00 37.03      D    O
ATOM  17567  N   LEU D  73     -40.681   1.653 -70.597  1.00 33.05      D    N
ATOM  17568  CA  LEU D  73     -40.833   2.256 -69.269  1.00 34.80      D    C
ATOM  17570  CB  LEU D  73     -41.049   1.180 -68.194  1.00 30.43      D    C
ATOM  17573  CG  LEU D  73     -40.999   1.635 -66.732  1.00 30.48      D    C
ATOM  17575  CD1 LEU D  73     -42.244   2.474 -66.347  1.00 28.28      D    C
ATOM  17579  CD2 LEU D  73     -40.783   0.466 -65.780  1.00 21.69      D    C
ATOM  17583  C   LEU D  73     -39.557   3.028 -68.941  1.00 39.42      D    C
ATOM  17584  O   LEU D  73     -38.456   2.469 -69.035  1.00 41.38      D    O
ATOM  17586  N   THR D  74     -39.710   4.284 -68.523  1.00 36.43      D    N
ATOM  17587  CA  THR D  74     -38.579   5.137 -68.172  1.00 35.96      D    C
ATOM  17589  CB  THR D  74     -38.465   6.375 -69.114  1.00 35.05      D    C
ATOM  17591  OG1 THR D  74     -38.371   5.952 -70.494  1.00 32.33      D    O
ATOM  17593  CG2 THR D  74     -37.261   7.219 -68.744  1.00 26.80      D    C
ATOM  17597  C   THR D  74     -38.728   5.622 -66.736  1.00 39.64      D    C
ATOM  17598  O   THR D  74     -39.755   6.205 -66.393  1.00 36.35      D    O
ATOM  17600  N   ILE D  75     -37.707   5.364 -65.909  1.00 38.18      D    N
ATOM  17601  CA  ILE D  75     -37.559   6.021 -64.609  1.00 38.32      D    C
ATOM  17603  CB  ILE D  75     -37.103   5.037 -63.505  1.00 37.96      D    C
ATOM  17605  CG1 ILE D  75     -37.964   3.764 -63.519  1.00 35.94      D    C
ATOM  17608  CD1 ILE D  75     -37.345   2.571 -62.825  1.00 35.28      D    C
ATOM  17612  CG2 ILE D  75     -37.150   5.720 -62.126  1.00 36.47      D    C
ATOM  17616  C   ILE D  75     -36.524   7.133 -64.796  1.00 39.92      D    C
ATOM  17617  O   ILE D  75     -35.360   6.853 -65.023  1.00 40.12      D    O
ATOM  17619  N   SER D  76     -36.952   8.389 -64.719  1.00 43.39      D    N
ATOM  17620  CA  SER D  76     -36.146   9.522 -65.198  1.00 45.47      D    C
ATOM  17622  CB  SER D  76     -37.017  10.766 -65.415  1.00 44.14      D    C
ATOM  17625  OG  SER D  76     -37.332  11.406 -64.173  1.00 46.89      D    O
ATOM  17627  C   SER D  76     -35.006   9.880 -64.263  1.00 48.55      D    C
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ATOM  17628  O   SER D  76     -33.958  10.380 -64.700  1.00 53.87      D    O
ATOM  17630  N   SER D  77     -35.220   9.651 -62.978  1.00 45.31      D    N
ATOM  17631  CA  SER D  77     -34.213   9.981 -61.986  1.00 44.77      D    C
ATOM  17633  CB  SER D  77     -34.418  11.423 -61.500  1.00 45.28      D    C
ATOM  17636  OG  SER D  77     -33.721  11.656 -60.291  1.00 53.02      D    O
ATOM  17638  C   SER D  77     -34.289   8.948 -60.856  1.00 43.15      D    C
ATOM  17639  O   SER D  77     -34.973   9.157 -59.859  1.00 46.57      D    O
ATOM  17641  N   LEU D  78     -33.571   7.845 -61.044  1.00 36.02      D    N
ATOM  17642  CA  LEU D  78     -33.629   6.693 -60.164  1.00 37.92      D    C
ATOM  17644  CB  LEU D  78     -32.617   5.643 -60.635  1.00 36.50      D    C
ATOM  17647  CG  LEU D  78     -32.696   4.278 -59.969  1.00 38.22      D    C
ATOM  17649  CD1 LEU D  78     -34.033   3.613 -60.305  1.00 39.21      D    C
ATOM  17653  CD2 LEU D  78     -31.508   3.413 -60.386  1.00 38.71      D    C
ATOM  17657  C   LEU D  78     -33.386   7.016 -58.688  1.00 35.46      D    C
ATOM  17658  O   LEU D  78     -32.422   7.680 -58.334  1.00 37.47      D    O
ATOM  17660  N   GLN D  79     -34.283   6.537 -57.831  1.00 38.02      D    N
ATOM  17661  CA  GLN D  79     -34.200   6.765 -56.391  1.00 39.42      D    C
ATOM  17663  CB  GLN D  79     -35.502   7.401 -55.855  1.00 35.52      D    C
ATOM  17666  CG  GLN D  79     -35.782   8.814 -56.314  1.00 31.66      D    C
ATOM  17669  CD  GLN D  79     -34.670   9.778 -55.963  1.00 36.40      D    C
ATOM  17670  OE1 GLN D  79     -34.027  10.372 -56.853  1.00 41.81      D    O
ATOM  17671  NE2 GLN D  79     -34.408   9.923 -54.670  1.00 38.07      D    N
ATOM  17674  C   GLN D  79     -33.965   5.458 -55.674  1.00 37.58      D    C
ATOM  17675  O   GLN D  79     -34.302   4.417 -56.201  1.00 38.75      D    O
ATOM  17677  N   PRO D  80     -33.387   5.503 -54.457  1.00 40.59      D    N
ATOM  17678  CA  PRO D  80     -33.161   4.259 -53.695  1.00 41.83      D    C
ATOM  17680  CB  PRO D  80     -32.679   4.767 -52.332  1.00 40.95      D    C
ATOM  17683  CG  PRO D  80     -32.063   6.098 -52.644  1.00 40.25      D    C
ATOM  17686  CD  PRO D  80     -32.895   6.688 -53.721  1.00 38.34      D    C
ATOM  17689  C   PRO D  80     -34.401   3.360 -53.531  1.00 41.58      D    C
ATOM  17690  O   PRO D  80     -34.303   2.137 -53.690  1.00 40.30      D    O
ATOM  17691  N   GLU D  81     -35.551   3.957 -53.235  1.00 40.96      D    N
ATOM  17692  CA  GLU D  81     -36.799   3.192 -53.083  1.00 41.06      D    C
ATOM  17694  CB  GLU D  81     -37.913   4.070 -52.493  1.00 42.37      D    C
ATOM  17697  CG  GLU D  81     -38.345   5.257 -53.347  1.00 43.97      D    C
ATOM  17700  CD  GLU D  81     -37.804   6.588 -52.833  1.00 52.48      D    C
ATOM  17701  OE1 GLU D  81     -36.571   6.707 -52.607  1.00 50.07      D    O
ATOM  17702  OE2 GLU D  81     -38.628   7.519 -52.653  1.00 57.71      D    O
ATOM  17703  C   GLU D  81     -37.315   2.504 -54.367  1.00 40.11      D    C
ATOM  17704  O   GLU D  81     -38.235   1.691 -54.297  1.00 39.57      D    O
ATOM  17706  N   ASP D  82     -36.714   2.812 -55.513  1.00 40.13      D    N
ATOM  17707  CA  ASP D  82     -37.126   2.264 -56.799  1.00 40.22      D    C
ATOM  17709  CB  ASP D  82     -36.738   3.234 -57.933  1.00 40.59      D    C
ATOM  17712  CG  ASP D  82     -37.456   4.560 -57.832  1.00 36.67      D    C
ATOM  17713  OD1 ASP D  82     -38.498   4.622 -57.144  1.00 39.80      D    O
ATOM  17714  OD2 ASP D  82     -36.992   5.529 -58.440  1.00 32.08      D    O
ATOM  17715  C   ASP D  82     -36.538   0.903 -57.094  1.00 41.61      D    C
ATOM  17716  O   ASP D  82     -36.848   0.323 -58.146  1.00 44.42      D    O
ATOM  17718  N   VAL D  83     -35.687   0.399 -56.197  1.00 38.81      D    N
ATOM  17719  CA  VAL D  83     -35.130  -0.944 -56.344  1.00 38.29      D    C
ATOM  17721  CB  VAL D  83     -33.970  -1.218 -55.325  1.00 37.45      D    C
ATOM  17723  CG1 VAL D  83     -34.451  -1.158 -53.905  1.00 41.14      D    C
ATOM  17727  CG2 VAL D  83     -33.340  -2.563 -55.577  1.00 40.26      D    C
ATOM  17731  C   VAL D  83     -36.278  -1.970 -56.213  1.00 41.19      D    C
ATOM  17732  O   VAL D  83     -37.025  -1.983 -55.239  1.00 43.73      D    O
ATOM  17734  N   ALA D  84     -36.421  -2.813 -57.230  1.00 38.64      D    N
ATOM  17735  CA  ALA D  84     -37.630  -3.613 -57.422  1.00 35.15      D    C
ATOM  17737  CB  ALA D  84     -38.859  -2.653 -57.648  1.00 28.02      D    C
ATOM  17741  C   ALA D  84     -37.417  -4.471 -58.649  1.00 35.36      D    C
ATOM  17742  O   ALA D  84     -36.434  -4.268 -59.357  1.00 32.60      D    O
ATOM  17744  N   THR D  85     -38.314  -5.431 -58.907  1.00 34.15      D    N
ATOM  17745  CA  THR D  85     -38.426  -6.035 -60.247  1.00 33.32      D    C
ATOM  17747  CB  THR D  85     -38.403  -7.572 -60.208  1.00 36.97      D    C
ATOM  17749  OG1 THR D  85     -37.199  -8.031 -59.557  1.00 32.91      D    O
ATOM  17751  CG2 THR D  85     -38.463  -8.165 -61.617  1.00 30.74      D    C
ATOM  17755  C   THR D  85     -39.682  -5.453 -60.950  1.00 35.11      D    C
ATOM  17756  O   THR D  85     -40.745  -5.311 -60.353  1.00 36.71      D    O
ATOM  17758  N   TYR D  86     -39.510  -5.060 -62.208  1.00 38.15      D    N
ATOM  17759  CA  TYR D  86     -40.526  -4.370 -62.989  1.00 35.18      D    C
ATOM  17761  CB  TYR D  86     -39.919  -3.105 -63.609  1.00 32.82      D    C
ATOM  17764  CG  TYR D  86     -39.692  -2.030 -62.579  1.00 32.79      D    C
ATOM  17765  CD1 TYR D  86     -40.714  -1.165 -62.215  1.00 33.11      D    C
ATOM  17767  CE1 TYR D  86     -40.503  -0.195 -61.263  1.00 33.29      D    C
ATOM  17769  CZ  TYR D  86     -39.276  -0.105 -60.652  1.00 29.81      D    C
ATOM  17770  OH  TYR D  86     -39.062   0.846 -59.693  1.00 31.53      D    O
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ATOM	17772	CE2	TYR	D	86	-38.271	-0.960	-60.987	1.00	26.87	D	C
ATOM	17774	CD2	TYR	D	86	-38.474	-1.908	-61.936	1.00	29.53	D	C
ATOM	17776	C	TYR	D	86	-41.036	-5.288	-64.078	1.00	34.53	D	C
ATOM	17777	O	TYR	D	86	-40.257	-6.027	-64.682	1.00	32.46	D	O
ATOM	17779	N	TYR	D	87	-42.339	-5.253	-64.310	1.00	33.76	D	N
ATOM	17780	CA	TYR	D	87	-43.017	-6.174	-65.244	1.00	31.51	D	C
ATOM	17782	CB	TYR	D	87	-43.875	-7.181	-64.475	1.00	27.78	D	C
ATOM	17785	CG	TYR	D	87	-43.073	-8.116	-63.593	1.00	30.93	D	C
ATOM	17786	CD1	TYR	D	87	-42.448	-9.219	-64.130	1.00	25.34	D	C
ATOM	17788	CE1	TYR	D	87	-41.732	-10.075	-63.359	1.00	26.90	D	C
ATOM	17790	CZ	TYR	D	87	-41.620	-9.857	-62.021	1.00	28.52	D	C
ATOM	17791	OH	TYR	D	87	-40.878	-10.744	-61.273	1.00	30.59	D	O
ATOM	17793	CE2	TYR	D	87	-42.232	-8.773	-61.434	1.00	28.56	D	C
ATOM	17795	CD2	TYR	D	87	-42.955	-7.898	-62.222	1.00	31.15	D	C
ATOM	17797	C	TYR	D	87	-43.942	-5.398	-66.148	1.00	31.19	D	C
ATOM	17798	O	TYR	D	87	-44.720	-4.579	-65.665	1.00	33.53	D	O
ATOM	17800	N	CYS	D	88	-43.855	-5.645	-67.449	1.00	30.54	D	N
ATOM	17801	CA	CYS	D	88	-44.883	-5.163	-68.363	1.00	30.46	D	C
ATOM	17803	CB	CYS	D	88	-44.325	-4.886	-69.755	1.00	28.22	D	C
ATOM	17806	SG	CYS	D	88	-43.797	-6.342	-70.731	1.00	31.02	D	S
ATOM	17808	C	CYS	D	88	-46.022	-6.193	-68.426	1.00	32.46	D	C
ATOM	17809	O	CYS	D	88	-45.843	-7.373	-68.118	1.00	31.88	D	O
ATOM	17811	N	LEU	D	89	-47.205	-5.715	-68.784	1.00	33.52	D	N
ATOM	17812	CA	LEU	D	89	-48.341	-6.583	-69.029	1.00	33.01	D	C
ATOM	17814	CB	LEU	D	89	-49.236	-6.736	-67.782	1.00	30.63	D	C
ATOM	17817	CG	LEU	D	89	-50.594	-7.460	-67.971	1.00	27.69	D	C
ATOM	17819	CD1	LEU	D	89	-50.563	-8.889	-67.528	1.00	20.55	D	C
ATOM	17823	CD2	LEU	D	89	-51.700	-6.729	-67.232	1.00	25.06	D	C
ATOM	17827	C	LEU	D	89	-49.139	-6.000	-70.168	1.00	32.58	D	C
ATOM	17828	O	LEU	D	89	-49.558	-4.857	-70.096	1.00	29.29	D	O
ATOM	17830	N	GLN	D	90	-49.354	-6.819	-71.194	1.00	31.94	D	N
ATOM	17831	CA	GLN	D	90	-50.220	-6.480	-72.311	1.00	36.73	D	C
ATOM	17833	CB	GLN	D	90	-49.793	-7.176	-73.616	1.00	31.28	D	C
ATOM	17836	CG	GLN	D	90	-50.019	-8.669	-73.703	1.00	29.06	D	C
ATOM	17839	CD	GLN	D	90	-51.428	-9.090	-74.095	1.00	24.98	D	C
ATOM	17840	OE1	GLN	D	90	-52.190	-8.334	-74.702	1.00	26.11	D	O
ATOM	17841	NE2	GLN	D	90	-51.774	-10.317	-73.745	1.00	21.58	D	N
ATOM	17844	C	GLN	D	90	-51.654	-6.834	-71.950	1.00	38.76	D	C
ATOM	17845	O	GLN	D	90	-51.932	-7.922	-71.446	1.00	33.01	D	O
ATOM	17847	N	SER	D	91	-52.561	-5.896	-72.204	1.00	41.17	D	N
ATOM	17848	CA	SER	D	91	-53.978	-6.118	-71.958	1.00	38.70	D	C
ATOM	17850	CB	SER	D	91	-54.413	-5.404	-70.672	1.00	32.95	D	C
ATOM	17853	OG	SER	D	91	-54.149	-4.033	-70.731	1.00	28.88	D	O
ATOM	17855	C	SER	D	91	-54.826	-5.734	-73.171	1.00	38.54	D	C
ATOM	17856	O	SER	D	91	-55.880	-5.126	-73.048	1.00	39.53	D	O
ATOM	17858	N	ASP	D	92	-54.347	-6.135	-74.342	1.00	32.72	D	N
ATOM	17859	CA	ASP	D	92	-55.089	-5.998	-75.582	1.00	36.91	D	C
ATOM	17861	CB	ASP	D	92	-54.201	-6.433	-76.750	1.00	35.09	D	C
ATOM	17864	CG	ASP	D	92	-54.934	-6.422	-78.059	1.00	28.98	D	C
ATOM	17865	OD1	ASP	D	92	-54.958	-5.370	-78.719	1.00	28.13	D	O
ATOM	17866	OD2	ASP	D	92	-55.544	-7.448	-78.384	1.00	28.04	D	O
ATOM	17867	C	ASP	D	92	-56.366	-6.831	-75.579	1.00	35.48	D	C
ATOM	17868	O	ASP	D	92	-57.387	-6.408	-76.067	1.00	37.44	D	O
ATOM	17870	N	SER	D	93	-56.278	-8.023	-75.027	1.00	40.76	D	N
ATOM	17871	CA	SER	D	93	-57.373	-8.965	-75.006	1.00	37.36	D	C
ATOM	17873	CB	SER	D	93	-57.637	-9.530	-76.409	1.00	36.63	D	C
ATOM	17876	OG	SER	D	93	-56.416	-9.851	-77.070	1.00	34.50	D	O
ATOM	17878	C	SER	D	93	-56.996	-10.076	-74.034	1.00	36.66	D	C
ATOM	17879	O	SER	D	93	-55.848	-10.183	-73.624	1.00	35.06	D	O
ATOM	17881	N	LEU	D	94	-57.977	-10.900	-73.682	1.00	36.84	D	N
ATOM	17882	CA	LEU	D	94	-57.774	-12.011	-72.781	1.00	35.34	D	C
ATOM	17884	CB	LEU	D	94	-59.092	-12.376	-72.096	1.00	32.60	D	C
ATOM	17887	CG	LEU	D	94	-59.780	-11.257	-71.291	1.00	30.67	D	C
ATOM	17889	CD1	LEU	D	94	-61.289	-11.530	-71.090	1.00	21.35	D	C
ATOM	17893	CD2	LEU	D	94	-59.091	-11.016	-69.948	1.00	28.99	D	C
ATOM	17897	C	LEU	D	94	-57.217	-13.190	-73.589	1.00	36.56	D	C
ATOM	17898	O	LEU	D	94	-57.611	-13.392	-74.729	1.00	42.67	D	O
ATOM	17900	N	PRO	D	95	-56.265	-13.952	-73.018	1.00	34.71	D	N
ATOM	17901	CA	PRO	D	95	-55.605	-13.730	-71.736	1.00	33.38	D	C
ATOM	17903	CB	PRO	D	95	-54.955	-15.079	-71.455	1.00	30.17	D	C
ATOM	17906	CG	PRO	D	95	-54.650	-15.601	-72.772	1.00	30.63	D	C
ATOM	17909	CD	PRO	D	95	-55.773	-15.177	-73.667	1.00	30.19	D	C
ATOM	17912	C	PRO	D	95	-54.531	-12.631	-71.811	1.00	34.64	D	C
ATOM	17913	O	PRO	D	95	-53.859	-12.491	-72.836	1.00	32.89	D	O
ATOM	17914	N	TYR	D	96	-54.392	-11.856	-70.735	1.00	32.70	D	N

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ATOM  17915  CA  TYR D  96     -53.305 -10.903 -70.626  1.00 31.75      D    C
ATOM  17917  CB  TYR D  96     -53.503  -9.971 -69.448  1.00 24.26      D    C
ATOM  17920  CG  TYR D  96     -54.779  -9.143 -69.402  1.00 21.12      D    C
ATOM  17921  CD1 TYR D  96     -55.599  -8.942 -70.530  1.00 20.34      D    C
ATOM  17923  CE1 TYR D  96     -56.768  -8.124 -70.436  1.00 21.35      D    C
ATOM  17925  CZ  TYR D  96     -57.086  -7.517 -69.200  1.00 23.00      D    C
ATOM  17926  OH  TYR D  96     -58.197  -6.705 -69.008  1.00 16.83      D    O
ATOM  17928  CE2 TYR D  96     -56.264  -7.720 -68.101  1.00 20.25      D    C
ATOM  17930  CD2 TYR D  96     -55.131  -8.511 -68.209  1.00 18.13      D    C
ATOM  17932  C   TYR D  96     -51.970 -11.642 -70.451  1.00 32.27      D    C
ATOM  17933  O   TYR D  96     -51.941 -12.846 -70.125  1.00 33.17      D    O
ATOM  17935  N   THR D  97     -50.867 -10.923 -70.667  1.00 31.46      D    N
ATOM  17936  CA  THR D  97     -49.525 -11.533 -70.637  1.00 32.27      D    C
ATOM  17938  CB  THR D  97     -48.998 -11.845 -72.075  1.00 30.08      D    C
ATOM  17940  OG1 THR D  97     -50.069 -12.318 -72.895  1.00 30.94      D    O
ATOM  17942  CG2 THR D  97     -47.830 -12.895 -72.037  1.00 27.91      D    C
ATOM  17946  C   THR D  97     -48.480 -10.624 -70.016  1.00 33.38      D    C
ATOM  17947  O   THR D  97     -48.275  -9.505 -70.461  1.00 33.71      D    O
ATOM  17949  N   PHE D  98     -47.785 -11.146 -69.018  1.00 34.96      D    N
ATOM  17950  CA  PHE D  98     -46.668 -10.468 -68.390  1.00 34.31      D    C
ATOM  17952  CB  PHE D  98     -46.383 -11.075 -67.010  1.00 28.87      D    C
ATOM  17955  CG  PHE D  98     -47.278 -10.576 -65.921  1.00 29.73      D    C
ATOM  17956  CD1 PHE D  98     -47.133  -9.299 -65.420  1.00 29.49      D    C
ATOM  17958  CE1 PHE D  98     -47.932  -8.851 -64.394  1.00 28.57      D    C
ATOM  17960  CZ  PHE D  98     -48.907  -9.682 -63.865  1.00 29.03      D    C
ATOM  17962  CE2 PHE D  98     -49.052 -10.951 -64.351  1.00 28.72      D    C
ATOM  17964  CD2 PHE D  98     -48.228 -11.403 -65.359  1.00 29.83      D    C
ATOM  17966  C   PHE D  98     -45.389 -10.601 -69.218  1.00 35.66      D    C
ATOM  17967  O   PHE D  98     -45.166 -11.628 -69.895  1.00 34.09      D    O
ATOM  17969  N   GLY D  99     -44.541  -9.570 -69.116  1.00 35.28      D    N
ATOM  17970  CA  GLY D  99     -43.143  -9.667 -69.487  1.00 34.03      D    C
ATOM  17973  C   GLY D  99     -42.382 -10.526 -68.492  1.00 37.03      D    C
ATOM  17974  O   GLY D  99     -42.886 -10.846 -67.411  1.00 35.75      D    O
ATOM  17976  N   GLN D 100     -41.169 -10.908 -68.876  1.00 36.51      D    N
ATOM  17977  CA  GLN D 100     -40.307 -11.783 -68.072  1.00 32.76      D    C
ATOM  17979  CB  GLN D 100     -39.147 -12.289 -68.940  1.00 31.39      D    C
ATOM  17982  CG  GLN D 100     -39.593 -13.169 -70.114  1.00 34.37      D    C
ATOM  17985  CD  GLN D 100     -39.682 -12.449 -71.471  1.00 36.27      D    C
ATOM  17986  OE1 GLN D 100     -40.168 -11.323 -71.581  1.00 28.09      D    O
ATOM  17987  NE2 GLN D 100     -39.214 -13.129 -72.519  1.00 43.08      D    N
ATOM  17990  C   GLN D 100     -39.760 -11.114 -66.803  1.00 34.65      D    C
ATOM  17991  O   GLN D 100     -39.328 -11.791 -65.867  1.00 39.07      D    O
ATOM  17993  N   GLY D 101     -39.802  -9.791 -66.771  1.00 34.98      D    N
ATOM  17994  CA  GLY D 101     -39.353  -9.009 -65.619  1.00 33.87      D    C
ATOM  17997  C   GLY D 101     -37.988  -8.377 -65.854  1.00 32.21      D    C
ATOM  17998  O   GLY D 101     -37.188  -8.891 -66.641  1.00 32.54      D    O
ATOM  18000  N   THR D 102     -37.737  -7.256 -65.184  1.00 32.75      D    N
ATOM  18001  CA  THR D 102     -36.412  -6.627 -65.170  1.00 31.77      D    C
ATOM  18003  CB  THR D 102     -36.327  -5.351 -66.068  1.00 33.86      D    C
ATOM  18005  OG1 THR D 102     -36.593  -5.663 -67.451  1.00 29.07      D    O
ATOM  18007  CG2 THR D 102     -34.936  -4.671 -65.943  1.00 32.97      D    C
ATOM  18011  C   THR D 102     -36.054  -6.227 -63.746  1.00 32.02      D    C
ATOM  18012  O   THR D 102     -36.702  -5.363 -63.158  1.00 25.82      D    O
ATOM  18014  N   LYS D 103     -34.995  -6.842 -63.217  1.00 31.03      D    N
ATOM  18015  CA  LYS D 103     -34.499  -6.551 -61.894  1.00 33.08      D    C
ATOM  18017  CB  LYS D 103     -33.695  -7.744 -61.368  1.00 36.67      D    C
ATOM  18020  CG  LYS D 103     -33.619  -7.783 -59.847  1.00 39.34      D    C
ATOM  18023  CD  LYS D 103     -32.527  -8.675 -59.296  1.00 41.54      D    C
ATOM  18026  CE  LYS D 103     -32.491  -8.588 -57.748  1.00 43.89      D    C
ATOM  18029  NZ  LYS D 103     -31.550  -9.577 -57.114  1.00 42.75      D    N
ATOM  18033  C   LYS D 103     -33.624  -5.299 -61.944  1.00 35.12      D    C
ATOM  18034  O   LYS D 103     -32.657  -5.249 -62.700  1.00 36.75      D    O
ATOM  18036  N   VAL D 104     -33.967  -4.295 -61.136  1.00 36.46      D    N
ATOM  18037  CA  VAL D 104     -33.277  -3.024 -61.132  1.00 32.87      D    C
ATOM  18039  CB  VAL D 104     -34.245  -1.859 -61.408  1.00 31.34      D    C
ATOM  18041  CG1 VAL D 104     -33.612  -0.545 -61.003  1.00 30.67      D    C
ATOM  18045  CG2 VAL D 104     -34.620  -1.821 -62.883  1.00 20.53      D    C
ATOM  18049  C   VAL D 104     -32.564  -2.837 -59.802  1.00 39.68      D    C
ATOM  18050  O   VAL D 104     -33.194  -2.840 -58.750  1.00 37.34      D    O
ATOM  18052  N   GLU D 105     -31.240  -2.716 -59.862  1.00 41.34      D    N
ATOM  18053  CA  GLU D 105     -30.411  -2.529 -58.678  1.00 45.28      D    C
ATOM  18055  CB  GLU D 105     -29.322  -3.603 -58.615  1.00 50.44      D    C
ATOM  18058  CG  GLU D 105     -29.835  -5.009 -58.870  1.00 55.09      D    C
ATOM  18061  CD  GLU D 105     -28.871  -6.094 -58.380  1.00 54.73      D    C
ATOM  18062  OE1 GLU D 105     -27.698  -6.104 -58.848  1.00 56.90      D    O
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ATOM  18063  OE2 GLU D 105     -29.293  -6.916 -57.520  1.00 51.30      D    O
ATOM  18064  C   GLU D 105     -29.753  -1.152 -58.700  1.00 43.14      D    C
ATOM  18065  O   GLU D 105     -29.573  -0.557 -59.763  1.00 37.69      D    O
ATOM  18067  N   ILE D 106     -29.407  -0.657 -57.516  1.00 45.95      D    N
ATOM  18068  CA  ILE D 106     -28.734   0.634 -57.372  1.00 48.69      D    C
ATOM  18070  CB  ILE D 106     -29.322   1.447 -56.202  1.00 47.63      D    C
ATOM  18072  CG1 ILE D 106     -30.695   2.016 -56.587  1.00 50.17      D    C
ATOM  18075  CD1 ILE D 106     -30.645   3.279 -57.424  1.00 50.66      D    C
ATOM  18079  CG2 ILE D 106     -28.368   2.543 -55.786  1.00 46.30      D    C
ATOM  18083  C   ILE D 106     -27.226   0.473 -57.157  1.00 48.62      D    C
ATOM  18084  O   ILE D 106     -26.786  -0.232 -56.247  1.00 44.17      D    O
ATOM  18086  N   LYS D 107     -26.449   1.132 -58.015  1.00 50.60      D    N
ATOM  18087  CA  LYS D 107     -25.018   1.283 -57.797  1.00 52.54      D    C
ATOM  18089  CB  LYS D 107     -24.266   1.605 -59.091  1.00 54.87      D    C
ATOM  18092  CG  LYS D 107     -23.287   0.537 -59.522  1.00 60.07      D    C
ATOM  18095  CD  LYS D 107     -22.245   1.091 -60.485  1.00 62.78      D    C
ATOM  18098  CE  LYS D 107     -21.148   1.894 -59.765  1.00 65.59      D    C
ATOM  18101  NZ  LYS D 107     -20.462   2.871 -60.680  1.00 61.80      D    N
ATOM  18105  C   LYS D 107     -24.787   2.403 -56.813  1.00 50.49      D    C
ATOM  18106  O   LYS D 107     -25.221   3.526 -57.027  1.00 49.64      D    O
ATOM  18108  N   ARG D 108     -24.102   2.094 -55.727  1.00 49.37      D    N
ATOM  18109  CA  ARG D 108     -23.777   3.101 -54.744  1.00 48.28      D    C
ATOM  18111  CB  ARG D 108     -24.739   2.987 -53.549  1.00 44.17      D    C
ATOM  18114  CG  ARG D 108     -24.816   1.605 -52.886  1.00 46.31      D    C
ATOM  18117  CD  ARG D 108     -24.885   1.710 -51.352  1.00 46.78      D    C
ATOM  18120  NE  ARG D 108     -23.745   2.484 -50.847  1.00 48.96      D    N
ATOM  18122  CZ  ARG D 108     -23.669   3.109 -49.674  1.00 48.45      D    C
ATOM  18123  NH1 ARG D 108     -24.671   3.090 -48.804  1.00 48.84      D    N
ATOM  18126  NH2 ARG D 108     -22.560   3.771 -49.379  1.00 48.31      D    N
ATOM  18129  C   ARG D 108     -22.290   3.003 -54.346  1.00 48.47      D    C
ATOM  18130  O   ARG D 108     -21.537   2.171 -54.859  1.00 47.58      D    O
ATOM  18132  N   THR D 109     -21.867   3.904 -53.478  1.00 48.75      D    N
ATOM  18133  CA  THR D 109     -20.532   3.877 -52.910  1.00 48.78      D    C
ATOM  18135  CB  THR D 109     -20.405   5.041 -51.909  1.00 53.11      D    C
ATOM  18137  OG1 THR D 109     -19.901   6.194 -52.596  1.00 54.13      D    O
ATOM  18139  CG2 THR D 109     -19.482   4.683 -50.755  1.00 61.93      D    C
ATOM  18143  C   THR D 109     -20.264   2.581 -52.170  1.00 48.97      D    C
ATOM  18144  O   THR D 109     -21.175   2.003 -51.593  1.00 52.57      D    O
ATOM  18146  N   VAL D 110     -19.012   2.129 -52.169  1.00 49.80      D    N
ATOM  18147  CA  VAL D 110     -18.607   0.933 -51.408  1.00 46.02      D    C
ATOM  18149  CB  VAL D 110     -17.157   0.527 -51.754  1.00 47.49      D    C
ATOM  18151  CG1 VAL D 110     -17.119  -0.032 -53.174  1.00 43.94      D    C
ATOM  18155  CG2 VAL D 110     -16.591  -0.477 -50.746  1.00 47.26      D    C
ATOM  18159  C   VAL D 110     -18.750   1.179 -49.918  1.00 42.35      D    C
ATOM  18160  O   VAL D 110     -18.277   2.179 -49.422  1.00 41.48      D    O
ATOM  18162  N   ALA D 111     -19.468   0.296 -49.225  1.00 45.68      D    N
ATOM  18163  CA  ALA D 111     -19.663   0.399 -47.786  1.00 44.70      D    C
ATOM  18165  CB  ALA D 111     -21.127   0.599 -47.459  1.00 32.24      D    C
ATOM  18169  C   ALA D 111     -19.154  -0.895 -47.170  1.00 43.74      D    C
ATOM  18170  O   ALA D 111     -19.479  -1.977 -47.657  1.00 42.08      D    O
ATOM  18172  N   ALA D 112     -18.368  -0.786 -46.100  1.00 49.41      D    N
ATOM  18173  CA  ALA D 112     -17.835  -1.974 -45.413  1.00 50.30      D    C
ATOM  18175  CB  ALA D 112     -16.550  -1.628 -44.641  1.00 51.84      D    C
ATOM  18179  C   ALA D 112     -18.902  -2.510 -44.465  1.00 49.43      D    C
ATOM  18180  O   ALA D 112     -19.675  -1.740 -43.920  1.00 52.03      D    O
ATOM  18182  N   PRO D 113     -18.959  -3.834 -44.279  1.00 49.18      D    N
ATOM  18183  CA  PRO D 113     -19.959  -4.400 -43.387  1.00 48.41      D    C
ATOM  18185  CB  PRO D 113     -19.947  -5.892 -43.753  1.00 48.78      D    C
ATOM  18188  CG  PRO D 113     -18.611  -6.151 -44.238  1.00 48.96      D    C
ATOM  18191  CD  PRO D 113     -18.119  -4.881 -44.890  1.00 49.88      D    C
ATOM  18194  C   PRO D 113     -19.562  -4.226 -41.939  1.00 47.38      D    C
ATOM  18195  O   PRO D 113     -18.385  -4.316 -41.620  1.00 45.70      D    O
ATOM  18196  N   SER D 114     -20.547  -4.003 -41.075  1.00 46.93      D    N
ATOM  18197  CA  SER D 114     -20.328  -3.989 -39.654  1.00 46.41      D    C
ATOM  18199  CB  SER D 114     -21.238  -2.957 -38.988  1.00 52.60      D    C
ATOM  18202  OG  SER D 114     -22.451  -3.535 -38.562  1.00 59.87      D    O
ATOM  18204  C   SER D 114     -20.625  -5.418 -39.237  1.00 47.10      D    C
ATOM  18205  O   SER D 114     -21.660  -5.957 -39.607  1.00 51.52      D    O
ATOM  18207  N   VAL D 115     -19.707  -6.060 -38.518  1.00 47.05      D    N
ATOM  18208  CA  VAL D 115     -19.800  -7.507 -38.302  1.00 44.95      D    C
ATOM  18210  CB  VAL D 115     -18.518  -8.194 -38.727  1.00 46.17      D    C
ATOM  18212  CG1 VAL D 115     -18.702  -9.728 -38.716  1.00 47.07      D    C
ATOM  18216  CG2 VAL D 115     -18.120  -7.676 -40.068  1.00 38.56      D    C
ATOM  18220  C   VAL D 115     -20.071  -7.872 -36.867  1.00 43.13      D    C
ATOM  18221  O   VAL D 115     -19.444  -7.330 -35.965  1.00 43.68      D    O
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ATOM  18223  N   PHE D 116     -20.996  -8.807 -36.667  1.00 44.64      D    N
ATOM  18224  CA  PHE D 116     -21.436  -9.221 -35.327  1.00 45.30      D    C
ATOM  18226  CB  PHE D 116     -22.807  -8.641 -35.007  1.00 51.57      D    C
ATOM  18229  CG  PHE D 116     -22.935  -7.166 -35.281  1.00 53.39      D    C
ATOM  18230  CD1 PHE D 116     -22.229  -6.246 -34.526  1.00 56.67      D    C
ATOM  18232  CE1 PHE D 116     -22.362  -4.881 -34.765  1.00 55.24      D    C
ATOM  18234  CZ  PHE D 116     -23.220  -4.427 -35.750  1.00 53.16      D    C
ATOM  18236  CE2 PHE D 116     -23.934  -5.334 -36.510  1.00 52.45      D    C
ATOM  18238  CD2 PHE D 116     -23.787  -6.695 -36.278  1.00 54.45      D    C
ATOM  18240  C   PHE D 116     -21.520 -10.738 -35.217  1.00 44.71      D    C
ATOM  18241  O   PHE D 116     -21.739 -11.441 -36.215  1.00 44.01      D    O
ATOM  18243  N   ILE D 117     -21.341 -11.243 -34.002  1.00 43.17      D    N
ATOM  18244  CA  ILE D 117     -21.350 -12.688 -33.760  1.00 44.64      D    C
ATOM  18246  CB  ILE D 117     -19.911 -13.247 -33.512  1.00 49.99      D    C
ATOM  18248  CG1 ILE D 117     -19.922 -14.788 -33.443  1.00 49.76      D    C
ATOM  18251  CD1 ILE D 117     -18.608 -15.426 -33.893  1.00 51.14      D    C
ATOM  18255  CG2 ILE D 117     -19.297 -12.629 -32.237  1.00 42.81      D    C
ATOM  18259  C   ILE D 117     -22.249 -12.971 -32.573  1.00 42.52      D    C
ATOM  18260  O   ILE D 117     -22.230 -12.227 -31.608  1.00 42.09      D    O
ATOM  18262  N   PHE D 118     -23.047 -14.031 -32.672  1.00 41.68      D    N
ATOM  18263  CA  PHE D 118     -23.944 -14.438 -31.595  1.00 42.95      D    C
ATOM  18265  CB  PHE D 118     -25.411 -14.269 -31.972  1.00 45.61      D    C
ATOM  18268  CG  PHE D 118     -25.798 -12.870 -32.353  1.00 43.69      D    C
ATOM  18269  CD1 PHE D 118     -26.339 -12.019 -31.418  1.00 40.42      D    C
ATOM  18271  CE1 PHE D 118     -26.713 -10.758 -31.748  1.00 40.90      D    C
ATOM  18273  CZ  PHE D 118     -26.569 -10.319 -33.032  1.00 45.60      D    C
ATOM  18275  CE2 PHE D 118     -26.042 -11.161 -33.992  1.00 46.95      D    C
ATOM  18277  CD2 PHE D 118     -25.670 -12.436 -33.653  1.00 41.44      D    C
ATOM  18279  C   PHE D 118     -23.746 -15.912 -31.256  1.00 47.23      D    C
ATOM  18280  O   PHE D 118     -23.940 -16.773 -32.121  1.00 44.40      D    O
ATOM  18282  N   PRO D 119     -23.334 -16.217 -30.008  1.00 48.90      D    N
ATOM  18283  CA  PRO D 119     -23.277 -17.624 -29.607  1.00 47.56      D    C
ATOM  18285  CB  PRO D 119     -22.695 -17.587 -28.182  1.00 48.79      D    C
ATOM  18288  CG  PRO D 119     -22.681 -16.177 -27.765  1.00 48.20      D    C
ATOM  18291  CD  PRO D 119     -22.810 -15.314 -28.968  1.00 50.04      D    C
ATOM  18294  C   PRO D 119     -24.628 -18.299 -29.562  1.00 47.18      D    C
ATOM  18295  O   PRO D 119     -25.655 -17.635 -29.538  1.00 50.01      D    O
ATOM  18296  N   PRO D 120     -24.634 -19.634 -29.484  1.00 47.40      D    N
ATOM  18297  CA  PRO D 120     -25.898 -20.298 -29.229  1.00 49.07      D    C
ATOM  18299  CB  PRO D 120     -25.516 -21.778 -29.117  1.00 50.47      D    C
ATOM  18302  CG  PRO D 120     -24.184 -21.900 -29.718  1.00 49.75      D    C
ATOM  18305  CD  PRO D 120     -23.517 -20.578 -29.597  1.00 44.98      D    C
ATOM  18308  C   PRO D 120     -26.508 -19.829 -27.912  1.00 52.79      D    C
ATOM  18309  O   PRO D 120     -25.783 -19.536 -26.962  1.00 54.40      D    O
ATOM  18310  N   SER D 121     -27.832 -19.762 -27.876  1.00 54.95      D    N
ATOM  18311  CA  SER D 121     -28.583 -19.459 -26.662  1.00 52.08      D    C
ATOM  18313  CB  SER D 121     -30.037 -19.101 -27.020  1.00 52.06      D    C
ATOM  18316  OG  SER D 121     -30.788 -20.264 -27.399  1.00 51.54      D    O
ATOM  18318  C   SER D 121     -28.569 -20.675 -25.734  1.00 54.84      D    C
ATOM  18319  O   SER D 121     -28.492 -21.828 -26.197  1.00 55.38      D    O
ATOM  18321  N   ASP D 122     -28.653 -20.412 -24.430  1.00 55.31      D    N
ATOM  18322  CA  ASP D 122     -28.676 -21.476 -23.431  1.00 57.41      D    C
ATOM  18324  CB  ASP D 122     -28.797 -20.899 -22.005  1.00 64.12      D    C
ATOM  18327  CG  ASP D 122     -27.613 -20.013 -21.611  1.00 68.20      D    C
ATOM  18328  OD1 ASP D 122     -26.453 -20.407 -21.863  1.00 67.83      D    O
ATOM  18329  OD2 ASP D 122     -27.850 -18.917 -21.049  1.00 71.94      D    O
ATOM  18330  C   ASP D 122     -29.840 -22.412 -23.690  1.00 55.89      D    C
ATOM  18331  O   ASP D 122     -29.729 -23.624 -23.490  1.00 56.44      D    O
ATOM  18333  N   GLU D 123     -30.962 -21.842 -24.119  1.00 55.62      D    N
ATOM  18334  CA  GLU D 123     -32.163 -22.639 -24.365  1.00 58.19      D    C
ATOM  18336  CB  GLU D 123     -33.426 -21.778 -24.324  1.00 62.28      D    C
ATOM  18339  CG  GLU D 123     -33.600 -20.844 -25.453  1.00 64.70      D    C
ATOM  18342  CD  GLU D 123     -34.523 -19.708 -25.097  1.00 66.14      D    C
ATOM  18343  OE1 GLU D 123     -34.026 -18.682 -24.558  1.00 65.09      D    O
ATOM  18344  OE2 GLU D 123     -35.738 -19.850 -25.372  1.00 68.76      D    O
ATOM  18345  C   GLU D 123     -32.103 -23.514 -25.624  1.00 55.92      D    C
ATOM  18346  O   GLU D 123     -32.788 -24.541 -25.681  1.00 57.81      D    O
ATOM  18348  N   GLN D 124     -31.273 -23.151 -26.607  1.00 53.51      D    N
ATOM  18349  CA  GLN D 124     -31.107 -24.016 -27.783  1.00 53.71      D    C
ATOM  18351  CB  GLN D 124     -30.524 -23.284 -28.991  1.00 53.16      D    C
ATOM  18354  CG  GLN D 124     -30.644 -24.108 -30.262  1.00 48.06      D    C
ATOM  18357  CD  GLN D 124     -29.780 -23.623 -31.405  1.00 48.64      D    C
ATOM  18358  OE1 GLN D 124     -29.041 -22.624 -31.292  1.00 46.14      D    O
ATOM  18359  NE2 GLN D 124     -29.850 -24.351 -32.529  1.00 42.72      D    N
ATOM  18362  C   GLN D 124     -30.231 -25.201 -27.456  1.00 54.06      D    C
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ATOM  18363  O   GLN D 124     -30.529 -26.316 -27.879  1.00 54.95      D    O
ATOM  18365  N   LEU D 125     -29.141 -24.956 -26.727  1.00 59.84      D    N
ATOM  18366  CA  LEU D 125     -28.277 -26.037 -26.226  1.00 61.75      D    C
ATOM  18368  CB  LEU D 125     -27.276 -25.478 -25.222  1.00 62.46      D    C
ATOM  18371  CG  LEU D 125     -26.009 -24.805 -25.753  1.00 64.31      D    C
ATOM  18373  CD1 LEU D 125     -25.866 -24.893 -27.275  1.00 63.47      D    C
ATOM  18377  CD2 LEU D 125     -25.958 -23.360 -25.256  1.00 61.72      D    C
ATOM  18381  C   LEU D 125     -29.097 -27.150 -25.568  1.00 62.59      D    C
ATOM  18382  O   LEU D 125     -28.865 -28.325 -25.823  1.00 61.70      D    O
ATOM  18384  N   LYS D 126     -30.062 -26.771 -24.736  1.00 67.78      D    N
ATOM  18385  CA  LYS D 126     -30.997 -27.730 -24.118  1.00 72.70      D    C
ATOM  18387  CB  LYS D 126     -32.175 -26.997 -23.449  1.00 77.92      D    C
ATOM  18390  CG  LYS D 126     -32.220 -27.117 -21.924  1.00 80.68      D    C
ATOM  18393  CD  LYS D 126     -33.156 -26.084 -21.280  1.00 81.68      D    C
ATOM  18396  CE  LYS D 126     -32.459 -24.729 -21.062  1.00 85.53      D    C
ATOM  18399  NZ  LYS D 126     -31.336 -24.777 -20.062  1.00 85.48      D    N
ATOM  18403  C   LYS D 126     -31.537 -28.755 -25.124  1.00 74.92      D    C
ATOM  18404  O   LYS D 126     -31.523 -29.959 -24.864  1.00 75.64      D    O
ATOM  18406  N   SER D 127     -31.988 -28.261 -26.278  1.00 75.06      D    N
ATOM  18407  CA  SER D 127     -32.573 -29.093 -27.336  1.00 70.35      D    C
ATOM  18409  CB  SER D 127     -33.183 -28.194 -28.428  1.00 72.55      D    C
ATOM  18412  OG  SER D 127     -33.792 -27.027 -27.894  1.00 71.46      D    O
ATOM  18414  C   SER D 127     -31.582 -30.066 -28.010  1.00 69.14      D    C
ATOM  18415  O   SER D 127     -32.003 -30.979 -28.718  1.00 68.81      D    O
ATOM  18417  N   GLY D 128     -30.280 -29.854 -27.829  1.00 67.21      D    N
ATOM  18418  CA  GLY D 128     -29.263 -30.745 -28.383  1.00 65.51      D    C
ATOM  18421  C   GLY D 128     -28.547 -30.227 -29.627  1.00 66.52      D    C
ATOM  18422  O   GLY D 128     -27.847 -31.000 -30.314  1.00 63.87      D    O
ATOM  18424  N   THR D 129     -28.686 -28.930 -29.919  1.00 66.07      D    N
ATOM  18425  CA  THR D 129     -28.019 -28.341 -31.089  1.00 62.22      D    C
ATOM  18427  CB  THR D 129     -28.942 -28.387 -32.324  1.00 65.78      D    C
ATOM  18429  OG1 THR D 129     -28.163 -28.160 -33.503  1.00 66.93      D    O
ATOM  18431  CG2 THR D 129     -30.062 -27.336 -32.220  1.00 68.68      D    C
ATOM  18435  C   THR D 129     -27.514 -26.908 -30.816  1.00 56.03      D    C
ATOM  18436  O   THR D 129     -28.041 -26.224 -29.945  1.00 54.82      D    O
ATOM  18438  N   ALA D 130     -26.474 -26.485 -31.540  1.00 53.04      D    N
ATOM  18439  CA  ALA D 130     -25.919 -25.121 -31.421  1.00 50.06      D    C
ATOM  18441  CB  ALA D 130     -24.541 -25.140 -30.790  1.00 47.66      D    C
ATOM  18445  C   ALA D 130     -25.828 -24.416 -32.769  1.00 48.89      D    C
ATOM  18446  O   ALA D 130     -25.081 -24.853 -33.647  1.00 50.81      D    O
ATOM  18448  N   SER D 131     -26.574 -23.317 -32.921  1.00 47.18      D    N
ATOM  18449  CA  SER D 131     -26.402 -22.410 -34.064  1.00 44.34      D    C
ATOM  18451  CB  SER D 131     -27.751 -22.025 -34.701  1.00 43.12      D    C
ATOM  18454  OG  SER D 131     -28.591 -23.163 -34.940  1.00 40.64      D    O
ATOM  18456  C   SER D 131     -25.603 -21.159 -33.648  1.00 38.56      D    C
ATOM  18457  O   SER D 131     -25.992 -20.429 -32.749  1.00 40.05      D    O
ATOM  18459  N   VAL D 132     -24.468 -20.943 -34.296  1.00 39.66      D    N
ATOM  18460  CA  VAL D 132     -23.684 -19.717 -34.138  1.00 41.65      D    C
ATOM  18462  CB  VAL D 132     -22.184 -20.018 -34.032  1.00 43.51      D    C
ATOM  18464  CG1 VAL D 132     -21.472 -18.849 -33.387  1.00 41.74      D    C
ATOM  18468  CG2 VAL D 132     -21.953 -21.300 -33.245  1.00 39.53      D    C
ATOM  18472  C   VAL D 132     -23.954 -18.808 -35.355  1.00 43.34      D    C
ATOM  18473  O   VAL D 132     -23.757 -19.223 -36.495  1.00 38.74      D    O
ATOM  18475  N   VAL D 133     -24.427 -17.586 -35.106  1.00 43.53      D    N
ATOM  18476  CA  VAL D 133     -24.842 -16.683 -36.172  1.00 41.20      D    C
ATOM  18478  CB  VAL D 133     -26.276 -16.117 -35.905  1.00 42.10      D    C
ATOM  18480  CG1 VAL D 133     -26.630 -14.981 -36.875  1.00 34.42      D    C
ATOM  18484  CG2 VAL D 133     -27.351 -17.243 -35.979  1.00 40.63      D    C
ATOM  18488  C   VAL D 133     -23.823 -15.549 -36.346  1.00 44.08      D    C
ATOM  18489  O   VAL D 133     -23.421 -14.892 -35.373  1.00 41.37      D    O
ATOM  18491  N   CYS D 134     -23.404 -15.334 -37.590  1.00 46.73      D    N
ATOM  18492  CA  CYS D 134     -22.563 -14.197 -37.955  1.00 43.71      D    C
ATOM  18494  CB  CYS D 134     -21.352 -14.687 -38.731  1.00 44.38      D    C
ATOM  18497  SG  CYS D 134     -20.072 -13.455 -38.867  1.00 55.55      D    S
ATOM  18499  C   CYS D 134     -23.377 -13.200 -38.803  1.00 42.93      D    C
ATOM  18500  O   CYS D 134     -23.896 -13.558 -39.852  1.00 41.41      D    O
ATOM  18502  N   LEU D 135     -23.491 -11.962 -38.337  1.00 40.84      D    N
ATOM  18503  CA  LEU D 135     -24.225 -10.945 -39.041  1.00 40.98      D    C
ATOM  18505  CB  LEU D 135     -25.187 -10.232 -38.087  1.00 44.17      D    C
ATOM  18508  CG  LEU D 135     -26.031  -9.075 -38.641  1.00 42.85      D    C
ATOM  18510  CD1 LEU D 135     -26.989  -9.570 -39.752  1.00 41.49      D    C
ATOM  18514  CD2 LEU D 135     -26.799  -8.362 -37.518  1.00 43.06      D    C
ATOM  18518  C   LEU D 135     -23.262  -9.948 -39.679  1.00 43.79      D    C
ATOM  18519  O   LEU D 135     -22.476  -9.326 -38.983  1.00 41.25      D    O
ATOM  18521  N   LEU D 136     -23.344  -9.826 -41.012  1.00 45.29      D    N
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ATOM  18522  CA  LEU D 136     -22.710  -8.758 -41.773  1.00 40.38      D    C
ATOM  18524  CB  LEU D 136     -22.117  -9.311 -43.072  1.00 36.77      D    C
ATOM  18527  CG  LEU D 136     -20.806 -10.113 -43.047  1.00 40.06      D    C
ATOM  18529  CD1 LEU D 136     -20.878 -11.399 -42.268  1.00 39.49      D    C
ATOM  18533  CD2 LEU D 136     -20.367 -10.417 -44.494  1.00 40.98      D    C
ATOM  18537  C   LEU D 136     -23.771  -7.725 -42.114  1.00 42.80      D    C
ATOM  18538  O   LEU D 136     -24.605  -7.964 -42.980  1.00 44.75      D    O
ATOM  18540  N   ASN D 137     -23.720  -6.561 -41.484  1.00 43.51      D    N
ATOM  18541  CA  ASN D 137     -24.801  -5.588 -41.585  1.00 41.88      D    C
ATOM  18543  CB  ASN D 137     -25.182  -5.126 -40.176  1.00 47.84      D    C
ATOM  18546  CG  ASN D 137     -26.648  -4.704 -40.052  1.00 51.40      D    C
ATOM  18547  OD1 ASN D 137     -27.550  -5.363 -40.562  1.00 51.20      D    O
ATOM  18548  ND2 ASN D 137     -26.882  -3.616 -39.329  1.00 56.40      D    N
ATOM  18551  C   ASN D 137     -24.480  -4.372 -42.475  1.00 43.45      D    C
ATOM  18552  O   ASN D 137     -23.418  -3.773 -42.372  1.00 43.05      D    O
ATOM  18554  N   ASN D 138     -25.420  -4.025 -43.354  1.00 45.14      D    N
ATOM  18555  CA  ASN D 138     -25.376  -2.794 -44.161  1.00 43.22      D    C
ATOM  18557  CB  ASN D 138     -25.681  -1.574 -43.286  1.00 48.14      D    C
ATOM  18560  CG  ASN D 138     -27.124  -1.544 -42.820  1.00 52.82      D    C
ATOM  18561  OD1 ASN D 138     -27.667  -2.552 -42.370  1.00 54.37      D    O
ATOM  18562  ND2 ASN D 138     -27.761  -0.387 -42.955  1.00 56.21      D    N
ATOM  18565  C   ASN D 138     -24.104  -2.565 -44.987  1.00 42.34      D    C
ATOM  18566  O   ASN D 138     -23.429  -1.561 -44.813  1.00 43.45      D    O
ATOM  18568  N   PHE D 139     -23.816  -3.488 -45.908  1.00 40.13      D    N
ATOM  18569  CA  PHE D 139     -22.653  -3.388 -46.810  1.00 41.60      D    C
ATOM  18571  CB  PHE D 139     -21.668  -4.566 -46.578  1.00 39.86      D    C
ATOM  18574  CG  PHE D 139     -22.255  -5.921 -46.871  1.00 39.31      D    C
ATOM  18575  CD1 PHE D 139     -22.184  -6.459 -48.151  1.00 41.64      D    C
ATOM  18577  CE1 PHE D 139     -22.759  -7.695 -48.444  1.00 40.93      D    C
ATOM  18579  CZ  PHE D 139     -23.393  -8.412 -47.445  1.00 38.97      D    C
ATOM  18581  CE2 PHE D 139     -23.472  -7.887 -46.171  1.00 40.10      D    C
ATOM  18583  CD2 PHE D 139     -22.910  -6.644 -45.886  1.00 39.21      D    C
ATOM  18585  C   PHE D 139     -23.047  -3.296 -48.308  1.00 42.78      D    C
ATOM  18586  O   PHE D 139     -24.157  -3.678 -48.709  1.00 42.60      D    O
ATOM  18588  N   TYR D 140     -22.119  -2.767 -49.111  1.00 44.31      D    N
ATOM  18589  CA  TYR D 140     -22.228  -2.727 -50.572  1.00 41.48      D    C
ATOM  18591  CB  TYR D 140     -22.944  -1.452 -51.067  1.00 46.96      D    C
ATOM  18594  CG  TYR D 140     -23.182  -1.492 -52.574  1.00 47.48      D    C
ATOM  18595  CD1 TYR D 140     -24.348  -2.042 -53.094  1.00 45.73      D    C
ATOM  18597  CE1 TYR D 140     -24.562  -2.126 -54.452  1.00 46.82      D    C
ATOM  18599  CZ  TYR D 140     -23.597  -1.685 -55.331  1.00 48.00      D    C
ATOM  18600  OH  TYR D 140     -23.833  -1.786 -56.678  1.00 44.85      D    O
ATOM  18602  CE2 TYR D 140     -22.410  -1.143 -54.853  1.00 49.95      D    C
ATOM  18604  CD2 TYR D 140     -22.210  -1.048 -53.473  1.00 49.47      D    C
ATOM  18606  C   TYR D 140     -20.808  -2.770 -51.149  1.00 40.36      D    C
ATOM  18607  O   TYR D 140     -19.950  -2.040 -50.700  1.00 42.57      D    O
ATOM  18609  N   PRO D 141     -20.559  -3.583 -52.181  1.00 44.53      D    N
ATOM  18610  CA  PRO D 141     -21.454  -4.444 -52.977  1.00 47.71      D    C
ATOM  18612  CB  PRO D 141     -20.633  -4.700 -54.260  1.00 48.83      D    C
ATOM  18615  CG  PRO D 141     -19.224  -4.647 -53.819  1.00 47.07      D    C
ATOM  18618  CD  PRO D 141     -19.175  -3.628 -52.691  1.00 47.42      D    C
ATOM  18621  C   PRO D 141     -21.861  -5.784 -52.332  1.00 45.07      D    C
ATOM  18622  O   PRO D 141     -21.411  -6.119 -51.241  1.00 45.77      D    O
ATOM  18623  N   ARG D 142     -22.712  -6.515 -53.047  1.00 49.42      D    N
ATOM  18624  CA  ARG D 142     -23.379  -7.746 -52.597  1.00 50.28      D    C
ATOM  18626  CB  ARG D 142     -24.373  -8.167 -53.715  1.00 56.97      D    C
ATOM  18629  CG  ARG D 142     -24.939  -9.597 -53.755  1.00 59.47      D    C
ATOM  18632  CD  ARG D 142     -26.047  -9.829 -52.742  1.00 65.69      D    C
ATOM  18635  NE  ARG D 142     -26.970 -10.899 -53.149  1.00 68.78      D    N
ATOM  18637  CZ  ARG D 142     -26.727 -12.212 -53.054  1.00 72.51      D    C
ATOM  18638  NH1 ARG D 142     -25.568 -12.664 -52.573  1.00 73.78      D    N
ATOM  18641  NH2 ARG D 142     -27.651 -13.088 -53.450  1.00 70.41      D    N
ATOM  18644  C   ARG D 142     -22.389  -8.867 -52.286  1.00 50.69      D    C
ATOM  18645  O   ARG D 142     -22.636  -9.712 -51.433  1.00 50.73      D    O
ATOM  18647  N   GLU D 143     -21.268  -8.876 -52.988  1.00 52.06      D    N
ATOM  18648  CA  GLU D 143     -20.314  -9.975 -52.898  1.00 50.85      D    C
ATOM  18650  CB  GLU D 143     -19.337  -9.949 -54.081  1.00 57.73      D    C
ATOM  18653  CG  GLU D 143     -20.005  -9.965 -55.479  1.00 61.88      D    C
ATOM  18656  CD  GLU D 143     -20.471  -8.583 -55.969  1.00 62.73      D    C
ATOM  18657  OE1 GLU D 143     -19.688  -7.601 -55.900  1.00 63.86      D    O
ATOM  18658  OE2 GLU D 143     -21.622  -8.497 -56.442  1.00 62.25      D    O
ATOM  18659  C   GLU D 143     -19.529  -9.875 -51.604  1.00 48.88      D    C
ATOM  18660  O   GLU D 143     -18.828  -8.878 -51.382  1.00 47.99      D    O
ATOM  18662  N   ALA D 144     -19.671 -10.903 -50.763  1.00 45.40      D    N
ATOM  18663  CA  ALA D 144     -18.956 -11.025 -49.483  1.00 46.71      D    C
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ATOM	18665	CB	ALA	D	144	-19.837	-10.551	-48.306	1.00	37.77	D	C
ATOM	18669	C	ALA	D	144	-18.511	-12.488	-49.272	1.00	45.16	D	C
ATOM	18670	O	ALA	D	144	-19.118	-13.406	-49.799	1.00	46.90	D	O
ATOM	18672	N	LYS	D	145	-17.443	-12.691	-48.507	1.00	49.41	D	N
ATOM	18673	CA	LYS	D	145	-16.943	-14.041	-48.187	1.00	51.18	D	C
ATOM	18675	CB	LYS	D	145	-15.498	-14.176	-48.691	1.00	57.21	D	C
ATOM	18678	CG	LYS	D	145	-15.133	-15.510	-49.355	1.00	62.87	D	C
ATOM	18681	CD	LYS	D	145	-14.411	-16.491	-48.395	1.00	63.09	D	C
ATOM	18684	CE	LYS	D	145	-13.286	-17.248	-49.098	1.00	61.79	D	C
ATOM	18687	NZ	LYS	D	145	-12.479	-18.082	-48.156	1.00	64.44	D	N
ATOM	18691	C	LYS	D	145	-16.975	-14.222	-46.675	1.00	47.70	D	C
ATOM	18692	O	LYS	D	145	-16.409	-13.416	-45.956	1.00	43.19	D	O
ATOM	18694	N	VAL	D	146	-17.658	-15.251	-46.188	1.00	51.30	D	N
ATOM	18695	CA	VAL	D	146	-17.648	-15.560	-44.764	1.00	52.74	D	C
ATOM	18697	CB	VAL	D	146	-19.064	-15.526	-44.184	1.00	53.80	D	C
ATOM	18699	CG1	VAL	D	146	-19.071	-16.005	-42.735	1.00	51.44	D	C
ATOM	18703	CG2	VAL	D	146	-19.634	-14.106	-44.300	1.00	53.70	D	C
ATOM	18707	C	VAL	D	146	-16.983	-16.915	-44.567	1.00	53.07	D	C
ATOM	18708	O	VAL	D	146	-17.305	-17.876	-45.261	1.00	55.41	D	O
ATOM	18710	N	GLN	D	147	-16.014	-16.974	-43.661	1.00	55.53	D	N
ATOM	18711	CA	GLN	D	147	-15.268	-18.212	-43.396	1.00	56.67	D	C
ATOM	18713	CB	GLN	D	147	-13.817	-18.102	-43.900	1.00	64.74	D	C
ATOM	18716	CG	GLN	D	147	-12.950	-19.384	-43.735	1.00	67.54	D	C
ATOM	18719	CD	GLN	D	147	-13.414	-20.569	-44.600	1.00	73.92	D	C
ATOM	18720	OE1	GLN	D	147	-13.352	-20.521	-45.844	1.00	74.05	D	O
ATOM	18721	NE2	GLN	D	147	-13.872	-21.643	-43.938	1.00	72.53	D	N
ATOM	18724	C	GLN	D	147	-15.297	-18.464	-41.901	1.00	55.49	D	C
ATOM	18725	O	GLN	D	147	-14.991	-17.563	-41.112	1.00	53.56	D	O
ATOM	18727	N	TRP	D	148	-15.692	-19.684	-41.519	1.00	53.63	D	N
ATOM	18728	CA	TRP	D	148	-15.818	-20.032	-40.109	1.00	52.80	D	C
ATOM	18730	CB	TRP	D	148	-17.052	-20.888	-39.875	1.00	48.18	D	C
ATOM	18733	CG	TRP	D	148	-18.302	-20.103	-39.801	1.00	47.98	D	C
ATOM	18734	CD1	TRP	D	148	-19.218	-19.910	-40.803	1.00	46.02	D	C
ATOM	18736	NE1	TRP	D	148	-20.243	-19.143	-40.356	1.00	43.61	D	N
ATOM	18738	CE2	TRP	D	148	-20.024	-18.813	-39.048	1.00	45.62	D	C
ATOM	18739	CD2	TRP	D	148	-18.802	-19.415	-38.663	1.00	45.98	D	C
ATOM	18740	CE3	TRP	D	148	-18.342	-19.238	-37.357	1.00	45.11	D	C
ATOM	18742	CZ3	TRP	D	148	-19.121	-18.485	-36.478	1.00	47.04	D	C
ATOM	18744	CH2	TRP	D	148	-20.334	-17.902	-36.896	1.00	46.95	D	C
ATOM	18746	CZ2	TRP	D	148	-20.802	-18.061	-38.168	1.00	45.51	D	C
ATOM	18748	C	TRP	D	148	-14.589	-20.776	-39.619	1.00	50.48	D	C
ATOM	18749	O	TRP	D	148	-14.020	-21.585	-40.339	1.00	48.22	D	O
ATOM	18751	N	LYS	D	149	-14.202	-20.499	-38.379	1.00	53.84	D	N
ATOM	18752	CA	LYS	D	149	-13.105	-21.204	-37.732	1.00	56.32	D	C
ATOM	18754	CB	LYS	D	149	-11.838	-20.337	-37.753	1.00	60.90	D	C
ATOM	18757	CG	LYS	D	149	-11.353	-20.055	-39.189	1.00	62.88	D	C
ATOM	18760	CD	LYS	D	149	-9.906	-19.550	-39.281	1.00	63.82	D	C
ATOM	18763	CE	LYS	D	149	-9.805	-18.067	-39.674	1.00	68.35	D	C
ATOM	18766	NZ	LYS	D	149	-8.661	-17.812	-40.616	1.00	66.35	D	N
ATOM	18770	C	LYS	D	149	-13.509	-21.604	-36.312	1.00	54.28	D	C
ATOM	18771	O	LYS	D	149	-14.011	-20.781	-35.532	1.00	52.00	D	O
ATOM	18773	N	VAL	D	150	-13.343	-22.888	-36.010	1.00	54.95	D	N
ATOM	18774	CA	VAL	D	150	-13.563	-23.428	-34.652	1.00	55.83	D	C
ATOM	18776	CB	VAL	D	150	-14.598	-24.606	-34.618	1.00	54.86	D	C
ATOM	18778	CG1	VAL	D	150	-14.974	-24.951	-33.172	1.00	46.52	D	C
ATOM	18782	CG2	VAL	D	150	-15.839	-24.264	-35.445	1.00	53.42	D	C
ATOM	18786	C	VAL	D	150	-12.203	-23.904	-34.139	1.00	55.57	D	C
ATOM	18787	O	VAL	D	150	-11.554	-24.753	-34.779	1.00	54.79	D	O
ATOM	18789	N	ASP	D	151	-11.780	-23.333	-33.008	1.00	57.22	D	N
ATOM	18790	CA	ASP	D	151	-10.409	-23.459	-32.510	1.00	58.24	D	C
ATOM	18792	CB	ASP	D	151	-10.261	-24.754	-31.685	1.00	58.39	D	C
ATOM	18795	CG	ASP	D	151	-10.844	-24.615	-30.277	1.00	58.50	D	C
ATOM	18796	OD1	ASP	D	151	-10.806	-23.505	-29.723	1.00	55.69	D	O
ATOM	18797	OD2	ASP	D	151	-11.342	-25.608	-29.715	1.00	60.39	D	O
ATOM	18798	C	ASP	D	151	-9.376	-23.337	-33.652	1.00	57.72	D	C
ATOM	18799	O	ASP	D	151	-8.420	-24.110	-33.743	1.00	57.00	D	O
ATOM	18801	N	ASN	D	152	-9.595	-22.347	-34.514	1.00	58.08	D	N
ATOM	18802	CA	ASN	D	152	-8.743	-22.069	-35.684	1.00	59.47	D	C
ATOM	18804	CB	ASN	D	152	-7.334	-21.656	-35.253	1.00	64.36	D	C
ATOM	18807	CG	ASN	D	152	-7.304	-20.272	-34.654	1.00	69.46	D	C
ATOM	18808	OD1	ASN	D	152	-7.246	-19.282	-35.377	1.00	75.92	D	O
ATOM	18809	ND2	ASN	D	152	-7.350	-20.192	-33.325	1.00	69.67	D	N
ATOM	18812	C	ASN	D	152	-8.689	-23.156	-36.772	1.00	59.21	D	C
ATOM	18813	O	ASN	D	152	-7.855	-23.085	-37.684	1.00	60.62	D	O
ATOM	18815	N	ALA	D	153	-9.600	-24.126	-36.699	1.00	58.73	D	N

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ATOM  18816  CA  ALA D 153      -9.778 -25.115 -37.762  1.00 59.76      D    C
ATOM  18818  CB  ALA D 153     -10.150 -26.478 -37.164  1.00 59.10      D    C
ATOM  18822  C   ALA D 153     -10.869 -24.644 -38.736  1.00 60.84      D    C
ATOM  18823  O   ALA D 153     -12.047 -24.545 -38.373  1.00 61.02      D    O
ATOM  18825  N   LEU D 154     -10.466 -24.360 -39.967  1.00 57.81      D    N
ATOM  18826  CA  LEU D 154     -11.378 -23.861 -40.996  1.00 57.44      D    C
ATOM  18828  CB  LEU D 154     -10.613 -23.599 -42.302  1.00 56.66      D    C
ATOM  18831  CG  LEU D 154      -9.761 -22.330 -42.347  1.00 61.68      D    C
ATOM  18833  CD1 LEU D 154      -8.809 -22.210 -41.166  1.00 65.30      D    C
ATOM  18837  CD2 LEU D 154      -8.978 -22.288 -43.636  1.00 61.70      D    C
ATOM  18841  C   LEU D 154     -12.505 -24.860 -41.247  1.00 58.16      D    C
ATOM  18842  O   LEU D 154     -12.250 -26.067 -41.409  1.00 55.49      D    O
ATOM  18844  N   GLN D 155     -13.741 -24.352 -41.277  1.00 54.65      D    N
ATOM  18845  CA  GLN D 155     -14.906 -25.214 -41.415  1.00 50.14      D    C
ATOM  18847  CB  GLN D 155     -16.046 -24.733 -40.523  1.00 51.74      D    C
ATOM  18850  CG  GLN D 155     -15.693 -24.547 -39.048  1.00 51.82      D    C
ATOM  18853  CD  GLN D 155     -15.400 -25.858 -38.325  1.00 50.83      D    C
ATOM  18854  OE1 GLN D 155     -16.174 -26.818 -38.399  1.00 41.87      D    O
ATOM  18855  NE2 GLN D 155     -14.285 -25.891 -37.601  1.00 47.16      D    N
ATOM  18858  C   GLN D 155     -15.355 -25.251 -42.868  1.00 48.57      D    C
ATOM  18859  O   GLN D 155     -15.130 -24.309 -43.629  1.00 53.52      D    O
ATOM  18861  N   SER D 156     -15.975 -26.357 -43.258  1.00 48.45      D    N
ATOM  18862  CA  SER D 156     -16.676 -26.422 -44.531  1.00 51.38      D    C
ATOM  18864  CB  SER D 156     -15.746 -26.913 -45.652  1.00 58.09      D    C
ATOM  18867  OG  SER D 156     -15.795 -28.326 -45.783  1.00 57.14      D    O
ATOM  18869  C   SER D 156     -17.828 -27.383 -44.376  1.00 48.54      D    C
ATOM  18870  O   SER D 156     -17.717 -28.367 -43.634  1.00 48.71      D    O
ATOM  18872  N   GLY D 157     -18.936 -27.088 -45.052  1.00 47.45      D    N
ATOM  18873  CA  GLY D 157     -20.062 -28.011 -45.103  1.00 47.24      D    C
ATOM  18876  C   GLY D 157     -21.076 -27.909 -43.984  1.00 46.48      D    C
ATOM  18877  O   GLY D 157     -22.109 -28.564 -44.067  1.00 48.81      D    O
ATOM  18879  N   ASN D 158     -20.796 -27.094 -42.963  1.00 45.16      D    N
ATOM  18880  CA  ASN D 158     -21.683 -26.926 -41.806  1.00 46.36      D    C
ATOM  18882  CB  ASN D 158     -20.993 -27.464 -40.552  1.00 44.54      D    C
ATOM  18885  CG  ASN D 158     -19.619 -26.900 -40.358  1.00 46.00      D    C
ATOM  18886  OD1 ASN D 158     -19.200 -25.973 -41.062  1.00 47.38      D    O
ATOM  18887  ND2 ASN D 158     -18.886 -27.467 -39.405  1.00 51.53      D    N
ATOM  18890  C   ASN D 158     -22.167 -25.475 -41.563  1.00 46.81      D    C
ATOM  18891  O   ASN D 158     -22.442 -25.071 -40.423  1.00 44.23      D    O
ATOM  18893  N   SER D 159     -22.270 -24.700 -42.643  1.00 47.57      D    N
ATOM  18894  CA  SER D 159     -22.762 -23.331 -42.566  1.00 45.03      D    C
ATOM  18896  CB  SER D 159     -21.596 -22.360 -42.516  1.00 48.33      D    C
ATOM  18899  OG  SER D 159     -20.827 -22.446 -43.700  1.00 50.56      D    O
ATOM  18901  C   SER D 159     -23.646 -23.030 -43.768  1.00 45.67      D    C
ATOM  18902  O   SER D 159     -23.559 -23.712 -44.792  1.00 45.41      D    O
ATOM  18904  N   GLN D 160     -24.500 -22.023 -43.625  1.00 43.83      D    N
ATOM  18905  CA  GLN D 160     -25.405 -21.587 -44.681  1.00 45.25      D    C
ATOM  18907  CB  GLN D 160     -26.787 -22.243 -44.535  1.00 47.55      D    C
ATOM  18910  CG  GLN D 160     -26.920 -23.577 -45.234  1.00 47.68      D    C
ATOM  18913  CD  GLN D 160     -28.257 -24.247 -45.008  1.00 48.64      D    C
ATOM  18914  OE1 GLN D 160     -28.668 -24.481 -43.869  1.00 52.49      D    O
ATOM  18915  NE2 GLN D 160     -28.931 -24.593 -46.096  1.00 51.36      D    N
ATOM  18918  C   GLN D 160     -25.550 -20.088 -44.548  1.00 43.66      D    C
ATOM  18919  O   GLN D 160     -25.561 -19.576 -43.432  1.00 43.63      D    O
ATOM  18921  N   GLU D 161     -25.669 -19.407 -45.688  1.00 45.29      D    N
ATOM  18922  CA  GLU D 161     -25.770 -17.957 -45.755  1.00 47.10      D    C
ATOM  18924  CB  GLU D 161     -24.738 -17.393 -46.714  1.00 48.86      D    C
ATOM  18927  CG  GLU D 161     -23.327 -17.548 -46.258  1.00 57.49      D    C
ATOM  18930  CD  GLU D 161     -22.361 -16.773 -47.124  1.00 60.18      D    C
ATOM  18931  OE1 GLU D 161     -22.771 -16.353 -48.229  1.00 69.35      D    O
ATOM  18932  OE2 GLU D 161     -21.196 -16.581 -46.704  1.00 68.61      D    O
ATOM  18933  C   GLU D 161     -27.109 -17.539 -46.297  1.00 46.24      D    C
ATOM  18934  O   GLU D 161     -27.756 -18.301 -47.024  1.00 43.08      D    O
ATOM  18936  N   SER D 162     -27.490 -16.303 -45.973  1.00 45.28      D    N
ATOM  18937  CA  SER D 162     -28.727 -15.716 -46.451  1.00 44.97      D    C
ATOM  18939  CB  SER D 162     -29.885 -16.103 -45.532  1.00 47.99      D    C
ATOM  18942  OG  SER D 162     -31.080 -15.486 -45.933  1.00 46.17      D    O
ATOM  18944  C   SER D 162     -28.540 -14.214 -46.503  1.00 43.72      D    C
ATOM  18945  O   SER D 162     -28.093 -13.621 -45.532  1.00 46.06      D    O
ATOM  18947  N   VAL D 163     -28.868 -13.618 -47.647  1.00 43.09      D    N
ATOM  18948  CA  VAL D 163     -28.624 -12.206 -47.902  1.00 41.80      D    C
ATOM  18950  CB  VAL D 163     -27.732 -12.023 -49.160  1.00 37.55      D    C
ATOM  18952  CG1 VAL D 163     -27.075 -10.676 -49.157  1.00 33.72      D    C
ATOM  18956  CG2 VAL D 163     -26.679 -13.097 -49.230  1.00 45.17      D    C
ATOM  18960  C   VAL D 163     -29.962 -11.506 -48.101  1.00 42.11      D    C
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ATOM  18961  O   VAL D 163     -30.854 -12.045 -48.745  1.00 44.53      D    O
ATOM  18963  N   THR D 164     -30.110 -10.313 -47.539  1.00 44.66      D    N
ATOM  18964  CA  THR D 164     -31.319  -9.523 -47.759  1.00 44.74      D    C
ATOM  18966  CB  THR D 164     -31.414  -8.383 -46.757  1.00 42.95      D    C
ATOM  18968  OG1 THR D 164     -30.129  -7.751 -46.652  1.00 44.32      D    O
ATOM  18970  CG2 THR D 164     -31.854  -8.891 -45.406  1.00 39.07      D    C
ATOM  18974  C   THR D 164     -31.303  -8.908 -49.148  1.00 47.82      D    C
ATOM  18975  O   THR D 164     -30.303  -8.968 -49.866  1.00 50.83      D    O
ATOM  18977  N   GLU D 165     -32.424  -8.309 -49.521  1.00 52.62      D    N
ATOM  18978  CA  GLU D 165     -32.495  -7.544 -50.749  1.00 51.62      D    C
ATOM  18980  CB  GLU D 165     -33.931  -7.557 -51.291  1.00 55.16      D    C
ATOM  18983  CG  GLU D 165     -34.086  -7.029 -52.717  1.00 61.89      D    C
ATOM  18986  CD  GLU D 165     -33.172  -7.708 -53.740  1.00 65.51      D    C
ATOM  18987  OE1 GLU D 165     -33.434  -8.897 -54.066  1.00 62.49      D    O
ATOM  18988  OE2 GLU D 165     -32.212  -7.032 -54.210  1.00 61.35      D    O
ATOM  18989  C   GLU D 165     -31.971  -6.131 -50.443  1.00 50.24      D    C
ATOM  18990  O   GLU D 165     -31.899  -5.724 -49.282  1.00 53.20      D    O
ATOM  18992  N   GLN D 166     -31.578  -5.407 -51.482  1.00 44.97      D    N
ATOM  18993  CA  GLN D 166     -31.039  -4.067 -51.324  1.00 45.52      D    C
ATOM  18995  CB  GLN D 166     -30.729  -3.494 -52.711  1.00 43.59      D    C
ATOM  18998  CG  GLN D 166     -29.685  -2.429 -52.737  1.00 42.42      D    C
ATOM  19001  CD  GLN D 166     -29.188  -2.129 -54.146  1.00 41.69      D    C
ATOM  19002  OE1 GLN D 166     -29.758  -2.592 -55.134  1.00 46.08      D    O
ATOM  19003  NE2 GLN D 166     -28.118  -1.349 -54.239  1.00 33.09      D    N
ATOM  19006  C   GLN D 166     -32.020  -3.172 -50.538  1.00 48.21      D    C
ATOM  19007  O   GLN D 166     -33.226  -3.161 -50.811  1.00 48.92      D    O
ATOM  19009  N   ASP D 167     -31.499  -2.459 -49.542  1.00 48.06      D    N
ATOM  19010  CA  ASP D 167     -32.321  -1.640 -48.672  1.00 46.44      D    C
ATOM  19012  CB  ASP D 167     -31.506  -1.112 -47.491  1.00 45.03      D    C
ATOM  19015  CG  ASP D 167     -32.360  -0.351 -46.489  1.00 41.70      D    C
ATOM  19016  OD1 ASP D 167     -33.231  -0.966 -45.877  1.00 38.77      D    O
ATOM  19017  OD2 ASP D 167     -32.178   0.856 -46.317  1.00 41.59      D    O
ATOM  19018  C   ASP D 167     -32.850  -0.476 -49.472  1.00 48.61      D    C
ATOM  19019  O   ASP D 167     -32.112   0.105 -50.259  1.00 47.20      D    O
ATOM  19021  N   SER D 168     -34.114  -0.126 -49.248  1.00 46.57      D    N
ATOM  19022  CA  SER D 168     -34.788   0.903 -50.029  1.00 45.39      D    C
ATOM  19024  CB  SER D 168     -36.308   0.742 -49.875  1.00 45.86      D    C
ATOM  19027  OG  SER D 168     -36.725   0.947 -48.540  1.00 43.78      D    O
ATOM  19029  C   SER D 168     -34.375   2.328 -49.676  1.00 44.06      D    C
ATOM  19030  O   SER D 168     -34.766   3.269 -50.361  1.00 45.43      D    O
ATOM  19032  N   LYS D 169     -33.603   2.494 -48.606  1.00 47.27      D    N
ATOM  19033  CA  LYS D 169     -33.156   3.825 -48.160  1.00 48.99      D    C
ATOM  19035  CB  LYS D 169     -33.468   4.017 -46.669  1.00 52.68      D    C
ATOM  19038  CG  LYS D 169     -34.875   3.533 -46.296  1.00 56.30      D    C
ATOM  19041  CD  LYS D 169     -35.392   4.084 -44.965  1.00 57.42      D    C
ATOM  19044  CE  LYS D 169     -36.838   3.600 -44.695  1.00 57.96      D    C
ATOM  19047  NZ  LYS D 169     -37.266   3.771 -43.276  1.00 57.53      D    N
ATOM  19051  C   LYS D 169     -31.675   4.035 -48.424  1.00 43.84      D    C
ATOM  19052  O   LYS D 169     -31.307   5.016 -49.041  1.00 45.37      D    O
ATOM  19054  N   ASP D 170     -30.847   3.085 -47.987  1.00 43.87      D    N
ATOM  19055  CA  ASP D 170     -29.392   3.189 -48.052  1.00 44.14      D    C
ATOM  19057  CB  ASP D 170     -28.793   2.822 -46.684  1.00 45.09      D    C
ATOM  19060  CG  ASP D 170     -29.051   1.379 -46.296  1.00 48.68      D    C
ATOM  19061  OD1 ASP D 170     -28.824   0.486 -47.125  1.00 46.33      D    O
ATOM  19062  OD2 ASP D 170     -29.471   1.121 -45.150  1.00 58.82      D    O
ATOM  19063  C   ASP D 170     -28.746   2.317 -49.142  1.00 41.63      D    C
ATOM  19064  O   ASP D 170     -27.532   2.388 -49.345  1.00 41.81      D    O
ATOM  19066  N   SER D 171     -29.547   1.476 -49.799  1.00 37.08      D    N
ATOM  19067  CA  SER D 171     -29.110   0.661 -50.923  1.00 38.49      D    C
ATOM  19069  CB  SER D 171     -28.713   1.550 -52.118  1.00 41.96      D    C
ATOM  19072  OG  SER D 171     -29.800   2.386 -52.535  1.00 41.72      D    O
ATOM  19074  C   SER D 171     -28.015  -0.368 -50.586  1.00 39.67      D    C
ATOM  19075  O   SER D 171     -27.280  -0.798 -51.454  1.00 41.27      D    O
ATOM  19077  N   THR D 172     -27.949  -0.796 -49.329  1.00 43.49      D    N
ATOM  19078  CA  THR D 172     -26.983  -1.801 -48.899  1.00 39.51      D    C
ATOM  19080  CB  THR D 172     -26.346  -1.462 -47.544  1.00 36.90      D    C
ATOM  19082  OG1 THR D 172     -27.352  -1.474 -46.538  1.00 34.25      D    O
ATOM  19084  CG2 THR D 172     -25.635  -0.104 -47.587  1.00 36.37      D    C
ATOM  19088  C   THR D 172     -27.616  -3.173 -48.745  1.00 42.91      D    C
ATOM  19089  O   THR D 172     -28.842  -3.319 -48.733  1.00 42.92      D    O
ATOM  19091  N   TYR D 173     -26.749  -4.176 -48.608  1.00 42.47      D    N
ATOM  19092  CA  TYR D 173     -27.154  -5.523 -48.279  1.00 40.63      D    C
ATOM  19094  CB  TYR D 173     -26.463  -6.519 -49.219  1.00 45.28      D    C
ATOM  19097  CG  TYR D 173     -26.762  -6.308 -50.677  1.00 46.09      D    C
ATOM  19098  CD1 TYR D 173     -27.884  -6.886 -51.268  1.00 45.78      D    C
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ATOM	19100	CE1	TYR	D	173	-28.178	-6.684	-52.611	1.00	42.43	D	C
ATOM	19102	CZ	TYR	D	173	-27.349	-5.902	-53.374	1.00	46.77	D	C
ATOM	19103	OH	TYR	D	173	-27.629	-5.701	-54.720	1.00	49.44	D	O
ATOM	19105	CE2	TYR	D	173	-26.227	-5.307	-52.801	1.00	47.60	D	C
ATOM	19107	CD2	TYR	D	173	-25.940	-5.519	-51.465	1.00	46.11	D	C
ATOM	19109	C	TYR	D	173	-26.767	-5.855	-46.834	1.00	42.48	D	C
ATOM	19110	O	TYR	D	173	-25.891	-5.215	-46.247	1.00	40.82	D	O
ATOM	19112	N	SER	D	174	-27.435	-6.860	-46.274	1.00	39.24	D	N
ATOM	19113	CA	SER	D	174	-27.008	-7.494	-45.040	1.00	36.55	D	C
ATOM	19115	CB	SER	D	174	-27.911	-7.088	-43.909	1.00	36.85	D	C
ATOM	19118	OG	SER	D	174	-27.739	-5.706	-43.734	1.00	37.23	D	O
ATOM	19120	C	SER	D	174	-27.023	-8.981	-45.211	1.00	36.75	D	C
ATOM	19121	O	SER	D	174	-27.721	-9.486	-46.070	1.00	38.90	D	O
ATOM	19123	N	LEU	D	175	-26.260	-9.688	-44.382	1.00	39.45	D	N
ATOM	19124	CA	LEU	D	175	-26.051	-11.124	-44.552	1.00	38.38	D	C
ATOM	19126	CB	LEU	D	175	-24.790	-11.378	-45.365	1.00	40.84	D	C
ATOM	19129	CG	LEU	D	175	-24.334	-12.818	-45.684	1.00	39.27	D	C
ATOM	19131	CD1	LEU	D	175	-23.705	-12.877	-47.095	1.00	34.02	D	C
ATOM	19135	CD2	LEU	D	175	-23.381	-13.357	-44.650	1.00	37.01	D	C
ATOM	19139	C	LEU	D	175	-25.956	-11.818	-43.206	1.00	42.57	D	C
ATOM	19140	O	LEU	D	175	-25.276	-11.309	-42.296	1.00	39.33	D	O
ATOM	19142	N	SER	D	176	-26.685	-12.940	-43.059	1.00	42.36	D	N
ATOM	19143	CA	SER	D	176	-26.478	-13.826	-41.935	1.00	43.15	D	C
ATOM	19145	CB	SER	D	176	-27.792	-14.208	-41.222	1.00	44.21	D	C
ATOM	19148	OG	SER	D	176	-28.483	-15.267	-41.852	1.00	51.80	D	O
ATOM	19150	C	SER	D	176	-25.681	-15.025	-42.436	1.00	45.20	D	C
ATOM	19151	O	SER	D	176	-25.826	-15.434	-43.590	1.00	49.07	D	O
ATOM	19153	N	SER	D	177	-24.783	-15.528	-41.594	1.00	43.83	D	N
ATOM	19154	CA	SER	D	177	-24.155	-16.835	-41.805	1.00	43.20	D	C
ATOM	19156	CB	SER	D	177	-22.668	-16.724	-42.108	1.00	49.58	D	C
ATOM	19159	OG	SER	D	177	-22.091	-18.009	-42.109	1.00	43.92	D	O
ATOM	19161	C	SER	D	177	-24.330	-17.637	-40.533	1.00	45.01	D	C
ATOM	19162	O	SER	D	177	-24.032	-17.147	-39.440	1.00	41.84	D	O
ATOM	19164	N	THR	D	178	-24.818	-18.866	-40.677	1.00	41.98	D	N
ATOM	19165	CA	THR	D	178	-25.095	-19.681	-39.537	1.00	41.42	D	C
ATOM	19167	CB	THR	D	178	-26.577	-19.980	-39.439	1.00	45.88	D	C
ATOM	19169	OG1	THR	D	178	-27.288	-18.746	-39.537	1.00	46.34	D	O
ATOM	19171	CG2	THR	D	178	-26.895	-20.624	-38.099	1.00	47.01	D	C
ATOM	19175	C	THR	D	178	-24.278	-20.955	-39.565	1.00	43.03	D	C
ATOM	19176	O	THR	D	178	-24.337	-21.721	-40.517	1.00	40.97	D	O
ATOM	19178	N	LEU	D	179	-23.505	-21.154	-38.494	1.00	43.97	D	N
ATOM	19179	CA	LEU	D	179	-22.783	-22.379	-38.249	1.00	41.84	D	C
ATOM	19181	CB	LEU	D	179	-21.506	-22.045	-37.507	1.00	41.87	D	C
ATOM	19184	CG	LEU	D	179	-20.472	-23.166	-37.313	1.00	42.06	D	C
ATOM	19186	CD1	LEU	D	179	-19.900	-23.571	-38.681	1.00	38.34	D	C
ATOM	19190	CD2	LEU	D	179	-19.385	-22.730	-36.339	1.00	36.54	D	C
ATOM	19194	C	LEU	D	179	-23.650	-23.352	-37.404	1.00	45.72	D	C
ATOM	19195	O	LEU	D	179	-24.098	-23.006	-36.309	1.00	42.23	D	O
ATOM	19197	N	THR	D	180	-23.892	-24.559	-37.922	1.00	48.77	D	N
ATOM	19198	CA	THR	D	180	-24.667	-25.552	-37.212	1.00	51.23	D	C
ATOM	19200	CB	THR	D	180	-25.793	-26.159	-38.099	1.00	54.63	D	C
ATOM	19202	OG1	THR	D	180	-26.665	-25.120	-38.561	1.00	55.90	D	O
ATOM	19204	CG2	THR	D	180	-26.622	-27.177	-37.302	1.00	52.12	D	C
ATOM	19208	C	THR	D	180	-23.750	-26.667	-36.685	1.00	52.64	D	C
ATOM	19209	O	THR	D	180	-23.081	-27.375	-37.462	1.00	52.84	D	O
ATOM	19211	N	LEU	D	181	-23.735	-26.806	-35.357	1.00	54.70	D	N
ATOM	19212	CA	LEU	D	181	-22.968	-27.841	-34.661	1.00	55.04	D	C
ATOM	19214	CB	LEU	D	181	-21.908	-27.198	-33.773	1.00	50.24	D	C
ATOM	19217	CG	LEU	D	181	-20.877	-26.296	-34.438	1.00	51.53	D	C
ATOM	19219	CD1	LEU	D	181	-20.131	-25.502	-33.399	1.00	47.98	D	C
ATOM	19223	CD2	LEU	D	181	-19.902	-27.123	-35.296	1.00	55.54	D	C
ATOM	19227	C	LEU	D	181	-23.879	-28.655	-33.760	1.00	56.22	D	C
ATOM	19228	O	LEU	D	181	-24.949	-28.196	-33.358	1.00	58.12	D	O
ATOM	19230	N	SER	D	182	-23.440	-29.857	-33.413	1.00	58.83	D	N
ATOM	19231	CA	SER	D	182	-24.051	-30.591	-32.304	1.00	58.51	D	C
ATOM	19233	CB	SER	D	182	-23.544	-32.035	-32.261	1.00	58.38	D	C
ATOM	19236	OG	SER	D	182	-22.207	-32.073	-31.801	1.00	63.89	D	O
ATOM	19238	C	SER	D	182	-23.690	-29.863	-31.003	1.00	57.35	D	C
ATOM	19239	O	SER	D	182	-22.721	-29.120	-30.958	1.00	56.98	D	O
ATOM	19241	N	LYS	D	183	-24.475	-30.069	-29.949	1.00	61.01	D	N
ATOM	19242	CA	LYS	D	183	-24.111	-29.553	-28.624	1.00	61.48	D	C
ATOM	19244	CB	LYS	D	183	-25.228	-29.793	-27.607	1.00	65.10	D	C
ATOM	19247	CG	LYS	D	183	-24.825	-29.606	-26.140	1.00	67.42	D	C
ATOM	19250	CD	LYS	D	183	-26.059	-29.425	-25.227	1.00	67.58	D	C
ATOM	19253	CE	LYS	D	183	-25.692	-29.356	-23.727	1.00	69.53	D	C

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ATOM	19256	NZ	LYS	D	183	-26.881	-29.065	-22.843	1.00	69.30	D	N
ATOM	19260	C	LYS	D	183	-22.808	-30.208	-28.183	1.00	60.89	D	C
ATOM	19261	O	LYS	D	183	-21.933	-29.543	-27.621	1.00	61.39	D	O
ATOM	19263	N	ALA	D	184	-22.678	-31.504	-28.472	1.00	63.13	D	N
ATOM	19264	CA	ALA	D	184	-21.460	-32.267	-28.194	1.00	62.04	D	C
ATOM	19266	CB	ALA	D	184	-21.574	-33.677	-28.778	1.00	62.03	D	C
ATOM	19270	C	ALA	D	184	-20.223	-31.558	-28.737	1.00	61.41	D	C
ATOM	19271	O	ALA	D	184	-19.305	-31.249	-27.980	1.00	62.14	D	O
ATOM	19273	N	ASP	D	185	-20.209	-31.292	-30.044	1.00	64.21	D	N
ATOM	19274	CA	ASP	D	185	-19.057	-30.635	-30.689	1.00	60.74	D	C
ATOM	19276	CB	ASP	D	185	-19.160	-30.678	-32.223	1.00	65.79	D	C
ATOM	19279	CG	ASP	D	185	-18.690	-31.995	-32.814	1.00	70.34	D	C
ATOM	19280	OD1	ASP	D	185	-17.958	-32.763	-32.141	1.00	73.63	D	O
ATOM	19281	OD2	ASP	D	185	-19.051	-32.253	-33.981	1.00	73.20	D	O
ATOM	19282	C	ASP	D	185	-18.887	-29.191	-30.229	1.00	56.56	D	C
ATOM	19283	O	ASP	D	185	-17.763	-28.735	-30.015	1.00	58.77	D	O
ATOM	19285	N	TYR	D	186	-19.999	-28.474	-30.080	1.00	56.43	D	N
ATOM	19286	CA	TYR	D	186	-19.958	-27.094	-29.626	1.00	55.77	D	C
ATOM	19288	CB	TYR	D	186	-21.369	-26.474	-29.533	1.00	51.16	D	C
ATOM	19291	CG	TYR	D	186	-21.315	-25.041	-29.013	1.00	49.78	D	C
ATOM	19292	CD1	TYR	D	186	-20.622	-24.054	-29.717	1.00	48.42	D	C
ATOM	19294	CE1	TYR	D	186	-20.523	-22.762	-29.237	1.00	46.95	D	C
ATOM	19296	CZ	TYR	D	186	-21.122	-22.444	-28.037	1.00	47.68	D	C
ATOM	19297	OH	TYR	D	186	-21.033	-21.170	-27.550	1.00	49.73	D	O
ATOM	19299	CE2	TYR	D	186	-21.807	-23.395	-27.316	1.00	48.58	D	C
ATOM	19301	CD2	TYR	D	186	-21.894	-24.695	-27.805	1.00	46.07	D	C
ATOM	19303	C	TYR	D	186	-19.254	-26.977	-28.277	1.00	55.56	D	C
ATOM	19304	O	TYR	D	186	-18.361	-26.158	-28.115	1.00	52.55	D	O
ATOM	19306	N	GLU	D	187	-19.656	-27.799	-27.311	1.00	61.89	D	N
ATOM	19307	CA	GLU	D	187	-19.007	-27.790	-25.987	1.00	63.34	D	C
ATOM	19309	CB	GLU	D	187	-19.948	-28.318	-24.907	1.00	68.82	D	C
ATOM	19312	CG	GLU	D	187	-20.768	-27.198	-24.281	1.00	72.70	D	C
ATOM	19315	CD	GLU	D	187	-22.193	-27.602	-24.030	1.00	78.61	D	C
ATOM	19316	OE1	GLU	D	187	-22.442	-28.829	-23.911	1.00	83.31	D	O
ATOM	19317	OE2	GLU	D	187	-23.054	-26.691	-23.953	1.00	76.05	D	O
ATOM	19318	C	GLU	D	187	-17.640	-28.490	-25.937	1.00	62.94	D	C
ATOM	19319	O	GLU	D	187	-16.984	-28.470	-24.912	1.00	63.10	D	O
ATOM	19321	N	LYS	D	188	-17.209	-29.076	-27.048	1.00	64.07	D	N
ATOM	19322	CA	LYS	D	188	-15.875	-29.642	-27.154	1.00	64.06	D	C
ATOM	19324	CB	LYS	D	188	-15.862	-30.754	-28.199	1.00	67.37	D	C
ATOM	19327	CG	LYS	D	188	-15.025	-31.960	-27.799	1.00	73.55	D	C
ATOM	19330	CD	LYS	D	188	-15.502	-33.247	-28.481	1.00	73.15	D	C
ATOM	19333	CE	LYS	D	188	-16.985	-33.524	-28.210	1.00	74.59	D	C
ATOM	19336	NZ	LYS	D	188	-17.315	-34.970	-28.317	1.00	76.62	D	N
ATOM	19340	C	LYS	D	188	-14.837	-28.572	-27.520	1.00	64.54	D	C
ATOM	19341	O	LYS	D	188	-13.640	-28.767	-27.286	1.00	68.25	D	O
ATOM	19343	N	HIS	D	189	-15.275	-27.451	-28.097	1.00	59.62	D	N
ATOM	19344	CA	HIS	D	189	-14.341	-26.406	-28.535	1.00	58.05	D	C
ATOM	19346	CB	HIS	D	189	-14.402	-26.290	-30.044	1.00	53.46	D	C
ATOM	19349	CG	HIS	D	189	-14.067	-27.571	-30.727	1.00	52.15	D	C
ATOM	19350	ND1	HIS	D	189	-15.000	-28.564	-30.937	1.00	52.24	D	N
ATOM	19352	CE1	HIS	D	189	-14.420	-29.590	-31.529	1.00	52.12	D	C
ATOM	19354	NE2	HIS	D	189	-13.142	-29.303	-31.695	1.00	51.57	D	N
ATOM	19356	CD2	HIS	D	189	-12.895	-28.051	-31.191	1.00	49.40	D	C
ATOM	19358	C	HIS	D	189	-14.546	-25.056	-27.857	1.00	55.21	D	C
ATOM	19359	O	HIS	D	189	-15.591	-24.795	-27.277	1.00	50.76	D	O
ATOM	19361	N	LYS	D	190	-13.518	-24.211	-27.934	1.00	60.45	D	N
ATOM	19362	CA	LYS	D	190	-13.495	-22.932	-27.215	1.00	61.67	D	C
ATOM	19364	CB	LYS	D	190	-12.189	-22.765	-26.408	1.00	64.07	D	C
ATOM	19367	CG	LYS	D	190	-11.706	-21.296	-26.274	1.00	69.50	D	C
ATOM	19370	CD	LYS	D	190	-11.177	-20.914	-24.883	1.00	72.86	D	C
ATOM	19373	CE	LYS	D	190	-9.648	-21.042	-24.768	1.00	75.88	D	C
ATOM	19376	NZ	LYS	D	190	-9.118	-20.196	-23.649	1.00	75.15	D	N
ATOM	19380	C	LYS	D	190	-13.704	-21.723	-28.138	1.00	60.27	D	C
ATOM	19381	O	LYS	D	190	-14.545	-20.870	-27.852	1.00	61.32	D	O
ATOM	19383	N	VAL	D	191	-12.928	-21.630	-29.215	1.00	57.66	D	N
ATOM	19384	CA	VAL	D	191	-12.891	-20.412	-30.023	1.00	56.33	D	C
ATOM	19386	CB	VAL	D	191	-11.450	-20.009	-30.404	1.00	54.22	D	C
ATOM	19388	CG1	VAL	D	191	-11.485	-18.812	-31.380	1.00	47.75	D	C
ATOM	19392	CG2	VAL	D	191	-10.636	-19.698	-29.148	1.00	51.32	D	C
ATOM	19396	C	VAL	D	191	-13.711	-20.526	-31.311	1.00	54.40	D	C
ATOM	19397	O	VAL	D	191	-13.388	-21.324	-32.207	1.00	52.32	D	O
ATOM	19399	N	TYR	D	192	-14.745	-19.694	-31.407	1.00	53.05	D	N
ATOM	19400	CA	TYR	D	192	-15.594	-19.654	-32.594	1.00	52.75	D	C
ATOM	19402	CB	TYR	D	192	-17.043	-19.922	-32.216	1.00	54.32	D	C

ATOM	19405	CG	TYR	D	192	-17.186	-21.276	-31.573	1.00	54.11	D	C
ATOM	19406	CD1	TYR	D	192	-17.493	-22.395	-32.331	1.00	52.99	D	C
ATOM	19408	CE1	TYR	D	192	-17.603	-23.635	-31.751	1.00	55.22	D	C
ATOM	19410	CZ	TYR	D	192	-17.391	-23.775	-30.391	1.00	55.66	D	C
ATOM	19411	OH	TYR	D	192	-17.510	-24.993	-29.804	1.00	54.61	D	O
ATOM	19413	CE2	TYR	D	192	-17.077	-22.684	-29.612	1.00	56.29	D	C
ATOM	19415	CD2	TYR	D	192	-16.969	-21.439	-30.208	1.00	54.03	D	C
ATOM	19417	C	TYR	D	192	-15.432	-18.326	-33.315	1.00	49.73	D	C
ATOM	19418	O	TYR	D	192	-15.689	-17.266	-32.748	1.00	47.81	D	O
ATOM	19420	N	ALA	D	193	-14.997	-18.394	-34.568	1.00	45.96	D	N
ATOM	19421	CA	ALA	D	193	-14.589	-17.197	-35.281	1.00	49.40	D	C
ATOM	19423	CB	ALA	D	193	-13.052	-17.118	-35.413	1.00	50.97	D	C
ATOM	19427	C	ALA	D	193	-15.221	-17.121	-36.651	1.00	49.78	D	C
ATOM	19428	O	ALA	D	193	-15.239	-18.094	-37.426	1.00	48.86	D	O
ATOM	19430	N	CYS	D	194	-15.675	-15.919	-36.954	1.00	51.74	D	N
ATOM	19431	CA	CYS	D	194	-16.277	-15.596	-38.217	1.00	50.40	D	C
ATOM	19433	CB	CYS	D	194	-17.620	-14.922	-37.952	1.00	54.71	D	C
ATOM	19436	SG	CYS	D	194	-18.426	-14.498	-39.441	1.00	60.80	D	S
ATOM	19438	C	CYS	D	194	-15.339	-14.624	-38.921	1.00	48.71	D	C
ATOM	19439	O	CYS	D	194	-15.133	-13.512	-38.427	1.00	47.09	D	O
ATOM	19441	N	GLU	D	195	-14.768	-15.045	-40.052	1.00	50.54	D	N
ATOM	19442	CA	GLU	D	195	-13.896	-14.184	-40.855	1.00	50.72	D	C
ATOM	19444	CB	GLU	D	195	-12.606	-14.915	-41.225	1.00	54.74	D	C
ATOM	19447	CG	GLU	D	195	-11.581	-13.961	-41.879	1.00	54.97	D	C
ATOM	19450	CD	GLU	D	195	-10.309	-14.656	-42.309	1.00	58.81	D	C
ATOM	19451	OE1	GLU	D	195	-10.402	-15.701	-43.000	1.00	59.12	D	O
ATOM	19452	OE2	GLU	D	195	-9.217	-14.142	-41.956	1.00	66.04	D	O
ATOM	19453	C	GLU	D	195	-14.587	-13.686	-42.133	1.00	48.21	D	C
ATOM	19454	O	GLU	D	195	-15.112	-14.486	-42.907	1.00	48.32	D	O
ATOM	19456	N	VAL	D	196	-14.550	-12.373	-42.349	1.00	49.51	D	N
ATOM	19457	CA	VAL	D	196	-15.282	-11.714	-43.430	1.00	46.28	D	C
ATOM	19459	CB	VAL	D	196	-16.185	-10.626	-42.838	1.00	44.79	D	C
ATOM	19461	CG1	VAL	D	196	-16.833	-9.780	-43.951	1.00	43.32	D	C
ATOM	19465	CG2	VAL	D	196	-17.219	-11.254	-41.953	1.00	42.25	D	C
ATOM	19469	C	VAL	D	196	-14.371	-11.045	-44.456	1.00	46.06	D	C
ATOM	19470	O	VAL	D	196	-13.551	-10.208	-44.097	1.00	47.08	D	O
ATOM	19472	N	THR	D	197	-14.540	-11.387	-45.737	1.00	47.54	D	N
ATOM	19473	CA	THR	D	197	-13.825	-10.692	-46.831	1.00	47.09	D	C
ATOM	19475	CB	THR	D	197	-13.047	-11.692	-47.759	1.00	52.80	D	C
ATOM	19477	OG1	THR	D	197	-12.292	-12.610	-46.961	1.00	55.00	D	O
ATOM	19479	CG2	THR	D	197	-12.101	-10.962	-48.761	1.00	50.59	D	C
ATOM	19483	C	THR	D	197	-14.831	-9.885	-47.667	1.00	46.61	D	C
ATOM	19484	O	THR	D	197	-15.842	-10.419	-48.135	1.00	45.51	D	O
ATOM	19486	N	HIS	D	198	-14.538	-8.598	-47.845	1.00	48.80	D	N
ATOM	19487	CA	HIS	D	198	-15.352	-7.689	-48.631	1.00	48.47	D	C
ATOM	19489	CB	HIS	D	198	-16.492	-7.112	-47.797	1.00	50.23	D	C
ATOM	19492	CG	HIS	D	198	-17.408	-6.225	-48.585	1.00	50.82	D	C
ATOM	19493	ND1	HIS	D	198	-17.199	-4.870	-48.715	1.00	53.22	D	N
ATOM	19495	CE1	HIS	D	198	-18.143	-4.350	-49.474	1.00	49.60	D	C
ATOM	19497	NE2	HIS	D	198	-18.955	-5.321	-49.848	1.00	53.50	D	N
ATOM	19499	CD2	HIS	D	198	-18.519	-6.504	-49.306	1.00	47.96	D	C
ATOM	19501	C	HIS	D	198	-14.478	-6.538	-49.167	1.00	50.55	D	C
ATOM	19502	O	HIS	D	198	-13.491	-6.134	-48.522	1.00	52.51	D	O
ATOM	19504	N	GLN	D	199	-14.864	-6.009	-50.332	1.00	50.13	D	N
ATOM	19505	CA	GLN	D	199	-14.137	-4.931	-51.001	1.00	49.94	D	C
ATOM	19507	CB	GLN	D	199	-14.821	-4.566	-52.346	1.00	54.46	D	C
ATOM	19510	CG	GLN	D	199	-14.258	-3.319	-53.056	1.00	55.35	D	C
ATOM	19513	CD	GLN	D	199	-15.007	-2.933	-54.355	1.00	60.27	D	C
ATOM	19514	OE1	GLN	D	199	-15.806	-3.712	-54.908	1.00	59.18	D	O
ATOM	19515	NE2	GLN	D	199	-14.738	-1.709	-54.844	1.00	57.47	D	N
ATOM	19518	C	GLN	D	199	-13.958	-3.680	-50.124	1.00	49.66	D	C
ATOM	19519	O	GLN	D	199	-12.972	-2.963	-50.278	1.00	51.51	D	O
ATOM	19521	N	GLY	D	200	-14.899	-3.400	-49.226	1.00	46.97	D	N
ATOM	19522	CA	GLY	D	200	-14.801	-2.233	-48.356	1.00	46.16	D	C
ATOM	19525	C	GLY	D	200	-13.935	-2.465	-47.128	1.00	47.56	D	C
ATOM	19526	O	GLY	D	200	-13.790	-1.562	-46.310	1.00	46.75	D	O
ATOM	19528	N	LEU	D	201	-13.397	-3.681	-46.978	1.00	48.89	D	N
ATOM	19529	CA	LEU	D	201	-12.474	-4.035	-45.882	1.00	51.37	D	C
ATOM	19531	CB	LEU	D	201	-12.948	-5.308	-45.151	1.00	52.74	D	C
ATOM	19534	CG	LEU	D	201	-14.224	-5.180	-44.292	1.00	51.46	D	C
ATOM	19536	CD1	LEU	D	201	-14.687	-6.539	-43.757	1.00	44.16	D	C
ATOM	19540	CD2	LEU	D	201	-14.015	-4.184	-43.159	1.00	50.44	D	C
ATOM	19544	C	LEU	D	201	-11.082	-4.263	-46.460	1.00	51.58	D	C
ATOM	19545	O	LEU	D	201	-10.911	-5.112	-47.334	1.00	48.63	D	O
ATOM	19547	N	SER	D	202	-10.093	-3.508	-45.972	1.00	54.97	D	N

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ATOM  19548  CA  SER D 202      -8.736  -3.508 -46.565  1.00 57.47      D    C
ATOM  19550  CB  SER D 202      -7.846  -2.460 -45.873  1.00 67.97      D    C
ATOM  19553  OG  SER D 202      -7.659  -2.758 -44.492  1.00 73.57      D    O
ATOM  19555  C   SER D 202      -8.069  -4.903 -46.517  1.00 60.46      D    C
ATOM  19556  O   SER D 202      -7.465  -5.361 -47.506  1.00 58.98      D    O
ATOM  19558  N   SER D 203      -8.190  -5.558 -45.356  1.00 60.48      D    N
ATOM  19559  CA  SER D 203      -7.933  -7.000 -45.197  1.00 58.31      D    C
ATOM  19561  CB  SER D 203      -6.620  -7.211 -44.425  1.00 59.08      D    C
ATOM  19564  OG  SER D 203      -6.649  -6.493 -43.194  1.00 59.30      D    O
ATOM  19566  C   SER D 203      -9.106  -7.667 -44.436  1.00 58.84      D    C
ATOM  19567  O   SER D 203      -9.877  -6.971 -43.741  1.00 57.58      D    O
ATOM  19569  N   PRO D 204      -9.242  -9.012 -44.554  1.00 57.78      D    N
ATOM  19570  CA  PRO D 204     -10.343  -9.750 -43.906  1.00 58.14      D    C
ATOM  19572  CB  PRO D 204      -9.985 -11.221 -44.164  1.00 59.58      D    C
ATOM  19575  CG  PRO D 204      -9.178 -11.188 -45.455  1.00 59.78      D    C
ATOM  19578  CD  PRO D 204      -8.377  -9.911 -45.354  1.00 60.01      D    C
ATOM  19581  C   PRO D 204     -10.452  -9.504 -42.413  1.00 59.16      D    C
ATOM  19582  O   PRO D 204      -9.447  -9.568 -41.723  1.00 61.55      D    O
ATOM  19583  N   VAL D 205     -11.665  -9.221 -41.943  1.00 58.15      D    N
ATOM  19584  CA  VAL D 205     -11.944  -8.979 -40.541  1.00 55.87      D    C
ATOM  19586  CB  VAL D 205     -12.922  -7.798 -40.390  1.00 60.14      D    C
ATOM  19588  CG1 VAL D 205     -13.794  -7.948 -39.140  1.00 61.89      D    C
ATOM  19592  CG2 VAL D 205     -12.140  -6.486 -40.373  1.00 62.00      D    C
ATOM  19596  C   VAL D 205     -12.519 -10.239 -39.891  1.00 55.73      D    C
ATOM  19597  O   VAL D 205     -13.385 -10.915 -40.458  1.00 58.30      D    O
ATOM  19599  N   THR D 206     -12.035 -10.549 -38.693  1.00 54.64      D    N
ATOM  19600  CA  THR D 206     -12.464 -11.736 -37.938  1.00 51.49      D    C
ATOM  19602  CB  THR D 206     -11.238 -12.618 -37.557  1.00 50.61      D    C
ATOM  19604  OG1 THR D 206     -10.604 -13.090 -38.758  1.00 47.13      D    O
ATOM  19606  CG2 THR D 206     -11.630 -13.805 -36.687  1.00 50.76      D    C
ATOM  19610  C   THR D 206     -13.203 -11.274 -36.698  1.00 48.60      D    C
ATOM  19611  O   THR D 206     -12.755 -10.352 -36.023  1.00 45.98      D    O
ATOM  19613  N   LYS D 207     -14.359 -11.882 -36.436  1.00 47.76      D    N
ATOM  19614  CA  LYS D 207     -15.152 -11.577 -35.256  1.00 48.01      D    C
ATOM  19616  CB  LYS D 207     -16.513 -11.002 -35.661  1.00 51.33      D    C
ATOM  19619  CG  LYS D 207     -17.347 -10.462 -34.522  1.00 51.83      D    C
ATOM  19622  CD  LYS D 207     -16.876  -9.076 -34.113  1.00 52.72      D    C
ATOM  19625  CE  LYS D 207     -17.802  -8.462 -33.068  1.00 54.05      D    C
ATOM  19628  NZ  LYS D 207     -17.323  -7.101 -32.683  1.00 57.41      D    N
ATOM  19632  C   LYS D 207     -15.333 -12.889 -34.523  1.00 45.79      D    C
ATOM  19633  O   LYS D 207     -15.768 -13.879 -35.130  1.00 46.67      D    O
ATOM  19635  N   SER D 208     -15.005 -12.920 -33.231  1.00 46.64      D    N
ATOM  19636  CA  SER D 208     -14.984 -14.195 -32.514  1.00 48.10      D    C
ATOM  19638  CB  SER D 208     -13.609 -14.875 -32.661  1.00 56.01      D    C
ATOM  19641  OG  SER D 208     -12.541 -13.974 -32.416  1.00 61.91      D    O
ATOM  19643  C   SER D 208     -15.335 -14.068 -31.052  1.00 48.51      D    C
ATOM  19644  O   SER D 208     -15.267 -12.998 -30.490  1.00 52.43      D    O
ATOM  19646  N   PHE D 209     -15.723 -15.186 -30.454  1.00 47.14      D    N
ATOM  19647  CA  PHE D 209     -15.889 -15.287 -29.009  1.00 49.69      D    C
ATOM  19649  CB  PHE D 209     -17.374 -15.137 -28.608  1.00 49.29      D    C
ATOM  19652  CG  PHE D 209     -18.229 -16.306 -29.012  1.00 49.29      D    C
ATOM  19653  CD1 PHE D 209     -18.455 -17.358 -28.132  1.00 50.09      D    C
ATOM  19655  CE1 PHE D 209     -19.221 -18.450 -28.497  1.00 48.65      D    C
ATOM  19657  CZ  PHE D 209     -19.762 -18.503 -29.765  1.00 49.81      D    C
ATOM  19659  CE2 PHE D 209     -19.531 -17.460 -30.660  1.00 47.39      D    C
ATOM  19661  CD2 PHE D 209     -18.767 -16.379 -30.285  1.00 47.64      D    C
ATOM  19663  C   PHE D 209     -15.304 -16.634 -28.528  1.00 49.46      D    C
ATOM  19664  O   PHE D 209     -15.040 -17.549 -29.339  1.00 46.80      D    O
ATOM  19666  N   ASN D 210     -15.096 -16.725 -27.214  1.00 51.50      D    N
ATOM  19667  CA  ASN D 210     -14.689 -17.966 -26.542  1.00 52.55      D    C
ATOM  19669  CB  ASN D 210     -13.631 -17.643 -25.499  1.00 54.69      D    C
ATOM  19672  CG  ASN D 210     -12.476 -16.855 -26.079  1.00 56.61      D    C
ATOM  19673  OD1 ASN D 210     -12.250 -15.708 -25.694  1.00 57.27      D    O
ATOM  19674  ND2 ASN D 210     -11.747 -17.461 -27.030  1.00 55.35      D    N
ATOM  19677  C   ASN D 210     -15.892 -18.569 -25.858  1.00 52.84      D    C
ATOM  19678  O   ASN D 210     -16.650 -17.835 -25.220  1.00 50.87      D    O
ATOM  19680  N   ARG D 211     -16.094 -19.883 -25.990  1.00 55.79      D    N
ATOM  19681  CA  ARG D 211     -17.303 -20.500 -25.437  1.00 58.69      D    C
ATOM  19683  CB  ARG D 211     -17.393 -21.994 -25.733  1.00 59.16      D    C
ATOM  19686  CG  ARG D 211     -18.678 -22.649 -25.192  1.00 58.13      D    C
ATOM  19689  CD  ARG D 211     -18.682 -24.150 -25.410  1.00 62.00      D    C
ATOM  19692  NE  ARG D 211     -17.366 -24.758 -25.174  1.00 63.90      D    N
ATOM  19694  CZ  ARG D 211     -16.816 -24.939 -23.970  1.00 67.08      D    C
ATOM  19695  NH1 ARG D 211     -17.456 -24.582 -22.855  1.00 68.10      D    N
ATOM  19698  NH2 ARG D 211     -15.609 -25.494 -23.878  1.00 67.43      D    N
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ATOM  19701  C   ARG D 211     -17.349 -20.240 -23.942  1.00 63.79      D    C
ATOM  19702  O   ARG D 211     -16.375 -20.464 -23.231  1.00 61.46      D    O
ATOM  19704  N   GLY D 212     -18.518 -19.817 -23.486  1.00 71.65      D    N
ATOM  19705  CA  GLY D 212     -18.648 -18.962 -22.319  1.00 78.79      D    C
ATOM  19708  C   GLY D 212     -18.749 -17.551 -22.895  1.00 85.37      D    C
ATOM  19709  O   GLY D 212     -19.225 -17.395 -24.035  1.00 89.68      D    O
ATOM  19711  N   GLU D 213     -18.316 -16.540 -22.127  1.00 87.45      D    N
ATOM  19712  CA  GLU D 213     -18.150 -15.141 -22.599  1.00 88.16      D    C
ATOM  19714  CB  GLU D 213     -16.716 -14.965 -23.149  1.00 91.22      D    C
ATOM  19717  CG  GLU D 213     -15.653 -14.665 -22.056  1.00 92.30      D    C
ATOM  19720  CD  GLU D 213     -14.451 -15.616 -22.083  1.00 92.85      D    C
ATOM  19721  OE1 GLU D 213     -14.650 -16.830 -21.845  1.00 92.53      D    O
ATOM  19722  OE2 GLU D 213     -13.310 -15.146 -22.323  1.00 92.58      D    O
ATOM  19723  C   GLU D 213     -19.216 -14.555 -23.576  1.00 89.57      D    C
ATOM  19724  O   GLU D 213     -19.976 -15.264 -24.254  1.00 89.03      D    O
ATOM  19726 CL   CL  I   1     -54.281   2.347 -59.649  1.00 28.91      I   CL
ATOM  19727 CL   CL  I   2     -60.942  -6.901 -76.219  1.00 54.32      I   CL
ATOM  19728  OWO WAT M   2      -4.534  15.367  -0.874  1.00 18.14      M    O
ATOM  19731  OWO WAT M   3     -35.291  23.410  15.442  1.00 24.36      M    O
ATOM  19734  OWO WAT M   5     -34.835  20.706  14.449  1.00 37.92      M    O
ATOM  19737  OWO WAT M   6     -37.927  -5.957 -75.491  1.00 25.09      M    O
ATOM  19740  OWO WAT M   7     -21.419  13.667  15.297  1.00 26.88      M    O
ATOM  19743  OWO WAT M   8      20.933  10.125 -36.094  1.00 60.69      M    O
ATOM  19746  OWO WAT M   9     -47.242  16.589   9.571  1.00 29.36      M    O
ATOM  19749  OWO WAT M  10      -8.589  28.328 -20.932  1.00 31.04      M    O
ATOM  19752  OWO WAT M  11     -46.641  19.023  20.352  1.00 32.44      M    O
ATOM  19755  OWO WAT M  12      -4.389  -5.578  -8.131  1.00 44.36      M    O
ATOM  19758  OWO WAT M  13       0.866  14.130 -18.623  1.00 28.76      M    O
ATOM  19761  OWO WAT M  14     -37.893  25.389  10.078  1.00 26.62      M    O
ATOM  19764  OWO WAT M  15      -5.619   9.736 -23.476  1.00 25.21      M    O
ATOM  19767  OWO WAT M  16      13.732  21.195 -14.902  1.00 28.82      M    O
ATOM  19770  OWO WAT M  17     -44.296  -3.704 -54.865  1.00 29.21      M    O
ATOM  19773  OWO WAT M  18     -14.549  -0.785 -10.645  1.00 37.70      M    O
ATOM  19776  OWO WAT M  19     -31.890   0.950 -52.804  1.00 28.85      M    O
ATOM  19779  OWO WAT M  20     -15.871  -4.863 -14.468  1.00 32.37      M    O
ATOM  19782  OWO WAT M  21     -54.349   6.249 -75.001  1.00 69.32      M    O
ATOM  19785  OWO WAT M  22      19.532  15.123 -18.661  1.00 32.55      M    O
ATOM  19788  OWO WAT M  23     -41.979  21.730  21.556  1.00 24.74      M    O
ATOM  19791  OWO WAT M  24      17.691   4.228 -25.982  1.00 27.81      M    O
ATOM  19794  OWO WAT M  25       3.179  13.377 -11.091  1.00 27.03      M    O
ATOM  19797  OWO WAT M  26     -46.147  20.934  16.845  1.00 28.42      M    O
ATOM  19800  OWO WAT M  27     -15.678   5.801   9.334  1.00 28.38      M    O
ATOM  19803  OWO WAT M  28     -13.049   2.883  -2.347  1.00 30.71      M    O
ATOM  19806  OWO WAT M  29     -58.291  -3.451 -59.105  1.00 31.01      M    O
ATOM  19809  OWO WAT M  30     -10.145  12.874  -4.134  1.00 28.92      M    O
ATOM  19812  OWO WAT M  31       1.253  -4.003 -21.892  1.00 28.95      M    O
ATOM  19815  OWO WAT M  32     -46.856 -23.145 -47.970  1.00 31.09      M    O
ATOM  19818  OWO WAT M  33     -42.886 -12.950 -65.674  1.00 26.68      M    O
ATOM  19821  OWO WAT M  34     -26.938  22.308   1.239  1.00 32.81      M    O
ATOM  19824  OWO WAT M  35      -2.912  13.067  -5.572  1.00 29.70      M    O
ATOM  19827  OWO WAT M  36     -25.572  15.823  15.827  1.00 23.30      M    O
ATOM  19830  OWO WAT M  37      -8.622  11.066   3.938  1.00 40.15      M    O
ATOM  19833  OWO WAT M  38     -66.032 -12.467 -70.057  1.00 32.73      M    O
ATOM  19836  OWO WAT M  39     -18.436  -4.274 -26.926  1.00 53.02      M    O
ATOM  19839  OWO WAT M  40     -62.205 -17.350 -59.542  1.00 38.82      M    O
ATOM  19842  OWO WAT M  41      28.338  -9.426 -23.257  1.00 49.31      M    O
ATOM  19845  OWO WAT M  42     -23.683  14.344 -10.354  1.00 29.81      M    O
ATOM  19848  OWO WAT M  43     -96.515  15.554 -68.590  1.00 50.30      M    O
ATOM  19851  OWO WAT M  45     -39.914   9.181 -66.831  1.00 41.67      M    O
ATOM  19854  OWO WAT M  46     -30.479  17.106   4.341  1.00 35.52      M    O
ATOM  19857  OWO WAT M  47     -44.523  30.045  10.553  1.00 21.74      M    O
ATOM  19860  OWO WAT M  48       5.418  16.323 -19.178  1.00 37.34      M    O
ATOM  19863  OWO WAT M  49     -37.733  32.247  19.311  1.00 30.00      M    O
ATOM  19866  OWO WAT M  50      -3.912  -6.478 -15.147  1.00 31.90      M    O
ATOM  19869  OWO WAT M  51      17.063  14.294 -18.650  1.00 34.51      M    O
ATOM  19872  OWO WAT M  52     -18.561 -23.844 -42.765  1.00 36.09      M    O
ATOM  19875  OWO WAT M  53     -21.384 -18.980 -44.959  1.00 37.55      M    O
ATOM  19878  OWO WAT M  54      18.205   5.329 -29.791  1.00 30.71      M    O
ATOM  19881  OWO WAT M  55     -10.913  33.164  -6.150  1.00 44.43      M    O
ATOM  19884  OWO WAT M  56     -44.584  18.450  29.220  1.00 27.90      M    O
ATOM  19887  OWO WAT M  57      -8.568   9.631  -2.324  1.00 29.45      M    O
ATOM  19890  OWO WAT M  58     -63.696  -6.318 -64.827  1.00 27.62      M    O
ATOM  19893  OWO WAT M  59     -10.177  14.602  -2.180  1.00 43.16      M    O
ATOM  19896  OWO WAT M  60      -0.830 -10.545 -28.927  1.00 40.02      M    O
ATOM  19899  OWO WAT M  61     -14.397  -2.677 -30.574  1.00 36.73      M    O
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ATOM	19902	OWO	WAT	M	62	-1.331	-8.781	-11.506	1.00	32.26	M	0
ATOM	19905	OWO	WAT	M	63	-79.884	11.946	-80.761	1.00	75.12	M	0
ATOM	19908	OWO	WAT	M	64	-16.759	-7.195	-51.786	1.00	45.62	M	0
ATOM	19911	OWO	WAT	M	65	-56.684	-2.070	-62.018	1.00	29.52	M	0
ATOM	19914	OWO	WAT	M	66	-18.811	6.119	18.486	1.00	56.61	M	0
ATOM	19917	OWO	WAT	M	67	9.110	3.564	-22.730	1.00	33.55	M	0
ATOM	19920	OWO	WAT	M	68	-63.429	-23.226	-65.669	1.00	43.76	M	0
ATOM	19923	OWO	WAT	M	69	-56.578	-0.932	-64.442	1.00	36.05	M	0
ATOM	19926	OWO	WAT	M	70	-37.982	36.318	3.832	1.00	36.56	M	0
ATOM	19929	OWO	WAT	M	71	-7.767	-9.832	-17.903	1.00	41.40	M	0
ATOM	19932	OWO	WAT	M	72	-41.822	16.779	2.235	1.00	34.20	M	0
ATOM	19935	OWO	WAT	M	73	34.957	1.883	-5.431	1.00	59.18	M	0
ATOM	19938	OWO	WAT	M	74	-19.863	11.555	15.342	1.00	20.99	M	0
ATOM	19941	OWO	WAT	M	75	-61.723	-8.822	-47.957	1.00	37.79	M	0
ATOM	19944	OWO	WAT	M	76	-19.812	1.521	-20.578	1.00	39.15	M	0
ATOM	19947	OWO	WAT	M	77	-13.329	-14.539	-45.719	1.00	38.21	M	0
ATOM	19950	OWO	WAT	M	78	-29.035	5.515	13.853	1.00	39.19	M	0
ATOM	19953	OWO	WAT	M	79	-25.238	-13.014	-28.178	1.00	43.61	M	0
ATOM	19956	OWO	WAT	M	80	7.152	18.842	-19.277	1.00	54.53	M	0
ATOM	19959	OWO	WAT	M	81	-1.108	10.935	-6.362	1.00	31.08	M	0
ATOM	19962	OWO	WAT	M	82	20.727	22.990	-30.224	1.00	35.25	M	0
ATOM	19965	OWO	WAT	M	83	-45.673	17.700	14.282	1.00	30.91	M	0
ATOM	19968	OWO	WAT	M	84	-17.975	10.870	13.517	1.00	27.57	M	0
ATOM	19971	OWO	WAT	M	85	-53.019	-3.827	-53.802	1.00	27.84	M	0
ATOM	19974	OWO	WAT	M	86	16.236	12.599	-16.079	1.00	38.59	M	0
ATOM	19977	OWO	WAT	M	87	3.302	-1.686	-25.486	1.00	33.60	M	0
ATOM	19980	OWO	WAT	M	88	-51.936	0.920	-58.566	1.00	40.28	M	0
ATOM	19983	OWO	WAT	M	89	-64.404	-8.835	-57.977	1.00	37.99	M	0
ATOM	19986	OWO	WAT	M	90	18.290	1.661	-34.980	1.00	29.35	M	0
ATOM	19989	OWO	WAT	M	91	17.374	0.930	-28.466	1.00	33.61	M	0
ATOM	19992	OWO	WAT	M	93	-33.916	-3.562	-45.793	1.00	44.35	M	0
ATOM	19995	OWO	WAT	M	94	-16.425	9.234	14.820	1.00	44.20	M	0
ATOM	19998	OWO	WAT	M	95	-19.309	-6.036	-31.256	1.00	39.52	M	0
ATOM	20001	OWO	WAT	M	96	5.823	26.633	-26.108	1.00	45.15	M	0
ATOM	20004	OWO	WAT	M	97	-39.869	14.202	12.233	1.00	33.18	M	0
ATOM	20007	OWO	WAT	M	98	-36.397	9.665	32.485	1.00	33.58	M	0
ATOM	20010	OWO	WAT	M	99	-42.535	-23.924	-48.682	1.00	38.72	M	0
ATOM	20013	OWO	WAT	M	100	8.965	0.856	-20.335	1.00	40.02	M	0
ATOM	20016	OWO	WAT	M	101	-41.054	-17.255	-44.484	1.00	53.61	M	0
ATOM	20019	OWO	WAT	M	102	-12.031	13.731	-19.130	1.00	30.01	M	0
ATOM	20022	OWO	WAT	M	103	-14.829	19.769	-5.945	1.00	30.31	M	0
ATOM	20025	OWO	WAT	M	104	-45.195	18.395	16.813	1.00	41.55	M	0
ATOM	20028	OWO	WAT	M	105	-26.193	5.835	-56.398	1.00	35.25	M	0
ATOM	20031	OWO	WAT	M	106	-19.232	20.545	17.504	1.00	51.18	M	0
ATOM	20034	OWO	WAT	M	107	1.313	-1.920	-15.907	1.00	35.52	M	0
ATOM	20037	OWO	WAT	M	108	-37.456	-0.672	-52.644	1.00	59.97	M	0
ATOM	20040	OWO	WAT	M	109	-43.541	-17.665	-61.769	1.00	33.98	M	0
ATOM	20043	OWO	WAT	M	110	-49.574	16.868	26.087	1.00	31.52	M	0
ATOM	20046	OWO	WAT	M	111	-23.554	6.858	-10.383	1.00	35.63	M	0
ATOM	20049	OWO	WAT	M	112	-37.975	-16.683	-46.818	1.00	32.08	M	0
ATOM	20052	OWO	WAT	M	113	-23.932	7.112	-7.203	1.00	37.47	M	0
ATOM	20055	OWO	WAT	M	114	-14.979	-7.848	-30.901	1.00	28.92	M	0
ATOM	20058	OWO	WAT	M	115	-28.837	-3.769	-45.797	1.00	44.96	M	0
ATOM	20061	OWO	WAT	M	116	-50.356	-28.925	-66.409	1.00	42.45	M	0
ATOM	20064	OWO	WAT	M	117	-28.888	9.122	-66.969	1.00	39.47	M	0
ATOM	20067	OWO	WAT	M	118	33.501	7.357	-40.098	1.00	45.31	M	0
ATOM	20070	OWO	WAT	M	119	-4.425	22.757	-23.255	1.00	32.08	M	0
ATOM	20073	OWO	WAT	M	120	-3.213	32.620	-7.259	1.00	39.79	M	0
ATOM	20076	OWO	WAT	M	121	-18.342	2.158	12.409	1.00	49.51	M	0
ATOM	20079	OWO	WAT	M	122	-24.124	17.186	-7.029	1.00	33.90	M	0
ATOM	20082	OWO	WAT	M	123	-58.994	-29.050	-61.007	1.00	37.08	M	0
ATOM	20085	OWO	WAT	M	124	10.030	19.817	-20.243	1.00	50.62	M	0
ATOM	20088	OWO	WAT	M	125	-47.255	-3.464	-53.069	1.00	41.31	M	0
ATOM	20091	OWO	WAT	M	126	27.250	22.243	-33.328	1.00	35.86	M	0
ATOM	20094	OWO	WAT	M	127	-16.794	-8.250	-26.920	1.00	40.45	M	0
ATOM	20097	OWO	WAT	M	128	-30.903	34.074	22.462	1.00	45.34	M	0
ATOM	20100	OWO	WAT	M	129	-48.251	28.786	26.131	1.00	42.83	M	0
ATOM	20103	OWO	WAT	M	130	-15.026	-24.898	-20.593	1.00	44.85	M	0
ATOM	20106	OWO	WAT	M	131	-48.220	-13.957	-68.169	1.00	28.45	M	0
ATOM	20109	OWO	WAT	M	132	-6.097	-12.095	-26.261	1.00	34.29	M	0
ATOM	20112	OWO	WAT	M	133	30.091	-0.876	-25.288	1.00	46.76	M	0
ATOM	20115	OWO	WAT	M	134	-8.477	27.597	-10.094	1.00	42.55	M	0
ATOM	20118	OWO	WAT	M	135	-47.229	-18.234	-42.048	1.00	37.15	M	0
ATOM	20121	OWO	WAT	M	136	44.196	-2.873	-25.182	1.00	65.60	M	0
ATOM	20124	OWO	WAT	M	137	-54.351	-0.743	-69.427	1.00	33.20	M	0

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ATOM  20127  OWO WAT M 138     -56.242  -5.531 -51.516  1.00 29.29      M    0
ATOM  20130  OWO WAT M 139     -11.273  21.269  20.386  1.00 54.11      M    0
ATOM  20133  OWO WAT M 140     -32.158 -17.946 -43.434  1.00 44.49      M    0
ATOM  20136  OWO WAT M 141     -64.018 -14.853 -70.071  1.00 46.21      M    0
ATOM  20139  OWO WAT M 142     -51.145  -3.152 -55.502  1.00 29.83      M    0
ATOM  20142  OWO WAT M 143     -52.231 -16.329 -47.452  1.00 35.57      M    0
ATOM  20145  OWO WAT M 144     -77.220   9.950 -86.384  1.00 54.03      M    0
ATOM  20148  OWO WAT M 145      21.191  -5.947  -8.236  1.00 41.30      M    0
ATOM  20151  OWO WAT M 146      20.674  -7.719 -37.116  1.00 47.56      M    0
ATOM  20154  OWO WAT M 147      18.038   2.707  -9.962  1.00 39.44      M    0
ATOM  20157  OWO WAT M 148     -40.492 -13.872 -43.073  1.00 41.26      M    0
ATOM  20160  OW  WAT M 149     -36.101  -4.809 -19.665  1.00 44.93      M    0
ATOM  20163  OW  WAT M 150       0.404  -5.640  -9.261  1.00 36.59      M    0
ATOM  20166  OW  WAT M 151     -47.856  -6.320 -50.032  1.00 49.64      M    0
ATOM  20169  OW  WAT M 152      12.364   2.173 -15.663  1.00 40.03      M    0
ATOM  20172  OW  WAT M 153     -66.525   0.268 -57.321  1.00 38.51      M    0
ATOM  20175  OW  WAT M 154       4.562 -11.140 -33.091  1.00 45.53      M    0
ATOM  20178  OW  WAT M 155     -42.096  -5.067 -37.148  1.00 43.55      M    0
ATOM  20181  OW  WAT M 156     -24.551   3.519 -15.184  1.00 43.00      M    0
ATOM  20184  OW  WAT M 157      13.711  -3.364 -12.760  1.00 37.73      M    0
ATOM  20187  OW  WAT M 158      16.368  16.368 -30.240  1.00 41.16      M    0
ATOM  20190  OW  WAT M 159     -47.305  24.586   4.890  1.00 43.93      M    0
ATOM  20193  OW  WAT M 160      -1.509   8.828  -4.973  1.00 26.52      M    0
ATOM  20196  OW  WAT M 161     -48.560  17.647  28.452  1.00 44.73      M    0
ATOM  20199  OW  WAT M 162     -62.176   2.313 -58.927  1.00 45.21      M    0
ATOM  20202  OW  WAT M 163     -25.013  28.118   6.717  1.00 46.71      M    0
ATOM  20205  OW  WAT M 164      19.269   2.302 -27.360  1.00 24.19      M    0
ATOM  20208  OW  WAT M 165     -36.375  18.726  -4.934  1.00 58.58      M    0
ATOM  20211  OW  WAT M 166     -33.696  -5.260 -57.400  1.00 34.73      M    0
ATOM  20214  OW  WAT M 167     -40.529 -15.181 -55.251  1.00 47.19      M    0
ATOM  20217  OW  WAT M 168      -9.018   7.126   4.815  1.00 26.55      M    0
ATOM  20220  OW  WAT M 169      38.278   6.226 -34.703  1.00 35.73      M    0
ATOM  20223  OW  WAT M 170      19.914  28.518 -16.239  1.00 35.62      M    0
ATOM  20226  OW  WAT M 171       0.550  -2.228 -13.264  1.00 37.78      M    0
ATOM  20229  OW  WAT M 172      -1.792   7.553 -28.851  1.00 43.24      M    0
ATOM  20232  OW  WAT M 173     -40.052   1.555 -50.693  1.00 43.29      M    0
ATOM  20235  OW  WAT M 174     -12.187  11.272 -23.326  1.00 42.77      M    0
ATOM  20238  OW  WAT M 175     -23.147  15.469  -8.448  1.00 32.11      M    0
ATOM  20241  OW  WAT M 176      30.243  26.751 -27.375  1.00 44.75      M    0
ATOM  20244  OW  WAT M 177     -33.251   7.129 -49.061  1.00 34.95      M    0
ATOM  20247  OW  WAT M 178      32.656  24.012 -28.413  1.00 32.40      M    0
ATOM  20250  OW  WAT M 179     -65.605 -20.485 -69.126  1.00 49.49      M    0
ATOM  20253  OW  WAT M 180     -40.423   8.167   8.134  1.00 51.86      M    0
ATOM  20256  OW  WAT M 181     -15.464 -11.444 -21.585  1.00 47.33      M    0
ATOM  20259  OW  WAT M 182       2.451  -2.709 -11.420  1.00 43.83      M    0
ATOM  20262  OW  WAT M 183     -25.546  24.110  -6.960  1.00 41.95      M    0
ATOM  20265  OW  WAT M 184     -38.504  31.345  32.264  1.00 45.43      M    0
ATOM  20268  OW  WAT M 185     -39.165   5.129   1.925  1.00 37.64      M    0
ATOM  20271  OW  WAT M 186     -24.835   4.490  34.437  1.00 48.71      M    0
ATOM  20274  OW  WAT M 187     -42.293 -24.390 -58.050  1.00 41.89      M    0
ATOM  20277  OW  WAT M 188     -41.672   8.078 -71.207  1.00 44.48      M    0
ATOM  20280  OW  WAT M 189     -40.235 -10.130 -58.774  1.00 32.72      M    0
ATOM  20283  OW  WAT M 190     -22.298  -0.407 -15.509  1.00 44.26      M    0
ATOM  20286  OW  WAT M 191     -36.695   7.918  -2.290  1.00 41.96      M    0
ATOM  20289  OW  WAT M 192     -15.993 -28.731 -40.944  1.00 42.17      M    0
ATOM  20292  OW  WAT M 193     -60.691 -15.702 -47.899  1.00 48.79      M    0
ATOM  20295  OW  WAT M 194      -7.677  -2.532 -33.616  1.00 38.58      M    0
ATOM  20298  OW  WAT M 195     -50.530  10.021 -67.323  1.00 39.55      M    0
ATOM  20301  OW  WAT M 196     -19.058 -17.104 -48.455  1.00 39.05      M    0
ATOM  20304  OW  WAT M 197     -67.887 -19.888 -63.511  1.00 45.06      M    0
ATOM  20307  OW  WAT M 198     -10.034  -8.599 -37.501  1.00 37.71      M    0
ATOM  20310  OW  WAT M 199     -60.619 -10.534 -75.220  1.00 41.76      M    0
ATOM  20313  OW  WAT M 200     -57.798 -26.874 -49.390  1.00 52.99      M    0
ATOM  20316  OW  WAT M 201     -48.232 -21.404 -30.457  1.00 43.45      M    0
ATOM  20319  OW  WAT M 202     -49.299  10.476  24.480  1.00 39.95      M    0
ATOM  20322  OW  WAT M 203      23.076  30.637 -22.610  1.00 44.36      M    0
ATOM  20325  OW  WAT M 204       7.670  -9.143 -11.397  1.00 42.36      M    0
ATOM  20328  OW  WAT M 205     -44.417 -13.640 -54.630  1.00 32.68      M    0
ATOM  20331  OW  WAT M 206     -51.056 -15.278 -71.657  1.00 46.23      M    0
ATOM  20334  OW  WAT M 207     -19.166  -0.866 -28.795  1.00 54.19      M    0
ATOM  20337  OW  WAT M 208     -34.876   3.584  22.311  1.00 49.63      M    0
ATOM  20340  OW  WAT M 209     -27.447   5.751   7.753  1.00 47.66      M    0
ATOM  20343  OW  WAT M 210     -32.537   0.412   5.862  1.00 43.21      M    0
ATOM  20346  OW  WAT M 211      20.997   6.581 -39.935  1.00 36.35      M    0
ATOM  20349  OW  WAT M 212     -18.490  29.455 -20.127  1.00 44.07      M    0
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ATOM  20352  OW  WAT M 213     -49.488   8.766 -72.730  1.00 50.63      M    O
ATOM  20355  OW  WAT M 214     -29.948  -9.863 -52.454  1.00 42.81      M    O
ATOM  20358  OW  WAT M 215     -32.679 -11.868 -51.105  1.00 43.01      M    O
ATOM  20361  OW  WAT M 216     -34.007  -5.817 -45.150  1.00 39.56      M    O
ATOM  20364  OW  WAT M 217     -40.472   3.212 -56.364  1.00 34.12      M    O
ATOM  20367  OW  WAT M 218     -10.948  21.444  -1.107  1.00 38.08      M    O
ATOM  20370  OW  WAT M 219       0.378   7.134 -17.753  1.00 40.40      M    O
ATOM  20373  OW  WAT M 220     -33.966  -2.262 -73.773  1.00 40.20      M    O
ATOM  20376  OW  WAT M 221     -78.319  14.018 -94.270  1.00 56.48      M    O
ATOM  20379  OW  WAT M 222     -27.405   0.184   3.530  1.00 35.87      M    O
ATOM  20382  OW  WAT M 223      14.124  13.977 -13.837  1.00 31.89      M    O
ATOM  20385  OW  WAT M 224     -41.206   2.393 -76.952  1.00 40.56      M    O
ATOM  20388  OW  WAT M 225      24.887 -10.898 -40.213  1.00 44.47      M    O
ATOM  20391  OW  WAT M 226     -43.732  17.169   3.248  1.00 54.35      M    O
ATOM  20394  OW  WAT M 227     -31.852  33.968  11.042  1.00 47.06      M    O
ATOM  20397  OW  WAT M 228     -38.345 -20.706 -23.200  1.00 53.95      M    O
ATOM  20400  OW  WAT M 229     -55.298   3.976 -68.786  1.00 31.49      M    O
ATOM  20403  OW  WAT M 230      17.633  -0.325 -31.020  1.00 41.65      M    O
ATOM  20406  OW  WAT M 231     -72.629   6.333 -74.856  1.00 45.83      M    O
ATOM  20409  OW  WAT M 232     -23.586   6.468 -17.039  1.00 32.63      M    O
ATOM  20412  OW  WAT M 233     -17.675  -5.414 -35.280  1.00 43.67      M    O
ATOM  20415  OW  WAT M 234     -30.223  15.948  -4.886  1.00 40.87      M    O
ATOM  20418  OW  WAT M 235      29.530  -6.556 -18.684  1.00 48.83      M    O
ATOM  20421  OW  WAT M 236     -43.897  19.551  19.673  1.00 38.78      M    O
ATOM  20424  OW  WAT M 237     -40.872  11.676 -59.087  1.00 46.09      M    O
ATOM  20427  OW  WAT M 238     -40.633   5.880 -71.412  1.00 39.16      M    O
ATOM  20430  OW  WAT M 239     -28.261   7.474  -2.116  1.00 38.58      M    O
ATOM  20433  OW  WAT M 240     -78.546  -2.935 -67.304  1.00 48.09      M    O
ATOM  20436  OW  WAT M 241      32.784  -1.582 -11.919  1.00 52.57      M    O
ATOM  20439  OW  WAT M 242     -34.068   0.493 -34.524  1.00 47.02      M    O
ATOM  20442  OW  WAT M 243     -52.441 -33.340 -49.131  1.00 38.72      M    O
ATOM  20445  OW  WAT M 244       7.482  36.315 -13.735  1.00 42.31      M    O
ATOM  20448  OW  WAT M 245     -13.986  19.404 -22.198  1.00 38.80      M    O
ATOM  20451  OW  WAT M 246     -33.887   4.772  26.254  1.00 51.11      M    O
ATOM  20454  OW  WAT M 247     -45.413  10.056 -66.121  1.00 49.81      M    O
ATOM  20457  OW  WAT M 248     -16.400  11.455 -22.590  1.00 41.97      M    O
ATOM  20460  OW  WAT M 249      23.512  13.193 -14.929  1.00 45.93      M    O
ATOM  20463  OW  WAT M 250      17.815  27.921 -14.688  1.00 31.37      M    O
ATOM  20466  OW  WAT M 251     -30.828 -25.574 -49.466  1.00 45.31      M    O
ATOM  20469  OW  WAT M 252     -72.635   6.628 -62.158  1.00 40.26      M    O
ATOM  20472  OW  WAT M 253     -39.364  32.072  21.510  1.00 35.72      M    O
ATOM  20475  OW  WAT M 254      14.742   8.901 -17.465  1.00 54.28      M    O
ATOM  20478  OW  WAT M 255      -8.828 -11.632 -40.110  1.00 41.76      M    O
ATOM  20481  OW  WAT M 256     -54.330 -30.264 -46.070  1.00 46.98      M    O
ATOM  20484  OW  WAT M 257     -39.400   1.833 -40.710  1.00 46.00      M    O
ATOM  20487  OW  WAT M 258      -8.468  -4.808 -43.046  1.00 61.43      M    O
ATOM  20490  OW  WAT M 259     -50.652  27.918  18.120  1.00 44.92      M    O
ATOM  20493  OW  WAT M 260       0.644  31.751 -19.881  1.00 37.94      M    O
ATOM  20496  OW  WAT M 261     -63.924  -2.264 -46.149  1.00 51.29      M    O
ATOM  20499  OW  WAT M 262     -80.111  11.800 -94.259  1.00 54.73      M    O
ATOM  20502  OW  WAT M 263     -66.588  -3.753 -46.057  1.00 54.14      M    O
ATOM  20505  OW  WAT W   1     -18.650 -24.706 -46.790  1.00 52.98      W    O
ATOM  20508  OW  WAT W   2      14.212   8.008 -34.289  1.00 40.97      W    O
ATOM  20511  OW  WAT W   3     -71.659  15.787 -67.171  1.00 83.16      W    O
ATOM  20514  OW  WAT W   4      18.991  13.948 -35.562  1.00 44.13      W    O
ATOM  20517  OW  WAT W   5     -80.750  19.086 -92.525  1.00 53.18      W    O
ATOM  20520  OW  WAT W   6     -63.802  12.489 -78.236  1.00 47.79      W    O
ATOM  20523  OW  WAT W   7     -32.816 -29.211 -38.814  1.00 31.83      W    O
ATOM  20526  OW  WAT W   8     -16.878 -21.901 -43.107  1.00 41.50      W    O
ATOM  20529  OW  WAT W   9     -23.985   1.126  28.393  1.00 43.31      W    O
ATOM  20532  OW  WAT W  10      -0.267   2.930  -3.665  1.00 56.96      W    O
ATOM  20535  OW  WAT W  11      -2.416 -13.003 -33.505  1.00 49.79      W    O
ATOM  20538  OW  WAT W  12     -26.020 -23.652 -40.734  1.00 45.36      W    O
ATOM  20541  OW  WAT W  13     -11.114   7.787   6.200  1.00 36.09      W    O
ATOM  20544  OW  WAT W  14     -63.725 -18.214 -72.622  1.00 44.40      W    O
ATOM  20547  OW  WAT W  15      36.358  10.061 -30.549  1.00 35.07      W    O
ATOM  20550  OW  WAT W  16      21.410  -1.252 -41.576  1.00 41.56      W    O
ATOM  20553  OW  WAT W  17      -8.769  34.774 -11.309  1.00 44.37      W    O
ATOM  20556  OW  WAT W  18     -11.416  -4.646 -32.187  1.00 53.07      W    O
ATOM  20559  OW  WAT W  19     -62.647 -23.258 -58.113  1.00 41.52      W    O
ATOM  20562  OW  WAT W  20     -35.863   5.769 -49.624  1.00 46.92      W    O
ATOM  20565  OW  WAT W  21     -33.612  10.645  -4.724  1.00 47.26      W    O
ATOM  20568  OW  WAT W  22      -6.454  -8.419 -12.348  1.00 55.20      W    O
ATOM  20571  OW  WAT W  23     -24.794  -0.792   7.732  1.00 41.49      W    O
ATOM  20574  OW  WAT W  24     -27.161   3.952 -27.015  1.00 48.23      W    O
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附錄1A.txt

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ATOM  20577  OW  WAT W  25     -33.414 -31.513 -37.614  1.00 44.12      W    O
ATOM  20580  OW  WAT W  26     -15.074  13.693  10.234  1.00 51.44      W    O
ATOM  20583  OW  WAT W  27     -22.599  16.990 -15.039  1.00 40.98      W    O
ATOM  20586  OW  WAT W  28       9.523   6.704 -28.424  1.00 46.54      W    O
ATOM  20589  OW  WAT W  29     -83.314  26.507 -80.625  1.00 53.01      W    O
ATOM  20592  OW  WAT W  30     -44.150  -1.635 -54.839  1.00 36.28      W    O
ATOM  20595  OW  WAT W  31      -4.641 -11.254 -33.664  1.00 47.35      W    O
ATOM  20598  OW  WAT W  32     -32.245  26.011  33.198  1.00 49.62      W    O
ATOM  20601  OW  WAT W  33     -11.065  25.645  -7.032  1.00 32.23      W    O
ATOM  20604  OW  WAT W  34     -21.148  24.067   3.149  1.00 45.81      W    O
ATOM  20607  OW  WAT W  35     -49.520 -17.607 -47.737  1.00 36.50      W    O
ATOM  20610  OW  WAT W  36     -31.425  12.357 -57.004  1.00 50.12      W    O
ATOM  20613  OW  WAT W  37      32.817  12.986 -38.638  1.00 40.39      W    O
ATOM  20616  OW  WAT W  38     -21.121 -30.765 -35.356  1.00 41.29      W    O
ATOM  20619  OW  WAT W  39     -57.086 -18.468 -73.899  1.00 54.32      W    O
ATOM  20622  OW  WAT W  40     -27.877 -18.428 -42.548  1.00 52.08      W    O
ATOM  20625  OW  WAT W  41     -75.595   0.624 -57.248  1.00 53.05      W    O
ATOM  20628  OW  WAT W  42     -67.633   6.652 -62.866  1.00 41.37      W    O
ATOM  20631  OW  WAT W  43      15.128  20.585  -8.186  1.00 45.32      W    O
ATOM  20634  OW  WAT W  44     -57.162  -3.567 -83.174  1.00 55.52      W    O
ATOM  20637  OW  WAT W  45     -69.453  10.000 -75.560  1.00 53.16      W    O
ATOM  20640  OW  WAT W  46      15.366   4.138 -26.649  1.00 50.32      W    O
ATOM  20643  OW  WAT W  47     -22.585   2.805   9.475  1.00 47.10      W    O
ATOM  20646  OW  WAT W  48     -23.313   1.604  20.977  1.00 43.04      W    O
ATOM  20649  OW  WAT W  49     -32.763  36.030  23.045  1.00 52.32      W    O
ATOM  20652  OW  WAT W  50     -47.114  12.452  32.975  1.00 49.61      W    O
ATOM  20655  OW  WAT W  51     -39.198 -12.448 -57.689  1.00 46.95      W    O
ATOM  20658  OW  WAT W  52     -35.660   3.155  10.626  1.00 44.00      W    O
ATOM  20661  OW  WAT W  53      19.851  12.608 -10.868  1.00 52.03      W    O
ATOM  20664  OW  WAT W  54     -21.186  11.027  29.892  1.00 53.09      W    O
ATOM  20667  OW  WAT W  55      22.199 -10.344 -39.699  1.00 48.04      W    O
ATOM  20670  OW  WAT W  56     -16.626 -17.979 -20.506  1.00 51.87      W    O
ATOM  20673  OW  WAT W  57     -53.691 -20.060 -77.553  1.00 39.79      W    O
ATOM  20676  OW  WAT W  58     -45.883  -0.267 -53.476  1.00 46.75      W    O
ATOM  20679  OW  WAT W  59     -53.421   0.456 -55.389  1.00 38.84      W    O
ATOM  20682  OW  WAT W  60      -7.552   6.378 -28.567  1.00 52.97      W    O
ATOM  20685  OW  WAT W  61       7.520 -13.478 -29.555  1.00 48.30      W    O
ATOM  20688  OW  WAT W  62     -25.789  -3.244 -57.626  1.00 49.42      W    O
ATOM  20691  OW  WAT W  63       4.831 -15.271 -27.469  1.00 42.72      W    O
ATOM  20694  OW  WAT W  64     -43.424   6.810  20.975  1.00 49.76      W    O
ATOM  20697  OW  WAT W  65      22.685   8.896 -39.495  1.00 44.21      W    O
ATOM  20700  OW  WAT W  66     -76.680  -2.683 -61.561  1.00 43.77      W    O
ATOM  20703  OW  WAT W  67      -4.983 -11.952 -18.184  1.00 52.25      W    O
ATOM  20706  OW  WAT W  68     -25.852  -0.017  27.207  1.00 39.78      W    O
ATOM  20709  OW  WAT W  69     -27.109  22.289 -11.700  1.00 50.77      W    O
ATOM  20712  OW  WAT W  70     -44.672   0.142 -82.184  1.00 37.71      W    O
ATOM  20715  OW  WAT W  71       3.536   8.356 -16.461  1.00 53.64      W    O
ATOM  20718  OW  WAT W  72     -51.995  14.726  30.299  1.00 55.20      W    O
ATOM  20721  OW  WAT W  73     -50.538 -31.362 -45.014  1.00 51.14      W    O
ATOM  20724  OW  WAT W  74     -40.068 -14.833 -23.935  1.00 48.95      W    O
ATOM  20727  OW  WAT W  75     -31.128 -16.292 -41.631  1.00 48.24      W    O
ATOM  20730  OW  WAT W  76     -28.610   5.991 -26.779  1.00 48.38      W    O
ATOM  20733  OW  WAT W  77     -47.633 -15.661 -47.480  1.00 41.96      W    O
ATOM  20736  OW  WAT W  78     -12.287   5.350   6.267  1.00 29.94      W    O
ATOM  20739  OW  WAT W  79       9.511 -15.420 -28.862  1.00 39.05      W    O
ATOM  20742  OW  WAT W  80     -12.205  -7.558 -33.715  1.00 46.15      W    O
ATOM  20745  OW  WAT W  81     -20.092  13.331  30.154  1.00 51.96      W    O
ATOM  20748  OW  WAT W  82      -7.643 -10.370  -9.140  1.00 54.79      W    O
END
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附錄1B

獼猴fD_Fab.txt

附錄1B：獼猴D因子:Fab之結構座標

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REMARK   3
REMARK   3 REFINEMENT.
REMARK   3   PROGRAM     : REFMAC 5.2.0019
REMARK   3   AUTHORS     : MURSHUDOV,VAGIN,DODSON
REMARK   3
REMARK   3    REFINEMENT TARGET : MAXIMUM LIKELIHOOD
REMARK   3
REMARK   3  DATA USED IN REFINEMENT.
REMARK   3   RESOLUTION RANGE HIGH (ANGSTROMS) :   2.10
REMARK   3   RESOLUTION RANGE LOW  (ANGSTROMS) :  20.00
REMARK   3   DATA CUTOFF            (SIGMA(F)) : NONE
REMARK   3   COMPLETENESS FOR RANGE        (%) :  91.51
REMARK   3   NUMBER OF REFLECTIONS             :  100140
REMARK   3
REMARK   3  FIT TO DATA USED IN REFINEMENT.
REMARK   3   CROSS-VALIDATION METHOD           : THROUGHOUT
REMARK   3   FREE R VALUE TEST SET SELECTION   : RANDOM
REMARK   3   R VALUE     (WORKING + TEST SET) : 0.21397
REMARK   3   R VALUE           (WORKING SET) :  0.21105
REMARK   3   FREE R VALUE                     :  0.26960
REMARK   3   FREE R VALUE TEST SET SIZE   (%) :  5.0
REMARK   3   FREE R VALUE TEST SET COUNT      :  5291
REMARK   3
REMARK   3  FIT IN THE HIGHEST RESOLUTION BIN.
REMARK   3   TOTAL NUMBER OF BINS USED           :      25
REMARK   3   BIN RESOLUTION RANGE HIGH           :   2.100
REMARK   3   BIN RESOLUTION RANGE LOW            :   2.143
REMARK   3   REFLECTION IN BIN     (WORKING SET) :    5661
REMARK   3   BIN COMPLETENESS (WORKING+TEST) (%) :   88.63
REMARK   3   BIN R VALUE           (WORKING SET) :   0.333
REMARK   3   BIN FREE R VALUE SET COUNT          :     295
REMARK   3   BIN FREE R VALUE                    :   0.404
REMARK   3
REMARK   3  NUMBER OF NON-HYDROGEN ATOMS USED IN REFINEMENT.
REMARK   3   ALL ATOMS                 :    10774
REMARK   3
REMARK   3  B VALUES.
REMARK   3   FROM WILSON PLOT           (A**2) : NULL
REMARK   3   MEAN B VALUE      (OVERALL, A**2) :  27.396
REMARK   3   OVERALL ANISOTROPIC B VALUE.
REMARK   3    B11 (A**2) :    -2.02
REMARK   3    B22 (A**2) :    -0.95
REMARK   3    B33 (A**2) :     1.58
REMARK   3    B12 (A**2) :     0.00
REMARK   3    B13 (A**2) :    -2.34
REMARK   3    B23 (A**2) :     0.00
REMARK   3
REMARK   3  ESTIMATED OVERALL COORDINATE ERROR.
REMARK   3   ESU BASED ON R VALUE                                (A):   0.202
REMARK   3   ESU BASED ON FREE R VALUE                           (A):   0.195
REMARK   3   ESU BASED ON MAXIMUM LIKELIHOOD                     (A):   0.177
REMARK   3   ESU FOR B VALUES BASED ON MAXIMUM LIKELIHOOD (A**2):  13.178
REMARK   3
REMARK   3 CORRELATION COEFFICIENTS.
REMARK   3   CORRELATION COEFFICIENT FO-FC      :   0.955
REMARK   3   CORRELATION COEFFICIENT FO-FC FREE :   0.926
REMARK   3
REMARK   3  RMS DEVIATIONS FROM IDEAL VALUES        COUNT    RMS    WEIGHT
REMARK   3   BOND LENGTHS REFINED ATOMS        (A): 10201 ; 0.010 ; 0.022
REMARK   3   BOND LENGTHS OTHERS               (A):  6856 ; 0.002 ; 0.020
REMARK   3   BOND ANGLES REFINED ATOMS   (DEGREES): 13877 ; 1.348 ; 1.964
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REMARK   3   BOND ANGLES OTHERS          (DEGREES): 16745 ; 0.864 ; 3.004
REMARK   3   TORSION ANGLES, PERIOD 1    (DEGREES):  1303 ; 7.428 ; 5.000
REMARK   3   TORSION ANGLES, PERIOD 2    (DEGREES):   406 ;35.270 ;24.138
REMARK   3   TORSION ANGLES, PERIOD 3    (DEGREES):  1632 ;15.851 ;15.000
REMARK   3   TORSION ANGLES, PERIOD 4    (DEGREES):    58 ;16.188 ;15.000
REMARK   3   CHIRAL-CENTER RESTRAINTS       (A**3):  1566 ; 0.076 ; 0.200
REMARK   3   GENERAL PLANES REFINED ATOMS      (A): 11335 ; 0.004 ; 0.020
REMARK   3   GENERAL PLANES OTHERS             (A):  1941 ; 0.001 ; 0.020
REMARK   3   NON-BONDED CONTACTS REFINED ATOMS (A):  1766 ; 0.183 ; 0.200
REMARK   3   NON-BONDED CONTACTS OTHERS        (A):  7046 ; 0.196 ; 0.200
REMARK   3   NON-BONDED TORSION REFINED ATOMS  (A):  4699 ; 0.171 ; 0.200
REMARK   3   NON-BONDED TORSION OTHERS         (A):  5649 ; 0.085 ; 0.200
REMARK   3   H-BOND (X...Y) REFINED ATOMS      (A):   645 ; 0.189 ; 0.200
REMARK   3   POTENTIAL METAL-ION REFINED ATOMS (A):     5 ; 0.096 ; 0.200
REMARK   3   SYMMETRY VDW REFINED ATOMS        (A):    26 ; 0.238 ; 0.200
REMARK   3   SYMMETRY VDW OTHERS               (A):    43 ; 0.165 ; 0.200
REMARK   3   SYMMETRY H-BOND REFINED ATOMS     (A):    22 ; 0.225 ; 0.200
REMARK   3   SYMMETRY METAL-ION REFINED ATOMS  (A):     2 ; 0.347 ; 0.200
REMARK   3
REMARK   3  ISOTROPIC THERMAL FACTOR RESTRAINTS.      COUNT   RMS     WEIGHT
REMARK   3   MAIN-CHAIN BOND REFINED ATOMS  (A**2):  8346 ; 3.108 ; 2.500
REMARK   3   MAIN-CHAIN BOND OTHER ATOMS    (A**2):  2652 ; 0.650 ; 2.500
REMARK   3   MAIN-CHAIN ANGLE REFINED ATOMS (A**2): 10525 ; 3.958 ; 5.000
REMARK   3   SIDE-CHAIN BOND REFINED ATOMS  (A**2):  4285 ; 2.990 ; 2.500
REMARK   3   SIDE-CHAIN ANGLE REFINED ATOMS (A**2):  3352 ; 4.086 ; 5.000
REMARK   3
REMARK   3  NCS RESTRAINTS STATISTICS
REMARK   3   NUMBER OF DIFFERENT NCS GROUPS :   3
REMARK   3
REMARK   3  NCS GROUP NUMBER                 :   1
REMARK   3     CHAIN NAMES                   : A B
REMARK   3     NUMBER OF COMPONENTS NCS GROUP :    1
REMARK   3       COMPONENT C  SSSEQI  TO  C   SSSEQI   CODE
REMARK   3           1     A     16       A     243      6
REMARK   3           1     B     16       B     243      6
REMARK   3                   GROUP CHAIN          COUNT   RMS     WEIGHT
REMARK   3   LOOSE POSITIONAL   1    A    (A):   2939 ;  0.53 ;  5.00
REMARK   3   LOOSE THERMAL      1    A (A**2):   2939 ;  4.08 ; 10.00
REMARK   3
REMARK   3  NCS GROUP NUMBER                 :   2
REMARK   3     CHAIN NAMES                   : L D
REMARK   3     NUMBER OF COMPONENTS NCS GROUP :    2
REMARK   3       COMPONENT C  SSSEQI  TO  C   SSSEQI   CODE
REMARK   3           1     L      1       L     109      6
REMARK   3           1     D      1       D     109      6
REMARK   3           2     L    110       L     214      6
REMARK   3           2     D    110       D     214      6
REMARK   3                   GROUP CHAIN          COUNT   RMS     WEIGHT
REMARK   3   LOOSE POSITIONAL   2    L    (A):   2731 ;  0.44 ;  5.00
REMARK   3   LOOSE THERMAL      2    L (A**2):   2731 ;  2.30 ; 10.00
REMARK   3
REMARK   3  NCS GROUP NUMBER                 :   3
REMARK   3     CHAIN NAMES                   : H E
REMARK   3     NUMBER OF COMPONENTS NCS GROUP :    1
REMARK   3       COMPONENT C  SSSEQI  TO  C   SSSEQI   CODE
REMARK   3           1     H      1       H     120      6
REMARK   3           1     E      1       E     120      6
REMARK   3                   GROUP CHAIN          COUNT   RMS     WEIGHT
REMARK   3   LOOSE POSITIONAL   3    H    (A):   1473 ;  0.29 ;  5.00
REMARK   3   LOOSE THERMAL      3    H (A**2):   1473 ;  2.35 ; 10.00
REMARK   3
REMARK   3
REMARK   3  TLS DETAILS
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REMARK   3   NUMBER OF TLS GROUPS  :    1
REMARK   3   ATOM RECORD CONTAINS RESIDUAL B FACTORS ONLY
REMARK   3
REMARK   3   TLS GROUP :     1
REMARK   3    NUMBER OF COMPONENTS GROUP :   10
REMARK   3    COMPONENTS        C SSSEQI   TO  C SSSEQI
REMARK   3    RESIDUE RANGE :   A    16        A   243
REMARK   3    RESIDUE RANGE :   L     1        L   109
REMARK   3    RESIDUE RANGE :   L   110        L   214
REMARK   3    RESIDUE RANGE :   H     1        H   120
REMARK   3    RESIDUE RANGE :   H   121        H   224
REMARK   3    RESIDUE RANGE :   B    16        B   243
REMARK   3    RESIDUE RANGE :   D     1        D   109
REMARK   3    RESIDUE RANGE :   D   110        D   214
REMARK   3    RESIDUE RANGE :   E     1        E   120
REMARK   3    RESIDUE RANGE :   E   121        E   224
REMARK   3    ORIGIN FOR THE GROUP (A):  26.7721 -32.1960 -51.5126
REMARK   3    T TENSOR
REMARK   3      T11:  -0.1168 T22:  -0.1381
REMARK   3      T33:  -0.1325 T12:   0.0139
REMARK   3      T13:  -0.0040 T23:  -0.0132
REMARK   3    L TENSOR
REMARK   3      L11:   0.5831 L22:   0.5482
REMARK   3      L33:   0.4061 L12:  -0.2108
REMARK   3      L13:   0.1924 L23:  -0.0152
REMARK   3    S TENSOR
REMARK   3      S11:  -0.0559 S12:  -0.1498 S13:   0.0388
REMARK   3      S21:   0.1239 S22:   0.0611 S23:  -0.0323
REMARK   3      S31:   0.0494 S32:  -0.0124 S33:  -0.0052
REMARK   3
REMARK   3
REMARK   3  BULK SOLVENT MODELLING.
REMARK   3   METHOD USED :  MASK
REMARK   3   PARAMETERS FOR MASK CALCULATION
REMARK   3   VDW PROBE RADIUS   :   1.40
REMARK   3   ION PROBE RADIUS   :   0.80
REMARK   3   SHRINKAGE RADIUS   :   0.80
REMARK   3
REMARK   3  OTHER REFINEMENT REMARKS:
REMARK   3  HYDROGENS HAVE BEEN ADDED IN THE RIDING POSITIONS
REMARK   3
SSBOND   1 CYS A   41    CYS A   57
SSBOND   2 CYS A  138    CYS A  204
SSBOND   3 CYS A  169    CYS A  185
SSBOND   4 CYS A  194    CYS A  219
SSBOND   5 CYS L   23    CYS L   88
SSBOND   6 CYS L  134    CYS L  194
SSBOND   7 CYS H   22    CYS H   96
SSBOND   8 CYS H  148    CYS H  204
SSBOND   9 CYS B   41    CYS B   57
SSBOND  10 CYS B  138    CYS B  204
SSBOND  11 CYS B  169    CYS B  185
SSBOND  12 CYS B  194    CYS B  219
SSBOND  13 CYS D   23    CYS D   88
SSBOND  14 CYS D  134    CYS D  194
SSBOND  15 CYS E   22    CYS E   96
SSBOND  16 CYS E  148    CYS E  204
CISPEP   1 SER L    7    PRO L    8          0.00
CISPEP   2 LEU L   94    PRO L   95          0.00
CISPEP   3 TYR L  140    PRO L  141          0.00
CISPEP   4 GLU H   99    GLY H  100          0.00
CISPEP   5 PHE H  154    PRO H  155          0.00
CISPEP   6 GLU H  156    PRO H  157          0.00
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獼猴fD_Fab.txt

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CISPEP   7 GLU E   99    GLY E  100                          0.00
LINK               SER E 136                 GLY E 142                 gap
CISPEP   8 PHE E  154    PRO E  155                          0.00
CISPEP   9 GLU E  156    PRO E  157                          0.00
LINK         C   GLY H 101                 N   VAL H 108                 TRANS
LINK         C   GLY E 101                 N   VAL E 108                 TRANS
CISPEP  10 SER D    7    PRO D    8                          0.00
CISPEP  11 LEU D   94    PRO D   95                          0.00
CISPEP  12 TYR D  140    PRO D  141                          0.00
CRYST1  182.205   80.673  142.575  90.00 107.27  90.00 C 1 2 1
SCALE1      0.005488  0.000000  0.001706        0.00000
SCALE2      0.000000  0.012396  0.000000        0.00000
SCALE3      0.000000  0.000000  0.007345        0.00000
ATOM      1  N   ILE A  16     -12.477 -20.126 -72.065  1.00 26.11      A    N
ATOM      2  CA  ILE A  16     -13.046 -20.518 -70.743  1.00 23.49      A    C
ATOM      4  CB  ILE A  16     -14.540 -20.163 -70.650  1.00 17.19      A    C
ATOM      6  CG1 ILE A  16     -14.756 -18.660 -70.832  1.00 16.04      A    C
ATOM      9  CD1 ILE A  16     -14.257 -17.844 -69.687  1.00 12.95      A    C
ATOM     13  CG2 ILE A  16     -15.131 -20.590 -69.291  1.00 18.24      A    C
ATOM     17  C   ILE A  16     -12.869 -22.019 -70.517  1.00 25.77      A    C
ATOM     18  O   ILE A  16     -13.363 -22.825 -71.302  1.00 30.65      A    O
ATOM     22  N   LEU A  17     -12.192 -22.388 -69.432  1.00 26.78      A    N
ATOM     23  CA  LEU A  17     -12.044 -23.792 -69.057  1.00 26.56      A    C
ATOM     25  CB  LEU A  17     -10.650 -24.075 -68.502  1.00 29.19      A    C
ATOM     28  CG  LEU A  17     -10.218 -25.538 -68.433  1.00 29.19      A    C
ATOM     30  CD1 LEU A  17      -9.804 -26.012 -69.827  1.00 30.15      A    C
ATOM     34  CD2 LEU A  17      -9.083 -25.733 -67.461  1.00 31.64      A    C
ATOM     38  C   LEU A  17     -13.076 -24.125 -68.002  1.00 25.50      A    C
ATOM     39  O   LEU A  17     -13.225 -23.388 -67.052  1.00 24.96      A    O
ATOM     41  N   GLY A  18     -13.779 -25.245 -68.171  1.00 27.34      A    N
ATOM     42  CA  GLY A  18     -14.694 -25.745 -67.150  1.00 26.28      A    C
ATOM     45  C   GLY A  18     -16.056 -25.127 -67.224  1.00 25.74      A    C
ATOM     46  O   GLY A  18     -16.859 -25.261 -66.294  1.00 27.40      A    O
ATOM     48  N   GLY A  19     -16.327 -24.459 -68.340  1.00 24.98      A    N
ATOM     49  CA  GLY A  19     -17.570 -23.750 -68.525  1.00 30.62      A    C
ATOM     52  C   GLY A  19     -18.585 -24.544 -69.326  1.00 34.86      A    C
ATOM     53  O   GLY A  19     -18.456 -25.763 -69.508  1.00 37.52      A    O
ATOM     55  N   ARG A  20     -19.609 -23.831 -69.780  1.00 33.69      A    N
ATOM     56  CA  ARG A  20     -20.627 -24.359 -70.680  1.00 31.69      A    C
ATOM     58  CB  ARG A  20     -21.893 -24.808 -69.914  1.00 35.24      A    C
ATOM     61  CG  ARG A  20     -22.318 -23.858 -68.817  1.00 40.28      A    C
ATOM     64  CD  ARG A  20     -23.727 -24.109 -68.232  1.00 41.93      A    C
ATOM     67  NE  ARG A  20     -23.986 -23.173 -67.119  1.00 44.05      A    N
ATOM     69  CZ  ARG A  20     -24.824 -22.126 -67.135  1.00 45.78      A    C
ATOM     70  NH1 ARG A  20     -25.567 -21.834 -68.207  1.00 48.14      A    N
ATOM     73  NH2 ARG A  20     -24.921 -21.352 -66.055  1.00 41.86      A    N
ATOM     76  C   ARG A  20     -20.942 -23.249 -71.674  1.00 26.68      A    C
ATOM     77  O   ARG A  20     -20.586 -22.072 -71.463  1.00 17.73      A    O
ATOM     79  N   GLU A  21     -21.597 -23.617 -72.764  1.00 26.61      A    N
ATOM     80  CA  GLU A  21     -22.067 -22.631 -73.722  1.00 27.09      A    C
ATOM     82  CB  GLU A  21     -22.765 -23.315 -74.889  1.00 28.01      A    C
ATOM     85  CG  GLU A  21     -23.000 -22.409 -76.067  1.00 28.48      A    C
ATOM     88  CD  GLU A  21     -23.779 -23.093 -77.146  1.00 29.03      A    C
ATOM     89  OE1 GLU A  21     -23.656 -24.329 -77.269  1.00 32.30      A    O
ATOM     90  OE2 GLU A  21     -24.515 -22.402 -77.867  1.00 26.79      A    O
ATOM     91  C   GLU A  21     -23.016 -21.614 -73.076  1.00 24.87      A    C
ATOM     92  O   GLU A  21     -23.990 -21.972 -72.416  1.00 24.39      A    O
ATOM     94  N   ALA A  22     -22.708 -20.340 -73.284  1.00 25.10      A    N
ATOM     95  CA  ALA A  22     -23.551 -19.253 -72.844  1.00 23.99      A    C
ATOM     97  CB  ALA A  22     -22.834 -17.920 -73.087  1.00 16.28      A    C
ATOM    101  C   ALA A  22     -24.882 -19.306 -73.604  1.00 24.75      A    C
ATOM    102  O   ALA A  22     -24.941 -19.783 -74.733  1.00 22.68      A    O
ATOM    104  N   GLU A  23     -25.962 -18.851 -72.976  1.00 27.04      A    N
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ATOM	105	CA	GLU	A	23	-27.212	-18.651	-73.694	1.00	27.93	A	C
ATOM	107	CB	GLU	A	23	-28.322	-18.212	-72.749	1.00	32.84	A	C
ATOM	110	CG	GLU	A	23	-28.932	-19.311	-71.901	1.00	37.53	A	C
ATOM	113	CD	GLU	A	23	-29.887	-18.734	-70.868	1.00	42.31	A	C
ATOM	114	OE1	GLU	A	23	-29.390	-18.099	-69.908	1.00	48.10	A	O
ATOM	115	OE2	GLU	A	23	-31.128	-18.884	-71.027	1.00	48.38	A	O
ATOM	116	C	GLU	A	23	-27.000	-17.576	-74.754	1.00	20.26	A	C
ATOM	117	O	GLU	A	23	-26.403	-16.549	-74.480	1.00	13.10	A	O
ATOM	119	N	ALA	A	24	-27.500	-17.805	-75.963	1.00	20.83	A	N
ATOM	120	CA	ALA	A	24	-27.210	-16.906	-77.081	1.00	20.13	A	C
ATOM	122	CB	ALA	A	24	-27.834	-17.438	-78.376	1.00	17.35	A	C
ATOM	126	C	ALA	A	24	-27.720	-15.506	-76.769	1.00	21.16	A	C
ATOM	127	O	ALA	A	24	-28.908	-15.311	-76.497	1.00	25.09	A	O
ATOM	129	N	HIS	A	25	-26.808	-14.544	-76.790	1.00	19.39	A	N
ATOM	130	CA	HIS	A	25	-27.113	-13.117	-76.625	1.00	17.07	A	C
ATOM	132	CB	HIS	A	25	-28.096	-12.625	-77.691	1.00	17.98	A	C
ATOM	135	CG	HIS	A	25	-27.824	-13.149	-79.066	1.00	14.73	A	C
ATOM	136	ND1	HIS	A	25	-26.746	-12.740	-79.819	1.00	15.69	A	N
ATOM	138	CE1	HIS	A	25	-26.758	-13.373	-80.978	1.00	15.54	A	C
ATOM	140	NE2	HIS	A	25	-27.796	-14.184	-81.001	1.00	11.60	A	N
ATOM	142	CD2	HIS	A	25	-28.476	-14.069	-79.812	1.00	15.49	A	C
ATOM	144	C	HIS	A	25	-27.613	-12.718	-75.221	1.00	16.72	A	C
ATOM	145	O	HIS	A	25	-28.197	-11.668	-75.070	1.00	16.69	A	O
ATOM	147	N	ALA	A	26	-27.321	-13.539	-74.211	1.00	21.13	A	N
ATOM	148	CA	ALA	A	26	-27.677	-13.281	-72.811	1.00	19.73	A	C
ATOM	150	CB	ALA	A	26	-27.602	-14.570	-72.011	1.00	19.47	A	C
ATOM	154	C	ALA	A	26	-26.775	-12.252	-72.168	1.00	21.51	A	C
ATOM	155	O	ALA	A	26	-27.114	-11.700	-71.125	1.00	26.85	A	O
ATOM	157	N	ARG	A	27	-25.619	-12.034	-72.790	1.00	24.12	A	N
ATOM	158	CA	ARG	A	27	-24.625	-11.068	-72.379	1.00	23.20	A	C
ATOM	160	CB	ARG	A	27	-23.323	-11.791	-72.026	1.00	17.93	A	C
ATOM	163	CG	ARG	A	27	-23.484	-12.655	-70.806	1.00	18.21	A	C
ATOM	166	CD	ARG	A	27	-22.439	-13.693	-70.627	1.00	20.29	A	C
ATOM	169	NE	ARG	A	27	-22.757	-14.485	-69.440	1.00	20.11	A	N
ATOM	171	CZ	ARG	A	27	-23.645	-15.475	-69.409	1.00	17.77	A	C
ATOM	172	NH1	ARG	A	27	-24.301	-15.837	-70.503	1.00	16.54	A	N
ATOM	175	NH2	ARG	A	27	-23.866	-16.120	-68.280	1.00	17.12	A	N
ATOM	178	C	ARG	A	27	-24.389	-10.103	-73.536	1.00	23.34	A	C
ATOM	179	O	ARG	A	27	-23.391	-10.230	-74.242	1.00	21.56	A	O
ATOM	181	N	PRO	A	28	-25.312	-9.141	-73.730	1.00	19.52	A	N
ATOM	182	CA	PRO	A	28	-25.280	-8.288	-74.920	1.00	22.85	A	C
ATOM	184	CB	PRO	A	28	-26.629	-7.558	-74.875	1.00	19.57	A	C
ATOM	187	CG	PRO	A	28	-27.097	-7.652	-73.492	1.00	22.07	A	C
ATOM	190	CD	PRO	A	28	-26.445	-8.815	-72.842	1.00	22.42	A	C
ATOM	193	C	PRO	A	28	-24.112	-7.303	-74.965	1.00	22.68	A	C
ATOM	194	O	PRO	A	28	-23.897	-6.647	-75.983	1.00	20.78	A	O
ATOM	195	N	TYR	A	29	-23.370	-7.221	-73.868	1.00	19.66	A	N
ATOM	196	CA	TYR	A	29	-22.201	-6.365	-73.751	1.00	22.39	A	C
ATOM	198	CB	TYR	A	29	-22.025	-5.947	-72.287	1.00	23.79	A	C
ATOM	201	CG	TYR	A	29	-22.194	-7.088	-71.299	1.00	23.27	A	C
ATOM	202	CD1	TYR	A	29	-21.163	-7.999	-71.077	1.00	20.11	A	C
ATOM	204	CE1	TYR	A	29	-21.311	-9.030	-70.192	1.00	23.57	A	C
ATOM	206	CZ	TYR	A	29	-22.503	-9.171	-69.495	1.00	22.70	A	C
ATOM	207	OH	TYR	A	29	-22.645	-10.213	-68.609	1.00	25.66	A	O
ATOM	209	CE2	TYR	A	29	-23.555	-8.291	-69.696	1.00	25.48	A	C
ATOM	211	CD2	TYR	A	29	-23.394	-7.250	-70.591	1.00	26.17	A	C
ATOM	213	C	TYR	A	29	-20.938	-7.057	-74.240	1.00	20.10	A	C
ATOM	214	O	TYR	A	29	-19.912	-6.422	-74.407	1.00	20.87	A	O
ATOM	216	N	MET	A	30	-21.026	-8.362	-74.466	1.00	24.01	A	N
ATOM	217	CA	MET	A	30	-19.895	-9.168	-74.897	1.00	25.14	A	C
ATOM	219	CB	MET	A	30	-20.299	-10.638	-74.841	1.00	24.60	A	C
ATOM	222	CG	MET	A	30	-19.139	-11.562	-74.889	1.00	25.03	A	C
ATOM	225	SD	MET	A	30	-18.191	-11.497	-73.370	1.00	26.66	A	S

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ATOM	226	CE	MET	A	30	-16.571	-11.678	-74.060	1.00	11.66	A	C
ATOM	230	C	MET	A	30	-19.398	-8.838	-76.310	1.00	26.55	A	C
ATOM	231	O	MET	A	30	-20.170	-8.872	-77.279	1.00	26.45	A	O
ATOM	233	N	ALA	A	31	-18.101	-8.548	-76.420	1.00	27.53	A	N
ATOM	234	CA	ALA	A	31	-17.483	-8.225	-77.690	1.00	27.28	A	C
ATOM	236	CB	ALA	A	31	-17.032	-6.756	-77.707	1.00	28.79	A	C
ATOM	240	C	ALA	A	31	-16.310	-9.161	-77.999	1.00	27.46	A	C
ATOM	241	O	ALA	A	31	-15.572	-9.598	-77.118	1.00	26.31	A	O
ATOM	243	N	SER	A	32	-16.174	-9.494	-79.272	1.00	25.49	A	N
ATOM	244	CA	SER	A	32	-15.004	-10.196	-79.762	1.00	28.86	A	C
ATOM	246	CB	SER	A	32	-15.434	-11.231	-80.809	1.00	32.20	A	C
ATOM	249	OG	SER	A	32	-14.335	-11.881	-81.401	1.00	34.63	A	O
ATOM	251	C	SER	A	32	-14.062	-9.170	-80.365	1.00	28.81	A	C
ATOM	252	O	SER	A	32	-14.405	-8.523	-81.349	1.00	22.90	A	O
ATOM	254	N	VAL	A	33	-12.893	-8.989	-79.760	1.00	32.95	A	N
ATOM	255	CA	VAL	A	33	-11.852	-8.149	-80.362	1.00	33.64	A	C
ATOM	257	CB	VAL	A	33	-10.922	-7.527	-79.297	1.00	30.76	A	C
ATOM	259	CG1	VAL	A	33	-9.813	-6.731	-79.945	1.00	30.92	A	C
ATOM	263	CG2	VAL	A	33	-11.723	-6.640	-78.353	1.00	25.56	A	C
ATOM	267	C	VAL	A	33	-11.076	-9.012	-81.354	1.00	33.39	A	C
ATOM	268	O	VAL	A	33	-10.466	-10.011	-80.977	1.00	25.22	A	O
ATOM	270	N	GLN	A	34	-11.144	-8.645	-82.633	1.00	38.86	A	N
ATOM	271	CA	GLN	A	34	-10.563	-9.453	-83.705	1.00	39.87	A	C
ATOM	273	CB	GLN	A	34	-11.635	-9.784	-84.746	1.00	40.71	A	C
ATOM	276	CG	GLN	A	34	-12.933	-10.328	-84.136	1.00	40.06	A	C
ATOM	279	CD	GLN	A	34	-13.737	-11.166	-85.096	1.00	37.65	A	C
ATOM	280	OE1	GLN	A	34	-13.861	-10.830	-86.269	1.00	42.71	A	O
ATOM	281	NE2	GLN	A	34	-14.296	-12.264	-84.604	1.00	33.59	A	N
ATOM	284	C	GLN	A	34	-9.383	-8.741	-84.370	1.00	42.61	A	C
ATOM	285	O	GLN	A	34	-9.341	-7.505	-84.423	1.00	40.24	A	O
ATOM	287	N	VAL	A	35	-8.421	-9.529	-84.845	1.00	42.47	A	N
ATOM	288	CA	VAL	A	35	-7.338	-9.024	-85.694	1.00	45.56	A	C
ATOM	290	CB	VAL	A	35	-5.980	-9.057	-84.982	1.00	46.98	A	C
ATOM	292	CG1	VAL	A	35	-5.613	-10.482	-84.575	1.00	48.21	A	C
ATOM	296	CG2	VAL	A	35	-4.894	-8.437	-85.876	1.00	44.49	A	C
ATOM	300	C	VAL	A	35	-7.268	-9.850	-86.982	1.00	47.90	A	C
ATOM	301	O	VAL	A	35	-7.112	-11.076	-86.928	1.00	48.26	A	O
ATOM	303	N	ASN	A	36	-7.396	-9.176	-88.127	1.00	48.17	A	N
ATOM	304	CA	ASN	A	36	-7.474	-9.835	-89.445	1.00	49.82	A	C
ATOM	306	CB	ASN	A	36	-6.161	-10.583	-89.786	1.00	53.04	A	C
ATOM	309	CG	ASN	A	36	-4.923	-9.688	-89.702	1.00	56.29	A	C
ATOM	310	OD1	ASN	A	36	-4.959	-8.531	-90.113	1.00	58.52	A	O
ATOM	311	ND2	ASN	A	36	-3.823	-10.226	-89.164	1.00	56.41	A	N
ATOM	314	C	ASN	A	36	-8.683	-10.790	-89.559	1.00	51.64	A	C
ATOM	315	O	ASN	A	36	-8.595	-11.852	-90.189	1.00	54.05	A	O
ATOM	317	N	GLY	A	37	-9.803	-10.414	-88.939	1.00	48.62	A	N
ATOM	318	CA	GLY	A	37	-11.016	-11.234	-88.963	1.00	48.26	A	C
ATOM	321	C	GLY	A	37	-10.999	-12.526	-88.150	1.00	49.20	A	C
ATOM	322	O	GLY	A	37	-11.911	-13.348	-88.283	1.00	49.81	A	O
ATOM	324	N	GLU	A	38	-9.971	-12.712	-87.319	1.00	48.08	A	N
ATOM	325	CA	GLU	A	38	-9.888	-13.845	-86.386	1.00	48.05	A	C
ATOM	327	CB	GLU	A	38	-8.557	-14.599	-86.540	1.00	53.92	A	C
ATOM	330	CG	GLU	A	38	-8.082	-14.830	-87.985	1.00	61.22	A	C
ATOM	333	CD	GLU	A	38	-8.501	-16.174	-88.566	1.00	65.96	A	C
ATOM	334	OE1	GLU	A	38	-8.115	-17.219	-87.996	1.00	68.40	A	O
ATOM	335	OE2	GLU	A	38	-9.195	-16.181	-89.610	1.00	69.01	A	O
ATOM	336	C	GLU	A	38	-9.996	-13.297	-84.955	1.00	44.28	A	C
ATOM	337	O	GLU	A	38	-9.437	-12.243	-84.655	1.00	37.93	A	O
ATOM	339	N	HIS	A	39	-10.693	-14.028	-84.079	1.00	42.52	A	N
ATOM	340	CA	HIS	A	39	-10.841	-13.645	-82.670	1.00	39.36	A	C
ATOM	342	CB	HIS	A	39	-11.795	-14.598	-81.938	1.00	38.53	A	C
ATOM	345	CG	HIS	A	39	-11.840	-14.375	-80.457	1.00	36.59	A	C
ATOM	346	ND1	HIS	A	39	-12.725	-13.504	-79.863	1.00	33.32	A	N

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ATOM    348  CE1 HIS A  39     -12.530 -13.506 -78.556  1.00 33.53           A    C
ATOM    350  NE2 HIS A  39     -11.523 -14.314 -78.284  1.00 30.08           A    N
ATOM    352  CD2 HIS A  39     -11.079 -14.877 -79.455  1.00 34.04           A    C
ATOM    354  C   HIS A  39      -9.509 -13.623 -81.928  1.00 34.93           A    C
ATOM    355  O   HIS A  39      -8.760 -14.587 -81.971  1.00 32.86           A    O
ATOM    357  N   LEU A  40      -9.243 -12.522 -81.222  1.00 34.95           A    N
ATOM    358  CA  LEU A  40      -8.037 -12.372 -80.411  1.00 34.86           A    C
ATOM    360  CB  LEU A  40      -7.268 -11.123 -80.847  1.00 36.35           A    C
ATOM    363  CG  LEU A  40      -5.880 -10.907 -80.244  1.00 36.45           A    C
ATOM    365  CD1 LEU A  40      -4.901 -11.960 -80.720  1.00 38.29           A    C
ATOM    369  CD2 LEU A  40      -5.389  -9.500 -80.579  1.00 36.67           A    C
ATOM    373  C   LEU A  40      -8.362 -12.287 -78.914  1.00 32.92           A    C
ATOM    374  O   LEU A  40      -7.854 -13.063 -78.127  1.00 34.56           A    O
ATOM    376  N   CYS A  41      -9.220 -11.346 -78.536  1.00 31.33           A    N
ATOM    377  CA  CYS A  41      -9.496 -11.057 -77.132  1.00 29.57           A    C
ATOM    379  CB  CYS A  41      -8.747  -9.785 -76.708  1.00 34.23           A    C
ATOM    382  SG  CYS A  41      -6.979 -10.034 -76.272  1.00 42.24           A    S
ATOM    384  C   CYS A  41     -10.983 -10.840 -76.923  1.00 30.66           A    C
ATOM    385  O   CYS A  41     -11.738 -10.652 -77.871  1.00 29.93           A    O
ATOM    387  N   GLY A  42     -11.390 -10.858 -75.665  1.00 28.56           A    N
ATOM    388  CA  GLY A  42     -12.696 -10.425 -75.284  1.00 27.04           A    C
ATOM    391  C   GLY A  42     -12.698  -8.924 -75.121  1.00 27.35           A    C
ATOM    392  O   GLY A  42     -11.648  -8.288 -75.024  1.00 27.10           A    O
ATOM    394  N   GLY A  43     -13.903  -8.375 -75.099  1.00 23.78           A    N
ATOM    395  CA  GLY A  43     -14.143  -6.967 -74.839  1.00 23.82           A    C
ATOM    398  C   GLY A  43     -15.529  -6.812 -74.250  1.00 23.52           A    C
ATOM    399  O   GLY A  43     -16.335  -7.748 -74.270  1.00 23.58           A    O
ATOM    401  N   VAL A  44     -15.805  -5.627 -73.725  1.00 25.38           A    N
ATOM    402  CA  VAL A  44     -17.076  -5.346 -73.084  1.00 26.23           A    C
ATOM    404  CB  VAL A  44     -16.995  -5.518 -71.536  1.00 26.22           A    C
ATOM    406  CG1 VAL A  44     -15.649  -5.085 -71.014  1.00 28.01           A    C
ATOM    410  CG2 VAL A  44     -18.118  -4.788 -70.837  1.00 25.18           A    C
ATOM    414  C   VAL A  44     -17.525  -3.952 -73.477  1.00 22.57           A    C
ATOM    415  O   VAL A  44     -16.788  -2.997 -73.308  1.00 28.52           A    O
ATOM    417  N   LEU A  45     -18.724  -3.863 -74.046  1.00 25.78           A    N
ATOM    418  CA  LEU A  45     -19.339  -2.579 -74.397  1.00 25.99           A    C
ATOM    420  CB  LEU A  45     -20.584  -2.772 -75.271  1.00 22.25           A    C
ATOM    423  CG  LEU A  45     -21.000  -1.599 -76.172  1.00 23.74           A    C
ATOM    425  CD1 LEU A  45     -19.997  -1.375 -77.298  1.00 21.58           A    C
ATOM    429  CD2 LEU A  45     -22.407  -1.807 -76.751  1.00 21.88           A    C
ATOM    433  C   LEU A  45     -19.702  -1.885 -73.103  1.00 27.07           A    C
ATOM    434  O   LEU A  45     -20.500  -2.394 -72.322  1.00 30.27           A    O
ATOM    436  N   VAL A  46     -19.054  -0.749 -72.871  1.00 29.71           A    N
ATOM    437  CA  VAL A  46     -19.270   0.078 -71.694  1.00 28.45           A    C
ATOM    439  CB  VAL A  46     -17.949   0.265 -70.885  1.00 25.81           A    C
ATOM    441  CG1 VAL A  46     -17.675  -0.969 -70.054  1.00 22.60           A    C
ATOM    445  CG2 VAL A  46     -16.779   0.581 -71.798  1.00 20.30           A    C
ATOM    449  C   VAL A  46     -19.893   1.430 -72.084  1.00 31.31           A    C
ATOM    450  O   VAL A  46     -20.444   2.145 -71.236  1.00 34.22           A    O
ATOM    452  N   ALA A  47     -19.820   1.767 -73.370  1.00 26.86           A    N
ATOM    453  CA  ALA A  47     -20.559   2.899 -73.921  1.00 30.42           A    C
ATOM    455  CB  ALA A  47     -19.698   4.166 -73.907  1.00 29.60           A    C
ATOM    459  C   ALA A  47     -20.970   2.546 -75.342  1.00 29.23           A    C
ATOM    460  O   ALA A  47     -20.506   1.558 -75.900  1.00 30.51           A    O
ATOM    462  N   GLU A  48     -21.805   3.374 -75.941  1.00 31.78           A    N
ATOM    463  CA  GLU A  48     -22.321   3.095 -77.274  1.00 34.71           A    C
ATOM    465  CB  GLU A  48     -23.372   4.127 -77.661  1.00 36.90           A    C
ATOM    468  CG  GLU A  48     -24.487   4.255 -76.641  1.00 39.94           A    C
ATOM    471  CD  GLU A  48     -25.745   4.857 -77.212  1.00 41.92           A    C
ATOM    472  OE1 GLU A  48     -26.812   4.679 -76.579  1.00 47.41           A    O
ATOM    473  OE2 GLU A  48     -25.675   5.497 -78.290  1.00 43.89           A    O
ATOM    474  C   GLU A  48     -21.241   3.019 -78.355  1.00 32.33           A    C
ATOM    475  O   GLU A  48     -21.418   2.299 -79.328  1.00 33.60           A    O
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ATOM    477  N   GLN A  49     -20.142   3.758 -78.186  1.00 35.25      A    N
ATOM    478  CA  GLN A  49     -19.029   3.772 -79.153  1.00 36.15      A    C
ATOM    480  CB  GLN A  49     -18.803   5.208 -79.666  1.00 39.44      A    C
ATOM    483  CG  GLN A  49     -17.890   5.310 -80.903  1.00 39.74      A    C
ATOM    486  CD  GLN A  49     -18.178   6.526 -81.783  1.00 40.76      A    C
ATOM    487  OE1 GLN A  49     -18.921   7.435 -81.401  1.00 46.06      A    O
ATOM    488  NE2 GLN A  49     -17.585   6.541 -82.971  1.00 40.57      A    N
ATOM    491  C   GLN A  49     -17.719   3.220 -78.573  1.00 36.42      A    C
ATOM    492  O   GLN A  49     -16.665   3.298 -79.220  1.00 35.80      A    O
ATOM    494  N   TRP A  50     -17.782   2.642 -77.371  1.00 32.55      A    N
ATOM    495  CA  TRP A  50     -16.577   2.258 -76.645  1.00 31.91      A    C
ATOM    497  CB  TRP A  50     -16.313   3.260 -75.513  1.00 35.09      A    C
ATOM    500  CG  TRP A  50     -15.855   4.611 -76.007  1.00 33.91      A    C
ATOM    501  CD1 TRP A  50     -16.624   5.711 -76.197  1.00 35.87      A    C
ATOM    503  NE1 TRP A  50     -15.858   6.754 -76.659  1.00 35.92      A    N
ATOM    505  CE2 TRP A  50     -14.561   6.332 -76.783  1.00 32.97      A    C
ATOM    506  CD2 TRP A  50     -14.518   4.987 -76.380  1.00 34.37      A    C
ATOM    507  CE3 TRP A  50     -13.292   4.313 -76.414  1.00 35.44      A    C
ATOM    509  CZ3 TRP A  50     -12.157   5.001 -76.840  1.00 35.02      A    C
ATOM    511  CH2 TRP A  50     -12.232   6.345 -77.232  1.00 34.96      A    C
ATOM    513  CZ2 TRP A  50     -13.424   7.024 -77.214  1.00 36.37      A    C
ATOM    515  C   TRP A  50     -16.616   0.831 -76.098  1.00 28.60      A    C
ATOM    516  O   TRP A  50     -17.510   0.468 -75.334  1.00 25.01      A    O
ATOM    518  N   VAL A  51     -15.623   0.043 -76.507  1.00 30.32      A    N
ATOM    519  CA  VAL A  51     -15.398  -1.317 -76.027  1.00 28.53      A    C
ATOM    521  CB  VAL A  51     -15.270  -2.297 -77.219  1.00 28.90      A    C
ATOM    523  CG1 VAL A  51     -14.754  -3.669 -76.767  1.00 28.11      A    C
ATOM    527  CG2 VAL A  51     -16.590  -2.429 -77.935  1.00 29.99      A    C
ATOM    531  C   VAL A  51     -14.105  -1.363 -75.193  1.00 31.96      A    C
ATOM    532  O   VAL A  51     -13.021  -0.994 -75.668  1.00 31.84      A    O
ATOM    534  N   LEU A  52     -14.225  -1.832 -73.954  1.00 30.30      A    N
ATOM    535  CA  LEU A  52     -13.083  -1.973 -73.046  1.00 26.83      A    C
ATOM    537  CB  LEU A  52     -13.522  -1.658 -71.600  1.00 24.00      A    C
ATOM    540  CG  LEU A  52     -12.530  -1.785 -70.441  1.00 26.30      A    C
ATOM    542  CD1 LEU A  52     -11.362  -0.803 -70.561  1.00 27.73      A    C
ATOM    546  CD2 LEU A  52     -13.244  -1.589 -69.126  1.00 23.19      A    C
ATOM    550  C   LEU A  52     -12.512  -3.395 -73.169  1.00 24.16      A    C
ATOM    551  O   LEU A  52     -13.255  -4.370 -73.144  1.00 24.61      A    O
ATOM    553  N   SER A  53     -11.196  -3.499 -73.339  1.00 23.00      A    N
ATOM    554  CA  SER A  53     -10.508  -4.781 -73.439  1.00 27.04      A    C
ATOM    556  CB  SER A  53     -10.277  -5.155 -74.913  1.00 29.06      A    C
ATOM    559  OG  SER A  53      -9.612  -6.410 -75.055  1.00 27.09      A    O
ATOM    561  C   SER A  53      -9.198  -4.658 -72.645  1.00 28.69      A    C
ATOM    562  O   SER A  53      -9.121  -3.836 -71.727  1.00 28.98      A    O
ATOM    564  N   ALA A  54      -8.190  -5.465 -72.982  1.00 27.47      A    N
ATOM    565  CA  ALA A  54      -6.909  -5.478 -72.266  1.00 31.99      A    C
ATOM    567  CB  ALA A  54      -6.582  -6.904 -71.776  1.00 31.40      A    C
ATOM    571  C   ALA A  54      -5.782  -4.945 -73.156  1.00 32.26      A    C
ATOM    572  O   ALA A  54      -5.740  -5.233 -74.342  1.00 32.95      A    O
ATOM    574  N   ALA A  55      -4.875  -4.181 -72.563  1.00 33.82      A    N
ATOM    575  CA  ALA A  55      -3.795  -3.495 -73.283  1.00 39.01      A    C
ATOM    577  CB  ALA A  55      -2.973  -2.624 -72.306  1.00 38.89      A    C
ATOM    581  C   ALA A  55      -2.872  -4.428 -74.054  1.00 41.72      A    C
ATOM    582  O   ALA A  55      -2.463  -4.105 -75.167  1.00 44.26      A    O
ATOM    584  N   HIS A  56      -2.560  -5.584 -73.481  1.00 46.85      A    N
ATOM    585  CA  HIS A  56      -1.685  -6.556 -74.146  1.00 50.67      A    C
ATOM    587  CB  HIS A  56      -1.252  -7.649 -73.162  1.00 55.55      A    C
ATOM    590  CG  HIS A  56       0.047  -8.305 -73.520  1.00 58.27      A    C
ATOM    591  ND1 HIS A  56       1.241  -7.615 -73.572  1.00 63.43      A    N
ATOM    593  CE1 HIS A  56       2.212  -8.444 -73.912  1.00 64.94      A    C
ATOM    595  NE2 HIS A  56       1.692  -9.647 -74.083  1.00 66.19      A    N
ATOM    597  CD2 HIS A  56       0.340  -9.588 -73.840  1.00 63.62      A    C
ATOM    599  C   HIS A  56      -2.298  -7.193 -75.409  1.00 54.34      A    C
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ATOM	600	O	HIS	A	56	-1.596	-7.865	-76.159	1.00	58.13	A	O
ATOM	602	N	CYS	A	57	-3.595	-6.990	-75.643	1.00	55.16	A	N
ATOM	603	CA	CYS	A	57	-4.241	-7.437	-76.881	1.00	54.80	A	C
ATOM	605	CB	CYS	A	57	-5.763	-7.332	-76.759	1.00	50.85	A	C
ATOM	608	SG	CYS	A	57	-6.464	-8.304	-75.389	1.00	48.06	A	S
ATOM	610	C	CYS	A	57	-3.764	-6.628	-78.088	1.00	56.94	A	C
ATOM	611	O	CYS	A	57	-3.619	-7.170	-79.177	1.00	57.62	A	O
ATOM	613	N	LEU	A	58	-3.526	-5.334	-77.883	1.00	61.49	A	N
ATOM	614	CA	LEU	A	58	-3.037	-4.447	-78.940	1.00	63.98	A	C
ATOM	616	CB	LEU	A	58	-3.175	-2.974	-78.517	1.00	63.85	A	C
ATOM	619	CG	LEU	A	58	-3.100	-1.892	-79.606	1.00	62.67	A	C
ATOM	621	CD1	LEU	A	58	-4.287	-1.962	-80.553	1.00	61.45	A	C
ATOM	625	CD2	LEU	A	58	-3.016	-0.498	-78.989	1.00	62.87	A	C
ATOM	629	C	LEU	A	58	-1.584	-4.771	-79.300	1.00	67.51	A	C
ATOM	630	O	LEU	A	58	-1.203	-4.674	-80.465	1.00	66.96	A	O
ATOM	632	N	GLU	A	59	-0.782	-5.151	-78.302	1.00	72.93	A	N
ATOM	633	CA	GLU	A	59	0.579	-5.641	-78.543	1.00	73.70	A	C
ATOM	635	CB	GLU	A	59	1.258	-6.076	-77.230	1.00	77.62	A	C
ATOM	638	CG	GLU	A	59	2.756	-6.449	-77.358	1.00	80.32	A	C
ATOM	641	CD	GLU	A	59	3.027	-7.951	-77.605	1.00	85.48	A	C
ATOM	642	OE1	GLU	A	59	2.771	-8.772	-76.695	1.00	87.61	A	O
ATOM	643	OE2	GLU	A	59	3.532	-8.310	-78.699	1.00	86.16	A	O
ATOM	644	C	GLU	A	59	0.536	-6.813	-79.522	1.00	74.77	A	C
ATOM	645	O	GLU	A	59	1.286	-6.843	-80.501	1.00	75.22	A	O
ATOM	647	N	ASP	A	60	-0.357	-7.766	-79.253	1.00	75.45	A	N
ATOM	648	CA	ASP	A	60	-0.469	-8.988	-80.057	1.00	75.68	A	C
ATOM	650	CB	ASP	A	60	-1.319	-10.038	-79.322	1.00	76.16	A	C
ATOM	653	CG	ASP	A	60	-0.607	-10.641	-78.115	1.00	76.05	A	C
ATOM	654	OD1	ASP	A	60	0.644	-10.628	-78.075	1.00	75.72	A	O
ATOM	655	OD2	ASP	A	60	-1.309	-11.145	-77.208	1.00	75.08	A	O
ATOM	656	C	ASP	A	60	-1.040	-8.761	-81.463	1.00	75.69	A	C
ATOM	657	O	ASP	A	60	-0.778	-9.556	-82.365	1.00	75.69	A	O
ATOM	659	N	ALA	A	61	-1.816	-7.691	-81.641	1.00	76.28	A	N
ATOM	660	CA	ALA	A	61	-2.439	-7.379	-82.933	1.00	76.49	A	C
ATOM	662	CB	ALA	A	61	-3.544	-6.344	-82.755	1.00	75.75	A	C
ATOM	666	C	ALA	A	61	-1.411	-6.883	-83.949	1.00	76.14	A	C
ATOM	667	O	ALA	A	61	-1.365	-7.368	-85.081	1.00	73.75	A	O
ATOM	669	N	ALA	A	62	-0.608	-5.902	-83.532	1.00	77.09	A	N
ATOM	670	CA	ALA	A	62	0.530	-5.407	-84.312	1.00	77.12	A	C
ATOM	672	CB	ALA	A	62	1.572	-6.530	-84.484	1.00	77.94	A	C
ATOM	676	C	ALA	A	62	0.123	-4.804	-85.673	1.00	76.63	A	C
ATOM	677	O	ALA	A	62	-0.594	-3.798	-85.721	1.00	73.71	A	O
ATOM	679	N	ASP	A	63	0.594	-5.421	-86.761	1.00	77.20	A	N
ATOM	680	CA	ASP	A	63	0.269	-5.013	-88.139	1.00	76.00	A	C
ATOM	682	CB	ASP	A	63	0.908	-5.990	-89.156	1.00	77.15	A	C
ATOM	685	CG	ASP	A	63	2.265	-5.526	-89.684	1.00	77.04	A	C
ATOM	686	OD1	ASP	A	63	2.773	-4.472	-89.245	1.00	77.86	A	O
ATOM	687	OD2	ASP	A	63	2.820	-6.233	-90.559	1.00	73.97	A	O
ATOM	688	C	ASP	A	63	-1.236	-4.991	-88.413	1.00	75.62	A	C
ATOM	689	O	ASP	A	63	-1.755	-4.016	-88.961	1.00	76.42	A	O
ATOM	691	N	GLY	A	64	-1.915	-6.073	-88.027	1.00	72.42	A	N
ATOM	692	CA	GLY	A	64	-3.268	-6.381	-88.494	1.00	68.45	A	C
ATOM	695	C	GLY	A	64	-4.340	-5.332	-88.269	1.00	65.09	A	C
ATOM	696	O	GLY	A	64	-4.184	-4.421	-87.454	1.00	64.75	A	O
ATOM	698	N	LYS	A	65	-5.438	-5.472	-89.008	1.00	62.79	A	N
ATOM	699	CA	LYS	A	65	-6.588	-4.584	-88.871	1.00	60.89	A	C
ATOM	701	CB	LYS	A	65	-7.456	-4.631	-90.132	1.00	61.99	A	C
ATOM	704	CG	LYS	A	65	-8.527	-3.555	-90.177	1.00	62.81	A	C
ATOM	707	CD	LYS	A	65	-9.269	-3.566	-91.498	1.00	63.38	A	C
ATOM	710	CE	LYS	A	65	-10.248	-2.409	-91.581	1.00	63.79	A	C
ATOM	713	NZ	LYS	A	65	-11.198	-2.584	-92.720	1.00	63.77	A	N
ATOM	717	C	LYS	A	65	-7.399	-5.025	-87.661	1.00	56.68	A	C
ATOM	718	O	LYS	A	65	-7.799	-6.184	-87.584	1.00	55.16	A	O

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ATOM	720	N	VAL	A	66	-7.626	-4.109	-86.719	1.00	52.66	A	N
ATOM	721	CA	VAL	A	66	-8.365	-4.417	-85.493	1.00	50.12	A	C
ATOM	723	CB	VAL	A	66	-7.790	-3.679	-84.268	1.00	48.86	A	C
ATOM	725	CG1	VAL	A	66	-8.685	-3.877	-83.052	1.00	47.57	A	C
ATOM	729	CG2	VAL	A	66	-6.391	-4.170	-83.975	1.00	51.58	A	C
ATOM	733	C	VAL	A	66	-9.836	-4.054	-85.644	1.00	47.37	A	C
ATOM	734	O	VAL	A	66	-10.172	-2.905	-85.937	1.00	49.77	A	O
ATOM	736	N	GLN	A	67	-10.706	-5.040	-85.434	1.00	43.89	A	N
ATOM	737	CA	GLN	A	67	-12.151	-4.857	-85.547	1.00	41.12	A	C
ATOM	739	CB	GLN	A	67	-12.653	-5.535	-86.823	1.00	40.24	A	C
ATOM	742	CG	GLN	A	67	-12.229	-4.824	-88.105	1.00	39.41	A	C
ATOM	745	CD	GLN	A	67	-12.375	-5.688	-89.340	1.00	38.04	A	C
ATOM	746	OE1	GLN	A	67	-11.856	-6.804	-89.404	1.00	33.96	A	O
ATOM	747	NE2	GLN	A	67	-13.062	-5.165	-90.341	1.00	37.16	A	N
ATOM	750	C	GLN	A	67	-12.855	-5.444	-84.320	1.00	40.02	A	C
ATOM	751	O	GLN	A	67	-12.290	-6.294	-83.626	1.00	38.85	A	O
ATOM	753	N	VAL	A	68	-14.082	-4.993	-84.057	1.00	38.42	A	N
ATOM	754	CA	VAL	A	68	-14.861	-5.479	-82.901	1.00	36.89	A	C
ATOM	756	CB	VAL	A	68	-15.053	-4.360	-81.848	1.00	36.68	A	C
ATOM	758	CG1	VAL	A	68	-15.926	-4.842	-80.676	1.00	35.81	A	C
ATOM	762	CG2	VAL	A	68	-13.706	-3.879	-81.361	1.00	29.48	A	C
ATOM	766	C	VAL	A	68	-16.221	-6.036	-83.337	1.00	33.30	A	C
ATOM	767	O	VAL	A	68	-17.039	-5.314	-83.896	1.00	32.49	A	O
ATOM	769	N	LEU	A	69	-16.457	-7.319	-83.072	1.00	30.19	A	N
ATOM	770	CA	LEU	A	69	-17.730	-7.963	-83.404	1.00	27.71	A	C
ATOM	772	CB	LEU	A	69	-17.494	-9.401	-83.869	1.00	25.35	A	C
ATOM	775	CG	LEU	A	69	-18.683	-10.245	-84.345	1.00	23.87	A	C
ATOM	777	CD1	LEU	A	69	-19.164	-9.828	-85.733	1.00	23.88	A	C
ATOM	781	CD2	LEU	A	69	-18.311	-11.713	-84.323	1.00	21.58	A	C
ATOM	785	C	LEU	A	69	-18.665	-7.929	-82.195	1.00	29.88	A	C
ATOM	786	O	LEU	A	69	-18.354	-8.494	-81.139	1.00	32.08	A	O
ATOM	788	N	LEU	A	70	-19.799	-7.247	-82.357	1.00	27.53	A	N
ATOM	789	CA	LEU	A	70	-20.838	-7.169	-81.328	1.00	24.29	A	C
ATOM	791	CB	LEU	A	70	-21.274	-5.717	-81.111	1.00	23.26	A	C
ATOM	794	CG	LEU	A	70	-20.190	-4.756	-80.600	1.00	20.72	A	C
ATOM	796	CD1	LEU	A	70	-20.678	-3.308	-80.577	1.00	20.49	A	C
ATOM	800	CD2	LEU	A	70	-19.731	-5.156	-79.221	1.00	18.03	A	C
ATOM	804	C	LEU	A	70	-22.019	-8.019	-81.766	1.00	18.72	A	C
ATOM	805	O	LEU	A	70	-22.135	-8.354	-82.939	1.00	21.17	A	O
ATOM	807	N	GLY	A	71	-22.896	-8.376	-80.832	1.00	21.94	A	N
ATOM	808	CA	GLY	A	71	-24.111	-9.145	-81.159	1.00	19.69	A	C
ATOM	811	C	GLY	A	71	-23.886	-10.595	-81.578	1.00	24.27	A	C
ATOM	812	O	GLY	A	71	-24.783	-11.226	-82.140	1.00	27.07	A	O
ATOM	814	N	ALA	A	72	-22.692	-11.114	-81.285	1.00	21.12	A	N
ATOM	815	CA	ALA	A	72	-22.256	-12.439	-81.693	1.00	21.42	A	C
ATOM	817	CB	ALA	A	72	-20.715	-12.424	-81.957	1.00	18.29	A	C
ATOM	821	C	ALA	A	72	-22.580	-13.513	-80.657	1.00	19.25	A	C
ATOM	822	O	ALA	A	72	-22.527	-13.278	-79.443	1.00	17.21	A	O
ATOM	824	N	HIS	A	73	-22.914	-14.703	-81.141	1.00	18.03	A	N
ATOM	825	CA	HIS	A	73	-22.806	-15.879	-80.315	1.00	19.39	A	C
ATOM	827	CB	HIS	A	73	-24.160	-16.519	-80.066	1.00	17.50	A	C
ATOM	830	CG	HIS	A	73	-24.085	-17.651	-79.102	1.00	14.96	A	C
ATOM	831	ND1	HIS	A	73	-23.529	-17.505	-77.854	1.00	14.20	A	N
ATOM	833	CE1	HIS	A	73	-23.566	-18.663	-77.220	1.00	14.22	A	C
ATOM	835	NE2	HIS	A	73	-24.116	-19.557	-78.018	1.00	13.69	A	N
ATOM	837	CD2	HIS	A	73	-24.435	-18.954	-79.212	1.00	15.47	A	C
ATOM	839	C	HIS	A	73	-21.825	-16.847	-80.977	1.00	23.60	A	C
ATOM	840	O	HIS	A	73	-20.769	-17.121	-80.426	1.00	20.57	A	O
ATOM	842	N	SER	A	74	-22.180	-17.337	-82.167	1.00	27.98	A	N
ATOM	843	CA	SER	A	74	-21.254	-18.049	-83.042	1.00	27.19	A	C
ATOM	845	CB	SER	A	74	-22.020	-18.819	-84.118	1.00	30.31	A	C
ATOM	848	OG	SER	A	74	-21.143	-19.209	-85.162	1.00	29.56	A	O
ATOM	850	C	SER	A	74	-20.331	-17.065	-83.746	1.00	28.34	A	C

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ATOM	851	O	SER	A	74	-20.808	-16.104	-84.340	1.00	29.97	A	O
ATOM	853	N	LEU	A	75	-19.024	-17.310	-83.698	1.00	28.45	A	N
ATOM	854	CA	LEU	A	75	-18.066	-16.486	-84.438	1.00	30.77	A	C
ATOM	856	CB	LEU	A	75	-16.633	-16.743	-83.962	1.00	31.45	A	C
ATOM	859	CG	LEU	A	75	-16.204	-16.437	-82.519	1.00	29.83	A	C
ATOM	861	CD1	LEU	A	75	-14.760	-16.923	-82.318	1.00	27.82	A	C
ATOM	865	CD2	LEU	A	75	-16.323	-14.955	-82.194	1.00	24.98	A	C
ATOM	869	C	LEU	A	75	-18.160	-16.749	-85.958	1.00	31.94	A	C
ATOM	870	O	LEU	A	75	-18.016	-15.821	-86.755	1.00	31.39	A	O
ATOM	872	N	SER	A	76	-18.417	-17.997	-86.357	1.00	29.54	A	N
ATOM	873	CA	SER	A	76	-18.378	-18.363	-87.782	1.00	33.60	A	C
ATOM	875	CB	SER	A	76	-17.793	-19.769	-87.972	1.00	32.67	A	C
ATOM	878	OG	SER	A	76	-18.645	-20.773	-87.455	1.00	34.34	A	O
ATOM	880	C	SER	A	76	-19.706	-18.232	-88.549	1.00	35.72	A	C
ATOM	881	O	SER	A	76	-19.688	-17.883	-89.729	1.00	36.76	A	O
ATOM	883	N	GLN	A	77	-20.837	-18.516	-87.894	1.00	38.21	A	N
ATOM	884	CA	GLN	A	77	-22.164	-18.483	-88.544	1.00	36.54	A	C
ATOM	886	CB	GLN	A	77	-23.120	-19.466	-87.862	1.00	42.31	A	C
ATOM	889	CG	GLN	A	77	-22.664	-20.908	-87.880	1.00	47.30	A	C
ATOM	892	CD	GLN	A	77	-22.391	-21.412	-89.292	1.00	53.49	A	C
ATOM	893	OE1	GLN	A	77	-21.298	-21.212	-89.829	1.00	56.37	A	O
ATOM	894	NE2	GLN	A	77	-23.384	-22.070	-89.898	1.00	53.31	A	N
ATOM	897	C	GLN	A	77	-22.807	-17.090	-88.531	1.00	33.29	A	C
ATOM	898	O	GLN	A	77	-22.959	-16.485	-87.464	1.00	24.82	A	O
ATOM	900	N	PRO	A	78	-23.209	-16.581	-89.716	1.00	34.78	A	N
ATOM	901	CA	PRO	A	78	-23.772	-15.233	-89.792	1.00	35.05	A	C
ATOM	903	CB	PRO	A	78	-23.708	-14.915	-91.285	1.00	37.90	A	C
ATOM	906	CG	PRO	A	78	-23.858	-16.236	-91.940	1.00	37.29	A	C
ATOM	909	CD	PRO	A	78	-23.179	-17.230	-91.041	1.00	36.88	A	C
ATOM	912	C	PRO	A	78	-25.212	-15.172	-89.286	1.00	33.48	A	C
ATOM	913	O	PRO	A	78	-25.929	-16.178	-89.296	1.00	31.67	A	O
ATOM	914	N	GLU	A	79	-25.624	-13.973	-88.890	1.00	34.04	A	N
ATOM	915	CA	GLU	A	79	-26.791	-13.772	-88.039	1.00	31.69	A	C
ATOM	917	CB	GLU	A	79	-26.397	-14.079	-86.581	1.00	34.44	A	C
ATOM	920	CG	GLU	A	79	-27.420	-14.847	-85.795	1.00	33.26	A	C
ATOM	923	CD	GLU	A	79	-27.183	-14.794	-84.297	1.00	28.32	A	C
ATOM	924	OE1	GLU	A	79	-26.028	-14.815	-83.842	1.00	26.80	A	O
ATOM	925	OE2	GLU	A	79	-28.180	-14.750	-83.557	1.00	29.16	A	O
ATOM	926	C	GLU	A	79	-27.154	-12.294	-88.148	1.00	28.59	A	C
ATOM	927	O	GLU	A	79	-26.253	-11.465	-88.192	1.00	29.20	A	O
ATOM	929	N	PRO	A	80	-28.457	-11.952	-88.207	1.00	28.86	A	N
ATOM	930	CA	PRO	A	80	-28.864	-10.540	-88.231	1.00	29.72	A	C
ATOM	932	CB	PRO	A	80	-30.392	-10.606	-88.113	1.00	31.62	A	C
ATOM	935	CG	PRO	A	80	-30.766	-11.930	-88.610	1.00	30.48	A	C
ATOM	938	CD	PRO	A	80	-29.612	-12.857	-88.334	1.00	29.51	A	C
ATOM	941	C	PRO	A	80	-28.275	-9.664	-87.107	1.00	30.10	A	C
ATOM	942	O	PRO	A	80	-27.980	-8.491	-87.341	1.00	28.03	A	O
ATOM	943	N	SER	A	81	-28.097	-10.220	-85.910	1.00	29.80	A	N
ATOM	944	CA	SER	A	81	-27.549	-9.448	-84.786	1.00	29.46	A	C
ATOM	946	CB	SER	A	81	-27.917	-10.110	-83.456	1.00	28.08	A	C
ATOM	949	OG	SER	A	81	-27.360	-11.408	-83.351	1.00	27.56	A	O
ATOM	951	C	SER	A	81	-26.028	-9.218	-84.866	1.00	26.31	A	C
ATOM	952	O	SER	A	81	-25.519	-8.260	-84.296	1.00	27.29	A	O
ATOM	954	N	LYS	A	82	-25.314	-10.085	-85.570	1.00	28.76	A	N
ATOM	955	CA	LYS	A	82	-23.846	-10.022	-85.649	1.00	31.99	A	C
ATOM	957	CB	LYS	A	82	-23.313	-11.334	-86.249	1.00	31.86	A	C
ATOM	960	CG	LYS	A	82	-22.039	-11.870	-85.642	1.00	34.31	A	C
ATOM	963	CD	LYS	A	82	-21.835	-13.365	-85.945	1.00	34.80	A	C
ATOM	966	CE	LYS	A	82	-20.837	-13.589	-87.054	1.00	36.31	A	C
ATOM	969	NZ	LYS	A	82	-20.696	-15.025	-87.392	1.00	36.18	A	N
ATOM	973	C	LYS	A	82	-23.402	-8.827	-86.511	1.00	34.03	A	C
ATOM	974	O	LYS	A	82	-23.667	-8.805	-87.713	1.00	37.75	A	O
ATOM	976	N	ARG	A	83	-22.751	-7.834	-85.903	1.00	36.11	A	N

ATOM	977	CA	ARG	A	83	-22.193	-6.695	-86.653	1.00	35.90	A	C
ATOM	979	CB	ARG	A	83	-23.036	-5.429	-86.460	1.00	39.71	A	C
ATOM	982	CG	ARG	A	83	-24.048	-5.160	-87.590	1.00	46.39	A	C
ATOM	985	CD	ARG	A	83	-24.158	-3.665	-87.920	1.00	48.90	A	C
ATOM	988	NE	ARG	A	83	-22.872	-3.087	-88.348	1.00	51.39	A	N
ATOM	990	CZ	ARG	A	83	-22.622	-1.778	-88.470	1.00	51.65	A	C
ATOM	991	NH1	ARG	A	83	-23.570	-0.875	-88.204	1.00	52.51	A	N
ATOM	994	NH2	ARG	A	83	-21.415	-1.364	-88.861	1.00	51.45	A	N
ATOM	997	C	ARG	A	83	-20.739	-6.417	-86.280	1.00	35.72	A	C
ATOM	998	O	ARG	A	83	-20.405	-6.247	-85.099	1.00	34.99	A	O
ATOM	1000	N	LEU	A	84	-19.887	-6.357	-87.306	1.00	32.54	A	N
ATOM	1001	CA	LEU	A	84	-18.453	-6.130	-87.151	1.00	30.78	A	C
ATOM	1003	CB	LEU	A	84	-17.695	-6.991	-88.171	1.00	31.81	A	C
ATOM	1006	CG	LEU	A	84	-16.171	-7.155	-88.050	1.00	33.03	A	C
ATOM	1008	CD1	LEU	A	84	-15.737	-7.757	-86.713	1.00	30.89	A	C
ATOM	1012	CD2	LEU	A	84	-15.645	-8.008	-89.209	1.00	32.32	A	C
ATOM	1016	C	LEU	A	84	-18.115	-4.652	-87.354	1.00	30.26	A	C
ATOM	1017	O	LEU	A	84	-18.385	-4.091	-88.410	1.00	28.72	A	O
ATOM	1019	N	TYR	A	85	-17.514	-4.027	-86.344	1.00	31.48	A	N
ATOM	1020	CA	TYR	A	85	-17.125	-2.616	-86.411	1.00	33.56	A	C
ATOM	1022	CB	TYR	A	85	-17.554	-1.907	-85.126	1.00	32.12	A	C
ATOM	1025	CG	TYR	A	85	-19.044	-1.850	-84.969	1.00	30.23	A	C
ATOM	1026	CD1	TYR	A	85	-19.748	-0.716	-85.313	1.00	30.29	A	C
ATOM	1028	CE1	TYR	A	85	-21.128	-0.666	-85.192	1.00	30.75	A	C
ATOM	1030	CZ	TYR	A	85	-21.820	-1.769	-84.738	1.00	30.57	A	C
ATOM	1031	OH	TYR	A	85	-23.193	-1.719	-84.615	1.00	30.61	A	O
ATOM	1033	CE2	TYR	A	85	-21.139	-2.918	-84.396	1.00	32.36	A	C
ATOM	1035	CD2	TYR	A	85	-19.757	-2.959	-84.525	1.00	32.01	A	C
ATOM	1037	C	TYR	A	85	-15.623	-2.408	-86.625	1.00	35.71	A	C
ATOM	1038	O	TYR	A	85	-14.810	-3.033	-85.957	1.00	40.39	A	O
ATOM	1040	N	ASP	A	86	-15.261	-1.529	-87.559	1.00	37.12	A	N
ATOM	1041	CA	ASP	A	86	-13.891	-1.038	-87.656	1.00	39.01	A	C
ATOM	1043	CB	ASP	A	86	-13.711	-0.081	-88.844	1.00	43.54	A	C
ATOM	1046	CG	ASP	A	86	-13.706	-0.786	-90.190	1.00	46.52	A	C
ATOM	1047	OD1	ASP	A	86	-13.393	-1.990	-90.249	1.00	49.78	A	O
ATOM	1048	OD2	ASP	A	86	-14.010	-0.114	-91.202	1.00	49.20	A	O
ATOM	1049	C	ASP	A	86	-13.588	-0.278	-86.374	1.00	37.64	A	C
ATOM	1050	O	ASP	A	86	-14.498	0.208	-85.704	1.00	34.63	A	O
ATOM	1052	N	VAL	A	87	-12.311	-0.177	-86.033	1.00	40.80	A	N
ATOM	1053	CA	VAL	A	87	-11.902	0.599	-84.866	1.00	44.99	A	C
ATOM	1055	CB	VAL	A	87	-10.882	-0.167	-83.970	1.00	42.23	A	C
ATOM	1057	CG1	VAL	A	87	-10.503	0.666	-82.763	1.00	40.88	A	C
ATOM	1061	CG2	VAL	A	87	-11.468	-1.492	-83.519	1.00	38.86	A	C
ATOM	1065	C	VAL	A	87	-11.335	1.929	-85.359	1.00	47.96	A	C
ATOM	1066	O	VAL	A	87	-10.486	1.966	-86.250	1.00	49.36	A	O
ATOM	1068	N	LEU	A	88	-11.835	3.013	-84.778	1.00	49.32	A	N
ATOM	1069	CA	LEU	A	88	-11.429	4.365	-85.144	1.00	49.07	A	C
ATOM	1071	CB	LEU	A	88	-12.564	5.341	-84.808	1.00	48.00	A	C
ATOM	1074	CG	LEU	A	88	-12.704	6.593	-85.661	1.00	49.32	A	C
ATOM	1076	CD1	LEU	A	88	-13.022	6.192	-87.095	1.00	51.05	A	C
ATOM	1080	CD2	LEU	A	88	-13.789	7.503	-85.083	1.00	48.37	A	C
ATOM	1084	C	LEU	A	88	-10.152	4.783	-84.409	1.00	50.71	A	C
ATOM	1085	O	LEU	A	88	-9.356	5.555	-84.935	1.00	51.19	A	O
ATOM	1087	N	ARG	A	89	-9.964	4.260	-83.198	1.00	51.10	A	N
ATOM	1088	CA	ARG	A	89	-8.948	4.758	-82.277	1.00	50.72	A	C
ATOM	1090	CB	ARG	A	89	-9.382	6.131	-81.756	1.00	50.65	A	C
ATOM	1093	CG	ARG	A	89	-8.366	6.859	-80.898	1.00	52.53	A	C
ATOM	1096	CD	ARG	A	89	-8.915	8.215	-80.467	1.00	53.64	A	C
ATOM	1099	NE	ARG	A	89	-8.440	8.611	-79.137	1.00	53.72	A	N
ATOM	1101	CZ	ARG	A	89	-9.161	9.287	-78.238	1.00	56.82	A	C
ATOM	1102	NH1	ARG	A	89	-10.419	9.657	-78.494	1.00	57.09	A	N
ATOM	1105	NH2	ARG	A	89	-8.625	9.590	-77.058	1.00	57.04	A	N
ATOM	1108	C	ARG	A	89	-8.785	3.780	-81.113	1.00	50.20	A	C

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ATOM	1109	O	ARG	A	89	-9.751	3.495	-80.406	1.00	50.71	A	O
ATOM	1111	N	ALA	A	90	-7.569	3.265	-80.929	1.00	49.57	A	N
ATOM	1112	CA	ALA	A	90	-7.257	2.338	-79.838	1.00	49.24	A	C
ATOM	1114	CB	ALA	A	90	-6.502	1.125	-80.363	1.00	46.55	A	C
ATOM	1118	C	ALA	A	90	-6.430	3.060	-78.783	1.00	50.35	A	C
ATOM	1119	O	ALA	A	90	-5.315	3.498	-79.066	1.00	52.23	A	O
ATOM	1121	N	VAL	A	91	-6.981	3.177	-77.576	1.00	49.71	A	N
ATOM	1122	CA	VAL	A	91	-6.354	3.915	-76.477	1.00	49.97	A	C
ATOM	1124	CB	VAL	A	91	-7.309	4.986	-75.923	1.00	49.35	A	C
ATOM	1126	CG1	VAL	A	91	-6.682	5.703	-74.731	1.00	51.15	A	C
ATOM	1130	CG2	VAL	A	91	-7.667	5.975	-77.007	1.00	50.24	A	C
ATOM	1134	C	VAL	A	91	-5.951	2.971	-75.333	1.00	51.95	A	C
ATOM	1135	O	VAL	A	91	-6.758	2.682	-74.444	1.00	52.56	A	O
ATOM	1137	N	PRO	A	92	-4.695	2.493	-75.345	1.00	51.64	A	N
ATOM	1138	CA	PRO	A	92	-4.222	1.723	-74.204	1.00	52.99	A	C
ATOM	1140	CB	PRO	A	92	-2.979	0.998	-74.734	1.00	52.11	A	C
ATOM	1143	CG	PRO	A	92	-2.627	1.638	-76.025	1.00	52.10	A	C
ATOM	1146	CD	PRO	A	92	-3.661	2.655	-76.379	1.00	52.98	A	C
ATOM	1149	C	PRO	A	92	-3.862	2.645	-73.052	1.00	52.72	A	C
ATOM	1150	O	PRO	A	92	-3.583	3.824	-73.268	1.00	53.28	A	O
ATOM	1151	N	HIS	A	93	-3.885	2.103	-71.840	1.00	53.09	A	N
ATOM	1152	CA	HIS	A	93	-3.578	2.877	-70.642	1.00	53.98	A	C
ATOM	1154	CB	HIS	A	93	-3.810	2.022	-69.395	1.00	48.30	A	C
ATOM	1157	CG	HIS	A	93	-3.772	2.786	-68.111	1.00	45.32	A	C
ATOM	1158	ND1	HIS	A	93	-2.597	3.071	-67.452	1.00	43.04	A	N
ATOM	1160	CE1	HIS	A	93	-2.868	3.740	-66.345	1.00	44.41	A	C
ATOM	1162	NE2	HIS	A	93	-4.176	3.888	-66.259	1.00	42.15	A	N
ATOM	1164	CD2	HIS	A	93	-4.765	3.291	-67.345	1.00	41.55	A	C
ATOM	1166	C	HIS	A	93	-2.118	3.318	-70.739	1.00	56.94	A	C
ATOM	1167	O	HIS	A	93	-1.252	2.499	-71.078	1.00	58.81	A	O
ATOM	1169	N	PRO	A	94	-1.836	4.606	-70.466	1.00	56.52	A	N
ATOM	1170	CA	PRO	A	94	-0.479	5.125	-70.687	1.00	58.36	A	C
ATOM	1172	CB	PRO	A	94	-0.606	6.608	-70.315	1.00	58.02	A	C
ATOM	1175	CG	PRO	A	94	-1.803	6.683	-69.422	1.00	57.43	A	C
ATOM	1178	CD	PRO	A	94	-2.740	5.641	-69.934	1.00	57.10	A	C
ATOM	1181	C	PRO	A	94	0.606	4.428	-69.846	1.00	60.01	A	C
ATOM	1182	O	PRO	A	94	1.724	4.259	-70.324	1.00	60.54	A	O
ATOM	1183	N	ASP	A	95	0.263	4.015	-68.624	1.00	62.08	A	N
ATOM	1184	CA	ASP	A	95	1.191	3.309	-67.720	1.00	62.53	A	C
ATOM	1186	CB	ASP	A	95	0.727	3.457	-66.267	1.00	63.52	A	C
ATOM	1189	CG	ASP	A	95	0.647	4.896	-65.822	1.00	65.42	A	C
ATOM	1190	OD1	ASP	A	95	1.228	5.768	-66.504	1.00	67.58	A	O
ATOM	1191	OD2	ASP	A	95	0.003	5.153	-64.781	1.00	66.41	A	O
ATOM	1192	C	ASP	A	95	1.373	1.812	-67.999	1.00	63.25	A	C
ATOM	1193	O	ASP	A	95	2.183	1.155	-67.332	1.00	62.76	A	O
ATOM	1195	N	SER	A	96	0.627	1.258	-68.956	1.00	64.83	A	N
ATOM	1196	CA	SER	A	96	0.753	-0.166	-69.281	1.00	66.29	A	C
ATOM	1198	CB	SER	A	96	-0.482	-0.672	-70.043	1.00	62.90	A	C
ATOM	1201	OG	SER	A	96	-0.628	-0.043	-71.302	1.00	61.79	A	O
ATOM	1203	C	SER	A	96	2.042	-0.437	-70.075	1.00	68.26	A	C
ATOM	1204	O	SER	A	96	2.429	0.359	-70.937	1.00	63.88	A	O
ATOM	1206	N	ARG	A	97	2.699	-1.558	-69.764	1.00	72.27	A	N
ATOM	1207	CA	ARG	A	97	3.952	-1.969	-70.423	1.00	74.38	A	C
ATOM	1209	CB	ARG	A	97	5.156	-1.770	-69.487	1.00	77.10	A	C
ATOM	1212	CG	ARG	A	97	5.380	-0.339	-69.008	1.00	77.88	A	C
ATOM	1215	CD	ARG	A	97	5.821	0.579	-70.136	1.00	79.38	A	C
ATOM	1218	NE	ARG	A	97	6.346	1.853	-69.639	1.00	80.35	A	N
ATOM	1220	CZ	ARG	A	97	5.613	2.918	-69.301	1.00	81.92	A	C
ATOM	1221	NH1	ARG	A	97	4.288	2.902	-69.392	1.00	81.67	A	N
ATOM	1224	NH2	ARG	A	97	6.214	4.022	-68.863	1.00	81.70	A	N
ATOM	1227	C	ARG	A	97	3.879	-3.445	-70.852	1.00	74.40	A	C
ATOM	1228	O	ARG	A	97	3.112	-4.218	-70.276	1.00	72.19	A	O
ATOM	1230	N	PRO	A	98	4.677	-3.840	-71.866	1.00	76.17	A	N

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ATOM   1231  CA  PRO A  98       4.718  -5.262 -72.247  1.00 77.02      A    C
ATOM   1233  CB  PRO A  98       5.470  -5.257 -73.595  1.00 78.10      A    C
ATOM   1236  CG  PRO A  98       5.623  -3.810 -73.985  1.00 77.58      A    C
ATOM   1239  CD  PRO A  98       5.560  -3.022 -72.717  1.00 77.08      A    C
ATOM   1242  C   PRO A  98       5.439  -6.158 -71.218  1.00 78.07      A    C
ATOM   1243  O   PRO A  98       5.250  -7.382 -71.224  1.00 79.43      A    O
ATOM   1244  N   ASP A  99       6.257  -5.545 -70.360  1.00 76.69      A    N
ATOM   1245  CA  ASP A  99       6.940  -6.242 -69.266  1.00 74.04      A    C
ATOM   1247  CB  ASP A  99       8.065  -5.363 -68.690  1.00 76.85      A    C
ATOM   1250  CG  ASP A  99       9.188  -5.104 -69.679  1.00 79.71      A    C
ATOM   1251  OD1 ASP A  99       9.837  -4.042 -69.563  1.00 81.00      A    O
ATOM   1252  OD2 ASP A  99       9.434  -5.954 -70.561  1.00 81.15      A    O
ATOM   1253  C   ASP A  99       5.988  -6.593 -68.122  1.00 70.17      A    C
ATOM   1254  O   ASP A  99       6.178  -7.595 -67.439  1.00 67.81      A    O
ATOM   1256  N   THR A 100       4.978  -5.749 -67.920  1.00 68.33      A    N
ATOM   1257  CA  THR A 100       4.125  -5.773 -66.729  1.00 64.26      A    C
ATOM   1259  CB  THR A 100       3.947  -4.320 -66.182  1.00 65.15      A    C
ATOM   1261  OG1 THR A 100       3.445  -4.353 -64.842  1.00 68.86      A    O
ATOM   1263  CG2 THR A 100       2.999  -3.506 -67.057  1.00 63.75      A    C
ATOM   1267  C   THR A 100       2.747  -6.396 -67.011  1.00 57.71      A    C
ATOM   1268  O   THR A 100       2.383  -6.608 -68.165  1.00 53.45      A    O
ATOM   1270  N   ILE A 101       2.006  -6.712 -65.948  1.00 52.89      A    N
ATOM   1271  CA  ILE A 101       0.562  -7.006 -66.054  1.00 54.39      A    C
ATOM   1273  CB  ILE A 101       0.146  -8.413 -65.461  1.00 52.40      A    C
ATOM   1275  CG1 ILE A 101       0.566  -8.569 -63.995  1.00 51.46      A    C
ATOM   1278  CD1 ILE A 101      -0.148  -9.693 -63.294  1.00 50.97      A    C
ATOM   1282  CG2 ILE A 101       0.709  -9.544 -66.308  1.00 52.28      A    C
ATOM   1286  C   ILE A 101      -0.288  -5.884 -65.418  1.00 48.00      A    C
ATOM   1287  O   ILE A 101      -1.504  -6.005 -65.329  1.00 45.48      A    O
ATOM   1289  N   ASP A 102       0.360  -4.798 -64.996  1.00 49.06      A    N
ATOM   1290  CA  ASP A 102      -0.340  -3.634 -64.428  1.00 48.35      A    C
ATOM   1292  CB  ASP A 102       0.607  -2.799 -63.556  1.00 49.50      A    C
ATOM   1295  CG  ASP A 102       1.128  -3.559 -62.340  1.00 48.75      A    C
ATOM   1296  OD1 ASP A 102       0.331  -3.907 -61.445  1.00 49.85      A    O
ATOM   1297  OD2 ASP A 102       2.352  -3.771 -62.263  1.00 49.93      A    O
ATOM   1298  C   ASP A 102      -0.948  -2.731 -65.515  1.00 46.52      A    C
ATOM   1299  O   ASP A 102      -0.437  -2.644 -66.649  1.00 42.84      A    O
ATOM   1301  N   HIS A 103      -2.052  -2.074 -65.144  1.00 47.39      A    N
ATOM   1302  CA  HIS A 103      -2.747  -1.077 -65.983  1.00 45.26      A    C
ATOM   1304  CB  HIS A 103      -1.899   0.213 -66.095  1.00 41.65      A    C
ATOM   1307  CG  HIS A 103      -1.121   0.522 -64.850  1.00 37.76      A    C
ATOM   1308  ND1 HIS A 103      -1.729   0.844 -63.655  1.00 34.62      A    N
ATOM   1310  CE1 HIS A 103      -0.805   1.037 -62.731  1.00 34.36      A    C
ATOM   1312  NE2 HIS A 103       0.381   0.843 -63.280  1.00 36.63      A    N
ATOM   1314  CD2 HIS A 103       0.211   0.509 -64.602  1.00 36.74      A    C
ATOM   1316  C   HIS A 103      -3.132  -1.640 -67.354  1.00 45.07      A    C
ATOM   1317  O   HIS A 103      -3.148  -0.919 -68.353  1.00 43.47      A    O
ATOM   1319  N   ASP A 104      -3.490  -2.926 -67.372  1.00 44.83      A    N
ATOM   1320  CA  ASP A 104      -3.675  -3.683 -68.606  1.00 40.82      A    C
ATOM   1322  CB  ASP A 104      -3.423  -5.186 -68.331  1.00 41.92      A    C
ATOM   1325  CG  ASP A 104      -3.325  -6.047 -69.618  1.00 44.77      A    C
ATOM   1326  OD1 ASP A 104      -3.169  -5.507 -70.729  1.00 45.72      A    O
ATOM   1327  OD2 ASP A 104      -3.382  -7.292 -69.513  1.00 49.37      A    O
ATOM   1328  C   ASP A 104      -5.076  -3.442 -69.170  1.00 37.29      A    C
ATOM   1329  O   ASP A 104      -5.790  -4.387 -69.490  1.00 30.84      A    O
ATOM   1331  N   LEU A 105      -5.466  -2.170 -69.280  1.00 35.98      A    N
ATOM   1332  CA  LEU A 105      -6.743  -1.799 -69.867  1.00 34.54      A    C
ATOM   1334  CB  LEU A 105      -7.544  -0.910 -68.921  1.00 35.42      A    C
ATOM   1337  CG  LEU A 105      -7.979  -1.506 -67.581  1.00 33.22      A    C
ATOM   1339  CD1 LEU A 105      -8.839  -0.492 -66.850  1.00 28.96      A    C
ATOM   1343  CD2 LEU A 105      -8.737  -2.837 -67.747  1.00 31.61      A    C
ATOM   1347  C   LEU A 105      -6.527  -1.103 -71.207  1.00 35.95      A    C
ATOM   1348  O   LEU A 105      -5.550  -0.386 -71.408  1.00 40.58      A    O
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ATOM	1350	N	LEU	A	106	-7.447	-1.357	-72.127	1.00	36.94	A	N
ATOM	1351	CA	LEU	A	106	-7.431	-0.781	-73.459	1.00	35.20	A	C
ATOM	1353	CB	LEU	A	106	-7.010	-1.838	-74.479	1.00	34.88	A	C
ATOM	1356	CG	LEU	A	106	-7.125	-1.549	-75.979	1.00	36.10	A	C
ATOM	1358	CD1	LEU	A	106	-6.028	-0.611	-76.466	1.00	33.22	A	C
ATOM	1362	CD2	LEU	A	106	-7.082	-2.856	-76.752	1.00	32.99	A	C
ATOM	1366	C	LEU	A	106	-8.846	-0.317	-73.738	1.00	37.09	A	C
ATOM	1367	O	LEU	A	106	-9.812	-0.980	-73.371	1.00	37.21	A	O
ATOM	1369	N	LEU	A	107	-8.973	0.836	-74.375	1.00	39.36	A	N
ATOM	1370	CA	LEU	A	107	-10.270	1.343	-74.752	1.00	35.19	A	C
ATOM	1372	CB	LEU	A	107	-10.580	2.625	-73.979	1.00	31.79	A	C
ATOM	1375	CG	LEU	A	107	-11.338	2.439	-72.659	1.00	30.33	A	C
ATOM	1377	CD1	LEU	A	107	-11.613	3.785	-71.968	1.00	23.53	A	C
ATOM	1381	CD2	LEU	A	107	-12.663	1.684	-72.895	1.00	24.74	A	C
ATOM	1385	C	LEU	A	107	-10.259	1.576	-76.251	1.00	38.00	A	C
ATOM	1386	O	LEU	A	107	-9.451	2.351	-76.742	1.00	39.53	A	O
ATOM	1388	N	LEU	A	108	-11.147	0.885	-76.966	1.00	38.84	A	N
ATOM	1389	CA	LEU	A	108	-11.254	0.973	-78.418	1.00	37.78	A	C
ATOM	1391	CB	LEU	A	108	-11.380	-0.425	-79.031	1.00	39.49	A	C
ATOM	1394	CG	LEU	A	108	-10.414	-1.507	-78.546	1.00	41.19	A	C
ATOM	1396	CD1	LEU	A	108	-10.821	-2.845	-79.112	1.00	40.38	A	C
ATOM	1400	CD2	LEU	A	108	-8.984	-1.162	-78.923	1.00	43.02	A	C
ATOM	1404	C	LEU	A	108	-12.493	1.779	-78.787	1.00	38.88	A	C
ATOM	1405	O	LEU	A	108	-13.588	1.505	-78.280	1.00	33.01	A	O
ATOM	1407	N	GLN	A	109	-12.315	2.759	-79.673	1.00	40.03	A	N
ATOM	1408	CA	GLN	A	109	-13.413	3.569	-80.190	1.00	40.00	A	C
ATOM	1410	CB	GLN	A	109	-12.951	5.016	-80.402	1.00	40.30	A	C
ATOM	1413	CG	GLN	A	109	-14.083	5.988	-80.679	1.00	40.09	A	C
ATOM	1416	CD	GLN	A	109	-13.609	7.411	-80.911	1.00	42.61	A	C
ATOM	1417	OE1	GLN	A	109	-12.414	7.672	-81.064	1.00	47.69	A	O
ATOM	1418	NE2	GLN	A	109	-14.550	8.340	-80.937	1.00	43.20	A	N
ATOM	1421	C	GLN	A	109	-13.914	2.985	-81.517	1.00	40.89	A	C
ATOM	1422	O	GLN	A	109	-13.130	2.800	-82.454	1.00	39.69	A	O
ATOM	1424	N	LEU	A	110	-15.216	2.708	-81.595	1.00	41.85	A	N
ATOM	1425	CA	LEU	A	110	-15.821	2.093	-82.783	1.00	41.85	A	C
ATOM	1427	CB	LEU	A	110	-17.154	1.436	-82.416	1.00	38.43	A	C
ATOM	1430	CG	LEU	A	110	-17.154	0.429	-81.264	1.00	35.60	A	C
ATOM	1432	CD1	LEU	A	110	-18.564	-0.114	-81.042	1.00	36.56	A	C
ATOM	1436	CD2	LEU	A	110	-16.180	-0.692	-81.537	1.00	31.67	A	C
ATOM	1440	C	LEU	A	110	-16.055	3.126	-83.892	1.00	45.42	A	C
ATOM	1441	O	LEU	A	110	-16.340	4.297	-83.609	1.00	47.04	A	O
ATOM	1443	N	SER	A	111	-15.960	2.679	-85.147	1.00	46.26	A	N
ATOM	1444	CA	SER	A	111	-16.089	3.566	-86.318	1.00	45.73	A	C
ATOM	1446	CB	SER	A	111	-16.034	2.772	-87.632	1.00	46.17	A	C
ATOM	1449	OG	SER	A	111	-17.005	1.734	-87.676	1.00	48.13	A	O
ATOM	1451	C	SER	A	111	-17.354	4.408	-86.256	1.00	45.74	A	C
ATOM	1452	O	SER	A	111	-17.344	5.571	-86.645	1.00	47.20	A	O
ATOM	1454	N	GLU	A	112	-18.435	3.814	-85.763	1.00	47.37	A	N
ATOM	1455	CA	GLU	A	112	-19.647	4.556	-85.413	1.00	47.46	A	C
ATOM	1457	CB	GLU	A	112	-20.674	4.438	-86.537	1.00	51.04	A	C
ATOM	1460	CG	GLU	A	112	-21.236	3.034	-86.716	1.00	53.20	A	C
ATOM	1463	CD	GLU	A	112	-21.724	2.780	-88.125	1.00	54.56	A	C
ATOM	1464	OE1	GLU	A	112	-22.952	2.624	-88.313	1.00	56.44	A	O
ATOM	1465	OE2	GLU	A	112	-20.872	2.749	-89.042	1.00	56.51	A	O
ATOM	1466	C	GLU	A	112	-20.220	4.006	-84.102	1.00	43.04	A	C
ATOM	1467	O	GLU	A	112	-19.798	2.951	-83.637	1.00	40.01	A	O
ATOM	1469	N	LYS	A	113	-21.163	4.723	-83.499	1.00	41.20	A	N
ATOM	1470	CA	LYS	A	113	-21.879	4.197	-82.337	1.00	42.99	A	C
ATOM	1472	CB	LYS	A	113	-22.931	5.182	-81.843	1.00	45.82	A	C
ATOM	1475	CG	LYS	A	113	-22.379	6.343	-81.055	1.00	48.42	A	C
ATOM	1478	CD	LYS	A	113	-23.482	7.358	-80.815	1.00	48.08	A	C
ATOM	1481	CE	LYS	A	113	-23.098	8.384	-79.768	1.00	49.62	A	C
ATOM	1484	NZ	LYS	A	113	-24.150	9.445	-79.662	1.00	51.88	A	N

ATOM	1488	C	LYS	A	113	-22.567	2.883	-82.700	1.00	41.20	A	C
ATOM	1489	O	LYS	A	113	-23.182	2.774	-83.764	1.00	39.17	A	O
ATOM	1491	N	ALA	A	114	-22.469	1.893	-81.815	1.00	38.73	A	N
ATOM	1492	CA	ALA	A	114	-23.059	0.580	-82.065	1.00	37.42	A	C
ATOM	1494	CB	ALA	A	114	-22.527	-0.452	-81.074	1.00	33.40	A	C
ATOM	1498	C	ALA	A	114	-24.586	0.653	-82.011	1.00	36.87	A	C
ATOM	1499	O	ALA	A	114	-25.172	1.375	-81.190	1.00	35.52	A	O
ATOM	1501	N	THR	A	115	-25.218	-0.080	-82.923	1.00	36.64	A	N
ATOM	1502	CA	THR	A	115	-26.667	-0.188	-82.974	1.00	36.58	A	C
ATOM	1504	CB	THR	A	115	-27.126	-0.775	-84.333	1.00	40.02	A	C
ATOM	1506	OG1	THR	A	115	-26.687	0.079	-85.399	1.00	42.05	A	O
ATOM	1508	CG2	THR	A	115	-28.629	-0.922	-84.386	1.00	36.82	A	C
ATOM	1512	C	THR	A	115	-27.138	-1.091	-81.835	1.00	34.85	A	C
ATOM	1513	O	THR	A	115	-26.779	-2.279	-81.781	1.00	32.31	A	O
ATOM	1515	N	LEU	A	116	-27.936	-0.523	-80.933	1.00	32.03	A	N
ATOM	1516	CA	LEU	A	116	-28.389	-1.227	-79.736	1.00	32.60	A	C
ATOM	1518	CB	LEU	A	116	-28.602	-0.243	-78.577	1.00	32.00	A	C
ATOM	1521	CG	LEU	A	116	-27.403	0.615	-78.143	1.00	28.88	A	C
ATOM	1523	CD1	LEU	A	116	-27.726	1.352	-76.843	1.00	24.99	A	C
ATOM	1527	CD2	LEU	A	116	-26.123	-0.220	-78.012	1.00	25.50	A	C
ATOM	1531	C	LEU	A	116	-29.671	-2.018	-79.980	1.00	34.30	A	C
ATOM	1532	O	LEU	A	116	-30.461	-1.691	-80.858	1.00	38.89	A	O
ATOM	1534	N	GLY	A	117	-29.868	-3.058	-79.176	1.00	33.76	A	N
ATOM	1535	CA	GLY	A	117	-31.016	-3.956	-79.297	1.00	32.80	A	C
ATOM	1538	C	GLY	A	117	-30.907	-5.064	-78.267	1.00	32.90	A	C
ATOM	1539	O	GLY	A	117	-30.037	-5.008	-77.390	1.00	33.29	A	O
ATOM	1541	N	PRO	A	118	-31.773	-6.086	-78.364	1.00	28.40	A	N
ATOM	1542	CA	PRO	A	118	-31.716	-7.213	-77.422	1.00	28.96	A	C
ATOM	1544	CB	PRO	A	118	-32.839	-8.136	-77.909	1.00	27.74	A	C
ATOM	1547	CG	PRO	A	118	-33.731	-7.266	-78.725	1.00	27.98	A	C
ATOM	1550	CD	PRO	A	118	-32.849	-6.248	-79.350	1.00	28.83	A	C
ATOM	1553	C	PRO	A	118	-30.357	-7.940	-77.423	1.00	26.11	A	C
ATOM	1554	O	PRO	A	118	-29.938	-8.506	-76.403	1.00	16.45	A	O
ATOM	1555	N	ALA	A	119	-29.666	-7.898	-78.559	1.00	27.71	A	N
ATOM	1556	CA	ALA	A	119	-28.384	-8.572	-78.703	1.00	26.41	A	C
ATOM	1558	CB	ALA	A	119	-28.332	-9.287	-80.059	1.00	26.95	A	C
ATOM	1562	C	ALA	A	119	-27.151	-7.662	-78.525	1.00	24.69	A	C
ATOM	1563	O	ALA	A	119	-26.037	-8.160	-78.492	1.00	19.22	A	O
ATOM	1565	N	VAL	A	120	-27.341	-6.345	-78.428	1.00	26.99	A	N
ATOM	1566	CA	VAL	A	120	-26.226	-5.408	-78.244	1.00	27.02	A	C
ATOM	1568	CB	VAL	A	120	-25.763	-4.803	-79.586	1.00	27.33	A	C
ATOM	1570	CG1	VAL	A	120	-24.419	-4.063	-79.402	1.00	23.51	A	C
ATOM	1574	CG2	VAL	A	120	-25.665	-5.890	-80.668	1.00	20.31	A	C
ATOM	1578	C	VAL	A	120	-26.596	-4.276	-77.270	1.00	29.45	A	C
ATOM	1579	O	VAL	A	120	-27.522	-3.515	-77.521	1.00	26.76	A	O
ATOM	1581	N	ARG	A	121	-25.863	-4.172	-76.162	1.00	31.36	A	N
ATOM	1582	CA	ARG	A	121	-26.207	-3.254	-75.076	1.00	31.87	A	C
ATOM	1584	CB	ARG	A	121	-27.372	-3.842	-74.283	1.00	34.09	A	C
ATOM	1587	CG	ARG	A	121	-28.227	-2.832	-73.527	1.00	37.38	A	C
ATOM	1590	CD	ARG	A	121	-29.287	-3.547	-72.696	1.00	40.86	A	C
ATOM	1593	NE	ARG	A	121	-29.883	-4.663	-73.437	1.00	41.78	A	N
ATOM	1595	CZ	ARG	A	121	-30.148	-5.871	-72.936	1.00	45.05	A	C
ATOM	1596	NH1	ARG	A	121	-30.680	-6.806	-73.719	1.00	47.24	A	N
ATOM	1599	NH2	ARG	A	121	-29.884	-6.166	-71.667	1.00	47.24	A	N
ATOM	1602	C	ARG	A	121	-25.001	-3.034	-74.137	1.00	31.61	A	C
ATOM	1603	O	ARG	A	121	-24.366	-4.005	-73.723	1.00	31.41	A	O
ATOM	1605	N	PRO	A	122	-24.673	-1.763	-73.809	1.00	30.34	A	N
ATOM	1606	CA	PRO	A	122	-23.581	-1.489	-72.860	1.00	30.39	A	C
ATOM	1608	CB	PRO	A	122	-23.503	0.042	-72.836	1.00	32.00	A	C
ATOM	1611	CG	PRO	A	122	-24.216	0.492	-74.067	1.00	31.57	A	C
ATOM	1614	CD	PRO	A	122	-25.268	-0.517	-74.322	1.00	30.60	A	C
ATOM	1617	C	PRO	A	122	-23.814	-2.024	-71.447	1.00	25.43	A	C
ATOM	1618	O	PRO	A	122	-24.944	-2.163	-71.015	1.00	23.87	A	O

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ATOM   1619  N   LEU A 123     -22.728  -2.359 -70.755  1.00 30.90           A    N
ATOM   1620  CA  LEU A 123     -22.817  -2.854 -69.389  1.00 32.21           A    C
ATOM   1622  CB  LEU A 123     -21.986  -4.139 -69.198  1.00 30.54           A    C
ATOM   1625  CG  LEU A 123     -22.033  -4.820 -67.818  1.00 27.61           A    C
ATOM   1627  CD1 LEU A 123     -21.136  -6.046 -67.760  1.00 17.80           A    C
ATOM   1631  CD2 LEU A 123     -23.494  -5.164 -67.440  1.00 25.49           A    C
ATOM   1635  C   LEU A 123     -22.303  -1.767 -68.464  1.00 30.39           A    C
ATOM   1636  O   LEU A 123     -21.207  -1.249 -68.681  1.00 26.88           A    O
ATOM   1638  N   PRO A 124     -23.092  -1.418 -67.433  1.00 35.06           A    N
ATOM   1639  CA  PRO A 124     -22.555  -0.531 -66.402  1.00 34.73           A    C
ATOM   1641  CB  PRO A 124     -23.741  -0.345 -65.430  1.00 39.14           A    C
ATOM   1644  CG  PRO A 124     -24.700  -1.453 -65.733  1.00 40.11           A    C
ATOM   1647  CD  PRO A 124     -24.505  -1.771 -67.181  1.00 38.23           A    C
ATOM   1650  C   PRO A 124     -21.313  -1.089 -65.676  1.00 32.26           A    C
ATOM   1651  O   PRO A 124     -21.273  -2.264 -65.283  1.00 28.04           A    O
ATOM   1652  N   TRP A 125     -20.310  -0.236 -65.504  1.00 31.91           A    N
ATOM   1653  CA  TRP A 125     -19.084  -0.625 -64.807  1.00 32.31           A    C
ATOM   1655  CB  TRP A 125     -17.848  -0.362 -65.657  1.00 33.29           A    C
ATOM   1658  CG  TRP A 125     -17.770   0.982 -66.241  1.00 34.47           A    C
ATOM   1659  CD1 TRP A 125     -18.289   1.383 -67.430  1.00 34.55           A    C
ATOM   1661  NE1 TRP A 125     -17.999   2.709 -67.648  1.00 35.86           A    N
ATOM   1663  CE2 TRP A 125     -17.258   3.180 -66.596  1.00 36.20           A    C
ATOM   1664  CD2 TRP A 125     -17.098   2.116 -65.687  1.00 34.68           A    C
ATOM   1665  CE3 TRP A 125     -16.377   2.336 -64.511  1.00 34.48           A    C
ATOM   1667  CZ3 TRP A 125     -15.853   3.600 -64.276  1.00 34.53           A    C
ATOM   1669  CH2 TRP A 125     -16.032   4.635 -65.197  1.00 34.74           A    C
ATOM   1671  CZ2 TRP A 125     -16.733   4.448 -66.360  1.00 34.53           A    C
ATOM   1673  C   TRP A 125     -18.969   0.041 -63.451  1.00 29.37           A    C
ATOM   1674  O   TRP A 125     -19.577   1.088 -63.196  1.00 34.09           A    O
ATOM   1676  N   GLN A 126     -18.218  -0.600 -62.569  1.00 26.16           A    N
ATOM   1677  CA  GLN A 126     -18.121  -0.157 -61.189  1.00 29.58           A    C
ATOM   1679  CB  GLN A 126     -17.451  -1.221 -60.320  1.00 25.64           A    C
ATOM   1682  CG  GLN A 126     -17.459  -0.888 -58.842  1.00 19.78           A    C
ATOM   1685  CD  GLN A 126     -18.852  -0.619 -58.329  1.00 18.10           A    C
ATOM   1686  OE1 GLN A 126     -19.296   0.527 -58.279  1.00 17.29           A    O
ATOM   1687  NE2 GLN A 126     -19.552  -1.668 -57.949  1.00 14.16           A    N
ATOM   1690  C   GLN A 126     -17.343   1.145 -61.083  1.00 30.89           A    C
ATOM   1691  O   GLN A 126     -16.197   1.231 -61.512  1.00 33.51           A    O
ATOM   1693  N   ARG A 127     -17.988   2.153 -60.512  1.00 33.83           A    N
ATOM   1694  CA  ARG A 127     -17.376   3.451 -60.291  1.00 34.13           A    C
ATOM   1696  CB  ARG A 127     -18.417   4.533 -60.572  1.00 37.02           A    C
ATOM   1699  CG  ARG A 127     -17.869   5.946 -60.715  1.00 41.30           A    C
ATOM   1702  CD  ARG A 127     -18.941   6.915 -61.265  1.00 39.98           A    C
ATOM   1705  NE  ARG A 127     -19.246   6.617 -62.664  1.00 38.47           A    N
ATOM   1707  CZ  ARG A 127     -18.464   6.934 -63.695  1.00 41.59           A    C
ATOM   1708  NH1 ARG A 127     -17.313   7.573 -63.509  1.00 39.96           A    N
ATOM   1711  NH2 ARG A 127     -18.831   6.601 -64.932  1.00 43.49           A    N
ATOM   1714  C   ARG A 127     -16.826   3.545 -58.857  1.00 32.75           A    C
ATOM   1715  O   ARG A 127     -15.886   4.297 -58.604  1.00 32.40           A    O
ATOM   1717  N   VAL A 128     -17.405   2.765 -57.938  1.00 31.02           A    N
ATOM   1718  CA  VAL A 128     -17.062   2.804 -56.513  1.00 27.97           A    C
ATOM   1720  CB  VAL A 128     -18.278   2.450 -55.623  1.00 23.37           A    C
ATOM   1722  CG1 VAL A 128     -17.986   2.685 -54.154  1.00 18.75           A    C
ATOM   1726  CG2 VAL A 128     -19.488   3.279 -56.024  1.00 21.92           A    C
ATOM   1730  C   VAL A 128     -15.900   1.844 -56.231  1.00 30.41           A    C
ATOM   1731  O   VAL A 128     -16.021   0.619 -56.361  1.00 29.19           A    O
ATOM   1733  N   ASP A 129     -14.760   2.416 -55.864  1.00 30.07           A    N
ATOM   1734  CA  ASP A 129     -13.549   1.649 -55.654  1.00 28.11           A    C
ATOM   1736  CB  ASP A 129     -12.346   2.587 -55.692  1.00 29.47           A    C
ATOM   1739  CG  ASP A 129     -11.026   1.863 -55.692  1.00 30.18           A    C
ATOM   1740  OD1 ASP A 129     -10.958   0.669 -55.333  1.00 33.10           A    O
ATOM   1741  OD2 ASP A 129     -10.033   2.515 -56.053  1.00 33.04           A    O
ATOM   1742  C   ASP A 129     -13.678   0.938 -54.316  1.00 28.31           A    C
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ATOM   1743  O   ASP A 129     -13.262   1.442 -53.287  1.00 29.24      A    O
ATOM   1745  N   ARG A 130     -14.321  -0.220 -54.346  1.00 30.53      A    N
ATOM   1746  CA  ARG A 130     -14.424  -1.094 -53.192  1.00 30.04      A    C
ATOM   1748  CB  ARG A 130     -15.767  -0.893 -52.511  1.00 33.92      A    C
ATOM   1751  CG  ARG A 130     -16.039  -1.790 -51.322  1.00 35.80      A    C
ATOM   1754  CD  ARG A 130     -17.468  -1.565 -50.788  1.00 39.17      A    C
ATOM   1757  NE  ARG A 130     -17.680  -2.219 -49.493  1.00 41.40      A    N
ATOM   1759  CZ  ARG A 130     -17.443  -1.661 -48.300  1.00 46.86      A    C
ATOM   1760  NH1 ARG A 130     -16.971  -0.415 -48.200  1.00 48.12      A    N
ATOM   1763  NH2 ARG A 130     -17.682  -2.358 -47.185  1.00 46.18      A    N
ATOM   1766  C   ARG A 130     -14.256  -2.529 -53.699  1.00 28.00      A    C
ATOM   1767  O   ARG A 130     -14.777  -2.875 -54.760  1.00 26.51      A    O
ATOM   1769  N   ASP A 131     -13.511  -3.344 -52.949  1.00 27.78      A    N
ATOM   1770  CA  ASP A 131     -13.187  -4.714 -53.363  1.00 25.39      A    C
ATOM   1772  CB  ASP A 131     -12.216  -5.387 -52.371  1.00 24.95      A    C
ATOM   1775  CG  ASP A 131     -10.754  -5.051 -52.619  1.00 23.96      A    C
ATOM   1776  OD1 ASP A 131     -10.361  -4.619 -53.723  1.00 25.08      A    O
ATOM   1777  OD2 ASP A 131      -9.977  -5.255 -51.677  1.00 23.47      A    O
ATOM   1778  C   ASP A 131     -14.443  -5.559 -53.402  1.00 23.52      A    C
ATOM   1779  O   ASP A 131     -15.295  -5.432 -52.532  1.00 19.47      A    O
ATOM   1781  N   VAL A 132     -14.535  -6.442 -54.392  1.00 22.52      A    N
ATOM   1782  CA  VAL A 132     -15.532  -7.497 -54.362  1.00 21.16      A    C
ATOM   1784  CB  VAL A 132     -15.576  -8.302 -55.681  1.00 20.45      A    C
ATOM   1786  CG1 VAL A 132     -16.623  -9.379 -55.617  1.00 14.62      A    C
ATOM   1790  CG2 VAL A 132     -15.837  -7.389 -56.870  1.00 22.18      A    C
ATOM   1794  C   VAL A 132     -15.158  -8.430 -53.217  1.00 18.80      A    C
ATOM   1795  O   VAL A 132     -13.992  -8.835 -53.075  1.00 18.64      A    O
ATOM   1797  N   GLU A 133     -16.141  -8.772 -52.394  1.00 15.31      A    N
ATOM   1798  CA  GLU A 133     -15.892  -9.622 -51.246  1.00 21.58      A    C
ATOM   1800  CB  GLU A 133     -17.151  -9.796 -50.396  1.00 22.06      A    C
ATOM   1803  CG  GLU A 133     -17.641  -8.524 -49.766  1.00 26.27      A    C
ATOM   1806  CD  GLU A 133     -19.041  -8.663 -49.163  1.00 27.46      A    C
ATOM   1807  OE1 GLU A 133     -19.952  -7.925 -49.601  1.00 37.11      A    O
ATOM   1808  OE2 GLU A 133     -19.228  -9.514 -48.269  1.00 29.31      A    O
ATOM   1809  C   GLU A 133     -15.420 -10.990 -51.710  1.00 25.15      A    C
ATOM   1810  O   GLU A 133     -15.907 -11.501 -52.720  1.00 24.26      A    O
ATOM   1812  N   PRO A 134     -14.468 -11.585 -50.974  1.00 24.40      A    N
ATOM   1813  CA  PRO A 134     -14.053 -12.941 -51.259  1.00 20.18      A    C
ATOM   1815  CB  PRO A 134     -13.000 -13.212 -50.181  1.00 24.61      A    C
ATOM   1818  CG  PRO A 134     -12.485 -11.887 -49.830  1.00 25.72      A    C
ATOM   1821  CD  PRO A 134     -13.704 -11.024 -49.846  1.00 24.65      A    C
ATOM   1824  C   PRO A 134     -15.178 -13.972 -51.196  1.00 19.06      A    C
ATOM   1825  O   PRO A 134     -16.071 -13.903 -50.320  1.00 23.00      A    O
ATOM   1826  N   GLY A 135     -15.138 -14.901 -52.151  1.00 16.00      A    N
ATOM   1827  CA  GLY A 135     -16.135 -15.969 -52.286  1.00 19.31      A    C
ATOM   1830  C   GLY A 135     -17.420 -15.591 -53.022  1.00 18.48      A    C
ATOM   1831  O   GLY A 135     -18.322 -16.424 -53.165  1.00 20.40      A    O
ATOM   1833  N   THR A 136     -17.510 -14.341 -53.478  1.00 18.76      A    N
ATOM   1834  CA  THR A 136     -18.633 -13.880 -54.286  1.00 20.67      A    C
ATOM   1836  CB  THR A 136     -18.615 -12.349 -54.505  1.00 19.72      A    C
ATOM   1838  OG1 THR A 136     -18.633 -11.661 -53.243  1.00 17.99      A    O
ATOM   1840  CG2 THR A 136     -19.819 -11.940 -55.320  1.00 20.71      A    C
ATOM   1844  C   THR A 136     -18.518 -14.539 -55.645  1.00 20.59      A    C
ATOM   1845  O   THR A 136     -17.415 -14.670 -56.169  1.00 18.04      A    O
ATOM   1847  N   LEU A 137     -19.641 -14.979 -56.201  1.00 19.97      A    N
ATOM   1848  CA  LEU A 137     -19.612 -15.657 -57.488  1.00 19.18      A    C
ATOM   1850  CB  LEU A 137     -20.753 -16.659 -57.609  1.00 20.25      A    C
ATOM   1853  CG  LEU A 137     -20.765 -17.816 -56.610  1.00 21.94      A    C
ATOM   1855  CD1 LEU A 137     -22.002 -18.690 -56.843  1.00 21.46      A    C
ATOM   1859  CD2 LEU A 137     -19.506 -18.616 -56.734  1.00 13.55      A    C
ATOM   1863  C   LEU A 137     -19.723 -14.632 -58.583  1.00 15.01      A    C
ATOM   1864  O   LEU A 137     -20.642 -13.829 -58.593  1.00 11.15      A    O
ATOM   1866  N   CYS A 138     -18.783 -14.658 -59.518  1.00 13.68      A    N
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ATOM   1867  CA  CYS A 138     -18.829 -13.748 -60.661  1.00 15.36      A    C
ATOM   1869  CB  CYS A 138     -17.684 -12.727 -60.614  1.00 16.13      A    C
ATOM   1872  SG  CYS A 138     -17.641 -11.707 -59.094  1.00 21.12      A    S
ATOM   1874  C   CYS A 138     -18.764 -14.544 -61.943  1.00 17.49      A    C
ATOM   1875  O   CYS A 138     -18.321 -15.667 -61.952  1.00 19.85      A    O
ATOM   1877  N   ASP A 139     -19.173 -13.916 -63.032  1.00 19.19      A    N
ATOM   1878  CA  ASP A 139     -19.345 -14.581 -64.299  1.00 15.10      A    C
ATOM   1880  CB  ASP A 139     -20.740 -14.264 -64.819  1.00 17.61      A    C
ATOM   1883  CG  ASP A 139     -21.160 -15.174 -65.928  1.00 21.30      A    C
ATOM   1884  OD1 ASP A 139     -21.399 -16.352 -65.648  1.00 25.60      A    O
ATOM   1885  OD2 ASP A 139     -21.239 -14.716 -67.077  1.00 23.89      A    O
ATOM   1886  C   ASP A 139     -18.283 -14.057 -65.259  1.00 15.36      A    C
ATOM   1887  O   ASP A 139     -18.126 -12.848 -65.417  1.00 18.19      A    O
ATOM   1889  N   VAL A 140     -17.546 -14.968 -65.877  1.00 18.90      A    N
ATOM   1890  CA  VAL A 140     -16.601 -14.608 -66.941  1.00 18.35      A    C
ATOM   1892  CB  VAL A 140     -15.122 -14.901 -66.539  1.00 22.08      A    C
ATOM   1894  CG1 VAL A 140     -14.921 -16.356 -66.193  1.00 21.93      A    C
ATOM   1898  CG2 VAL A 140     -14.117 -14.463 -67.648  1.00 23.84      A    C
ATOM   1902  C   VAL A 140     -17.061 -15.333 -68.202  1.00 18.31      A    C
ATOM   1903  O   VAL A 140     -17.445 -16.504 -68.150  1.00 17.82      A    O
ATOM   1905  N   ALA A 141     -17.096 -14.608 -69.317  1.00 21.26      A    N
ATOM   1906  CA  ALA A 141     -17.490 -15.162 -70.615  1.00 19.01      A    C
ATOM   1908  CB  ALA A 141     -18.751 -14.500 -71.118  1.00 17.39      A    C
ATOM   1912  C   ALA A 141     -16.360 -14.967 -71.610  1.00 20.81      A    C
ATOM   1913  O   ALA A 141     -15.548 -14.072 -71.457  1.00 22.40      A    O
ATOM   1915  N   GLY A 142     -16.288 -15.827 -72.621  1.00 22.29      A    N
ATOM   1916  CA  GLY A 142     -15.306 -15.632 -73.681  1.00 19.78      A    C
ATOM   1919  C   GLY A 142     -15.312 -16.707 -74.745  1.00 20.65      A    C
ATOM   1920  O   GLY A 142     -15.984 -17.732 -74.614  1.00 21.03      A    O
ATOM   1922  N   TRP A 143     -14.507 -16.465 -75.779  1.00 28.34      A    N
ATOM   1923  CA  TRP A 143     -14.278 -17.393 -76.881  1.00 22.99      A    C
ATOM   1925  CB  TRP A 143     -14.507 -16.686 -78.222  1.00 25.86      A    C
ATOM   1928  CG  TRP A 143     -15.937 -16.410 -78.552  1.00 25.28      A    C
ATOM   1929  CD1 TRP A 143     -16.807 -17.278 -79.103  1.00 23.95      A    C
ATOM   1931  NE1 TRP A 143     -18.029 -16.680 -79.278  1.00 24.46      A    N
ATOM   1933  CE2 TRP A 143     -17.967 -15.390 -78.829  1.00 23.90      A    C
ATOM   1934  CD2 TRP A 143     -16.653 -15.177 -78.368  1.00 24.99      A    C
ATOM   1935  CE3 TRP A 143     -16.316 -13.923 -77.848  1.00 21.01      A    C
ATOM   1937  CZ3 TRP A 143     -17.278 -12.944 -77.809  1.00 24.74      A    C
ATOM   1939  CH2 TRP A 143     -18.583 -13.176 -78.283  1.00 23.16      A    C
ATOM   1941  CZ2 TRP A 143     -18.948 -14.394 -78.793  1.00 24.14      A    C
ATOM   1943  C   TRP A 143     -12.846 -17.909 -76.822  1.00 29.13      A    C
ATOM   1944  O   TRP A 143     -12.305 -18.415 -77.820  1.00 27.75      A    O
ATOM   1946  N   GLY A 144     -12.250 -17.793 -75.638  1.00 27.30      A    N
ATOM   1947  CA  GLY A 144     -10.943 -18.339 -75.375  1.00 28.04      A    C
ATOM   1950  C   GLY A 144     -10.963 -19.850 -75.320  1.00 27.63      A    C
ATOM   1951  O   GLY A 144     -12.025 -20.464 -75.246  1.00 28.04      A    O
ATOM   1953  N   ILE A 145      -9.771 -20.432 -75.355  1.00 26.81      A    N
ATOM   1954  CA  ILE A 145      -9.597 -21.888 -75.442  1.00 29.71      A    C
ATOM   1956  CB  ILE A 145      -8.080 -22.271 -75.431  1.00 32.32      A    C
ATOM   1958  CG1 ILE A 145      -7.419 -21.937 -74.083  1.00 31.00      A    C
ATOM   1961  CD1 ILE A 145      -5.958 -22.280 -74.019  1.00 33.83      A    C
ATOM   1965  CG2 ILE A 145      -7.362 -21.508 -76.537  1.00 30.15      A    C
ATOM   1969  C   ILE A 145     -10.359 -22.631 -74.350  1.00 27.12      A    C
ATOM   1970  O   ILE A 145     -10.476 -22.145 -73.237  1.00 30.94      A    O
ATOM   1972  N   VAL A 146     -10.891 -23.796 -74.708  1.00 25.62      A    N
ATOM   1973  CA  VAL A 146     -11.730 -24.609 -73.837  1.00 26.26      A    C
ATOM   1975  CB  VAL A 146     -13.074 -24.958 -74.539  1.00 24.91      A    C
ATOM   1977  CG1 VAL A 146     -14.002 -23.723 -74.566  1.00 15.51      A    C
ATOM   1981  CG2 VAL A 146     -12.849 -25.479 -75.964  1.00 20.43      A    C
ATOM   1985  C   VAL A 146     -11.026 -25.888 -73.347  1.00 27.98      A    C
ATOM   1986  O   VAL A 146     -11.577 -26.639 -72.546  1.00 28.80      A    O
ATOM   1988  N   SER A 147      -9.799 -26.089 -73.830  1.00 29.57      A    N
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ATOM   1989  CA  SER A 147      -8.971 -27.246 -73.545  1.00 31.21      A    C
ATOM   1991  CB  SER A 147      -9.208 -28.296 -74.606  1.00 31.60      A    C
ATOM   1994  OG  SER A 147      -8.566 -27.873 -75.801  1.00 29.89      A    O
ATOM   1996  C   SER A 147      -7.512 -26.806 -73.649  1.00 34.49      A    C
ATOM   1997  O   SER A 147      -7.188 -25.830 -74.329  1.00 33.82      A    O
ATOM   1999  N   HIS A 148      -6.620 -27.546 -73.011  1.00 40.96      A    N
ATOM   2000  CA  HIS A 148      -5.196 -27.218 -73.064  1.00 36.62      A    C
ATOM   2002  CB  HIS A 148      -4.454 -27.890 -71.922  1.00 37.45      A    C
ATOM   2005  CG  HIS A 148      -4.860 -27.385 -70.573  1.00 35.43      A    C
ATOM   2006  ND1 HIS A 148      -5.642 -28.117 -69.703  1.00 34.93      A    N
ATOM   2008  CE1 HIS A 148      -5.834 -27.417 -68.599  1.00 36.86      A    C
ATOM   2010  NE2 HIS A 148      -5.209 -26.260 -68.721  1.00 31.81      A    N
ATOM   2012  CD2 HIS A 148      -4.600 -26.213 -69.949  1.00 34.81      A    C
ATOM   2014  C   HIS A 148      -4.554 -27.516 -74.418  1.00 33.43      A    C
ATOM   2015  O   HIS A 148      -3.572 -26.868 -74.772  1.00 33.76      A    O
ATOM   2017  N   ALA A 149      -5.123 -28.457 -75.175  1.00 35.18      A    N
ATOM   2018  CA  ALA A 149      -4.736 -28.700 -76.579  1.00 41.68      A    C
ATOM   2020  CB  ALA A 149      -5.564 -29.879 -77.182  1.00 38.00      A    C
ATOM   2024  C   ALA A 149      -4.876 -27.434 -77.454  1.00 44.39      A    C
ATOM   2025  O   ALA A 149      -4.290 -27.342 -78.533  1.00 45.28      A    O
ATOM   2027  N   GLY A 150      -5.672 -26.477 -76.979  1.00 45.22      A    N
ATOM   2028  CA  GLY A 150      -5.784 -25.151 -77.586  1.00 43.96      A    C
ATOM   2031  C   GLY A 150      -7.001 -24.994 -78.477  1.00 43.10      A    C
ATOM   2032  O   GLY A 150      -6.976 -24.191 -79.415  1.00 38.65      A    O
ATOM   2034  N   ARG A 151      -8.066 -25.752 -78.197  1.00 42.16      A    N
ATOM   2035  CA  ARG A 151      -9.253 -25.705 -79.050  1.00 46.11      A    C
ATOM   2037  CB  ARG A 151     -10.172 -26.913 -78.869  1.00 45.34      A    C
ATOM   2040  CG  ARG A 151     -11.349 -26.822 -79.812  1.00 43.91      A    C
ATOM   2043  CD  ARG A 151     -12.289 -27.973 -79.709  1.00 48.15      A    C
ATOM   2046  NE  ARG A 151     -13.626 -27.450 -79.449  1.00 53.50      A    N
ATOM   2048  CZ  ARG A 151     -14.305 -27.591 -78.312  1.00 52.84      A    C
ATOM   2049  NH1 ARG A 151     -13.819 -28.302 -77.286  1.00 54.12      A    N
ATOM   2052  NH2 ARG A 151     -15.501 -27.030 -78.217  1.00 47.80      A    N
ATOM   2055  C   ARG A 151     -10.055 -24.423 -78.823  1.00 45.78      A    C
ATOM   2056  O   ARG A 151     -10.424 -24.097 -77.686  1.00 36.87      A    O
ATOM   2058  N   ARG A 152     -10.319 -23.725 -79.925  1.00 45.20      A    N
ATOM   2059  CA  ARG A 152     -11.080 -22.493 -79.907  1.00 46.08      A    C
ATOM   2061  CB  ARG A 152     -10.538 -21.528 -80.965  1.00 49.84      A    C
ATOM   2064  CG  ARG A 152      -9.054 -21.230 -80.792  1.00 50.26      A    C
ATOM   2067  CD  ARG A 152      -8.503 -20.316 -81.876  1.00 54.44      A    C
ATOM   2070  NE  ARG A 152      -7.066 -20.531 -82.065  1.00 58.49      A    N
ATOM   2072  CZ  ARG A 152      -6.222 -19.685 -82.668  1.00 61.42      A    C
ATOM   2073  NH1 ARG A 152      -6.650 -18.530 -83.178  1.00 60.62      A    N
ATOM   2076  NH2 ARG A 152      -4.925 -20.004 -82.763  1.00 58.93      A    N
ATOM   2079  C   ARG A 152     -12.552 -22.834 -80.150  1.00 44.99      A    C
ATOM   2080  O   ARG A 152     -12.874 -23.509 -81.129  1.00 44.36      A    O
ATOM   2082  N   PRO A 153     -13.449 -22.409 -79.234  1.00 39.93      A    N
ATOM   2083  CA  PRO A 153     -14.860 -22.629 -79.461  1.00 36.36      A    C
ATOM   2085  CB  PRO A 153     -15.476 -22.375 -78.081  1.00 36.05      A    C
ATOM   2088  CG  PRO A 153     -14.622 -21.368 -77.492  1.00 34.25      A    C
ATOM   2091  CD  PRO A 153     -13.225 -21.717 -77.953  1.00 39.12      A    C
ATOM   2094  C   PRO A 153     -15.411 -21.644 -80.481  1.00 31.32      A    C
ATOM   2095  O   PRO A 153     -14.953 -20.504 -80.559  1.00 34.16      A    O
ATOM   2096  N   ASP A 154     -16.377 -22.108 -81.261  1.00 30.93      A    N
ATOM   2097  CA  ASP A 154     -17.140 -21.262 -82.162  1.00 30.67      A    C
ATOM   2099  CB  ASP A 154     -17.912 -22.123 -83.172  1.00 25.39      A    C
ATOM   2102  CG  ASP A 154     -18.667 -21.299 -84.175  1.00 26.76      A    C
ATOM   2103  OD1 ASP A 154     -18.031 -20.474 -84.851  1.00 24.57      A    O
ATOM   2104  OD2 ASP A 154     -19.901 -21.462 -84.279  1.00 27.62      A    O
ATOM   2105  C   ASP A 154     -18.123 -20.403 -81.371  1.00 28.56      A    C
ATOM   2106  O   ASP A 154     -18.357 -19.253 -81.712  1.00 24.83      A    O
ATOM   2108  N   ARG A 155     -18.712 -20.975 -80.328  1.00 28.26      A    N
ATOM   2109  CA  ARG A 155     -19.768 -20.293 -79.596  1.00 27.71      A    C
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ATOM   2111  CB  ARG A 155     -20.991 -21.189 -79.476  1.00 29.20      A    C
ATOM   2114  CG  ARG A 155     -21.708 -21.304 -80.805  1.00 33.28      A    C
ATOM   2117  CD  ARG A 155     -22.733 -22.366 -80.813  1.00 31.61      A    C
ATOM   2120  NE  ARG A 155     -22.134 -23.666 -80.597  1.00 33.54      A    N
ATOM   2122  CZ  ARG A 155     -22.827 -24.794 -80.557  1.00 35.30      A    C
ATOM   2123  NH1 ARG A 155     -24.147 -24.782 -80.726  1.00 39.14      A    N
ATOM   2126  NH2 ARG A 155     -22.200 -25.940 -80.349  1.00 36.27      A    N
ATOM   2129  C   ARG A 155     -19.293 -19.803 -78.249  1.00 27.25      A    C
ATOM   2130  O   ARG A 155     -18.368 -20.352 -77.665  1.00 31.25      A    O
ATOM   2132  N   LEU A 156     -19.927 -18.740 -77.775  1.00 24.85      A    N
ATOM   2133  CA  LEU A 156     -19.564 -18.120 -76.514  1.00 22.64      A    C
ATOM   2135  CB  LEU A 156     -20.396 -16.860 -76.297  1.00 23.90      A    C
ATOM   2138  CG  LEU A 156     -19.997 -16.035 -75.080  1.00 22.33      A    C
ATOM   2140  CD1 LEU A 156     -18.586 -15.467 -75.249  1.00 13.18      A    C
ATOM   2144  CD2 LEU A 156     -21.001 -14.969 -74.927  1.00 19.84      A    C
ATOM   2148  C   LEU A 156     -19.734 -19.061 -75.315  1.00 20.76      A    C
ATOM   2149  O   LEU A 156     -20.752 -19.729 -75.169  1.00 21.60      A    O
ATOM   2151  N   GLN A 157     -18.723 -19.070 -74.454  1.00 23.15      A    N
ATOM   2152  CA  GLN A 157     -18.698 -19.894 -73.263  1.00 20.93      A    C
ATOM   2154  CB  GLN A 157     -17.459 -20.783 -73.272  1.00 21.93      A    C
ATOM   2157  CG  GLN A 157     -17.237 -21.573 -74.560  1.00 25.99      A    C
ATOM   2160  CD  GLN A 157     -18.204 -22.726 -74.707  1.00 26.63      A    C
ATOM   2161  OE1 GLN A 157     -18.390 -23.509 -73.779  1.00 31.72      A    O
ATOM   2162  NE2 GLN A 157     -18.829 -22.838 -75.877  1.00 27.16      A    N
ATOM   2165  C   GLN A 157     -18.649 -18.991 -72.049  1.00 15.50      A    C
ATOM   2166  O   GLN A 157     -18.204 -17.865 -72.128  1.00 16.34      A    O
ATOM   2168  N   HIS A 158     -19.082 -19.501 -70.914  1.00 19.52      A    N
ATOM   2169  CA  HIS A 158     -18.996 -18.735 -69.673  1.00 19.83      A    C
ATOM   2171  CB  HIS A 158     -20.266 -17.901 -69.457  1.00 20.54      A    C
ATOM   2174  CG  HIS A 158     -21.379 -18.677 -68.832  1.00 22.61      A    C
ATOM   2175  ND1 HIS A 158     -22.038 -19.680 -69.502  1.00 20.53      A    N
ATOM   2177  CE1 HIS A 158     -22.951 -20.207 -68.710  1.00 23.64      A    C
ATOM   2179  NE2 HIS A 158     -22.891 -19.598 -67.540  1.00 23.00      A    N
ATOM   2181  CD2 HIS A 158     -21.916 -18.637 -67.589  1.00 22.29      A    C
ATOM   2183  C   HIS A 158     -18.820 -19.692 -68.518  1.00 17.38      A    C
ATOM   2184  O   HIS A 158     -18.979 -20.904 -68.671  1.00 17.10      A    O
ATOM   2186  N   VAL A 159     -18.477 -19.135 -67.364  1.00 20.26      A    N
ATOM   2187  CA  VAL A 159     -18.309 -19.919 -66.149  1.00 17.49      A    C
ATOM   2189  CB  VAL A 159     -16.964 -20.788 -66.155  1.00 18.10      A    C
ATOM   2191  CG1 VAL A 159     -15.686 -19.944 -66.109  1.00  8.59      A    C
ATOM   2195  CG2 VAL A 159     -16.982 -21.863 -65.010  1.00 16.09      A    C
ATOM   2199  C   VAL A 159     -18.463 -18.994 -64.948  1.00 18.69      A    C
ATOM   2200  O   VAL A 159     -18.087 -17.821 -64.996  1.00 16.96      A    O
ATOM   2202  N   LEU A 160     -19.101 -19.507 -63.902  1.00 19.74      A    N
ATOM   2203  CA  LEU A 160     -19.296 -18.762 -62.671  1.00 19.02      A    C
ATOM   2205  CB  LEU A 160     -20.680 -19.111 -62.105  1.00 19.54      A    C
ATOM   2208  CG  LEU A 160     -21.446 -18.129 -61.229  1.00 19.36      A    C
ATOM   2210  CD1 LEU A 160     -21.603 -16.742 -61.912  1.00 16.65      A    C
ATOM   2214  CD2 LEU A 160     -22.825 -18.760 -60.875  1.00 13.16      A    C
ATOM   2218  C   LEU A 160     -18.162 -19.100 -61.681  1.00 19.79      A    C
ATOM   2219  O   LEU A 160     -18.045 -20.233 -61.235  1.00 24.92      A    O
ATOM   2221  N   LEU A 161     -17.330 -18.112 -61.354  1.00 18.59      A    N
ATOM   2222  CA  LEU A 161     -16.133 -18.305 -60.536  1.00 21.76      A    C
ATOM   2224  CB  LEU A 161     -14.888 -17.804 -61.282  1.00 23.47      A    C
ATOM   2227  CG  LEU A 161     -14.426 -18.440 -62.597  1.00 21.99      A    C
ATOM   2229  CD1 LEU A 161     -13.130 -17.766 -63.064  1.00 18.36      A    C
ATOM   2233  CD2 LEU A 161     -14.222 -19.911 -62.439  1.00 22.70      A    C
ATOM   2237  C   LEU A 161     -16.220 -17.560 -59.187  1.00 24.45      A    C
ATOM   2238  O   LEU A 161     -16.679 -16.415 -59.129  1.00 25.20      A    O
ATOM   2240  N   PRO A 162     -15.775 -18.204 -58.095  1.00 24.12      A    N
ATOM   2241  CA  PRO A 162     -15.684 -17.481 -56.806  1.00 19.46      A    C
ATOM   2243  CB  PRO A 162     -15.664 -18.598 -55.757  1.00 20.25      A    C
ATOM   2246  CG  PRO A 162     -15.349 -19.895 -56.520  1.00 20.47      A    C
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ATOM   2249  CD  PRO A 162     -15.348 -19.613 -57.998  1.00 20.78      A    C
ATOM   2252  C   PRO A 162     -14.441 -16.574 -56.675  1.00 18.90      A    C
ATOM   2253  O   PRO A 162     -13.322 -16.970 -57.013  1.00 20.24      A    O
ATOM   2254  N   VAL A 163     -14.659 -15.356 -56.191  1.00 21.80      A    N
ATOM   2255  CA  VAL A 163     -13.585 -14.404 -55.975  1.00 20.89      A    C
ATOM   2257  CB  VAL A 163     -14.168 -12.982 -55.760  1.00 21.63      A    C
ATOM   2259  CG1 VAL A 163     -13.136 -12.010 -55.234  1.00 20.25      A    C
ATOM   2263  CG2 VAL A 163     -14.730 -12.459 -57.074  1.00 19.97      A    C
ATOM   2267  C   VAL A 163     -12.658 -14.905 -54.829  1.00 24.06      A    C
ATOM   2268  O   VAL A 163     -13.119 -15.367 -53.782  1.00 26.39      A    O
ATOM   2270  N   LEU A 164     -11.353 -14.854 -55.078  1.00 20.04      A    N
ATOM   2271  CA  LEU A 164     -10.340 -15.294 -54.142  1.00 20.58      A    C
ATOM   2273  CB  LEU A 164      -9.289 -16.133 -54.881  1.00 18.41      A    C
ATOM   2276  CG  LEU A 164      -8.174 -16.813 -54.084  1.00 20.38      A    C
ATOM   2278  CD1 LEU A 164      -8.716 -17.893 -53.142  1.00 17.03      A    C
ATOM   2282  CD2 LEU A 164      -7.145 -17.395 -55.055  1.00 21.63      A    C
ATOM   2286  C   LEU A 164      -9.710 -14.035 -53.563  1.00 20.51      A    C
ATOM   2287  O   LEU A 164      -9.264 -13.168 -54.311  1.00 24.96      A    O
ATOM   2289  N   ASP A 165      -9.682 -13.939 -52.233  1.00 20.22      A    N
ATOM   2290  CA  ASP A 165      -9.082 -12.805 -51.553  1.00 17.69      A    C
ATOM   2292  CB  ASP A 165      -9.136 -12.999 -50.038  1.00 23.18      A    C
ATOM   2295  CG  ASP A 165      -8.150 -14.022 -49.545  1.00 29.87      A    C
ATOM   2296  OD1 ASP A 165      -7.026 -13.628 -49.160  1.00 30.87      A    O
ATOM   2297  OD2 ASP A 165      -8.491 -15.218 -49.563  1.00 34.33      A    O
ATOM   2298  C   ASP A 165      -7.628 -12.529 -52.019  1.00 22.45      A    C
ATOM   2299  O   ASP A 165      -6.926 -13.422 -52.479  1.00 20.10      A    O
ATOM   2301  N   ARG A 166      -7.180 -11.288 -51.868  1.00 21.60      A    N
ATOM   2302  CA  ARG A 166      -5.911 -10.868 -52.440  1.00 22.03      A    C
ATOM   2304  CB  ARG A 166      -5.831  -9.334 -52.470  1.00 19.86      A    C
ATOM   2307  CG  ARG A 166      -4.674  -8.815 -53.308  1.00 24.19      A    C
ATOM   2310  CD  ARG A 166      -4.748  -7.303 -53.491  1.00 24.63      A    C
ATOM   2313  NE  ARG A 166      -5.852  -6.904 -54.349  1.00 26.26      A    N
ATOM   2315  CZ  ARG A 166      -7.007  -6.389 -53.932  1.00 21.16      A    C
ATOM   2316  NH1 ARG A 166      -7.269  -6.191 -52.644  1.00 18.22      A    N
ATOM   2319  NH2 ARG A 166      -7.924  -6.077 -54.827  1.00 26.25      A    N
ATOM   2322  C   ARG A 166      -4.694 -11.474 -51.732  1.00 18.59      A    C
ATOM   2323  O   ARG A 166      -3.690 -11.749 -52.382  1.00 21.13      A    O
ATOM   2325  N   ALA A 167      -4.804 -11.703 -50.421  1.00 18.53      A    N
ATOM   2326  CA  ALA A 167      -3.698 -12.192 -49.593  1.00 18.47      A    C
ATOM   2328  CB  ALA A 167      -4.014 -12.059 -48.096  1.00 19.96      A    C
ATOM   2332  C   ALA A 167      -3.381 -13.638 -49.964  1.00 21.72      A    C
ATOM   2333  O   ALA A 167      -2.213 -13.983 -50.253  1.00 24.85      A    O
ATOM   2335  N   THR A 168      -4.415 -14.472 -50.036  1.00 20.26      A    N
ATOM   2336  CA  THR A 168      -4.233 -15.822 -50.577  1.00 20.44      A    C
ATOM   2338  CB  THR A 168      -5.558 -16.565 -50.694  1.00 18.81      A    C
ATOM   2340  OG1 THR A 168      -6.097 -16.784 -49.384  1.00 22.97      A    O
ATOM   2342  CG2 THR A 168      -5.367 -17.902 -51.405  1.00 21.73      A    C
ATOM   2346  C   THR A 168      -3.584 -15.764 -51.962  1.00 23.35      A    C
ATOM   2347  O   THR A 168      -2.629 -16.490 -52.244  1.00 21.77      A    O
ATOM   2349  N   CYS A 169      -4.092 -14.877 -52.814  1.00 24.99      A    N
ATOM   2350  CA  CYS A 169      -3.619 -14.776 -54.195  1.00 22.71      A    C
ATOM   2352  CB  CYS A 169      -4.552 -13.843 -54.990  1.00 22.88      A    C
ATOM   2355  SG  CYS A 169      -4.419 -14.130 -56.761  1.00 29.22      A    S
ATOM   2357  C   CYS A 169      -2.153 -14.312 -54.318  1.00 21.42      A    C
ATOM   2358  O   CYS A 169      -1.479 -14.572 -55.338  1.00 23.65      A    O
ATOM   2360  N   ASN A 170      -1.671 -13.610 -53.291  1.00 23.92      A    N
ATOM   2361  CA  ASN A 170      -0.285 -13.138 -53.235  1.00 23.63      A    C
ATOM   2363  CB  ASN A 170      -0.211 -11.745 -52.594  1.00 18.85      A    C
ATOM   2366  CG  ASN A 170      -0.416 -10.632 -53.600  1.00 22.74      A    C
ATOM   2367  OD1 ASN A 170       0.032 -10.728 -54.756  1.00 19.40      A    O
ATOM   2368  ND2 ASN A 170      -1.062  -9.559 -53.168  1.00 18.56      A    N
ATOM   2371  C   ASN A 170       0.722 -14.084 -52.547  1.00 24.40      A    C
ATOM   2372  O   ASN A 170       1.924 -13.848 -52.619  1.00 22.92      A    O
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ATOM   2374  N   ARG A 171       0.241 -15.128 -51.882  1.00 25.33           A    N
ATOM   2375  CA  ARG A 171       1.110 -16.222 -51.426  1.00 23.63           A    C
ATOM   2377  CB  ARG A 171       0.287 -17.454 -51.058  1.00 23.21           A    C
ATOM   2380  CG  ARG A 171       0.151 -17.676 -49.568  1.00 27.77           A    C
ATOM   2383  CD  ARG A 171      -0.382 -19.038 -49.251  1.00 31.54           A    C
ATOM   2386  NE  ARG A 171      -1.774 -18.912 -48.863  1.00 37.50           A    N
ATOM   2388  CZ  ARG A 171      -2.766 -19.709 -49.246  1.00 39.05           A    C
ATOM   2389  NH1 ARG A 171      -3.999 -19.451 -48.809  1.00 43.84           A    N
ATOM   2392  NH2 ARG A 171      -2.561 -20.739 -50.055  1.00 31.78           A    N
ATOM   2395  C   ARG A 171       2.105 -16.597 -52.513  1.00 22.78           A    C
ATOM   2396  O   ARG A 171       1.755 -16.570 -53.686  1.00 21.17           A    O
ATOM   2398  N   ARG A 172       3.338 -16.955 -52.130  1.00 22.43           A    N
ATOM   2399  CA  ARG A 172       4.387 -17.213 -53.120  1.00 26.74           A    C
ATOM   2401  CB  ARG A 172       5.739 -17.486 -52.434  1.00 27.50           A    C
ATOM   2404  CG  ARG A 172       5.820 -18.800 -51.691  1.00 25.13           A    C
ATOM   2407  CD  ARG A 172       7.087 -18.888 -50.893  1.00 27.27           A    C
ATOM   2410  NE  ARG A 172       6.951 -18.209 -49.608  1.00 27.02           A    N
ATOM   2412  CZ  ARG A 172       7.958 -18.014 -48.768  1.00 25.71           A    C
ATOM   2413  NH1 ARG A 172       9.198 -18.406 -49.085  1.00 20.19           A    N
ATOM   2416  NH2 ARG A 172       7.729 -17.387 -47.617  1.00 28.46           A    N
ATOM   2419  C   ARG A 172       4.039 -18.349 -54.076  1.00 24.36           A    C
ATOM   2420  O   ARG A 172       4.496 -18.356 -55.228  1.00 25.99           A    O
ATOM   2422  N   THR A 173       3.229 -19.301 -53.607  1.00 25.42           A    N
ATOM   2423  CA  THR A 173       2.751 -20.392 -54.473  1.00 25.47           A    C
ATOM   2425  CB  THR A 173       1.818 -21.346 -53.729  1.00 20.22           A    C
ATOM   2427  OG1 THR A 173       2.294 -21.552 -52.398  1.00 16.95           A    O
ATOM   2429  CG2 THR A 173       1.740 -22.673 -54.457  1.00 23.50           A    C
ATOM   2433  C   THR A 173       1.943 -19.881 -55.654  1.00 27.26           A    C
ATOM   2434  O   THR A 173       1.870 -20.535 -56.703  1.00 26.37           A    O
ATOM   2436  N   HIS A 174       1.310 -18.724 -55.453  1.00 27.47           A    N
ATOM   2437  CA  HIS A 174       0.382 -18.149 -56.402  1.00 25.23           A    C
ATOM   2439  CB  HIS A 174      -0.921 -17.803 -55.685  1.00 25.54           A    C
ATOM   2442  CG  HIS A 174      -1.526 -18.982 -55.002  1.00 22.85           A    C
ATOM   2443  ND1 HIS A 174      -2.237 -18.885 -53.830  1.00 24.48           A    N
ATOM   2445  CE1 HIS A 174      -2.634 -20.092 -53.458  1.00 24.84           A    C
ATOM   2447  NE2 HIS A 174      -2.199 -20.967 -54.344  1.00 24.16           A    N
ATOM   2449  CD2 HIS A 174      -1.480 -20.302 -55.307  1.00 20.64           A    C
ATOM   2451  C   HIS A 174       1.033 -16.994 -57.119  1.00 26.13           A    C
ATOM   2452  O   HIS A 174       1.945 -17.217 -57.913  1.00 29.10           A    O
ATOM   2454  N   HIS A 175       0.605 -15.765 -56.871  1.00 30.72           A    N
ATOM   2455  CA  HIS A 175       1.133 -14.671 -57.666  1.00 25.85           A    C
ATOM   2457  CB  HIS A 175      -0.019 -13.890 -58.284  1.00 25.40           A    C
ATOM   2460  CG  HIS A 175      -0.761 -14.677 -59.314  1.00 27.33           A    C
ATOM   2461  ND1 HIS A 175      -0.156 -15.154 -60.462  1.00 25.47           A    N
ATOM   2463  CE1 HIS A 175      -1.046 -15.812 -61.179  1.00 25.76           A    C
ATOM   2465  NE2 HIS A 175      -2.203 -15.787 -60.537  1.00 28.33           A    N
ATOM   2467  CD2 HIS A 175      -2.048 -15.095 -59.362  1.00 23.27           A    C
ATOM   2469  C   HIS A 175       2.170 -13.809 -56.968  1.00 26.70           A    C
ATOM   2470  O   HIS A 175       2.669 -12.857 -57.571  1.00 30.20           A    O
ATOM   2472  N   ASP A 176       2.493 -14.145 -55.713  1.00 26.66           A    N
ATOM   2473  CA  ASP A 176       3.762 -13.757 -55.105  1.00 25.62           A    C
ATOM   2475  CB  ASP A 176       4.916 -14.398 -55.909  1.00 26.96           A    C
ATOM   2478  CG  ASP A 176       6.195 -14.591 -55.095  1.00 25.57           A    C
ATOM   2479  OD1 ASP A 176       6.221 -14.332 -53.870  1.00 21.71           A    O
ATOM   2480  OD2 ASP A 176       7.201 -15.026 -55.705  1.00 27.90           A    O
ATOM   2481  C   ASP A 176       3.924 -12.229 -55.035  1.00 25.46           A    C
ATOM   2482  O   ASP A 176       4.996 -11.695 -55.336  1.00 23.03           A    O
ATOM   2484  N   GLY A 177       2.847 -11.551 -54.647  1.00 21.78           A    N
ATOM   2485  CA  GLY A 177       2.822 -10.096 -54.454  1.00 20.61           A    C
ATOM   2488  C   GLY A 177       2.427  -9.257 -55.662  1.00 22.71           A    C
ATOM   2489  O   GLY A 177       2.288  -8.042 -55.544  1.00 26.55           A    O
ATOM   2491  N   ALA A 178       2.275  -9.901 -56.819  1.00 26.13           A    N
ATOM   2492  CA  ALA A 178       1.990  -9.237 -58.106  1.00 25.28           A    C
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ATOM   2494  CB  ALA A 178       2.232 -10.228 -59.278  1.00 24.14      A    C
ATOM   2498  C   ALA A 178       0.581  -8.654 -58.200  1.00 27.53      A    C
ATOM   2499  O   ALA A 178       0.330  -7.779 -59.030  1.00 30.65      A    O
ATOM   2501  N   ILE A 179      -0.326  -9.131 -57.342  1.00 26.84      A    N
ATOM   2502  CA  ILE A 179      -1.707  -8.644 -57.298  1.00 27.21      A    C
ATOM   2504  CB  ILE A 179      -2.703  -9.723 -56.756  1.00 23.00      A    C
ATOM   2506  CG1 ILE A 179      -2.406 -11.109 -57.360  1.00 20.36      A    C
ATOM   2509  CD1 ILE A 179      -2.091 -11.124 -58.878  1.00 17.33      A    C
ATOM   2513  CG2 ILE A 179      -4.161  -9.290 -56.997  1.00 18.33      A    C
ATOM   2517  C   ILE A 179      -1.798  -7.384 -56.430  1.00 27.98      A    C
ATOM   2518  O   ILE A 179      -1.788  -7.452 -55.193  1.00 31.45      A    O
ATOM   2520  N   THR A 180      -1.891  -6.242 -57.103  1.00 25.23      A    N
ATOM   2521  CA  THR A 180      -1.995  -4.940 -56.457  1.00 29.01      A    C
ATOM   2523  CB  THR A 180      -1.479  -3.796 -57.367  1.00 30.06      A    C
ATOM   2525  OG1 THR A 180      -2.406  -3.560 -58.436  1.00 31.95      A    O
ATOM   2527  CG2 THR A 180      -0.107  -4.103 -57.933  1.00 29.98      A    C
ATOM   2531  C   THR A 180      -3.446  -4.656 -56.120  1.00 29.88      A    C
ATOM   2532  O   THR A 180      -4.330  -5.477 -56.371  1.00 30.84      A    O
ATOM   2534  N   GLN A 181      -3.685  -3.476 -55.559  1.00 32.25      A    N
ATOM   2535  CA  GLN A 181      -5.034  -3.024 -55.230  1.00 27.50      A    C
ATOM   2537  CB  GLN A 181      -4.987  -1.709 -54.447  1.00 34.08      A    C
ATOM   2540  CG  GLN A 181      -6.148  -1.521 -53.494  1.00 34.95      A    C
ATOM   2543  CD  GLN A 181      -6.038  -2.398 -52.263  1.00 38.74      A    C
ATOM   2544  OE1 GLN A 181      -6.990  -2.542 -51.496  1.00 41.65      A    O
ATOM   2545  NE2 GLN A 181      -4.877  -2.999 -52.075  1.00 38.41      A    N
ATOM   2548  C   GLN A 181      -5.914  -2.821 -56.445  1.00 20.22      A    C
ATOM   2549  O   GLN A 181      -7.123  -2.827 -56.308  1.00 21.70      A    O
ATOM   2551  N   ARG A 182      -5.315  -2.658 -57.624  1.00 20.91      A    N
ATOM   2552  CA  ARG A 182      -6.045  -2.409 -58.865  1.00 26.89      A    C
ATOM   2554  CB  ARG A 182      -5.249  -1.506 -59.836  1.00 35.06      A    C
ATOM   2557  CG  ARG A 182      -4.269  -0.490 -59.232  1.00 40.34      A    C
ATOM   2560  CD  ARG A 182      -4.904   0.784 -58.736  1.00 47.01      A    C
ATOM   2563  NE  ARG A 182      -5.192   1.755 -59.798  1.00 52.05      A    N
ATOM   2565  CZ  ARG A 182      -4.282   2.453 -60.484  1.00 53.87      A    C
ATOM   2566  NH1 ARG A 182      -2.975   2.309 -60.252  1.00 56.05      A    N
ATOM   2569  NH2 ARG A 182      -4.691   3.309 -61.424  1.00 51.91      A    N
ATOM   2572  C   ARG A 182      -6.390  -3.722 -59.581  1.00 29.98      A    C
ATOM   2573  O   ARG A 182      -6.832  -3.707 -60.729  1.00 32.16      A    O
ATOM   2575  N   MET A 183      -6.186  -4.846 -58.892  1.00 29.84      A    N
ATOM   2576  CA  MET A 183      -6.292  -6.172 -59.472  1.00 26.68      A    C
ATOM   2578  CB  MET A 183      -4.897  -6.777 -59.653  1.00 26.85      A    C
ATOM   2581  CG  MET A 183      -4.232  -6.455 -60.984  1.00 32.53      A    C
ATOM   2584  SD  MET A 183      -2.451  -6.812 -60.976  1.00 32.78      A    S
ATOM   2585  CE  MET A 183      -1.938  -5.348 -60.168  1.00 38.11      A    C
ATOM   2589  C   MET A 183      -7.106  -7.035 -58.534  1.00 21.15      A    C
ATOM   2590  O   MET A 183      -7.202  -6.750 -57.347  1.00 23.07      A    O
ATOM   2592  N   MET A 184      -7.723  -8.074 -59.071  1.00 24.53      A    N
ATOM   2593  CA  MET A 184      -8.439  -9.043 -58.246  1.00 21.72      A    C
ATOM   2595  CB  MET A 184      -9.940  -8.730 -58.176  1.00 23.03      A    C
ATOM   2598  CG  MET A 184     -10.701  -8.730 -59.488  1.00 20.18      A    C
ATOM   2601  SD  MET A 184     -12.399  -8.201 -59.244  1.00 23.38      A    S
ATOM   2602  CE  MET A 184     -13.061  -9.551 -58.270  1.00 21.93      A    C
ATOM   2606  C   MET A 184      -8.200 -10.441 -58.777  1.00 23.48      A    C
ATOM   2607  O   MET A 184      -7.687 -10.620 -59.881  1.00 18.50      A    O
ATOM   2609  N   CYS A 185      -8.568 -11.428 -57.973  1.00 21.58      A    N
ATOM   2610  CA  CYS A 185      -8.350 -12.818 -58.324  1.00 26.00      A    C
ATOM   2612  CB  CYS A 185      -7.278 -13.437 -57.412  1.00 31.71      A    C
ATOM   2615  SG  CYS A 185      -5.646 -12.784 -57.675  1.00 35.37      A    S
ATOM   2617  C   CYS A 185      -9.642 -13.611 -58.226  1.00 23.36      A    C
ATOM   2618  O   CYS A 185     -10.589 -13.202 -57.532  1.00 23.41      A    O
ATOM   2620  N   ALA A 186      -9.671 -14.727 -58.961  1.00 21.25      A    N
ATOM   2621  CA  ALA A 186     -10.721 -15.730 -58.852  1.00 18.39      A    C
ATOM   2623  CB  ALA A 186     -11.699 -15.600 -60.012  1.00 22.22      A    C
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ATOM   2627  C   ALA A 186     -10.088 -17.104 -58.859  1.00 20.74           A    C
ATOM   2628  O   ALA A 186      -8.984 -17.284 -59.374  1.00 19.79           A    O
ATOM   2630  N   GLU A 187     -10.796 -18.088 -58.319  1.00 20.89           A    N
ATOM   2631  CA  GLU A 187     -10.319 -19.469 -58.359  1.00 23.28           A    C
ATOM   2633  CB  GLU A 187     -11.232 -20.392 -57.559  1.00 28.66           A    C
ATOM   2636  CG  GLU A 187     -11.140 -20.077 -56.050  1.00 31.43           A    C
ATOM   2639  CD  GLU A 187     -11.985 -20.964 -55.182  1.00 35.27           A    C
ATOM   2640  OE1 GLU A 187     -12.169 -22.146 -55.529  1.00 48.59           A    O
ATOM   2641  OE2 GLU A 187     -12.454 -20.483 -54.131  1.00 34.82           A    O
ATOM   2642  C   GLU A 187     -10.115 -19.938 -59.805  1.00 26.50           A    C
ATOM   2643  O   GLU A 187     -10.758 -19.441 -60.735  1.00 20.38           A    O
ATOM   2645  N   SER A 188      -9.136 -20.836 -59.971  1.00 23.92           A    N
ATOM   2646  CA  SER A 188      -8.702 -21.327 -61.261  1.00 25.93           A    C
ATOM   2648  CB  SER A 188      -7.293 -20.829 -61.523  1.00 17.83           A    C
ATOM   2651  OG  SER A 188      -6.489 -21.092 -60.398  1.00 21.89           A    O
ATOM   2653  C   SER A 188      -8.710 -22.855 -61.372  1.00 26.38           A    C
ATOM   2654  O   SER A 188      -8.414 -23.369 -62.426  1.00 26.77           A    O
ATOM   2656  N   ASN A 189      -9.082 -23.563 -60.310  1.00 26.10           A    N
ATOM   2657  CA  ASN A 189      -8.947 -25.018 -60.261  1.00 29.58           A    C
ATOM   2659  CB  ASN A 189      -9.152 -25.510 -58.824  1.00 32.74           A    C
ATOM   2662  CG  ASN A 189      -8.847 -26.996 -58.637  1.00 33.31           A    C
ATOM   2663  OD1 ASN A 189      -8.159 -27.628 -59.436  1.00 37.29           A    O
ATOM   2664  ND2 ASN A 189      -9.346 -27.546 -57.545  1.00 38.45           A    N
ATOM   2667  C   ASN A 189      -9.934 -25.684 -61.193  1.00 28.30           A    C
ATOM   2668  O   ASN A 189     -11.114 -25.785 -60.884  1.00 20.07           A    O
ATOM   2670  N   ARG A 190      -9.441 -26.090 -62.361  1.00 30.01           A    N
ATOM   2671  CA  ARG A 190     -10.248 -26.781 -63.379  1.00 37.30           A    C
ATOM   2673  CB  ARG A 190     -10.757 -28.134 -62.830  1.00 42.30           A    C
ATOM   2676  CG  ARG A 190      -9.616 -29.097 -62.471  1.00 46.77           A    C
ATOM   2679  CD  ARG A 190     -10.119 -30.494 -62.133  1.00 50.54           A    C
ATOM   2682  NE  ARG A 190     -10.941 -30.508 -60.918  1.00 56.85           A    N
ATOM   2684  CZ  ARG A 190     -10.511 -30.804 -59.684  1.00 59.99           A    C
ATOM   2685  NH1 ARG A 190      -9.238 -31.129 -59.453  1.00 61.53           A    N
ATOM   2688  NH2 ARG A 190     -11.372 -30.782 -58.662  1.00 57.81           A    N
ATOM   2691  C   ARG A 190     -11.397 -25.945 -63.995  1.00 35.38           A    C
ATOM   2692  O   ARG A 190     -12.159 -26.449 -64.823  1.00 31.83           A    O
ATOM   2694  N   ARG A 191     -11.478 -24.669 -63.608  1.00 35.99           A    N
ATOM   2695  CA  ARG A 191     -12.500 -23.719 -64.050  1.00 30.67           A    C
ATOM   2697  CB  ARG A 191     -13.650 -23.645 -63.052  1.00 36.05           A    C
ATOM   2700  CG  ARG A 191     -14.632 -24.776 -63.118  1.00 38.16           A    C
ATOM   2703  CD  ARG A 191     -15.946 -24.326 -62.513  1.00 44.34           A    C
ATOM   2706  NE  ARG A 191     -16.960 -25.377 -62.505  1.00 47.89           A    N
ATOM   2708  CZ  ARG A 191     -17.248 -26.166 -61.466  1.00 56.46           A    C
ATOM   2709  NH1 ARG A 191     -16.593 -26.054 -60.305  1.00 57.52           A    N
ATOM   2712  NH2 ARG A 191     -18.210 -27.089 -61.587  1.00 54.56           A    N
ATOM   2715  C   ARG A 191     -11.825 -22.370 -64.082  1.00 23.20           A    C
ATOM   2716  O   ARG A 191     -11.465 -21.857 -63.041  1.00 27.82           A    O
ATOM   2718  N   ASP A 192     -11.636 -21.789 -65.259  1.00 21.33           A    N
ATOM   2719  CA  ASP A 192     -10.757 -20.650 -65.363  1.00 19.68           A    C
ATOM   2721  CB  ASP A 192      -9.303 -21.154 -65.291  1.00 21.43           A    C
ATOM   2724  CG  ASP A 192      -8.324 -20.096 -64.865  1.00 16.40           A    C
ATOM   2725  OD1 ASP A 192      -8.727 -18.938 -64.626  1.00 25.12           A    O
ATOM   2726  OD2 ASP A 192      -7.122 -20.425 -64.787  1.00 26.56           A    O
ATOM   2727  C   ASP A 192     -10.986 -19.880 -66.652  1.00 19.25           A    C
ATOM   2728  O   ASP A 192     -11.582 -20.398 -67.591  1.00 22.47           A    O
ATOM   2730  N   SER A 193     -10.539 -18.627 -66.679  1.00 22.34           A    N
ATOM   2731  CA  SER A 193     -10.385 -17.891 -67.926  1.00 27.08           A    C
ATOM   2733  CB  SER A 193     -10.510 -16.375 -67.698  1.00 26.57           A    C
ATOM   2736  OG  SER A 193      -9.852 -15.967 -66.518  1.00 31.62           A    O
ATOM   2738  C   SER A 193      -9.034 -18.284 -68.537  1.00 29.35           A    C
ATOM   2739  O   SER A 193      -8.090 -18.610 -67.816  1.00 28.41           A    O
ATOM   2741  N   CYS A 194      -8.964 -18.329 -69.867  1.00 35.46           A    N
ATOM   2742  CA  CYS A 194      -7.765 -18.811 -70.559  1.00 35.62           A    C
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ATOM   2744  CB  CYS A 194      -7.983 -20.246 -71.085  1.00 38.72      A    C
ATOM   2747  SG  CYS A 194      -8.598 -21.459 -69.858  1.00 37.64      A    S
ATOM   2749  C   CYS A 194      -7.365 -17.882 -71.706  1.00 36.97      A    C
ATOM   2750  O   CYS A 194      -7.949 -16.826 -71.893  1.00 31.60      A    O
ATOM   2752  N   LYS A 195      -6.349 -18.290 -72.457  1.00 37.38      A    N
ATOM   2753  CA  LYS A 195      -5.914 -17.586 -73.656  1.00 38.74      A    C
ATOM   2755  CB  LYS A 195      -4.797 -18.384 -74.344  1.00 43.77      A    C
ATOM   2758  CG  LYS A 195      -4.022 -17.661 -75.427  1.00 44.77      A    C
ATOM   2761  CD  LYS A 195      -3.308 -18.689 -76.302  1.00 47.51      A    C
ATOM   2764  CE  LYS A 195      -2.601 -18.066 -77.516  1.00 51.32      A    C
ATOM   2767  NZ  LYS A 195      -1.957 -19.118 -78.381  1.00 50.65      A    N
ATOM   2771  C   LYS A 195      -7.093 -17.389 -74.602  1.00 34.36      A    C
ATOM   2772  O   LYS A 195      -7.845 -18.330 -74.881  1.00 33.82      A    O
ATOM   2774  N   GLY A 196      -7.260 -16.143 -75.053  1.00 34.33      A    N
ATOM   2775  CA  GLY A 196      -8.396 -15.729 -75.868  1.00 31.57      A    C
ATOM   2778  C   GLY A 196      -9.537 -15.115 -75.060  1.00 31.48      A    C
ATOM   2779  O   GLY A 196     -10.438 -14.515 -75.638  1.00 25.54      A    O
ATOM   2781  N   ASP A 197      -9.501 -15.286 -73.732  1.00 29.85      A    N
ATOM   2782  CA  ASP A 197     -10.484 -14.698 -72.822  1.00 27.11      A    C
ATOM   2784  CB  ASP A 197     -10.752 -15.632 -71.640  1.00 25.09      A    C
ATOM   2787  CG  ASP A 197     -11.451 -16.915 -72.058  1.00 25.05      A    C
ATOM   2788  OD1 ASP A 197     -12.324 -16.856 -72.943  1.00 19.95      A    O
ATOM   2789  OD2 ASP A 197     -11.140 -17.989 -71.506  1.00 26.94      A    O
ATOM   2790  C   ASP A 197     -10.017 -13.340 -72.308  1.00 28.11      A    C
ATOM   2791  O   ASP A 197     -10.823 -12.561 -71.795  1.00 26.28      A    O
ATOM   2793  N   SER A 198      -8.717 -13.082 -72.443  1.00 26.36      A    N
ATOM   2794  CA  SER A 198      -8.092 -11.839 -72.036  1.00 28.50      A    C
ATOM   2796  CB  SER A 198      -6.642 -11.772 -72.558  1.00 33.13      A    C
ATOM   2799  OG  SER A 198      -5.886 -12.947 -72.253  1.00 33.48      A    O
ATOM   2801  C   SER A 198      -8.896 -10.655 -72.582  1.00 25.09      A    C
ATOM   2802  O   SER A 198      -9.300 -10.662 -73.740  1.00 23.64      A    O
ATOM   2804  N   GLY A 199      -9.150  -9.663 -71.738  1.00 21.76      A    N
ATOM   2805  CA  GLY A 199      -9.933  -8.492 -72.141  1.00 22.98      A    C
ATOM   2808  C   GLY A 199     -11.433  -8.620 -71.935  1.00 21.49      A    C
ATOM   2809  O   GLY A 199     -12.158  -7.645 -72.075  1.00 25.37      A    O
ATOM   2811  N   GLY A 200     -11.915  -9.816 -71.605  1.00 24.68      A    N
ATOM   2812  CA  GLY A 200     -13.349 -10.012 -71.375  1.00 22.74      A    C
ATOM   2815  C   GLY A 200     -13.785  -9.582 -69.984  1.00 23.75      A    C
ATOM   2816  O   GLY A 200     -12.962  -9.212 -69.147  1.00 25.70      A    O
ATOM   2818  N   PRO A 201     -15.095  -9.644 -69.721  1.00 21.81      A    N
ATOM   2819  CA  PRO A 201     -15.674  -9.158 -68.482  1.00 21.05      A    C
ATOM   2821  CB  PRO A 201     -17.066  -8.712 -68.914  1.00 18.53      A    C
ATOM   2824  CG  PRO A 201     -17.400  -9.582 -70.078  1.00 20.74      A    C
ATOM   2827  CD  PRO A 201     -16.124 -10.183 -70.621  1.00 19.11      A    C
ATOM   2830  C   PRO A 201     -15.789 -10.197 -67.374  1.00 20.79      A    C
ATOM   2831  O   PRO A 201     -16.162 -11.333 -67.632  1.00 22.69      A    O
ATOM   2832  N   LEU A 202     -15.452  -9.779 -66.157  1.00 21.21      A    N
ATOM   2833  CA  LEU A 202     -15.835 -10.456 -64.929  1.00 19.29      A    C
ATOM   2835  CB  LEU A 202     -14.663 -10.507 -63.952  1.00 23.65      A    C
ATOM   2838  CG  LEU A 202     -14.803 -11.309 -62.656  1.00 23.29      A    C
ATOM   2840  CD1 LEU A 202     -14.815 -12.805 -62.916  1.00 20.55      A    C
ATOM   2844  CD2 LEU A 202     -13.689 -10.967 -61.723  1.00 20.52      A    C
ATOM   2848  C   LEU A 202     -16.938  -9.581 -64.369  1.00 19.18      A    C
ATOM   2849  O   LEU A 202     -16.699  -8.414 -64.020  1.00 16.26      A    O
ATOM   2851  N   VAL A 203     -18.140 -10.146 -64.287  1.00 18.94      A    N
ATOM   2852  CA  VAL A 203     -19.364  -9.409 -63.945  1.00 14.05      A    C
ATOM   2854  CB  VAL A 203     -20.354  -9.513 -65.116  1.00 12.86      A    C
ATOM   2856  CG1 VAL A 203     -21.618  -8.716 -64.873  1.00 13.22      A    C
ATOM   2860  CG2 VAL A 203     -19.685  -9.024 -66.406  1.00 11.48      A    C
ATOM   2864  C   VAL A 203     -19.971  -9.994 -62.663  1.00 15.48      A    C
ATOM   2865  O   VAL A 203     -20.260 -11.180 -62.610  1.00 12.73      A    O
ATOM   2867  N   CYS A 204     -20.155  -9.158 -61.632  1.00 17.62      A    N
ATOM   2868  CA  CYS A 204     -20.630  -9.613 -60.325  1.00 15.36      A    C
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ATOM	2870	CB	CYS	A	204	-19.597	-9.326	-59.233	1.00	15.35	A	C
ATOM	2873	SG	CYS	A	204	-17.892	-9.788	-59.691	1.00	22.33	A	S
ATOM	2875	C	CYS	A	204	-21.961	-8.954	-59.989	1.00	18.76	A	C
ATOM	2876	O	CYS	A	204	-22.059	-7.729	-59.918	1.00	18.14	A	O
ATOM	2878	N	GLY	A	205	-22.993	-9.770	-59.800	1.00	18.96	A	N
ATOM	2879	CA	GLY	A	205	-24.327	-9.264	-59.507	1.00	17.09	A	C
ATOM	2882	C	GLY	A	205	-24.905	-8.314	-60.539	1.00	17.80	A	C
ATOM	2883	O	GLY	A	205	-25.768	-7.509	-60.214	1.00	26.09	A	O
ATOM	2885	N	GLY	A	206	-24.448	-8.429	-61.784	1.00	18.79	A	N
ATOM	2886	CA	GLY	A	206	-24.883	-7.569	-62.892	1.00	19.04	A	C
ATOM	2889	C	GLY	A	206	-23.964	-6.389	-63.184	1.00	19.01	A	C
ATOM	2890	O	GLY	A	206	-24.238	-5.593	-64.086	1.00	20.02	A	O
ATOM	2892	N	VAL	A	207	-22.886	-6.253	-62.417	1.00	17.54	A	N
ATOM	2893	CA	VAL	A	207	-22.009	-5.092	-62.531	1.00	17.29	A	C
ATOM	2895	CB	VAL	A	207	-21.971	-4.268	-61.210	1.00	16.77	A	C
ATOM	2897	CG1	VAL	A	207	-21.005	-3.057	-61.324	1.00	10.36	A	C
ATOM	2901	CG2	VAL	A	207	-23.375	-3.794	-60.847	1.00	11.24	A	C
ATOM	2905	C	VAL	A	207	-20.607	-5.553	-62.944	1.00	17.63	A	C
ATOM	2906	O	VAL	A	207	-20.048	-6.484	-62.362	1.00	19.92	A	O
ATOM	2908	N	LEU	A	208	-20.063	-4.916	-63.973	1.00	17.54	A	N
ATOM	2909	CA	LEU	A	208	-18.699	-5.196	-64.428	1.00	17.57	A	C
ATOM	2911	CB	LEU	A	208	-18.407	-4.431	-65.718	1.00	16.00	A	C
ATOM	2914	CG	LEU	A	208	-16.992	-4.624	-66.263	1.00	15.20	A	C
ATOM	2916	CD1	LEU	A	208	-16.957	-5.933	-66.990	1.00	14.58	A	C
ATOM	2920	CD2	LEU	A	208	-16.602	-3.452	-67.161	1.00	16.32	A	C
ATOM	2924	C	LEU	A	208	-17.705	-4.785	-63.351	1.00	17.52	A	C
ATOM	2925	O	LEU	A	208	-17.582	-3.607	-63.038	1.00	22.06	A	O
ATOM	2927	N	GLU	A	209	-17.015	-5.765	-62.772	1.00	22.00	A	N
ATOM	2928	CA	GLU	A	209	-16.006	-5.511	-61.746	1.00	19.90	A	C
ATOM	2930	CB	GLU	A	209	-16.233	-6.429	-60.548	1.00	20.12	A	C
ATOM	2933	CG	GLU	A	209	-17.475	-6.102	-59.742	1.00	18.24	A	C
ATOM	2936	CD	GLU	A	209	-17.350	-4.838	-58.912	1.00	18.76	A	C
ATOM	2937	OE1	GLU	A	209	-16.235	-4.307	-58.791	1.00	27.02	A	O
ATOM	2938	OE2	GLU	A	209	-18.370	-4.374	-58.363	1.00	23.72	A	O
ATOM	2939	C	GLU	A	209	-14.594	-5.705	-62.261	1.00	21.86	A	C
ATOM	2940	O	GLU	A	209	-13.669	-5.108	-61.739	1.00	23.57	A	O
ATOM	2942	N	GLY	A	210	-14.426	-6.544	-63.283	1.00	19.36	A	N
ATOM	2943	CA	GLY	A	210	-13.102	-6.904	-63.743	1.00	20.95	A	C
ATOM	2946	C	GLY	A	210	-12.993	-7.054	-65.240	1.00	17.48	A	C
ATOM	2947	O	GLY	A	210	-13.979	-7.222	-65.921	1.00	15.35	A	O
ATOM	2949	N	VAL	A	211	-11.771	-6.941	-65.742	1.00	23.83	A	N
ATOM	2950	CA	VAL	A	211	-11.449	-7.285	-67.112	1.00	24.75	A	C
ATOM	2952	CB	VAL	A	211	-10.990	-6.044	-67.911	1.00	26.58	A	C
ATOM	2954	CG1	VAL	A	211	-10.502	-6.440	-69.289	1.00	25.54	A	C
ATOM	2958	CG2	VAL	A	211	-12.117	-5.048	-68.036	1.00	24.15	A	C
ATOM	2962	C	VAL	A	211	-10.351	-8.343	-67.055	1.00	25.92	A	C
ATOM	2963	O	VAL	A	211	-9.350	-8.141	-66.391	1.00	25.60	A	O
ATOM	2965	N	VAL	A	212	-10.560	-9.485	-67.715	1.00	28.11	A	N
ATOM	2966	CA	VAL	A	212	-9.600	-10.602	-67.695	1.00	32.28	A	C
ATOM	2968	CB	VAL	A	212	-10.049	-11.798	-68.632	1.00	26.53	A	C
ATOM	2970	CG1	VAL	A	212	-9.027	-12.933	-68.641	1.00	24.57	A	C
ATOM	2974	CG2	VAL	A	212	-11.386	-12.314	-68.214	1.00	19.84	A	C
ATOM	2978	C	VAL	A	212	-8.213	-10.096	-68.097	1.00	35.81	A	C
ATOM	2979	O	VAL	A	212	-8.043	-9.559	-69.193	1.00	35.76	A	O
ATOM	2981	N	THR	A	213	-7.241	-10.260	-67.196	1.00	40.29	A	N
ATOM	2982	CA	THR	A	213	-5.888	-9.714	-67.370	1.00	42.98	A	C
ATOM	2984	CB	THR	A	213	-5.178	-9.521	-66.022	1.00	41.71	A	C
ATOM	2986	OG1	THR	A	213	-5.933	-8.625	-65.211	1.00	43.58	A	O
ATOM	2988	CG2	THR	A	213	-3.771	-8.973	-66.208	1.00	40.06	A	C
ATOM	2992	C	THR	A	213	-5.011	-10.637	-68.186	1.00	46.80	A	C
ATOM	2993	O	THR	A	213	-4.903	-11.824	-67.876	1.00	47.51	A	O
ATOM	2995	N	SER	A	214	-4.339	-10.061	-69.183	1.00	52.77	A	N
ATOM	2996	CA	SER	A	214	-3.442	-10.797	-70.078	1.00	55.16	A	C

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ATOM   2998  CB  SER A 214      -3.207  -9.985 -71.369  1.00 56.98      A    C
ATOM   3001  OG  SER A 214      -3.224 -10.809 -72.531  1.00 59.28      A    O
ATOM   3003  C   SER A 214      -2.105 -11.169 -69.381  1.00 57.56      A    C
ATOM   3004  O   SER A 214      -1.700 -10.547 -68.388  1.00 55.71      A    O
ATOM   3006  N   GLY A 215      -1.441 -12.197 -69.907  1.00 60.48      A    N
ATOM   3007  CA  GLY A 215      -0.192 -12.720 -69.335  1.00 61.29      A    C
ATOM   3010  C   GLY A 215       0.092 -14.141 -69.810  1.00 62.40      A    C
ATOM   3011  O   GLY A 215      -0.740 -14.758 -70.481  1.00 61.13      A    O
ATOM   3013  N   SER A 216       1.261 -14.670 -69.454  1.00 63.59      A    N
ATOM   3014  CA  SER A 216       1.695 -15.997 -69.932  1.00 62.07      A    C
ATOM   3016  CB  SER A 216       3.231 -16.055 -69.997  1.00 64.66      A    C
ATOM   3019  OG  SER A 216       3.681 -17.314 -70.485  1.00 65.95      A    O
ATOM   3021  C   SER A 216       1.160 -17.165 -69.077  1.00 60.62      A    C
ATOM   3022  O   SER A 216       1.514 -18.330 -69.305  1.00 57.64      A    O
ATOM   3024  N   ARG A 217       0.296 -16.839 -68.115  1.00 58.14      A    N
ATOM   3025  CA  ARG A 217      -0.209 -17.779 -67.104  1.00 56.02      A    C
ATOM   3027  CB  ARG A 217      -1.166 -17.018 -66.179  1.00 54.28      A    C
ATOM   3030  CG  ARG A 217      -1.568 -17.733 -64.899  1.00 53.34      A    C
ATOM   3033  CD  ARG A 217      -2.680 -16.945 -64.204  1.00 50.63      A    C
ATOM   3036  NE  ARG A 217      -3.840 -16.856 -65.087  1.00 50.26      A    N
ATOM   3038  CZ  ARG A 217      -4.955 -17.585 -64.988  1.00 48.61      A    C
ATOM   3039  NH1 ARG A 217      -5.139 -18.437 -63.994  1.00 47.81      A    N
ATOM   3042  NH2 ARG A 217      -5.913 -17.426 -65.878  1.00 44.81      A    N
ATOM   3045  C   ARG A 217      -0.927 -19.012 -67.684  1.00 54.16      A    C
ATOM   3046  O   ARG A 217      -1.670 -18.917 -68.672  1.00 52.76      A    O
ATOM   3048  N   VAL A 218      -0.692 -20.164 -67.054  1.00 53.57      A    N
ATOM   3049  CA  VAL A 218      -1.376 -21.423 -67.406  1.00 51.91      A    C
ATOM   3051  CB  VAL A 218      -0.643 -22.668 -66.809  1.00 54.01      A    C
ATOM   3053  CG1 VAL A 218      -0.838 -22.761 -65.262  1.00 50.76      A    C
ATOM   3057  CG2 VAL A 218      -1.111 -23.947 -67.501  1.00 54.22      A    C
ATOM   3061  C   VAL A 218      -2.798 -21.378 -66.862  1.00 50.04      A    C
ATOM   3062  O   VAL A 218      -3.039 -20.713 -65.848  1.00 52.34      A    O
ATOM   3064  N   CYS A 219      -3.741 -22.071 -67.504  1.00 43.80      A    N
ATOM   3065  CA  CYS A 219      -5.125 -22.013 -67.027  1.00 41.02      A    C
ATOM   3067  CB  CYS A 219      -6.066 -21.383 -68.088  1.00 42.98      A    C
ATOM   3070  SG  CYS A 219      -6.944 -22.500 -69.232  1.00 41.03      A    S
ATOM   3072  C   CYS A 219      -5.612 -23.363 -66.513  1.00 32.14      A    C
ATOM   3073  O   CYS A 219      -5.207 -24.408 -66.999  1.00 33.42      A    O
ATOM   3075  N   GLY A 220      -6.460 -23.322 -65.500  1.00 33.38      A    N
ATOM   3076  CA  GLY A 220      -7.041 -24.523 -64.910  1.00 33.34      A    C
ATOM   3079  C   GLY A 220      -6.297 -25.025 -63.686  1.00 31.67      A    C
ATOM   3080  O   GLY A 220      -6.711 -26.007 -63.063  1.00 27.93      A    O
ATOM   3082  N   ASN A 221      -5.219 -24.333 -63.331  1.00 33.27      A    N
ATOM   3083  CA  ASN A 221      -4.293 -24.767 -62.279  1.00 32.26      A    C
ATOM   3085  CB  ASN A 221      -2.851 -24.528 -62.764  1.00 34.92      A    C
ATOM   3088  CG  ASN A 221      -1.767 -25.002 -61.772  1.00 36.56      A    C
ATOM   3089  OD1 ASN A 221      -2.006 -25.820 -60.876  1.00 34.95      A    O
ATOM   3090  ND2 ASN A 221      -0.549 -24.476 -61.962  1.00 34.90      A    N
ATOM   3093  C   ASN A 221      -4.570 -23.951 -61.037  1.00 25.99      A    C
ATOM   3094  O   ASN A 221      -4.488 -22.724 -61.092  1.00 26.89      A    O
ATOM   3096  N   ARG A 222      -4.912 -24.632 -59.940  1.00 26.76      A    N
ATOM   3097  CA  ARG A 222      -5.176 -24.003 -58.634  1.00 29.73      A    C
ATOM   3099  CB  ARG A 222      -5.530 -25.075 -57.594  1.00 37.03      A    C
ATOM   3102  CG  ARG A 222      -4.373 -26.038 -57.285  1.00 41.65      A    C
ATOM   3105  CD  ARG A 222      -4.659 -26.957 -56.114  1.00 46.86      A    C
ATOM   3108  NE  ARG A 222      -3.749 -28.112 -56.097  1.00 50.54      A    N
ATOM   3110  CZ  ARG A 222      -3.935 -29.266 -56.756  1.00 53.52      A    C
ATOM   3111  NH1 ARG A 222      -5.011 -29.471 -57.518  1.00 51.75      A    N
ATOM   3114  NH2 ARG A 222      -3.028 -30.237 -56.654  1.00 53.23      A    N
ATOM   3117  C   ARG A 222      -4.042 -23.159 -58.069  1.00 23.87      A    C
ATOM   3118  O   ARG A 222      -4.275 -22.295 -57.235  1.00 27.75      A    O
ATOM   3120  N   LYS A 223      -2.805 -23.447 -58.472  1.00 26.24      A    N
ATOM   3121  CA  LYS A 223      -1.658 -22.711 -58.004  1.00 20.88      A    C
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ATOM   3123  CB  LYS A 223      -0.355 -23.505 -58.232  1.00 24.90           A    C
ATOM   3126  CG  LYS A 223      -0.169 -24.727 -57.290  1.00 21.88           A    C
ATOM   3129  CD  LYS A 223       1.213 -25.412 -57.467  1.00 21.07           A    C
ATOM   3132  CE  LYS A 223       1.403 -26.534 -56.420  1.00 26.51           A    C
ATOM   3135  NZ  LYS A 223       2.790 -27.103 -56.417  1.00 24.28           A    N
ATOM   3139  C   LYS A 223      -1.558 -21.343 -58.667  1.00 21.19           A    C
ATOM   3140  O   LYS A 223      -0.841 -20.500 -58.188  1.00 27.59           A    O
ATOM   3142  N   LYS A 224      -2.248 -21.128 -59.785  1.00 25.34           A    N
ATOM   3143  CA  LYS A 224      -2.233 -19.832 -60.466  1.00 20.45           A    C
ATOM   3145  CB  LYS A 224      -1.488 -19.933 -61.816  1.00 21.13           A    C
ATOM   3148  CG  LYS A 224       0.004 -20.212 -61.637  1.00 25.76           A    C
ATOM   3151  CD  LYS A 224       0.722 -19.049 -60.928  1.00 27.94           A    C
ATOM   3154  CE  LYS A 224       2.181 -19.331 -60.628  1.00 29.94           A    C
ATOM   3157  NZ  LYS A 224       2.301 -20.420 -59.647  1.00 32.28           A    N
ATOM   3161  C   LYS A 224      -3.636 -19.319 -60.674  1.00 19.16           A    C
ATOM   3162  O   LYS A 224      -4.192 -19.490 -61.757  1.00 16.40           A    O
ATOM   3164  N   PRO A 225      -4.228 -18.698 -59.628  1.00 19.45           A    N
ATOM   3165  CA  PRO A 225      -5.569 -18.116 -59.753  1.00 20.40           A    C
ATOM   3167  CB  PRO A 225      -5.727 -17.326 -58.437  1.00 21.17           A    C
ATOM   3170  CG  PRO A 225      -4.878 -18.086 -57.451  1.00 22.92           A    C
ATOM   3173  CD  PRO A 225      -3.671 -18.498 -58.273  1.00 18.87           A    C
ATOM   3176  C   PRO A 225      -5.711 -17.171 -60.955  1.00 17.36           A    C
ATOM   3177  O   PRO A 225      -4.716 -16.629 -61.435  1.00 22.41           A    O
ATOM   3178  N   GLY A 226      -6.943 -16.980 -61.421  1.00 22.32           A    N
ATOM   3179  CA  GLY A 226      -7.237 -16.038 -62.500  1.00 22.47           A    C
ATOM   3182  C   GLY A 226      -7.040 -14.624 -62.019  1.00 22.96           A    C
ATOM   3183  O   GLY A 226      -7.342 -14.319 -60.851  1.00 18.48           A    O
ATOM   3185  N   ILE A 227      -6.491 -13.775 -62.895  1.00 24.12           A    N
ATOM   3186  CA  ILE A 227      -6.197 -12.381 -62.557  1.00 25.47           A    C
ATOM   3188  CB  ILE A 227      -4.713 -11.993 -62.793  1.00 25.51           A    C
ATOM   3190  CG1 ILE A 227      -3.775 -12.882 -61.996  1.00 23.90           A    C
ATOM   3193  CD1 ILE A 227      -2.309 -12.671 -62.375  1.00 26.64           A    C
ATOM   3197  CG2 ILE A 227      -4.452 -10.516 -62.395  1.00 21.56           A    C
ATOM   3201  C   ILE A 227      -7.082 -11.460 -63.376  1.00 26.31           A    C
ATOM   3202  O   ILE A 227      -7.228 -11.621 -64.591  1.00 23.08           A    O
ATOM   3204  N   TYR A 228      -7.675 -10.494 -62.686  1.00 28.36           A    N
ATOM   3205  CA  TYR A 228      -8.632  -9.564 -63.290  1.00 25.01           A    C
ATOM   3207  CB  TYR A 228     -10.077  -9.960 -62.903  1.00 24.06           A    C
ATOM   3210  CG  TYR A 228     -10.363 -11.419 -63.216  1.00 25.54           A    C
ATOM   3211  CD1 TYR A 228     -10.913 -11.800 -64.435  1.00 25.52           A    C
ATOM   3213  CE1 TYR A 228     -11.132 -13.143 -64.741  1.00 23.25           A    C
ATOM   3215  CZ  TYR A 228     -10.776 -14.127 -63.824  1.00 26.58           A    C
ATOM   3216  OH  TYR A 228     -10.985 -15.480 -64.095  1.00 25.35           A    O
ATOM   3218  CE2 TYR A 228     -10.215 -13.765 -62.619  1.00 26.32           A    C
ATOM   3220  CD2 TYR A 228     -10.011 -12.420 -62.322  1.00 27.08           A    C
ATOM   3222  C   TYR A 228      -8.283  -8.150 -62.850  1.00 24.13           A    C
ATOM   3223  O   TYR A 228      -8.038  -7.901 -61.664  1.00 27.77           A    O
ATOM   3225  N   THR A 229      -8.249  -7.226 -63.809  1.00 26.20           A    N
ATOM   3226  CA  THR A 229      -8.058  -5.799 -63.510  1.00 25.76           A    C
ATOM   3228  CB  THR A 229      -7.546  -5.033 -64.752  1.00 25.42           A    C
ATOM   3230  OG1 THR A 229      -6.411  -5.722 -65.301  1.00 29.63           A    O
ATOM   3232  CG2 THR A 229      -7.131  -3.655 -64.390  1.00 25.27           A    C
ATOM   3236  C   THR A 229      -9.375  -5.209 -63.015  1.00 21.74           A    C
ATOM   3237  O   THR A 229     -10.396  -5.315 -63.679  1.00 25.52           A    O
ATOM   3239  N   ARG A 230      -9.352  -4.616 -61.829  1.00 22.01           A    N
ATOM   3240  CA  ARG A 230     -10.524  -3.967 -61.270  1.00 24.73           A    C
ATOM   3242  CB  ARG A 230     -10.323  -3.694 -59.777  1.00 24.23           A    C
ATOM   3245  CG  ARG A 230     -10.149  -4.945 -58.964  1.00 26.03           A    C
ATOM   3248  CD  ARG A 230      -9.920  -4.647 -57.512  1.00 22.13           A    C
ATOM   3251  NE  ARG A 230     -11.021  -3.862 -56.997  1.00 24.28           A    N
ATOM   3253  CZ  ARG A 230     -10.974  -2.579 -56.669  1.00 22.93           A    C
ATOM   3254  NH1 ARG A 230      -9.848  -1.893 -56.740  1.00 28.99           A    N
ATOM   3257  NH2 ARG A 230     -12.073  -1.986 -56.235  1.00 23.18           A    N
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ATOM   3260  C   ARG A 230     -10.802  -2.643 -61.992  1.00 24.60      A    C
ATOM   3261  O   ARG A 230      -9.972  -1.750 -61.971  1.00 23.54      A    O
ATOM   3263  N   VAL A 231     -11.971  -2.511 -62.607  1.00 28.46      A    N
ATOM   3264  CA  VAL A 231     -12.287  -1.301 -63.386  1.00 27.54      A    C
ATOM   3266  CB  VAL A 231     -13.401  -1.549 -64.448  1.00 25.49      A    C
ATOM   3268  CG1 VAL A 231     -12.955  -2.644 -65.391  1.00 23.60      A    C
ATOM   3272  CG2 VAL A 231     -14.750  -1.877 -63.797  1.00 22.57      A    C
ATOM   3276  C   VAL A 231     -12.624  -0.074 -62.544  1.00 27.33      A    C
ATOM   3277  O   VAL A 231     -12.477   1.041 -63.034  1.00 26.83      A    O
ATOM   3279  N   ALA A 232     -13.055  -0.258 -61.295  1.00 25.84      A    N
ATOM   3280  CA  ALA A 232     -13.308   0.879 -60.410  1.00 28.11      A    C
ATOM   3282  CB  ALA A 232     -13.821   0.402 -59.054  1.00 24.48      A    C
ATOM   3286  C   ALA A 232     -12.038   1.724 -60.247  1.00 29.08      A    C
ATOM   3287  O   ALA A 232     -12.084   2.956 -60.264  1.00 24.29      A    O
ATOM   3289  N   SER A 233     -10.908   1.036 -60.137  1.00 31.93      A    N
ATOM   3290  CA  SER A 233      -9.596   1.654 -59.990  1.00 33.67      A    C
ATOM   3292  CB  SER A 233      -8.522   0.562 -59.924  1.00 33.96      A    C
ATOM   3295  OG ASER A 233      -8.562  -0.129 -58.694  0.70 34.87      A    O
ATOM   3296  OG BSER A 233      -8.579  -0.133 -58.695  0.30 34.35      A    O
ATOM   3299  C   SER A 233      -9.201   2.606 -61.109  1.00 35.71      A    C
ATOM   3300  O   SER A 233      -8.324   3.445 -60.919  1.00 40.75      A    O
ATOM   3302  N   TYR A 234      -9.809   2.453 -62.278  1.00 35.00      A    N
ATOM   3303  CA  TYR A 234      -9.454   3.263 -63.431  1.00 33.84      A    C
ATOM   3305  CB  TYR A 234      -8.972   2.344 -64.565  1.00 33.04      A    C
ATOM   3308  CG  TYR A 234      -7.739   1.542 -64.194  1.00 33.40      A    C
ATOM   3309  CD1 TYR A 234      -6.460   2.049 -64.431  1.00 34.91      A    C
ATOM   3311  CE1 TYR A 234      -5.317   1.332 -64.079  1.00 37.04      A    C
ATOM   3313  CZ  TYR A 234      -5.441   0.080 -63.487  1.00 34.27      A    C
ATOM   3314  OH  TYR A 234      -4.305  -0.603 -63.138  1.00 33.36      A    O
ATOM   3316  CE2 TYR A 234      -6.699  -0.450 -63.227  1.00 32.49      A    C
ATOM   3318  CD2 TYR A 234      -7.845   0.287 -63.589  1.00 33.80      A    C
ATOM   3320  C   TYR A 234     -10.623   4.140 -63.883  1.00 32.94      A    C
ATOM   3321  O   TYR A 234     -10.692   4.499 -65.048  1.00 35.23      A    O
ATOM   3323  N   ALA A 235     -11.530   4.485 -62.963  1.00 32.88      A    N
ATOM   3324  CA  ALA A 235     -12.730   5.278 -63.284  1.00 38.13      A    C
ATOM   3326  CB  ALA A 235     -13.613   5.466 -62.038  1.00 34.67      A    C
ATOM   3330  C   ALA A 235     -12.410   6.644 -63.894  1.00 40.07      A    C
ATOM   3331  O   ALA A 235     -13.105   7.099 -64.805  1.00 40.64      A    O
ATOM   3333  N   ALA A 236     -11.370   7.296 -63.383  1.00 40.14      A    N
ATOM   3334  CA  ALA A 236     -10.970   8.603 -63.884  1.00 42.82      A    C
ATOM   3336  CB  ALA A 236      -9.980   9.272 -62.927  1.00 45.37      A    C
ATOM   3340  C   ALA A 236     -10.369   8.469 -65.281  1.00 42.28      A    C
ATOM   3341  O   ALA A 236     -10.620   9.298 -66.155  1.00 44.88      A    O
ATOM   3343  N   TRP A 237      -9.582   7.425 -65.491  1.00 42.68      A    N
ATOM   3344  CA  TRP A 237      -8.985   7.177 -66.803  1.00 42.71      A    C
ATOM   3346  CB  TRP A 237      -7.964   6.057 -66.735  1.00 42.74      A    C
ATOM   3349  CG  TRP A 237      -7.408   5.731 -68.068  1.00 42.83      A    C
ATOM   3350  CD1 TRP A 237      -6.469   6.434 -68.748  1.00 42.44      A    C
ATOM   3352  NE1 TRP A 237      -6.197   5.825 -69.946  1.00 43.25      A    N
ATOM   3354  CE2 TRP A 237      -6.986   4.712 -70.069  1.00 43.01      A    C
ATOM   3355  CD2 TRP A 237      -7.765   4.621 -68.899  1.00 42.70      A    C
ATOM   3356  CE3 TRP A 237      -8.656   3.550 -68.762  1.00 42.19      A    C
ATOM   3358  CZ3 TRP A 237      -8.742   2.624 -69.783  1.00 41.96      A    C
ATOM   3360  CH2 TRP A 237      -7.953   2.738 -70.940  1.00 42.37      A    C
ATOM   3362  CZ2 TRP A 237      -7.072   3.774 -71.103  1.00 43.38      A    C
ATOM   3364  C   TRP A 237     -10.035   6.835 -67.856  1.00 44.38      A    C
ATOM   3365  O   TRP A 237      -9.970   7.327 -68.987  1.00 45.85      A    O
ATOM   3367  N   ILE A 238     -10.994   5.988 -67.487  1.00 43.73      A    N
ATOM   3368  CA  ILE A 238     -12.069   5.603 -68.401  1.00 42.04      A    C
ATOM   3370  CB  ILE A 238     -12.968   4.482 -67.803  1.00 38.51      A    C
ATOM   3372  CG1 ILE A 238     -12.188   3.162 -67.715  1.00 39.24      A    C
ATOM   3375  CD1 ILE A 238     -12.970   2.023 -67.102  1.00 38.64      A    C
ATOM   3379  CG2 ILE A 238     -14.189   4.253 -68.661  1.00 38.82      A    C
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ATOM   3383  C   ILE A 238     -12.860   6.865 -68.765  1.00 41.74      A    C
ATOM   3384  O   ILE A 238     -13.103   7.135 -69.938  1.00 41.34      A    O
ATOM   3386  N   ASP A 239     -13.209   7.652 -67.750  1.00 45.02      A    N
ATOM   3387  CA  ASP A 239     -13.864   8.958 -67.944  1.00 43.99      A    C
ATOM   3389  CB  ASP A 239     -14.010   9.680 -66.601  1.00 43.49      A    C
ATOM   3392  CG  ASP A 239     -15.190   9.178 -65.798  1.00 44.07      A    C
ATOM   3393  OD1 ASP A 239     -16.113   8.595 -66.407  1.00 44.92      A    O
ATOM   3394  OD2 ASP A 239     -15.197   9.372 -64.560  1.00 43.08      A    O
ATOM   3395  C   ASP A 239     -13.173   9.883 -68.954  1.00 43.22      A    C
ATOM   3396  O   ASP A 239     -13.822  10.378 -69.874  1.00 44.74      A    O
ATOM   3398  N   SER A 240     -11.874  10.127 -68.792  1.00 44.13      A    N
ATOM   3399  CA  SER A 240     -11.165  11.007 -69.721  1.00 45.86      A    C
ATOM   3401  CB  SER A 240      -9.682  11.156 -69.355  1.00 45.16      A    C
ATOM   3404  OG ASER A 240      -8.997   9.918 -69.400  0.60 46.17      A    O
ATOM   3405  OG BSER A 240      -9.002   9.915 -69.401  0.40 45.75      A    O
ATOM   3408  C   SER A 240     -11.331  10.525 -71.169  1.00 50.03      A    C
ATOM   3409  O   SER A 240     -11.693  11.305 -72.056  1.00 51.58      A    O
ATOM   3411  N   VAL A 241     -11.119   9.231 -71.392  1.00 50.96      A    N
ATOM   3412  CA  VAL A 241     -11.151   8.666 -72.742  1.00 46.94      A    C
ATOM   3414  CB  VAL A 241     -10.546   7.230 -72.751  1.00 44.94      A    C
ATOM   3416  CG1 VAL A 241     -10.709   6.558 -74.111  1.00 45.96      A    C
ATOM   3420  CG2 VAL A 241      -9.070   7.283 -72.368  1.00 38.44      A    C
ATOM   3424  C   VAL A 241     -12.557   8.719 -73.370  1.00 47.32      A    C
ATOM   3425  O   VAL A 241     -12.686   8.950 -74.572  1.00 51.82      A    O
ATOM   3427  N   LEU A 242     -13.603   8.560 -72.561  1.00 47.39      A    N
ATOM   3428  CA  LEU A 242     -14.973   8.407 -73.088  1.00 46.77      A    C
ATOM   3430  CB  LEU A 242     -15.777   7.431 -72.209  1.00 45.42      A    C
ATOM   3433  CG  LEU A 242     -15.793   5.967 -72.676  1.00 45.47      A    C
ATOM   3435  CD1 LEU A 242     -14.385   5.472 -72.941  1.00 44.04      A    C
ATOM   3439  CD2 LEU A 242     -16.501   5.071 -71.669  1.00 44.50      A    C
ATOM   3443  C   LEU A 242     -15.760   9.716 -73.280  1.00 50.61      A    C
ATOM   3444  O   LEU A 242     -16.953   9.684 -73.626  1.00 47.58      A    O
ATOM   3446  N   ALA A 243     -15.107  10.859 -73.078  1.00 54.86      A    N
ATOM   3447  CA  ALA A 243     -15.770  12.159 -73.259  1.00 55.32      A    C
ATOM   3449  CB  ALA A 243     -16.573  12.523 -72.007  1.00 55.32      A    C
ATOM   3453  C   ALA A 243     -14.763  13.260 -73.595  1.00 60.01      A    C
ATOM   3454  O   ALA A 243     -15.067  14.181 -74.362  1.00 64.45      A    O
ATOM   3456  OXT ALA A 243     -13.627  13.256 -73.110  1.00 60.42      A    O
ATOM   3457  N   ASP L   1       0.320 -34.124 -43.608  1.00 39.68      L    N
ATOM   3458  CA  ASP L   1       0.857 -32.817 -44.116  1.00 35.44      L    C
ATOM   3460  CB  ASP L   1       0.855 -31.775 -43.006  1.00 39.56      L    C
ATOM   3463  CG  ASP L   1      -0.579 -31.443 -42.504  1.00 43.75      L    C
ATOM   3464  OD1 ASP L   1      -1.578 -32.039 -42.992  1.00 35.08      L    O
ATOM   3465  OD2 ASP L   1      -0.710 -30.574 -41.609  1.00 50.87      L    O
ATOM   3466  C   ASP L   1       2.250 -33.066 -44.664  1.00 35.43      L    C
ATOM   3467  O   ASP L   1       2.807 -34.124 -44.408  1.00 38.67      L    O
ATOM   3471  N   ILE L   2       2.799 -32.132 -45.443  1.00 29.46      L    N
ATOM   3472  CA  ILE L   2       3.967 -32.448 -46.259  1.00 28.30      L    C
ATOM   3474  CB  ILE L   2       4.118 -31.512 -47.464  1.00 21.86      L    C
ATOM   3476  CG1 ILE L   2       2.883 -31.586 -48.366  1.00 18.55      L    C
ATOM   3479  CD1 ILE L   2       2.965 -30.723 -49.583  1.00 20.84      L    C
ATOM   3483  CG2 ILE L   2       5.363 -31.876 -48.240  1.00 20.07      L    C
ATOM   3487  C   ILE L   2       5.281 -32.464 -45.477  1.00 28.84      L    C
ATOM   3488  O   ILE L   2       5.632 -31.507 -44.767  1.00 30.47      L    O
ATOM   3490  N   GLN L   3       6.021 -33.546 -45.641  1.00 26.48      L    N
ATOM   3491  CA  GLN L   3       7.277 -33.706 -44.945  1.00 31.95      L    C
ATOM   3493  CB  GLN L   3       7.383 -35.097 -44.364  1.00 36.89      L    C
ATOM   3496  CG  GLN L   3       6.342 -35.376 -43.314  1.00 38.60      L    C
ATOM   3499  CD  GLN L   3       6.154 -36.831 -43.164  1.00 41.85      L    C
ATOM   3500  OE1 GLN L   3       5.031 -37.333 -43.201  1.00 49.69      L    O
ATOM   3501  NE2 GLN L   3       7.266 -37.550 -43.040  1.00 45.63      L    N
ATOM   3504  C   GLN L   3       8.448 -33.451 -45.846  1.00 29.18      L    C
ATOM   3505  O   GLN L   3       8.385 -33.673 -47.054  1.00 25.48      L    O
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ATOM   3507  N   VAL L   4       9.529 -32.981 -45.234  1.00 31.71           L   N
ATOM   3508  CA  VAL L   4      10.724 -32.607 -45.966  1.00 26.51           L   C
ATOM   3510  CB  VAL L   4      10.788 -31.079 -46.128  1.00 22.86           L   C
ATOM   3512  CG1 VAL L   4      12.180 -30.625 -46.322  1.00 30.96           L   C
ATOM   3516  CG2 VAL L   4       9.941 -30.650 -47.315  1.00 26.63           L   C
ATOM   3520  C   VAL L   4      11.932 -33.162 -45.224  1.00 28.50           L   C
ATOM   3521  O   VAL L   4      12.049 -33.008 -43.995  1.00 26.20           L   O
ATOM   3523  N   THR L   5      12.808 -33.851 -45.957  1.00 27.71           L   N
ATOM   3524  CA  THR L   5      14.044 -34.375 -45.379  1.00 23.84           L   C
ATOM   3526  CB  THR L   5      14.214 -35.898 -45.564  1.00 25.45           L   C
ATOM   3528  OG1 THR L   5      13.056 -36.585 -45.082  1.00 33.94           L   O
ATOM   3530  CG2 THR L   5      15.434 -36.385 -44.755  1.00 29.86           L   C
ATOM   3534  C   THR L   5      15.222 -33.676 -46.022  1.00 16.29           L   C
ATOM   3535  O   THR L   5      15.431 -33.809 -47.224  1.00 20.13           L   O
ATOM   3537  N   GLN L   6      15.999 -32.965 -45.206  1.00 21.24           L   N
ATOM   3538  CA  GLN L   6      17.197 -32.272 -45.656  1.00 24.81           L   C
ATOM   3540  CB  GLN L   6      17.246 -30.883 -45.078  1.00 19.28           L   C
ATOM   3543  CG  GLN L   6      18.430 -30.052 -45.607  1.00 24.11           L   C
ATOM   3546  CD  GLN L   6      18.256 -28.571 -45.332  1.00 25.58           L   C
ATOM   3547  OE1 GLN L   6      17.166 -28.129 -44.974  1.00 27.17           L   O
ATOM   3548  NE2 GLN L   6      19.329 -27.805 -45.483  1.00 26.56           L   N
ATOM   3551  C   GLN L   6      18.489 -32.994 -45.294  1.00 27.00           L   C
ATOM   3552  O   GLN L   6      18.596 -33.551 -44.220  1.00 29.70           L   O
ATOM   3554  N   SER L   7      19.456 -32.968 -46.213  1.00 26.45           L   N
ATOM   3555  CA  SER L   7      20.789 -33.547 -45.989  1.00 28.93           L   C
ATOM   3557  CB  SER L   7      20.851 -35.018 -46.421  1.00 26.48           L   C
ATOM   3560  OG  SER L   7      20.201 -35.195 -47.649  1.00 35.79           L   O
ATOM   3562  C   SER L   7      21.906 -32.798 -46.712  1.00 23.85           L   C
ATOM   3563  O   SER L   7      21.692 -32.232 -47.768  1.00 24.96           L   O
ATOM   3565  N   PRO L   8      23.123 -32.844 -46.163  1.00 22.72           L   N
ATOM   3566  CA  PRO L   8      23.534 -33.498 -44.912  1.00 26.52           L   C
ATOM   3568  CB  PRO L   8      25.048 -33.519 -45.034  1.00 24.98           L   C
ATOM   3571  CG  PRO L   8      25.360 -32.290 -45.793  1.00 27.22           L   C
ATOM   3574  CD  PRO L   8      24.253 -32.179 -46.822  1.00 25.34           L   C
ATOM   3577  C   PRO L   8      23.112 -32.671 -43.696  1.00 22.27           L   C
ATOM   3578  O   PRO L   8      22.544 -31.604 -43.884  1.00 27.06           L   O
ATOM   3579  N   SER L   9      23.395 -33.132 -42.477  1.00 26.95           L   N
ATOM   3580  CA  SER L   9      23.197 -32.296 -41.268  1.00 26.60           L   C
ATOM   3582  CB  SER L   9      23.343 -33.116 -39.994  1.00 29.70           L   C
ATOM   3585  OG  SER L   9      22.538 -34.265 -40.041  1.00 40.54           L   O
ATOM   3587  C   SER L   9      24.209 -31.168 -41.168  1.00 27.29           L   C
ATOM   3588  O   SER L   9      23.890 -30.058 -40.752  1.00 22.40           L   O
ATOM   3590  N   SER L  10      25.460 -31.476 -41.482  1.00 26.29           L   N
ATOM   3591  CA  SER L  10      26.522 -30.477 -41.410  1.00 27.87           L   C
ATOM   3593  CB  SER L  10      27.028 -30.281 -39.963  1.00 31.91           L   C
ATOM   3596  OG  SER L  10      27.474 -31.485 -39.331  1.00 29.68           L   O
ATOM   3598  C   SER L  10      27.647 -30.887 -42.342  1.00 22.10           L   C
ATOM   3599  O   SER L  10      27.741 -32.045 -42.712  1.00 29.04           L   O
ATOM   3601  N   LEU L  11      28.461 -29.923 -42.750  1.00 22.92           L   N
ATOM   3602  CA  LEU L  11      29.595 -30.163 -43.647  1.00 23.95           L   C
ATOM   3604  CB  LEU L  11      29.116 -30.261 -45.115  1.00 26.33           L   C
ATOM   3607  CG  LEU L  11      28.531 -29.058 -45.886  1.00 25.38           L   C
ATOM   3609  CD1 LEU L  11      29.616 -28.185 -46.525  1.00 19.53           L   C
ATOM   3613  CD2 LEU L  11      27.603 -29.541 -46.990  1.00 24.48           L   C
ATOM   3617  C   LEU L  11      30.690 -29.088 -43.518  1.00 27.32           L   C
ATOM   3618  O   LEU L  11      30.414 -27.979 -43.079  1.00 30.55           L   O
ATOM   3620  N   SER L  12      31.928 -29.441 -43.896  1.00 31.28           L   N
ATOM   3621  CA  SER L  12      33.041 -28.472 -44.028  1.00 27.41           L   C
ATOM   3623  CB  SER L  12      34.164 -28.759 -43.026  1.00 26.25           L   C
ATOM   3626  OG  SER L  12      33.663 -28.844 -41.706  1.00 34.73           L   O
ATOM   3628  C   SER L  12      33.631 -28.539 -45.429  1.00 25.16           L   C
ATOM   3629  O   SER L  12      33.944 -29.610 -45.913  1.00 21.95           L   O
ATOM   3631  N   ALA L  13      33.813 -27.387 -46.059  1.00 26.96           L   N
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ATOM   3632  CA  ALA L  13      34.393 -27.331 -47.388  1.00 27.27           L    C
ATOM   3634  CB  ALA L  13      33.303 -27.199 -48.452  1.00 29.19           L    C
ATOM   3638  C   ALA L  13      35.318 -26.148 -47.402  1.00 30.02           L    C
ATOM   3639  O   ALA L  13      35.190 -25.258 -46.563  1.00 24.82           L    O
ATOM   3641  N   SER L  14      36.261 -26.144 -48.341  1.00 29.23           L    N
ATOM   3642  CA  SER L  14      37.242 -25.057 -48.457  1.00 29.18           L    C
ATOM   3644  CB  SER L  14      38.566 -25.569 -49.065  1.00 30.28           L    C
ATOM   3647  OG  SER L  14      39.044 -26.738 -48.414  1.00 31.00           L    O
ATOM   3649  C   SER L  14      36.695 -23.949 -49.335  1.00 25.20           L    C
ATOM   3650  O   SER L  14      35.815 -24.180 -50.151  1.00 32.36           L    O
ATOM   3652  N   VAL L  15      37.223 -22.749 -49.163  1.00 24.39           L    N
ATOM   3653  CA  VAL L  15      36.869 -21.612 -49.984  1.00 27.55           L    C
ATOM   3655  CB  VAL L  15      37.709 -20.371 -49.566  1.00 27.46           L    C
ATOM   3657  CG1 VAL L  15      37.610 -19.251 -50.602  1.00 29.48           L    C
ATOM   3661  CG2 VAL L  15      37.291 -19.877 -48.185  1.00 26.86           L    C
ATOM   3665  C   VAL L  15      37.121 -21.986 -51.451  1.00 32.32           L    C
ATOM   3666  O   VAL L  15      38.206 -22.438 -51.794  1.00 34.05           L    O
ATOM   3668  N   GLY L  16      36.098 -21.853 -52.288  1.00 33.09           L    N
ATOM   3669  CA  GLY L  16      36.171 -22.208 -53.708  1.00 32.05           L    C
ATOM   3672  C   GLY L  16      35.537 -23.547 -54.026  1.00 36.11           L    C
ATOM   3673  O   GLY L  16      35.416 -23.925 -55.191  1.00 41.60           L    O
ATOM   3675  N   ASP L  17      35.151 -24.279 -52.986  1.00 36.76           L    N
ATOM   3676  CA  ASP L  17      34.546 -25.580 -53.143  1.00 31.73           L    C
ATOM   3678  CB  ASP L  17      34.574 -26.411 -51.822  1.00 31.16           L    C
ATOM   3681  CG  ASP L  17      35.902 -27.181 -51.611  1.00 32.15           L    C
ATOM   3682  OD1 ASP L  17      36.829 -26.974 -52.425  1.00 33.00           L    O
ATOM   3683  OD2 ASP L  17      35.997 -28.019 -50.654  1.00 24.25           L    O
ATOM   3684  C   ASP L  17      33.120 -25.372 -53.580  1.00 32.08           L    C
ATOM   3685  O   ASP L  17      32.532 -24.317 -53.351  1.00 35.87           L    O
ATOM   3687  N   ARG L  18      32.567 -26.387 -54.218  1.00 34.16           L    N
ATOM   3688  CA  ARG L  18      31.141 -26.435 -54.465  1.00 33.01           L    C
ATOM   3690  CB  ARG L  18      30.846 -27.100 -55.812  1.00 33.19           L    C
ATOM   3693  CG  ARG L  18      29.359 -27.330 -56.089  1.00 35.75           L    C
ATOM   3696  CD  ARG L  18      29.156 -27.905 -57.462  1.00 37.32           L    C
ATOM   3699  NE  ARG L  18      29.553 -26.954 -58.488  1.00 36.87           L    N
ATOM   3701  CZ  ARG L  18      29.498 -27.190 -59.786  1.00 34.97           L    C
ATOM   3702  NH1 ARG L  18      29.049 -28.349 -60.229  1.00 38.66           L    N
ATOM   3705  NH2 ARG L  18      29.877 -26.250 -60.642  1.00 36.37           L    N
ATOM   3708  C   ARG L  18      30.473 -27.183 -53.316  1.00 28.49           L    C
ATOM   3709  O   ARG L  18      30.874 -28.276 -52.960  1.00 32.92           L    O
ATOM   3711  N   VAL L  19      29.447 -26.573 -52.738  1.00 34.41           L    N
ATOM   3712  CA  VAL L  19      28.672 -27.175 -51.661  1.00 26.15           L    C
ATOM   3714  CB  VAL L  19      28.517 -26.188 -50.477  1.00 29.37           L    C
ATOM   3716  CG1 VAL L  19      27.402 -26.632 -49.510  1.00 13.13           L    C
ATOM   3720  CG2 VAL L  19      29.825 -26.058 -49.736  1.00 27.77           L    C
ATOM   3724  C   VAL L  19      27.314 -27.540 -52.221  1.00 28.29           L    C
ATOM   3725  O   VAL L  19      26.685 -26.717 -52.871  1.00 32.27           L    O
ATOM   3727  N   THR L  20      26.865 -28.777 -52.004  1.00 30.11           L    N
ATOM   3728  CA  THR L  20      25.578 -29.215 -52.546  1.00 28.11           L    C
ATOM   3730  CB  THR L  20      25.702 -30.235 -53.721  1.00 28.33           L    C
ATOM   3732  OG1 THR L  20      25.678 -31.556 -53.194  1.00 37.86           L    O
ATOM   3734  CG2 THR L  20      26.998 -30.033 -54.549  1.00 28.52           L    C
ATOM   3738  C   THR L  20      24.756 -29.803 -51.413  1.00 22.56           L    C
ATOM   3739  O   THR L  20      25.264 -30.622 -50.643  1.00 23.99           L    O
ATOM   3741  N   ILE L  21      23.500 -29.351 -51.305  1.00 23.02           L    N
ATOM   3742  CA  ILE L  21      22.597 -29.713 -50.204  1.00 24.76           L    C
ATOM   3744  CB  ILE L  21      22.335 -28.500 -49.276  1.00 26.36           L    C
ATOM   3746  CG1 ILE L  21      23.636 -28.022 -48.661  1.00 27.83           L    C
ATOM   3749  CD1 ILE L  21      23.499 -26.733 -47.883  1.00 27.59           L    C
ATOM   3753  CG2 ILE L  21      21.284 -28.846 -48.184  1.00 24.60           L    C
ATOM   3757  C   ILE L  21      21.252 -30.203 -50.772  1.00 25.49           L    C
ATOM   3758  O   ILE L  21      20.670 -29.564 -51.643  1.00 24.12           L    O
ATOM   3760  N   THR L  22      20.762 -31.322 -50.258  1.00 28.51           L    N
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ATOM   3761  CA  THR L  22      19.543 -31.973 -50.756  1.00 28.34           L    C
ATOM   3763  CB  THR L  22      19.775 -33.484 -50.860  1.00 27.86           L    C
ATOM   3765  OG1 THR L  22      20.925 -33.702 -51.685  1.00 28.86           L    O
ATOM   3767  CG2 THR L  22      18.598 -34.169 -51.487  1.00 31.64           L    C
ATOM   3771  C   THR L  22      18.312 -31.745 -49.875  1.00 28.39           L    C
ATOM   3772  O   THR L  22      18.417 -31.661 -48.665  1.00 28.85           L    O
ATOM   3774  N   CYS L  23      17.152 -31.651 -50.515  1.00 24.36           L    N
ATOM   3775  CA  CYS L  23      15.860 -31.713 -49.844  1.00 30.90           L    C
ATOM   3777  CB  CYS L  23      15.220 -30.334 -49.622  1.00 28.47           L    C
ATOM   3780  SG  CYS L  23      15.879 -29.641 -48.113  1.00 46.68           L    S
ATOM   3782  C   CYS L  23      14.948 -32.589 -50.648  1.00 24.86           L    C
ATOM   3783  O   CYS L  23      14.840 -32.448 -51.857  1.00 30.27           L    O
ATOM   3785  N   ILE L  24      14.300 -33.497 -49.944  1.00 21.35           L    N
ATOM   3786  CA  ILE L  24      13.432 -34.470 -50.550  1.00 21.76           L    C
ATOM   3788  CB  ILE L  24      14.022 -35.898 -50.468  1.00 22.43           L    C
ATOM   3790  CG1 ILE L  24      15.414 -35.929 -51.152  1.00 26.49           L    C
ATOM   3793  CD1 ILE L  24      16.068 -37.317 -51.209  1.00 25.20           L    C
ATOM   3797  CG2 ILE L  24      13.119 -36.866 -51.181  1.00 20.83           L    C
ATOM   3801  C   ILE L  24      12.102 -34.335 -49.860  1.00 18.64           L    C
ATOM   3802  O   ILE L  24      12.027 -34.296 -48.628  1.00 17.98           L    O
ATOM   3804  N   THR L  25      11.050 -34.201 -50.652  1.00 23.57           L    N
ATOM   3805  CA  THR L  25       9.698 -34.020 -50.104  1.00 23.75           L    C
ATOM   3807  CB  THR L  25       8.943 -32.888 -50.852  1.00 18.41           L    C
ATOM   3809  OG1 THR L  25       8.984 -33.140 -52.267  1.00 20.65           L    O
ATOM   3811  CG2 THR L  25       9.592 -31.554 -50.576  1.00 14.27           L    C
ATOM   3815  C   THR L  25       8.924 -35.327 -50.152  1.00 24.60           L    C
ATOM   3816  O   THR L  25       9.258 -36.241 -50.907  1.00 20.79           L    O
ATOM   3818  N   SER L  26       7.913 -35.429 -49.292  1.00 27.54           L    N
ATOM   3819  CA  SER L  26       7.117 -36.638 -49.187  1.00 26.71           L    C
ATOM   3821  CB  SER L  26       6.270 -36.584 -47.920  1.00 24.35           L    C
ATOM   3824  OG  SER L  26       5.555 -35.374 -47.864  1.00 26.34           L    O
ATOM   3826  C   SER L  26       6.201 -36.887 -50.396  1.00 27.41           L    C
ATOM   3827  O   SER L  26       5.859 -38.047 -50.695  1.00 29.52           L    O
ATOM   3829  N   THR L  27       5.771 -35.794 -51.029  1.00 25.00           L    N
ATOM   3830  CA  THR L  27       4.819 -35.796 -52.150  1.00 22.02           L    C
ATOM   3832  CB  THR L  27       3.409 -35.340 -51.688  1.00 20.90           L    C
ATOM   3834  OG1 THR L  27       2.438 -35.709 -52.665  1.00 26.04           L    O
ATOM   3836  CG2 THR L  27       3.353 -33.845 -51.474  1.00 14.67           L    C
ATOM   3840  C   THR L  27       5.299 -34.800 -53.180  1.00 23.00           L    C
ATOM   3841  O   THR L  27       6.064 -33.900 -52.833  1.00 22.69           L    O
ATOM   3843  N   ASP L  28       4.850 -34.955 -54.431  1.00 22.00           L    N
ATOM   3844  CA  ASP L  28       5.253 -34.072 -55.552  1.00 18.45           L    C
ATOM   3846  CB  ASP L  28       4.624 -34.602 -56.853  1.00 20.06           L    C
ATOM   3849  CG  ASP L  28       4.972 -33.785 -58.088  1.00 24.86           L    C
ATOM   3850  OD1 ASP L  28       5.436 -32.632 -57.975  1.00 27.72           L    O
ATOM   3851  OD2 ASP L  28       4.742 -34.296 -59.213  1.00 26.40           L    O
ATOM   3852  C   ASP L  28       4.800 -32.638 -55.279  1.00 22.12           L    C
ATOM   3853  O   ASP L  28       3.614 -32.399 -55.072  1.00 27.10           L    O
ATOM   3855  N   ILE L  29       5.745 -31.695 -55.240  1.00 22.75           L    N
ATOM   3856  CA  ILE L  29       5.438 -30.293 -54.968  1.00 18.57           L    C
ATOM   3858  CB  ILE L  29       6.226 -29.738 -53.735  1.00  8.50           L    C
ATOM   3860  CG1 ILE L  29       7.748 -29.896 -53.882  1.00 15.18           L    C
ATOM   3863  CD1 ILE L  29       8.588 -28.706 -53.323  1.00 13.13           L    C
ATOM   3867  CG2 ILE L  29       5.713 -30.391 -52.379  1.00  9.90           L    C
ATOM   3871  C   ILE L  29       5.674 -29.383 -56.192  1.00 23.83           L    C
ATOM   3872  O   ILE L  29       5.738 -28.151 -56.061  1.00 31.83           L    O
ATOM   3874  N   ASP L  30       5.768 -29.983 -57.373  1.00 25.88           L    N
ATOM   3875  CA  ASP L  30       6.128 -29.279 -58.601  1.00 23.97           L    C
ATOM   3877  CB  ASP L  30       4.999 -28.355 -59.054  1.00 25.05           L    C
ATOM   3880  CG  ASP L  30       3.685 -29.096 -59.201  1.00 32.71           L    C
ATOM   3881  OD1 ASP L  30       3.671 -30.091 -59.968  1.00 36.70           L    O
ATOM   3882  OD2 ASP L  30       2.685 -28.706 -58.545  1.00 30.24           L    O
ATOM   3883  C   ASP L  30       7.455 -28.556 -58.395  1.00 22.32           L    C
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ATOM   3884  O   ASP L  30       8.430 -29.195 -58.031  1.00 24.00           L   O
ATOM   3886  N   ASP L  31       7.507 -27.248 -58.600  1.00 20.65           L   N
ATOM   3887  CA  ASP L  31       8.760 -26.525 -58.476  1.00 23.99           L   C
ATOM   3889  CB  ASP L  31       9.078 -25.728 -59.763  1.00 28.76           L   C
ATOM   3892  CG  ASP L  31       8.067 -24.620 -60.046  1.00 38.63           L   C
ATOM   3893  OD1 ASP L  31       7.014 -24.592 -59.374  1.00 43.13           L   O
ATOM   3894  OD2 ASP L  31       8.309 -23.776 -60.943  1.00 46.83           L   O
ATOM   3895  C   ASP L  31       8.744 -25.614 -57.265  1.00 22.71           L   C
ATOM   3896  O   ASP L  31       9.570 -24.726 -57.160  1.00 20.16           L   O
ATOM   3898  N   ASP L  32       7.833 -25.855 -56.318  1.00 28.27           L   N
ATOM   3899  CA  ASP L  32       7.597 -24.916 -55.235  1.00 20.77           L   C
ATOM   3901  CB  ASP L  32       6.122 -24.950 -54.827  1.00 29.58           L   C
ATOM   3904  CG  ASP L  32       5.237 -24.379 -55.891  1.00 26.44           L   C
ATOM   3905  OD1 ASP L  32       5.508 -23.213 -56.296  1.00 24.61           L   O
ATOM   3906  OD2 ASP L  32       4.305 -25.096 -56.324  1.00 24.64           L   O
ATOM   3907  C   ASP L  32       8.500 -25.127 -54.033  1.00 24.20           L   C
ATOM   3908  O   ASP L  32       8.044 -25.367 -52.900  1.00 15.84           L   O
ATOM   3910  N   MET L  33       9.795 -24.983 -54.294  1.00 21.65           L   N
ATOM   3911  CA  MET L  33      10.836 -25.134 -53.273  1.00 25.55           L   C
ATOM   3913  CB  MET L  33      11.856 -26.184 -53.747  1.00 22.69           L   C
ATOM   3916  CG  MET L  33      12.972 -26.481 -52.810  1.00 23.30           L   C
ATOM   3919  SD  MET L  33      12.461 -26.911 -51.135  1.00 24.74           L   S
ATOM   3920  CE  MET L  33      11.715 -28.515 -51.300  1.00 26.62           L   C
ATOM   3924  C   MET L  33      11.551 -23.806 -53.020  1.00 27.50           L   C
ATOM   3925  O   MET L  33      11.872 -23.074 -53.953  1.00 28.56           L   O
ATOM   3927  N   ASN L  34      11.810 -23.517 -51.744  1.00 31.83           L   N
ATOM   3928  CA  ASN L  34      12.614 -22.360 -51.350  1.00 26.61           L   C
ATOM   3930  CB  ASN L  34      11.755 -21.394 -50.541  1.00 21.75           L   C
ATOM   3933  CG  ASN L  34      10.412 -21.093 -51.214  1.00 19.36           L   C
ATOM   3934  OD1 ASN L  34      10.164 -19.971 -51.623  1.00 21.78           L   O
ATOM   3935  ND2 ASN L  34       9.546 -22.094 -51.314  1.00 18.75           L   N
ATOM   3938  C   ASN L  34      13.844 -22.764 -50.525  1.00 24.66           L   C
ATOM   3939  O   ASN L  34      13.883 -23.829 -49.930  1.00 28.75           L   O
ATOM   3941  N   TRP L  35      14.832 -21.886 -50.496  1.00 24.16           L   N
ATOM   3942  CA  TRP L  35      16.076 -22.099 -49.784  1.00 22.17           L   C
ATOM   3944  CB  TRP L  35      17.201 -22.410 -50.775  1.00 23.27           L   C
ATOM   3947  CG  TRP L  35      17.131 -23.763 -51.369  1.00 20.36           L   C
ATOM   3948  CD1 TRP L  35      16.749 -24.076 -52.647  1.00 22.31           L   C
ATOM   3950  NE1 TRP L  35      16.825 -25.420 -52.847  1.00 18.60           L   N
ATOM   3952  CE2 TRP L  35      17.224 -26.028 -51.688  1.00 20.03           L   C
ATOM   3953  CD2 TRP L  35      17.438 -25.014 -50.732  1.00 18.92           L   C
ATOM   3954  CE3 TRP L  35      17.892 -25.375 -49.467  1.00 20.16           L   C
ATOM   3956  CZ3 TRP L  35      18.110 -26.744 -49.192  1.00 20.54           L   C
ATOM   3958  CH2 TRP L  35      17.904 -27.714 -50.161  1.00 20.08           L   C
ATOM   3960  CZ2 TRP L  35      17.449 -27.383 -51.412  1.00 23.98           L   C
ATOM   3962  C   TRP L  35      16.406 -20.840 -49.001  1.00 20.27           L   C
ATOM   3963  O   TRP L  35      16.560 -19.770 -49.586  1.00 19.60           L   O
ATOM   3965  N   TYR L  36      16.427 -20.947 -47.670  1.00 25.41           L   N
ATOM   3966  CA  TYR L  36      16.842 -19.835 -46.821  1.00 23.57           L   C
ATOM   3968  CB  TYR L  36      15.926 -19.693 -45.597  1.00 25.19           L   C
ATOM   3971  CG  TYR L  36      14.473 -19.357 -45.861  1.00 25.99           L   C
ATOM   3972  CD1 TYR L  36      14.009 -18.045 -45.726  1.00 21.32           L   C
ATOM   3974  CE1 TYR L  36      12.697 -17.732 -45.935  1.00 26.14           L   C
ATOM   3976  CZ  TYR L  36      11.801 -18.719 -46.265  1.00 25.62           L   C
ATOM   3977  OH  TYR L  36      10.488 -18.379 -46.453  1.00 28.27           L   O
ATOM   3979  CE2 TYR L  36      12.220 -20.039 -46.404  1.00 25.74           L   C
ATOM   3981  CD2 TYR L  36      13.553 -20.349 -46.201  1.00 24.71           L   C
ATOM   3983  C   TYR L  36      18.294 -19.979 -46.325  1.00 23.47           L   C
ATOM   3984  O   TYR L  36      18.840 -21.089 -46.222  1.00 24.41           L   O
ATOM   3986  N   GLN L  37      18.917 -18.836 -46.014  1.00 19.56           L   N
ATOM   3987  CA  GLN L  37      20.226 -18.818 -45.365  1.00 23.88           L   C
ATOM   3989  CB  GLN L  37      21.245 -18.062 -46.210  1.00 24.43           L   C
ATOM   3992  CG  GLN L  37      22.563 -17.679 -45.483  1.00 22.44           L   C
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ATOM   3995  CD  GLN L  37      23.402 -16.742 -46.331  1.00 24.17        L    C
ATOM   3996  OE1 GLN L  37      23.039 -15.582 -46.513  1.00 33.10        L    O
ATOM   3997  NE2 GLN L  37      24.491 -17.250 -46.903  1.00 23.99        L    N
ATOM   4000  C   GLN L  37      20.059 -18.124 -44.045  1.00 17.12        L    C
ATOM   4001  O   GLN L  37      19.440 -17.074 -43.986  1.00 24.86        L    O
ATOM   4003  N   GLN L  38      20.567 -18.707 -42.970  1.00 24.77        L    N
ATOM   4004  CA  GLN L  38      20.549 -17.992 -41.686  1.00 25.58        L    C
ATOM   4006  CB  GLN L  38      19.579 -18.628 -40.715  1.00 22.19        L    C
ATOM   4009  CG  GLN L  38      19.356 -17.810 -39.436  1.00 21.64        L    C
ATOM   4012  CD  GLN L  38      18.661 -18.585 -38.367  1.00 26.69        L    C
ATOM   4013  OE1 GLN L  38      18.684 -19.815 -38.366  1.00 31.66        L    O
ATOM   4014  NE2 GLN L  38      18.030 -17.872 -37.429  1.00 17.41        L    N
ATOM   4017  C   GLN L  38      21.951 -17.957 -41.100  1.00 29.75        L    C
ATOM   4018  O   GLN L  38      22.482 -18.986 -40.692  1.00 31.30        L    O
ATOM   4020  N   LYS L  39      22.548 -16.768 -41.076  1.00 30.91        L    N
ATOM   4021  CA  LYS L  39      23.858 -16.582 -40.465  1.00 31.89        L    C
ATOM   4023  CB  LYS L  39      24.555 -15.350 -41.033  1.00 35.23        L    C
ATOM   4026  CG  LYS L  39      24.588 -15.303 -42.567  1.00 35.45        L    C
ATOM   4029  CD  LYS L  39      25.842 -14.590 -43.047  1.00 38.63        L    C
ATOM   4032  CE  LYS L  39      25.647 -13.726 -44.298  1.00 39.59        L    C
ATOM   4035  NZ  LYS L  39      26.303 -14.324 -45.496  1.00 42.07        L    N
ATOM   4039  C   LYS L  39      23.702 -16.474 -38.948  1.00 33.63        L    C
ATOM   4040  O   LYS L  39      22.599 -16.193 -38.457  1.00 28.91        L    O
ATOM   4042  N   PRO L  40      24.790 -16.759 -38.197  1.00 37.93        L    N
ATOM   4043  CA  PRO L  40      24.840 -16.649 -36.728  1.00 37.74        L    C
ATOM   4045  CB  PRO L  40      26.342 -16.655 -36.433  1.00 40.69        L    C
ATOM   4048  CG  PRO L  40      26.980 -17.368 -37.594  1.00 40.63        L    C
ATOM   4051  CD  PRO L  40      26.050 -17.300 -38.757  1.00 38.43        L    C
ATOM   4054  C   PRO L  40      24.195 -15.371 -36.156  1.00 39.38        L    C
ATOM   4055  O   PRO L  40      24.649 -14.270 -36.464  1.00 36.28        L    O
ATOM   4056  N   GLY L  41      23.144 -15.531 -35.350  1.00 35.09        L    N
ATOM   4057  CA  GLY L  41      22.422 -14.395 -34.761  1.00 39.17        L    C
ATOM   4060  C   GLY L  41      21.688 -13.455 -35.715  1.00 38.72        L    C
ATOM   4061  O   GLY L  41      21.371 -12.316 -35.352  1.00 33.46        L    O
ATOM   4063  N   LYS L  42      21.424 -13.922 -36.935  1.00 39.83        L    N
ATOM   4064  CA  LYS L  42      20.719 -13.127 -37.937  1.00 37.06        L    C
ATOM   4066  CB  LYS L  42      21.546 -12.976 -39.224  1.00 39.99        L    C
ATOM   4069  CG  LYS L  42      22.928 -12.342 -39.080  1.00 43.38        L    C
ATOM   4072  CD  LYS L  42      22.904 -11.011 -38.336  1.00 44.34        L    C
ATOM   4075  CE  LYS L  42      24.307 -10.398 -38.236  1.00 44.50        L    C
ATOM   4078  NZ  LYS L  42      24.438  -9.439 -37.084  1.00 45.59        L    N
ATOM   4082  C   LYS L  42      19.368 -13.760 -38.276  1.00 34.04        L    C
ATOM   4083  O   LYS L  42      19.130 -14.937 -38.003  1.00 31.67        L    O
ATOM   4085  N   VAL L  43      18.496 -12.953 -38.874  1.00 31.52        L    N
ATOM   4086  CA  VAL L  43      17.206 -13.419 -39.344  1.00 29.80        L    C
ATOM   4088  CB  VAL L  43      16.180 -12.229 -39.474  1.00 32.57        L    C
ATOM   4090  CG1 VAL L  43      16.455 -11.360 -40.694  1.00 35.95        L    C
ATOM   4094  CG2 VAL L  43      14.760 -12.743 -39.526  1.00 33.03        L    C
ATOM   4098  C   VAL L  43      17.431 -14.190 -40.655  1.00 27.97        L    C
ATOM   4099  O   VAL L  43      18.371 -13.872 -41.420  1.00 27.65        L    O
ATOM   4101  N   PRO L  44      16.629 -15.252 -40.891  1.00 25.65        L    N
ATOM   4102  CA  PRO L  44      16.698 -15.932 -42.179  1.00 26.36        L    C
ATOM   4104  CB  PRO L  44      15.603 -17.001 -42.074  1.00 24.65        L    C
ATOM   4107  CG  PRO L  44      15.539 -17.286 -40.614  1.00 24.48        L    C
ATOM   4110  CD  PRO L  44      15.666 -15.925 -39.995  1.00 24.73        L    C
ATOM   4113  C   PRO L  44      16.485 -15.030 -43.383  1.00 25.81        L    C
ATOM   4114  O   PRO L  44      15.659 -14.101 -43.354  1.00 34.05        L    O
ATOM   4115  N   LYS L  45      17.276 -15.295 -44.418  1.00 28.51        L    N
ATOM   4116  CA  LYS L  45      17.189 -14.594 -45.688  1.00 29.34        L    C
ATOM   4118  CB  LYS L  45      18.514 -13.913 -46.025  1.00 30.98        L    C
ATOM   4121  CG  LYS L  45      18.502 -13.084 -47.293  1.00 34.25        L    C
ATOM   4124  CD  LYS L  45      19.854 -12.431 -47.505  1.00 35.85        L    C
ATOM   4127  CE  LYS L  45      20.155 -12.118 -48.979  1.00 39.81        L    C
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ATOM   4130  NZ  LYS L  45      21.671 -12.011 -49.211  1.00 42.04           L    N
ATOM   4134  C   LYS L  45      16.823 -15.625 -46.741  1.00 22.45           L    C
ATOM   4135  O   LYS L  45      17.355 -16.711 -46.742  1.00 23.67           L    O
ATOM   4137  N   LEU L  46      15.878 -15.290 -47.612  1.00 28.51           L    N
ATOM   4138  CA  LEU L  46      15.478 -16.176 -48.693  1.00 29.44           L    C
ATOM   4140  CB  LEU L  46      14.035 -15.907 -49.125  1.00 27.74           L    C
ATOM   4143  CG  LEU L  46      13.432 -16.790 -50.212  1.00 26.95           L    C
ATOM   4145  CD1 LEU L  46      13.217 -18.182 -49.722  1.00 29.96           L    C
ATOM   4149  CD2 LEU L  46      12.130 -16.242 -50.678  1.00 25.49           L    C
ATOM   4153  C   LEU L  46      16.431 -15.917 -49.837  1.00 29.15           L    C
ATOM   4154  O   LEU L  46      16.542 -14.793 -50.308  1.00 29.85           L    O
ATOM   4156  N   LEU L  47      17.130 -16.962 -50.261  1.00 26.91           L    N
ATOM   4157  CA  LEU L  47      18.032 -16.866 -51.410  1.00 29.30           L    C
ATOM   4159  CB  LEU L  47      19.312 -17.660 -51.151  1.00 26.60           L    C
ATOM   4162  CG  LEU L  47      20.169 -17.302 -49.944  1.00 27.06           L    C
ATOM   4164  CD1 LEU L  47      21.481 -18.057 -50.023  1.00 29.57           L    C
ATOM   4168  CD2 LEU L  47      20.418 -15.813 -49.829  1.00 28.71           L    C
ATOM   4172  C   LEU L  47      17.407 -17.348 -52.723  1.00 29.56           L    C
ATOM   4173  O   LEU L  47      17.657 -16.767 -53.777  1.00 24.98           L    O
ATOM   4175  N   ILE L  48      16.632 -18.431 -52.653  1.00 29.93           L    N
ATOM   4176  CA  ILE L  48      16.043 -19.067 -53.834  1.00 29.86           L    C
ATOM   4178  CB  ILE L  48      16.714 -20.421 -54.175  1.00 31.28           L    C
ATOM   4180  CG1 ILE L  48      18.252 -20.310 -54.230  1.00 30.56           L    C
ATOM   4183  CD1 ILE L  48      18.791 -19.744 -55.519  1.00 29.17           L    C
ATOM   4187  CG2 ILE L  48      16.193 -20.965 -55.505  1.00 30.35           L    C
ATOM   4191  C   ILE L  48      14.565 -19.334 -53.578  1.00 30.99           L    C
ATOM   4192  O   ILE L  48      14.162 -19.761 -52.484  1.00 30.01           L    O
ATOM   4194  N   SER L  49      13.745 -19.073 -54.581  1.00 27.94           L    N
ATOM   4195  CA  SER L  49      12.311 -19.306 -54.455  1.00 29.29           L    C
ATOM   4197  CB  SER L  49      11.565 -17.982 -54.462  1.00 29.00           L    C
ATOM   4200  OG  SER L  49      11.904 -17.255 -55.629  1.00 28.87           L    O
ATOM   4202  C   SER L  49      11.855 -20.173 -55.604  1.00 29.64           L    C
ATOM   4203  O   SER L  49      12.597 -20.379 -56.547  1.00 35.91           L    O
ATOM   4205  N   GLY L  50      10.615 -20.652 -55.520  1.00 33.07           L    N
ATOM   4206  CA  GLY L  50      10.043 -21.574 -56.478  1.00 30.92           L    C
ATOM   4209  C   GLY L  50      10.491 -21.370 -57.906  1.00 32.01           L    C
ATOM   4210  O   GLY L  50      10.546 -20.234 -58.380  1.00 35.43           L    O
ATOM   4212  N   GLY L  51      10.801 -22.471 -58.594  1.00 26.66           L    N
ATOM   4213  CA  GLY L  51      11.280 -22.407 -60.003  1.00 35.10           L    C
ATOM   4216  C   GLY L  51      12.785 -22.201 -60.067  1.00 37.69           L    C
ATOM   4217  O   GLY L  51      13.396 -21.931 -61.143  1.00 34.90           L    O
ATOM   4219  N   ASN L  52      13.358 -22.324 -58.873  1.00 40.07           L    N
ATOM   4220  CA  ASN L  52      14.744 -22.029 -58.584  1.00 38.26           L    C
ATOM   4222  CB  ASN L  52      15.556 -23.266 -58.795  1.00 40.16           L    C
ATOM   4225  CG  ASN L  52      15.135 -24.369 -57.782  1.00 42.80           L    C
ATOM   4226  OD1 ASN L  52      15.803 -25.379 -57.641  1.00 53.29           L    O
ATOM   4227  ND2 ASN L  52      14.009 -24.145 -57.069  1.00 42.56           L    N
ATOM   4230  C   ASN L  52      15.246 -20.728 -59.177  1.00 36.48           L    C
ATOM   4231  O   ASN L  52      16.255 -20.618 -59.886  1.00 38.92           L    O
ATOM   4233  N   THR L  53      14.461 -19.736 -58.770  1.00 32.39           L    N
ATOM   4234  CA  THR L  53      14.611 -18.338 -59.066  1.00 32.29           L    C
ATOM   4236  CB  THR L  53      13.217 -17.664 -58.983  1.00 29.69           L    C
ATOM   4238  OG1 THR L  53      12.321 -18.346 -59.864  1.00 32.35           L    O
ATOM   4240  CG2 THR L  53      13.281 -16.168 -59.320  1.00 26.64           L    C
ATOM   4244  C   THR L  53      15.489 -17.761 -57.986  1.00 31.58           L    C
ATOM   4245  O   THR L  53      15.122 -17.815 -56.803  1.00 23.39           L    O
ATOM   4247  N   LEU L  54      16.638 -17.232 -58.404  1.00 31.18           L    N
ATOM   4248  CA  LEU L  54      17.570 -16.518 -57.532  1.00 31.99           L    C
ATOM   4250  CB  LEU L  54      18.958 -16.428 -58.193  1.00 28.80           L    C
ATOM   4253  CG  LEU L  54      20.112 -15.744 -57.437  1.00 33.35           L    C
ATOM   4255  CD1 LEU L  54      20.471 -16.454 -56.127  1.00 30.74           L    C
ATOM   4259  CD2 LEU L  54      21.312 -15.648 -58.344  1.00 33.92           L    C
ATOM   4263  C   LEU L  54      17.065 -15.125 -57.259  1.00 30.83           L    C
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ATOM   4264  O   LEU L  54      16.852 -14.348 -58.201  1.00 28.78           L  O
ATOM   4266  N   ARG L  55      16.902 -14.799 -55.974  1.00 34.36           L  N
ATOM   4267  CA  ARG L  55      16.399 -13.499 -55.566  1.00 35.76           L  C
ATOM   4269  CB  ARG L  55      15.995 -13.487 -54.072  1.00 42.99           L  C
ATOM   4272  CG  ARG L  55      14.716 -14.345 -53.720  1.00 46.72           L  C
ATOM   4275  CD  ARG L  55      13.512 -14.104 -54.684  1.00 48.01           L  C
ATOM   4278  NE  ARG L  55      12.227 -14.692 -54.237  1.00 50.48           L  N
ATOM   4280  CZ  ARG L  55      11.286 -14.074 -53.510  1.00 49.73           L  C
ATOM   4281  NH1 ARG L  55      11.455 -12.821 -53.111  1.00 52.37           L  N
ATOM   4284  NH2 ARG L  55      10.160 -14.717 -53.175  1.00 47.12           L  N
ATOM   4287  C   ARG L  55      17.445 -12.424 -55.875  1.00 38.88           L  C
ATOM   4288  O   ARG L  55      18.645 -12.642 -55.681  1.00 35.64           L  O
ATOM   4290  N   PRO L  56      16.996 -11.274 -56.415  1.00 42.75           L  N
ATOM   4291  CA  PRO L  56      17.910 -10.164 -56.723  1.00 38.04           L  C
ATOM   4293  CB  PRO L  56      16.979  -9.035 -57.185  1.00 40.47           L  C
ATOM   4296  CG  PRO L  56      15.594  -9.551 -57.098  1.00 43.33           L  C
ATOM   4299  CD  PRO L  56      15.605 -10.999 -56.818  1.00 40.69           L  C
ATOM   4302  C   PRO L  56      18.738  -9.710 -55.521  1.00 35.39           L  C
ATOM   4303  O   PRO L  56      18.215  -9.615 -54.414  1.00 31.42           L  O
ATOM   4304  N   GLY L  57      20.022  -9.429 -55.752  1.00 36.50           L  N
ATOM   4305  CA  GLY L  57      20.952  -9.083 -54.679  1.00 35.10           L  C
ATOM   4308  C   GLY L  57      21.757 -10.262 -54.166  1.00 33.15           L  C
ATOM   4309  O   GLY L  57      22.854 -10.089 -53.645  1.00 36.74           L  O
ATOM   4311  N   VAL L  58      21.216 -11.469 -54.315  1.00 36.35           L  N
ATOM   4312  CA  VAL L  58      21.919 -12.685 -53.926  1.00 34.96           L  C
ATOM   4314  CB  VAL L  58      20.922 -13.823 -53.634  1.00 31.40           L  C
ATOM   4316  CG1 VAL L  58      21.643 -15.051 -53.159  1.00 24.70           L  C
ATOM   4320  CG2 VAL L  58      19.910 -13.369 -52.588  1.00 30.20           L  C
ATOM   4324  C   VAL L  58      22.911 -13.064 -55.046  1.00 37.32           L  C
ATOM   4325  O   VAL L  58      22.561 -12.994 -56.227  1.00 37.20           L  O
ATOM   4327  N   PRO L  59      24.165 -13.408 -54.685  1.00 36.98           L  N
ATOM   4328  CA  PRO L  59      25.184 -13.728 -55.696  1.00 37.70           L  C
ATOM   4330  CB  PRO L  59      26.432 -13.999 -54.855  1.00 40.50           L  C
ATOM   4333  CG  PRO L  59      26.182 -13.278 -53.568  1.00 40.80           L  C
ATOM   4336  CD  PRO L  59      24.729 -13.428 -53.326  1.00 37.44           L  C
ATOM   4339  C   PRO L  59      24.872 -14.928 -56.589  1.00 40.91           L  C
ATOM   4340  O   PRO L  59      24.264 -15.903 -56.141  1.00 45.71           L  O
ATOM   4341  N   SER L  60      25.305 -14.856 -57.846  1.00 39.77           L  N
ATOM   4342  CA  SER L  60      25.079 -15.922 -58.812  1.00 37.60           L  C
ATOM   4344  CB  SER L  60      25.563 -15.489 -60.202  1.00 42.77           L  C
ATOM   4347  OG  SER L  60      26.952 -15.191 -60.207  1.00 44.83           L  O
ATOM   4349  C   SER L  60      25.738 -17.257 -58.428  1.00 38.54           L  C
ATOM   4350  O   SER L  60      25.451 -18.297 -59.037  1.00 38.30           L  O
ATOM   4352  N   ARG L  61      26.613 -17.259 -57.426  1.00 34.92           L  N
ATOM   4353  CA  ARG L  61      27.218 -18.532 -57.003  1.00 31.55           L  C
ATOM   4355  CB  ARG L  61      28.444 -18.317 -56.098  1.00 31.06           L  C
ATOM   4358  CG  ARG L  61      28.142 -17.732 -54.727  1.00 34.63           L  C
ATOM   4361  CD  ARG L  61      29.338 -17.887 -53.785  1.00 34.52           L  C
ATOM   4364  NE  ARG L  61      29.144 -17.107 -52.568  1.00 35.07           L  N
ATOM   4366  CZ  ARG L  61      29.317 -15.793 -52.479  1.00 35.28           L  C
ATOM   4367  NH1 ARG L  61      29.681 -15.080 -53.535  1.00 40.23           L  N
ATOM   4370  NH2 ARG L  61      29.117 -15.176 -51.322  1.00 35.77           L  N
ATOM   4373  C   ARG L  61      26.175 -19.473 -56.375  1.00 28.28           L  C
ATOM   4374  O   ARG L  61      26.363 -20.698 -56.373  1.00 28.68           L  O
ATOM   4376  N   PHE L  62      25.075 -18.910 -55.865  1.00 32.78           L  N
ATOM   4377  CA  PHE L  62      23.943 -19.704 -55.370  1.00 29.72           L  C
ATOM   4379  CB  PHE L  62      23.162 -18.929 -54.317  1.00 30.01           L  C
ATOM   4382  CG  PHE L  62      23.925 -18.655 -53.061  1.00 28.54           L  C
ATOM   4383  CD1 PHE L  62      23.847 -19.530 -51.980  1.00 29.80           L  C
ATOM   4385  CE1 PHE L  62      24.530 -19.274 -50.818  1.00 29.58           L  C
ATOM   4387  CZ  PHE L  62      25.289 -18.122 -50.707  1.00 30.15           L  C
ATOM   4389  CE2 PHE L  62      25.369 -17.231 -51.771  1.00 28.84           L  C
ATOM   4391  CD2 PHE L  62      24.690 -17.503 -52.938  1.00 32.91           L  C
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ATOM   4393  C   PHE L  62      22.965 -20.079 -56.471  1.00 29.31           L    C
ATOM   4394  O   PHE L  62      22.393 -19.196 -57.127  1.00 29.29           L    O
ATOM   4396  N   SER L  63      22.747 -21.383 -56.652  1.00 27.16           L    N
ATOM   4397  CA  SER L  63      21.741 -21.887 -57.605  1.00 31.28           L    C
ATOM   4399  CB  SER L  63      22.396 -22.392 -58.893  1.00 27.83           L    C
ATOM   4402  OG  SER L  63      23.470 -23.230 -58.557  1.00 34.49           L    O
ATOM   4404  C   SER L  63      20.889 -22.988 -57.002  1.00 31.82           L    C
ATOM   4405  O   SER L  63      21.319 -23.705 -56.097  1.00 37.45           L    O
ATOM   4407  N   GLY L  64      19.654 -23.086 -57.490  1.00 30.47           L    N
ATOM   4408  CA  GLY L  64      18.760 -24.150 -57.104  1.00 28.02           L    C
ATOM   4411  C   GLY L  64      18.483 -25.016 -58.313  1.00 27.03           L    C
ATOM   4412  O   GLY L  64      18.468 -24.526 -59.434  1.00 34.99           L    O
ATOM   4414  N   SER L  65      18.257 -26.305 -58.088  1.00 30.05           L    N
ATOM   4415  CA  SER L  65      17.753 -27.189 -59.134  1.00 29.26           L    C
ATOM   4417  CB  SER L  65      18.903 -27.902 -59.858  1.00 34.20           L    C
ATOM   4420  OG  SER L  65      19.588 -28.813 -59.018  1.00 39.69           L    O
ATOM   4422  C   SER L  65      16.748 -28.184 -58.592  1.00 28.73           L    C
ATOM   4423  O   SER L  65      16.629 -28.385 -57.383  1.00 32.61           L    O
ATOM   4425  N   GLY L  66      15.997 -28.782 -59.508  1.00 30.22           L    N
ATOM   4426  CA  GLY L  66      15.077 -29.845 -59.172  1.00 27.50           L    C
ATOM   4429  C   GLY L  66      13.626 -29.460 -59.307  1.00 26.84           L    C
ATOM   4430  O   GLY L  66      13.264 -28.283 -59.321  1.00 31.78           L    O
ATOM   4432  N   SER L  67      12.793 -30.486 -59.376  1.00 31.57           L    N
ATOM   4433  CA  SER L  67      11.363 -30.356 -59.557  1.00 33.48           L    C
ATOM   4435  CB  SER L  67      11.050 -30.073 -61.031  1.00 40.62           L    C
ATOM   4438  OG  SER L  67       9.708 -29.636 -61.152  1.00 50.74           L    O
ATOM   4440  C   SER L  67      10.722 -31.668 -59.133  1.00 33.67           L    C
ATOM   4441  O   SER L  67      11.302 -32.728 -59.355  1.00 43.40           L    O
ATOM   4443  N   GLY L  68       9.547 -31.615 -58.508  1.00 29.66           L    N
ATOM   4444  CA  GLY L  68       8.871 -32.831 -58.094  1.00 27.58           L    C
ATOM   4447  C   GLY L  68       9.060 -33.104 -56.624  1.00 25.21           L    C
ATOM   4448  O   GLY L  68       8.441 -32.430 -55.807  1.00 24.35           L    O
ATOM   4450  N   THR L  69       9.911 -34.087 -56.281  1.00 29.76           L    N
ATOM   4451  CA  THR L  69      10.236 -34.396 -54.873  1.00 23.15           L    C
ATOM   4453  CB  THR L  69       9.956 -35.884 -54.475  1.00 22.87           L    C
ATOM   4455  OG1 THR L  69      10.811 -36.762 -55.218  1.00 28.34           L    O
ATOM   4457  CG2 THR L  69       8.521 -36.271 -54.697  1.00 16.94           L    C
ATOM   4461  C   THR L  69      11.680 -34.089 -54.462  1.00 22.23           L    C
ATOM   4462  O   THR L  69      11.935 -33.888 -53.285  1.00 21.49           L    O
ATOM   4464  N   ASP L  70      12.610 -34.061 -55.416  1.00 25.31           L    N
ATOM   4465  CA  ASP L  70      14.055 -34.065 -55.134  1.00 23.44           L    C
ATOM   4467  CB  ASP L  70      14.757 -35.095 -56.017  1.00 29.31           L    C
ATOM   4470  CG  ASP L  70      14.544 -36.534 -55.591  1.00 27.13           L    C
ATOM   4471  OD1 ASP L  70      13.617 -36.909 -54.823  1.00 28.62           L    O
ATOM   4472  OD2 ASP L  70      15.334 -37.327 -56.096  1.00 31.58           L    O
ATOM   4473  C   ASP L  70      14.707 -32.725 -55.458  1.00 24.18           L    C
ATOM   4474  O   ASP L  70      14.801 -32.364 -56.622  1.00 24.97           L    O
ATOM   4476  N   PHE L  71      15.181 -31.995 -54.448  1.00 23.17           L    N
ATOM   4477  CA  PHE L  71      15.741 -30.653 -54.678  1.00 24.80           L    C
ATOM   4479  CB  PHE L  71      14.805 -29.594 -54.086  1.00 23.84           L    C
ATOM   4482  CG  PHE L  71      13.422 -29.639 -54.656  1.00 22.41           L    C
ATOM   4483  CD1 PHE L  71      13.084 -28.848 -55.749  1.00 27.90           L    C
ATOM   4485  CE1 PHE L  71      11.825 -28.910 -56.294  1.00 27.80           L    C
ATOM   4487  CZ  PHE L  71      10.884 -29.768 -55.747  1.00 28.31           L    C
ATOM   4489  CE2 PHE L  71      11.208 -30.573 -54.697  1.00 22.97           L    C
ATOM   4491  CD2 PHE L  71      12.476 -30.501 -54.145  1.00 24.87           L    C
ATOM   4493  C   PHE L  71      17.176 -30.460 -54.149  1.00 17.22           L    C
ATOM   4494  O   PHE L  71      17.575 -31.069 -53.171  1.00 22.61           L    O
ATOM   4496  N   THR L  72      17.923 -29.592 -54.816  1.00 22.55           L    N
ATOM   4497  CA  THR L  72      19.340 -29.347 -54.526  1.00 27.48           L    C
ATOM   4499  CB  THR L  72      20.236 -29.980 -55.638  1.00 28.08           L    C
ATOM   4501  OG1 THR L  72      19.871 -31.354 -55.789  1.00 33.64           L    O
ATOM   4503  CG2 THR L  72      21.731 -29.908 -55.313  1.00 27.74           L    C
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ATOM   4507  C   THR L  72      19.581 -27.837 -54.421  1.00 26.21           L    C
ATOM   4508  O   THR L  72      19.054 -27.066 -55.225  1.00 27.18           L    O
ATOM   4510  N   LEU L  73      20.346 -27.431 -53.410  1.00 27.45           L    N
ATOM   4511  CA  LEU L  73      21.026 -26.126 -53.384  1.00 28.71           L    C
ATOM   4513  CB  LEU L  73      20.796 -25.399 -52.060  1.00 29.97           L    C
ATOM   4516  CG  LEU L  73      21.533 -24.079 -51.824  1.00 29.03           L    C
ATOM   4518  CD1 LEU L  73      20.930 -22.892 -52.621  1.00 26.07           L    C
ATOM   4522  CD2 LEU L  73      21.495 -23.805 -50.344  1.00 28.64           L    C
ATOM   4526  C   LEU L  73      22.528 -26.331 -53.620  1.00 30.11           L    C
ATOM   4527  O   LEU L  73      23.169 -27.168 -52.987  1.00 35.54           L    O
ATOM   4529  N   THR L  74      23.072 -25.557 -54.547  1.00 29.24           L    N
ATOM   4530  CA  THR L  74      24.477 -25.605 -54.906  1.00 30.11           L    C
ATOM   4532  CB  THR L  74      24.655 -25.967 -56.398  1.00 30.17           L    C
ATOM   4534  OG1 THR L  74      24.022 -27.220 -56.674  1.00 28.59           L    O
ATOM   4536  CG2 THR L  74      26.155 -26.064 -56.783  1.00 28.72           L    C
ATOM   4540  C   THR L  74      25.065 -24.223 -54.627  1.00 31.00           L    C
ATOM   4541  O   THR L  74      24.691 -23.265 -55.284  1.00 32.34           L    O
ATOM   4543  N   ILE L  75      25.944 -24.104 -53.629  1.00 30.28           L    N
ATOM   4544  CA  ILE L  75      26.796 -22.915 -53.505  1.00 31.22           L    C
ATOM   4546  CB  ILE L  75      27.199 -22.546 -52.066  1.00 25.59           L    C
ATOM   4548  CG1 ILE L  75      26.014 -22.578 -51.106  1.00 27.18           L    C
ATOM   4551  CD1 ILE L  75      26.445 -22.429 -49.658  1.00 23.10           L    C
ATOM   4555  CG2 ILE L  75      27.871 -21.167 -52.071  1.00 21.88           L    C
ATOM   4559  C   ILE L  75      28.073 -23.235 -54.252  1.00 25.24           L    C
ATOM   4560  O   ILE L  75      28.889 -24.047 -53.792  1.00 30.52           L    O
ATOM   4562  N   SER L  76      28.267 -22.599 -55.392  1.00 34.57           L    N
ATOM   4563  CA  SER L  76      29.244 -23.102 -56.354  1.00 36.92           L    C
ATOM   4565  CB  SER L  76      28.832 -22.716 -57.767  1.00 43.47           L    C
ATOM   4568  OG  SER L  76      29.581 -23.457 -58.709  1.00 50.61           L    O
ATOM   4570  C   SER L  76      30.689 -22.686 -56.130  1.00 41.87           L    C
ATOM   4571  O   SER L  76      31.612 -23.344 -56.636  1.00 54.07           L    O
ATOM   4573  N   SER L  77      30.928 -21.601 -55.412  1.00 40.23           L    N
ATOM   4574  CA  SER L  77      32.314 -21.197 -55.217  1.00 36.15           L    C
ATOM   4576  CB  SER L  77      32.712 -20.230 -56.324  1.00 42.00           L    C
ATOM   4579  OG  SER L  77      34.107 -20.077 -56.375  1.00 43.96           L    O
ATOM   4581  C   SER L  77      32.466 -20.591 -53.841  1.00 33.65           L    C
ATOM   4582  O   SER L  77      32.514 -19.365 -53.694  1.00 39.60           L    O
ATOM   4584  N   LEU L  78      32.552 -21.478 -52.841  1.00 24.50           L    N
ATOM   4585  CA  LEU L  78      32.206 -21.146 -51.458  1.00 25.00           L    C
ATOM   4587  CB  LEU L  78      32.273 -22.391 -50.573  1.00 22.30           L    C
ATOM   4590  CG  LEU L  78      31.810 -22.220 -49.121  1.00 22.91           L    C
ATOM   4592  CD1 LEU L  78      30.308 -21.885 -49.060  1.00 22.42           L    C
ATOM   4596  CD2 LEU L  78      32.129 -23.457 -48.291  1.00 22.89           L    C
ATOM   4600  C   LEU L  78      33.116 -20.063 -50.913  1.00 28.19           L    C
ATOM   4601  O   LEU L  78      34.333 -20.131 -51.064  1.00 35.35           L    O
ATOM   4603  N   GLN L  79      32.515 -19.037 -50.325  1.00 27.53           L    N
ATOM   4604  CA  GLN L  79      33.243 -17.905 -49.800  1.00 26.14           L    C
ATOM   4606  CB  GLN L  79      32.663 -16.615 -50.384  1.00 28.06           L    C
ATOM   4609  CG  GLN L  79      32.879 -16.471 -51.876  1.00 28.35           L    C
ATOM   4612  CD  GLN L  79      34.337 -16.528 -52.220  1.00 27.68           L    C
ATOM   4613  OE1 GLN L  79      35.126 -15.745 -51.700  1.00 26.91           L    O
ATOM   4614  NE2 GLN L  79      34.719 -17.482 -53.068  1.00 24.25           L    N
ATOM   4617  C   GLN L  79      33.162 -17.891 -48.277  1.00 29.05           L    C
ATOM   4618  O   GLN L  79      32.262 -18.496 -47.696  1.00 30.68           L    O
ATOM   4620  N   PRO L  80      34.122 -17.229 -47.617  1.00 30.26           L    N
ATOM   4621  CA  PRO L  80      34.111 -17.189 -46.157  1.00 29.87           L    C
ATOM   4623  CB  PRO L  80      35.171 -16.134 -45.821  1.00 26.81           L    C
ATOM   4626  CG  PRO L  80      36.113 -16.205 -46.928  1.00 29.99           L    C
ATOM   4629  CD  PRO L  80      35.288 -16.513 -48.163  1.00 28.60           L    C
ATOM   4632  C   PRO L  80      32.791 -16.761 -45.574  1.00 31.54           L    C
ATOM   4633  O   PRO L  80      32.387 -17.290 -44.550  1.00 28.23           L    O
ATOM   4634  N   GLU L  81      32.152 -15.786 -46.224  1.00 34.23           L    N
ATOM   4635  CA  GLU L  81      30.927 -15.161 -45.726  1.00 31.10           L    C
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ATOM   4637  CB  GLU L  81      30.699 -13.793 -46.401  1.00 35.25           L    C
ATOM   4640  CG  GLU L  81      30.471 -13.822 -47.925  1.00 41.26           L    C
ATOM   4643  CD  GLU L  81      31.736 -13.539 -48.758  1.00 48.81           L    C
ATOM   4644  OE1 GLU L  81      32.877 -13.879 -48.316  1.00 46.11           L    O
ATOM   4645  OE2 GLU L  81      31.574 -12.971 -49.868  1.00 50.23           L    O
ATOM   4646  C   GLU L  81      29.670 -16.005 -45.876  1.00 30.04           L    C
ATOM   4647  O   GLU L  81      28.613 -15.581 -45.428  1.00 30.78           L    O
ATOM   4649  N   ASP L  82      29.786 -17.180 -46.505  1.00 29.44           L    N
ATOM   4650  CA  ASP L  82      28.675 -18.126 -46.677  1.00 25.79           L    C
ATOM   4652  CB  ASP L  82      28.875 -18.998 -47.930  1.00 23.56           L    C
ATOM   4655  CG  ASP L  82      28.988 -18.187 -49.215  1.00 26.90           L    C
ATOM   4656  OD1 ASP L  82      28.553 -17.021 -49.208  1.00 21.54           L    O
ATOM   4657  OD2 ASP L  82      29.517 -18.714 -50.236  1.00 23.70           L    O
ATOM   4658  C   ASP L  82      28.474 -19.049 -45.470  1.00 24.57           L    C
ATOM   4659  O   ASP L  82      27.581 -19.884 -45.480  1.00 27.04           L    O
ATOM   4661  N   VAL L  83      29.296 -18.916 -44.435  1.00 27.35           L    N
ATOM   4662  CA  VAL L  83      29.106 -19.707 -43.226  1.00 27.74           L    C
ATOM   4664  CB  VAL L  83      30.203 -19.415 -42.182  1.00 32.22           L    C
ATOM   4666  CG1 VAL L  83      29.820 -19.926 -40.798  1.00 27.26           L    C
ATOM   4670  CG2 VAL L  83      31.496 -20.057 -42.641  1.00 33.24           L    C
ATOM   4674  C   VAL L  83      27.722 -19.398 -42.683  1.00 26.93           L    C
ATOM   4675  O   VAL L  83      27.407 -18.246 -42.412  1.00 32.44           L    O
ATOM   4677  N   ALA L  84      26.893 -20.436 -42.575  1.00 23.63           L    N
ATOM   4678  CA  ALA L  84      25.511 -20.313 -42.099  1.00 24.43           L    C
ATOM   4680  CB  ALA L  84      24.689 -19.491 -43.076  1.00 23.14           L    C
ATOM   4684  C   ALA L  84      24.916 -21.702 -41.980  1.00 21.75           L    C
ATOM   4685  O   ALA L  84      25.561 -22.685 -42.324  1.00 26.64           L    O
ATOM   4687  N   THR L  85      23.680 -21.775 -41.487  1.00 25.41           L    N
ATOM   4688  CA  THR L  85      22.853 -22.969 -41.586  1.00 21.03           L    C
ATOM   4690  CB  THR L  85      22.156 -23.259 -40.215  1.00 23.99           L    C
ATOM   4692  OG1 THR L  85      23.161 -23.385 -39.208  1.00 21.81           L    O
ATOM   4694  CG2 THR L  85      21.325 -24.566 -40.249  1.00 19.42           L    C
ATOM   4698  C   THR L  85      21.853 -22.668 -42.702  1.00 23.60           L    C
ATOM   4699  O   THR L  85      21.215 -21.615 -42.676  1.00 15.27           L    O
ATOM   4701  N   TYR L  86      21.794 -23.533 -43.728  1.00 24.17           L    N
ATOM   4702  CA  TYR L  86      20.835 -23.406 -44.828  1.00 21.47           L    C
ATOM   4704  CB  TYR L  86      21.484 -23.703 -46.189  1.00 22.59           L    C
ATOM   4707  CG  TYR L  86      22.579 -22.738 -46.468  1.00 21.53           L    C
ATOM   4708  CD1 TYR L  86      22.337 -21.574 -47.186  1.00 23.29           L    C
ATOM   4710  CE1 TYR L  86      23.353 -20.645 -47.406  1.00 25.30           L    C
ATOM   4712  CZ  TYR L  86      24.626 -20.883 -46.895  1.00 24.87           L    C
ATOM   4713  OH  TYR L  86      25.628 -19.967 -47.102  1.00 26.31           L    O
ATOM   4715  CE2 TYR L  86      24.874 -22.012 -46.148  1.00 21.74           L    C
ATOM   4717  CD2 TYR L  86      23.856 -22.946 -45.958  1.00 21.76           L    C
ATOM   4719  C   TYR L  86      19.606 -24.295 -44.616  1.00 20.27           L    C
ATOM   4720  O   TYR L  86      19.735 -25.436 -44.196  1.00 20.94           L    O
ATOM   4722  N   TYR L  87      18.424 -23.739 -44.897  1.00 23.56           L    N
ATOM   4723  CA  TYR L  87      17.139 -24.444 -44.758  1.00 19.01           L    C
ATOM   4725  CB  TYR L  87      16.279 -23.818 -43.675  1.00 21.93           L    C
ATOM   4728  CG  TYR L  87      16.903 -23.785 -42.307  1.00 20.93           L    C
ATOM   4729  CD1 TYR L  87      16.673 -24.793 -41.388  1.00 19.04           L    C
ATOM   4731  CE1 TYR L  87      17.250 -24.743 -40.124  1.00 24.45           L    C
ATOM   4733  CZ  TYR L  87      18.063 -23.677 -39.785  1.00 21.60           L    C
ATOM   4734  OH  TYR L  87      18.631 -23.602 -38.531  1.00 23.99           L    O
ATOM   4736  CE2 TYR L  87      18.289 -22.666 -40.683  1.00 16.99           L    C
ATOM   4738  CD2 TYR L  87      17.719 -22.723 -41.928  1.00 21.05           L    C
ATOM   4740  C   TYR L  87      16.357 -24.417 -46.057  1.00 20.23           L    C
ATOM   4741  O   TYR L  87      16.213 -23.364 -46.670  1.00 23.11           L    O
ATOM   4743  N   CYS L  88      15.862 -25.574 -46.496  1.00 23.95           L    N
ATOM   4744  CA  CYS L  88      14.891 -25.592 -47.604  1.00 25.00           L    C
ATOM   4746  CB  CYS L  88      14.879 -26.910 -48.351  1.00 27.66           L    C
ATOM   4749  SG  CYS L  88      14.494 -28.421 -47.396  1.00 30.09           L    S
ATOM   4751  C   CYS L  88      13.526 -25.372 -46.992  1.00 21.79           L    C
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ATOM   4752  O   CYS L  88      13.344 -25.610 -45.801  1.00 17.37      L    O
ATOM   4754  N   LEU L  89      12.579 -24.894 -47.791  1.00 23.22      L    N
ATOM   4755  CA  LEU L  89      11.170 -24.803 -47.341  1.00 20.80      L    C
ATOM   4757  CB  LEU L  89      10.827 -23.396 -46.837  1.00 20.57      L    C
ATOM   4760  CG  LEU L  89       9.342 -23.146 -46.470  1.00 18.93      L    C
ATOM   4762  CD1 LEU L  89       9.163 -23.007 -44.979  1.00 18.18      L    C
ATOM   4766  CD2 LEU L  89       8.792 -21.925 -47.217  1.00 17.36      L    C
ATOM   4770  C   LEU L  89      10.249 -25.167 -48.492  1.00 19.93      L    C
ATOM   4771  O   LEU L  89      10.400 -24.658 -49.603  1.00 18.43      L    O
ATOM   4773  N   GLN L  90       9.292 -26.050 -48.214  1.00 20.22      L    N
ATOM   4774  CA  GLN L  90       8.326 -26.456 -49.212  1.00 23.91      L    C
ATOM   4776  CB  GLN L  90       7.775 -27.883 -48.951  1.00 21.99      L    C
ATOM   4779  CG  GLN L  90       6.267 -28.041 -49.324  1.00 25.60      L    C
ATOM   4782  CD  GLN L  90       5.358 -27.873 -48.171  1.00 30.23      L    C
ATOM   4783  OE1 GLN L  90       5.706 -28.204 -47.058  1.00 36.99      L    O
ATOM   4784  NE2 GLN L  90       4.167 -27.412 -48.427  1.00 40.71      L    N
ATOM   4787  C   GLN L  90       7.219 -25.437 -49.168  1.00 19.47      L    C
ATOM   4788  O   GLN L  90       6.689 -25.147 -48.087  1.00 17.07      L    O
ATOM   4790  N   SER L  91       6.825 -24.930 -50.345  1.00 23.64      L    N
ATOM   4791  CA  SER L  91       5.670 -24.042 -50.408  1.00 25.08      L    C
ATOM   4793  CB  SER L  91       6.134 -22.579 -50.477  1.00 22.90      L    C
ATOM   4796  OG  SER L  91       6.537 -22.208 -51.759  1.00 15.46      L    O
ATOM   4798  C   SER L  91       4.587 -24.410 -51.461  1.00 25.06      L    C
ATOM   4799  O   SER L  91       3.944 -23.549 -52.047  1.00 26.38      L    O
ATOM   4801  N   ASP L  92       4.335 -25.706 -51.598  1.00 25.61      L    N
ATOM   4802  CA  ASP L  92       3.308 -26.249 -52.478  1.00 24.49      L    C
ATOM   4804  CB  ASP L  92       3.499 -27.778 -52.549  1.00 23.52      L    C
ATOM   4807  CG  ASP L  92       2.297 -28.496 -53.109  1.00 27.32      L    C
ATOM   4808  OD1 ASP L  92       2.246 -28.712 -54.337  1.00 25.72      L    O
ATOM   4809  OD2 ASP L  92       1.393 -28.816 -52.309  1.00 21.92      L    O
ATOM   4810  C   ASP L  92       1.862 -25.922 -52.022  1.00 26.36      L    C
ATOM   4811  O   ASP L  92       0.942 -25.737 -52.819  1.00 23.83      L    O
ATOM   4813  N   SER L  93       1.676 -25.869 -50.722  1.00 25.09      L    N
ATOM   4814  CA  SER L  93       0.370 -25.729 -50.151  1.00 19.22      L    C
ATOM   4816  CB  SER L  93      -0.448 -26.996 -50.399  1.00 15.50      L    C
ATOM   4819  OG  SER L  93       0.253 -28.204 -50.054  1.00 13.07      L    O
ATOM   4821  C   SER L  93       0.622 -25.528 -48.669  1.00 23.85      L    C
ATOM   4822  O   SER L  93       1.726 -25.816 -48.173  1.00 25.31      L    O
ATOM   4824  N   LEU L  94      -0.385 -25.039 -47.969  1.00 22.99      L    N
ATOM   4825  CA  LEU L  94      -0.290 -24.815 -46.538  1.00 20.48      L    C
ATOM   4827  CB  LEU L  94      -1.277 -23.739 -46.106  1.00 21.67      L    C
ATOM   4830  CG  LEU L  94      -1.175 -22.301 -46.616  1.00 18.21      L    C
ATOM   4832  CD1 LEU L  94      -2.473 -21.569 -46.210  1.00 18.76      L    C
ATOM   4836  CD2 LEU L  94       0.062 -21.568 -46.074  1.00 12.37      L    C
ATOM   4840  C   LEU L  94      -0.603 -26.093 -45.770  1.00 21.17      L    C
ATOM   4841  O   LEU L  94      -1.536 -26.804 -46.113  1.00 26.26      L    O
ATOM   4843  N   PRO L  95       0.127 -26.365 -44.680  1.00 21.53      L    N
ATOM   4844  CA  PRO L  95       1.184 -25.560 -44.119  1.00 19.46      L    C
ATOM   4846  CB  PRO L  95       1.240 -26.047 -42.678  1.00 23.51      L    C
ATOM   4849  CG  PRO L  95       0.888 -27.469 -42.771  1.00 23.20      L    C
ATOM   4852  CD  PRO L  95      -0.100 -27.582 -43.880  1.00 22.93      L    C
ATOM   4855  C   PRO L  95       2.514 -25.805 -44.835  1.00 18.19      L    C
ATOM   4856  O   PRO L  95       2.767 -26.910 -45.313  1.00 22.86      L    O
ATOM   4857  N   TYR L  96       3.340 -24.766 -44.918  1.00 16.10      L    N
ATOM   4858  CA  TYR L  96       4.697 -24.906 -45.420  1.00 21.13      L    C
ATOM   4860  CB  TYR L  96       5.360 -23.545 -45.684  1.00 15.78      L    C
ATOM   4863  CG  TYR L  96       4.678 -22.611 -46.654  1.00 11.35      L    C
ATOM   4864  CD1 TYR L  96       3.664 -23.033 -47.494  1.00 13.34      L    C
ATOM   4866  CE1 TYR L  96       3.069 -22.164 -48.359  1.00 14.62      L    C
ATOM   4868  CZ  TYR L  96       3.485 -20.843 -48.419  1.00 15.70      L    C
ATOM   4869  OH  TYR L  96       2.891 -19.960 -49.305  1.00 15.51      L    O
ATOM   4871  CE2 TYR L  96       4.507 -20.403 -47.599  1.00 12.39      L    C
ATOM   4873  CD2 TYR L  96       5.081 -21.273 -46.731  1.00 13.42      L    C
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ATOM   4875  C   TYR L  96       5.549 -25.704 -44.421  1.00 16.48           L    C
ATOM   4876  O   TYR L  96       5.167 -25.940 -43.277  1.00 20.41           L    O
ATOM   4878  N   THR L  97       6.720 -26.115 -44.869  1.00 22.03           L    N
ATOM   4879  CA  THR L  97       7.535 -27.059 -44.116  1.00 20.39           L    C
ATOM   4881  CB  THR L  97       7.147 -28.506 -44.492  1.00 17.47           L    C
ATOM   4883  OG1 THR L  97       5.710 -28.624 -44.513  1.00 17.34           L    O
ATOM   4885  CG2 THR L  97       7.737 -29.498 -43.525  1.00 14.07           L    C
ATOM   4889  C   THR L  97       9.012 -26.812 -44.420  1.00 24.61           L    C
ATOM   4890  O   THR L  97       9.431 -26.867 -45.573  1.00 19.22           L    O
ATOM   4892  N   PHE L  98       9.777 -26.527 -43.366  1.00 26.06           L    N
ATOM   4893  CA  PHE L  98      11.219 -26.310 -43.456  1.00 25.08           L    C
ATOM   4895  CB  PHE L  98      11.696 -25.473 -42.229  1.00 22.13           L    C
ATOM   4898  CG  PHE L  98      11.561 -23.987 -42.401  1.00 20.61           L    C
ATOM   4899  CD1 PHE L  98      12.375 -23.306 -43.306  1.00 18.98           L    C
ATOM   4901  CE1 PHE L  98      12.257 -21.933 -43.474  1.00 21.34           L    C
ATOM   4903  CZ  PHE L  98      11.323 -21.223 -42.711  1.00 24.27           L    C
ATOM   4905  CE2 PHE L  98      10.519 -21.895 -41.801  1.00 17.37           L    C
ATOM   4907  CD2 PHE L  98      10.645 -23.262 -41.650  1.00 17.21           L    C
ATOM   4909  C   PHE L  98      11.957 -27.647 -43.462  1.00 22.27           L    C
ATOM   4910  O   PHE L  98      11.534 -28.607 -42.830  1.00 20.00           L    O
ATOM   4912  N   GLY L  99      13.085 -27.710 -44.154  1.00 29.73           L    N
ATOM   4913  CA  GLY L  99      14.056 -28.751 -43.874  1.00 24.02           L    C
ATOM   4916  C   GLY L  99      14.630 -28.647 -42.460  1.00 25.54           L    C
ATOM   4917  O   GLY L  99      14.463 -27.632 -41.747  1.00 24.47           L    O
ATOM   4919  N   GLN L 100      15.355 -29.689 -42.071  1.00 26.67           L    N
ATOM   4920  CA  GLN L 100      15.973 -29.758 -40.750  1.00 22.86           L    C
ATOM   4922  CB  GLN L 100      16.353 -31.187 -40.395  1.00 21.01           L    C
ATOM   4925  CG  GLN L 100      15.206 -32.163 -40.385  1.00 20.47           L    C
ATOM   4928  CD  GLN L 100      14.817 -32.697 -41.766  1.00 27.97           L    C
ATOM   4929  OE1 GLN L 100      15.419 -32.362 -42.813  1.00 23.15           L    O
ATOM   4930  NE2 GLN L 100      13.807 -33.544 -41.772  1.00 35.92           L    N
ATOM   4933  C   GLN L 100      17.214 -28.887 -40.624  1.00 20.93           L    C
ATOM   4934  O   GLN L 100      17.659 -28.627 -39.509  1.00 22.08           L    O
ATOM   4936  N   GLY L 101      17.758 -28.426 -41.751  1.00 22.71           L    N
ATOM   4937  CA  GLY L 101      18.910 -27.536 -41.740  1.00 24.60           L    C
ATOM   4940  C   GLY L 101      20.200 -28.246 -42.101  1.00 26.13           L    C
ATOM   4941  O   GLY L 101      20.359 -29.428 -41.841  1.00 29.65           L    O
ATOM   4943  N   THR L 102      21.107 -27.512 -42.730  1.00 26.36           L    N
ATOM   4944  CA  THR L 102      22.457 -27.981 -42.989  1.00 26.55           L    C
ATOM   4946  CB  THR L 102      22.739 -28.249 -44.467  1.00 23.82           L    C
ATOM   4948  OG1 THR L 102      21.825 -29.229 -44.975  1.00 25.68           L    O
ATOM   4950  CG2 THR L 102      24.186 -28.736 -44.625  1.00 22.53           L    C
ATOM   4954  C   THR L 102      23.435 -26.896 -42.556  1.00 23.62           L    C
ATOM   4955  O   THR L 102      23.494 -25.851 -43.172  1.00 21.90           L    O
ATOM   4957  N   LYS L 103      24.221 -27.190 -41.531  1.00 21.31           L    N
ATOM   4958  CA  LYS L 103      25.229 -26.283 -41.029  1.00 25.59           L    C
ATOM   4960  CB  LYS L 103      25.641 -26.707 -39.623  1.00 25.58           L    C
ATOM   4963  CG  LYS L 103      26.339 -25.629 -38.818  1.00 26.60           L    C
ATOM   4966  CD  LYS L 103      27.012 -26.211 -37.606  1.00 28.54           L    C
ATOM   4969  CE  LYS L 103      27.748 -25.150 -36.762  1.00 33.51           L    C
ATOM   4972  NZ  LYS L 103      26.813 -24.170 -36.109  1.00 38.27           L    N
ATOM   4976  C   LYS L 103      26.413 -26.321 -41.986  1.00 25.33           L    C
ATOM   4977  O   LYS L 103      26.975 -27.381 -42.257  1.00 24.17           L    O
ATOM   4979  N   VAL L 104      26.762 -25.176 -42.552  1.00 28.43           L    N
ATOM   4980  CA  VAL L 104      27.904 -25.118 -43.455  1.00 24.98           L    C
ATOM   4982  CB  VAL L 104      27.536 -24.423 -44.767  1.00 21.05           L    C
ATOM   4984  CG1 VAL L 104      28.769 -24.286 -45.694  1.00 20.66           L    C
ATOM   4988  CG2 VAL L 104      26.422 -25.181 -45.431  1.00 13.60           L    C
ATOM   4992  C   VAL L 104      29.036 -24.397 -42.741  1.00 33.08           L    C
ATOM   4993  O   VAL L 104      28.844 -23.304 -42.194  1.00 28.61           L    O
ATOM   4995  N   GLU L 105      30.209 -25.033 -42.721  1.00 33.88           L    N
ATOM   4996  CA  GLU L 105      31.397 -24.457 -42.117  1.00 31.05           L    C
ATOM   4998  CB  GLU L 105      31.745 -25.192 -40.813  1.00 34.83           L    C
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ATOM   5001  CG  GLU L 105      31.069 -24.521 -39.580  1.00 41.04           L    C
ATOM   5004  CD  GLU L 105      31.110 -25.338 -38.288  1.00 39.98           L    C
ATOM   5005  OE1 GLU L 105      30.890 -26.575 -38.328  1.00 42.49           L    O
ATOM   5006  OE2 GLU L 105      31.340 -24.715 -37.224  1.00 40.83           L    O
ATOM   5007  C   GLU L 105      32.539 -24.437 -43.133  1.00 27.77           L    C
ATOM   5008  O   GLU L 105      32.572 -25.249 -44.061  1.00 23.32           L    O
ATOM   5010  N   ILE L 106      33.422 -23.446 -43.021  1.00 32.10           L    N
ATOM   5011  CA  ILE L 106      34.573 -23.352 -43.921  1.00 33.37           L    C
ATOM   5013  CB  ILE L 106      35.003 -21.900 -44.232  1.00 35.53           L    C
ATOM   5015  CG1 ILE L 106      34.126 -21.295 -45.324  1.00 37.32           L    C
ATOM   5018  CD1 ILE L 106      32.684 -21.139 -44.935  1.00 40.30           L    C
ATOM   5022  CG2 ILE L 106      36.446 -21.860 -44.740  1.00 31.85           L    C
ATOM   5026  C   ILE L 106      35.750 -24.086 -43.307  1.00 33.88           L    C
ATOM   5027  O   ILE L 106      36.030 -23.921 -42.114  1.00 34.44           L    O
ATOM   5029  N   LYS L 107      36.414 -24.892 -44.132  1.00 34.53           L    N
ATOM   5030  CA  LYS L 107      37.673 -25.538 -43.785  1.00 36.55           L    C
ATOM   5032  CB  LYS L 107      37.767 -26.919 -44.423  1.00 39.43           L    C
ATOM   5035  CG  LYS L 107      38.967 -27.739 -43.979  1.00 40.06           L    C
ATOM   5038  CD  LYS L 107      39.395 -28.722 -45.055  1.00 40.37           L    C
ATOM   5041  CE  LYS L 107      40.760 -29.291 -44.764  1.00 42.50           L    C
ATOM   5044  NZ  LYS L 107      40.725 -30.003 -43.464  1.00 40.70           L    N
ATOM   5048  C   LYS L 107      38.842 -24.671 -44.249  1.00 35.86           L    C
ATOM   5049  O   LYS L 107      38.970 -24.336 -45.428  1.00 26.08           L    O
ATOM   5051  N   ARG L 108      39.711 -24.371 -43.290  1.00 37.76           L    N
ATOM   5052  CA  ARG L 108      40.700 -23.314 -43.368  1.00 37.49           L    C
ATOM   5054  CB  ARG L 108      40.206 -22.256 -42.388  1.00 40.73           L    C
ATOM   5057  CG  ARG L 108      40.968 -20.994 -42.299  1.00 45.09           L    C
ATOM   5060  CD  ARG L 108      41.092 -20.559 -40.864  1.00 43.58           L    C
ATOM   5063  NE  ARG L 108      41.502 -19.170 -40.808  1.00 46.88           L    N
ATOM   5065  CZ  ARG L 108      42.743 -18.725 -40.978  1.00 46.41           L    C
ATOM   5066  NH1 ARG L 108      43.764 -19.550 -41.180  1.00 46.86           L    N
ATOM   5069  NH2 ARG L 108      42.960 -17.421 -40.923  1.00 50.11           L    N
ATOM   5072  C   ARG L 108      42.082 -23.900 -42.957  1.00 36.21           L    C
ATOM   5073  O   ARG L 108      42.159 -25.041 -42.456  1.00 33.63           L    O
ATOM   5075  N   THR L 109      43.171 -23.160 -43.176  1.00 31.25           L    N
ATOM   5076  CA  THR L 109      44.459 -23.553 -42.604  1.00 32.62           L    C
ATOM   5078  CB  THR L 109      45.645 -22.747 -43.189  1.00 35.14           L    C
ATOM   5080  OG1 THR L 109      45.417 -21.342 -43.042  1.00 34.81           L    O
ATOM   5082  CG2 THR L 109      45.820 -23.066 -44.671  1.00 32.20           L    C
ATOM   5086  C   THR L 109      44.420 -23.435 -41.077  1.00 29.12           L    C
ATOM   5087  O   THR L 109      43.619 -22.702 -40.517  1.00 26.55           L    O
ATOM   5089  N   VAL L 110      45.255 -24.211 -40.405  1.00 33.31           L    N
ATOM   5090  CA  VAL L 110      45.354 -24.162 -38.947  1.00 34.24           L    C
ATOM   5092  CB  VAL L 110      46.339 -25.234 -38.429  1.00 33.83           L    C
ATOM   5094  CG1 VAL L 110      45.858 -26.645 -38.858  1.00 31.60           L    C
ATOM   5098  CG2 VAL L 110      46.528 -25.143 -36.910  1.00 32.46           L    C
ATOM   5102  C   VAL L 110      45.796 -22.762 -38.517  1.00 38.28           L    C
ATOM   5103  O   VAL L 110      46.618 -22.134 -39.189  1.00 41.32           L    O
ATOM   5105  N   ALA L 111      45.214 -22.264 -37.423  1.00 35.55           L    N
ATOM   5106  CA  ALA L 111      45.585 -20.967 -36.856  1.00 32.46           L    C
ATOM   5108  CB  ALA L 111      44.602 -19.869 -37.280  1.00 29.38           L    C
ATOM   5112  C   ALA L 111      45.601 -21.099 -35.344  1.00 35.67           L    C
ATOM   5113  O   ALA L 111      44.588 -21.450 -34.742  1.00 33.80           L    O
ATOM   5115  N   ALA L 112      46.763 -20.827 -34.747  1.00 37.38           L    N
ATOM   5116  CA  ALA L 112      46.935 -20.854 -33.298  1.00 33.98           L    C
ATOM   5118  CB  ALA L 112      48.410 -20.779 -32.949  1.00 35.33           L    C
ATOM   5122  C   ALA L 112      46.188 -19.691 -32.655  1.00 33.67           L    C
ATOM   5123  O   ALA L 112      46.151 -18.596 -33.219  1.00 31.87           L    O
ATOM   5125  N   PRO L 113      45.585 -19.924 -31.473  1.00 36.10           L    N
ATOM   5126  CA  PRO L 113      44.897 -18.859 -30.735  1.00 35.72           L    C
ATOM   5128  CB  PRO L 113      44.075 -19.628 -29.695  1.00 35.75           L    C
ATOM   5131  CG  PRO L 113      44.822 -20.870 -29.473  1.00 35.36           L    C
ATOM   5134  CD  PRO L 113      45.498 -21.217 -30.771  1.00 35.21           L    C
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ATOM   5137  C   PRO L 113      45.837 -17.888 -30.026  1.00 36.75           L    C
ATOM   5138  O   PRO L 113      46.875 -18.295 -29.502  1.00 39.60           L    O
ATOM   5139  N   SER L 114      45.468 -16.611 -30.012  1.00 34.02           L    N
ATOM   5140  CA  SER L 114      46.127 -15.652 -29.154  1.00 32.66           L    C
ATOM   5142  CB  SER L 114      45.929 -14.232 -29.662  1.00 32.42           L    C
ATOM   5145  OG  SER L 114      46.299 -14.140 -31.016  1.00 34.32           L    O
ATOM   5147  C   SER L 114      45.462 -15.803 -27.813  1.00 32.10           L    C
ATOM   5148  O   SER L 114      44.235 -15.732 -27.727  1.00 32.06           L    O
ATOM   5150  N   VAL L 115      46.256 -16.003 -26.768  1.00 31.87           L    N
ATOM   5151  CA  VAL L 115      45.704 -16.172 -25.433  1.00 32.60           L    C
ATOM   5153  CB  VAL L 115      46.262 -17.434 -24.732  1.00 30.38           L    C
ATOM   5155  CG1 VAL L 115      45.335 -17.863 -23.609  1.00 29.53           L    C
ATOM   5159  CG2 VAL L 115      46.415 -18.574 -25.731  1.00 30.32           L    C
ATOM   5163  C   VAL L 115      45.944 -14.912 -24.592  1.00 34.21           L    C
ATOM   5164  O   VAL L 115      47.060 -14.391 -24.521  1.00 35.31           L    O
ATOM   5166  N   PHE L 116      44.869 -14.407 -23.997  1.00 33.48           L    N
ATOM   5167  CA  PHE L 116      44.932 -13.295 -23.068  1.00 33.33           L    C
ATOM   5169  CB  PHE L 116      44.206 -12.069 -23.635  1.00 33.68           L    C
ATOM   5172  CG  PHE L 116      44.574 -11.747 -25.065  1.00 36.34           L    C
ATOM   5173  CD1 PHE L 116      45.657 -10.928 -25.359  1.00 37.25           L    C
ATOM   5175  CE1 PHE L 116      46.001 -10.634 -26.684  1.00 35.21           L    C
ATOM   5177  CZ  PHE L 116      45.266 -11.163 -27.711  1.00 32.65           L    C
ATOM   5179  CE2 PHE L 116      44.187 -11.981 -27.433  1.00 34.11           L    C
ATOM   5181  CD2 PHE L 116      43.845 -12.271 -26.121  1.00 34.18           L    C
ATOM   5183  C   PHE L 116      44.272 -13.756 -21.776  1.00 34.21           L    C
ATOM   5184  O   PHE L 116      43.344 -14.561 -21.801  1.00 33.93           L    O
ATOM   5186  N   ILE L 117      44.765 -13.262 -20.647  1.00 35.12           L    N
ATOM   5187  CA  ILE L 117      44.152 -13.553 -19.360  1.00 32.68           L    C
ATOM   5189  CB  ILE L 117      45.069 -14.439 -18.462  1.00 33.33           L    C
ATOM   5191  CG1 ILE L 117      44.296 -14.939 -17.239  1.00 30.66           L    C
ATOM   5194  CD1 ILE L 117      45.062 -15.915 -16.411  1.00 31.12           L    C
ATOM   5198  CG2 ILE L 117      46.341 -13.694 -18.051  1.00 34.54           L    C
ATOM   5202  C   ILE L 117      43.771 -12.237 -18.693  1.00 31.48           L    C
ATOM   5203  O   ILE L 117      44.457 -11.225 -18.856  1.00 30.97           L    O
ATOM   5205  N   PHE L 118      42.643 -12.253 -17.987  1.00 31.51           L    N
ATOM   5206  CA  PHE L 118      42.112 -11.076 -17.320  1.00 31.01           L    C
ATOM   5208  CB  PHE L 118      40.816 -10.588 -17.978  1.00 31.07           L    C
ATOM   5211  CG  PHE L 118      40.965 -10.193 -19.421  1.00 32.20           L    C
ATOM   5212  CD1 PHE L 118      41.280  -8.887 -19.769  1.00 30.51           L    C
ATOM   5214  CE1 PHE L 118      41.411  -8.519 -21.105  1.00 31.53           L    C
ATOM   5216  CZ  PHE L 118      41.225  -9.460 -22.107  1.00 30.93           L    C
ATOM   5218  CE2 PHE L 118      40.905 -10.766 -21.772  1.00 31.94           L    C
ATOM   5220  CD2 PHE L 118      40.774 -11.127 -20.438  1.00 31.03           L    C
ATOM   5222  C   PHE L 118      41.789 -11.456 -15.890  1.00 32.89           L    C
ATOM   5223  O   PHE L 118      41.017 -12.392 -15.675  1.00 35.18           L    O
ATOM   5225  N   PRO L 119      42.363 -10.732 -14.911  1.00 29.28           L    N
ATOM   5226  CA  PRO L 119      41.968 -10.945 -13.527  1.00 29.52           L    C
ATOM   5228  CB  PRO L 119      43.092 -10.272 -12.722  1.00 30.05           L    C
ATOM   5231  CG  PRO L 119      43.655  -9.250 -13.610  1.00 30.80           L    C
ATOM   5234  CD  PRO L 119      43.406  -9.698 -15.037  1.00 29.96           L    C
ATOM   5237  C   PRO L 119      40.620 -10.303 -13.220  1.00 28.26           L    C
ATOM   5238  O   PRO L 119      40.119  -9.504 -14.021  1.00 30.99           L    O
ATOM   5239  N   PRO L 120      40.014 -10.671 -12.083  1.00 23.94           L    N
ATOM   5240  CA  PRO L 120      38.773 -10.033 -11.686  1.00 28.24           L    C
ATOM   5242  CB  PRO L 120      38.333 -10.843 -10.463  1.00 24.91           L    C
ATOM   5245  CG  PRO L 120      39.558 -11.444  -9.949  1.00 26.27           L    C
ATOM   5248  CD  PRO L 120      40.422 -11.715 -11.132  1.00 23.97           L    C
ATOM   5251  C   PRO L 120      38.974  -8.562 -11.328  1.00 31.32           L    C
ATOM   5252  O   PRO L 120      40.056  -8.166 -10.887  1.00 35.50           L    O
ATOM   5253  N   SER L 121      37.930  -7.768 -11.535  1.00 33.30           L    N
ATOM   5254  CA  SER L 121      37.959  -6.350 -11.233  1.00 32.60           L    C
ATOM   5256  CB  SER L 121      36.800  -5.657 -11.937  1.00 33.35           L    C
ATOM   5259  OG  SER L 121      35.563  -6.081 -11.391  1.00 32.63           L    O
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ATOM   5261  C   SER L 121      37.829  -6.163  -9.729  1.00 34.97        L    C
ATOM   5262  O   SER L 121      37.104  -6.910  -9.067  1.00 33.63        L    O
ATOM   5264  N   ASP L 122      38.522  -5.165  -9.186  1.00 37.59        L    N
ATOM   5265  CA  ASP L 122      38.313  -4.780  -7.792  1.00 36.41        L    C
ATOM   5267  CB  ASP L 122      39.114  -3.527  -7.440  1.00 41.23        L    C
ATOM   5270  CG  ASP L 122      40.580  -3.821  -7.217  1.00 45.91        L    C
ATOM   5271  OD1 ASP L 122      40.906  -4.526  -6.236  1.00 48.01        L    O
ATOM   5272  OD2 ASP L 122      41.406  -3.339  -8.019  1.00 48.69        L    O
ATOM   5273  C   ASP L 122      36.824  -4.548  -7.557  1.00 33.78        L    C
ATOM   5274  O   ASP L 122      36.285  -4.940  -6.528  1.00 27.92        L    O
ATOM   5276  N   GLU L 123      36.165  -3.939  -8.540  1.00 37.53        L    N
ATOM   5277  CA  GLU L 123      34.722  -3.712  -8.500  1.00 39.09        L    C
ATOM   5279  CB  GLU L 123      34.263  -3.119  -9.829  1.00 38.84        L    C
ATOM   5282  CG  GLU L 123      32.835  -2.630  -9.813  1.00 41.05        L    C
ATOM   5285  CD  GLU L 123      32.440  -1.975 -11.111  1.00 44.35        L    C
ATOM   5286  OE1 GLU L 123      33.307  -1.853 -12.009  1.00 47.32        L    O
ATOM   5287  OE2 GLU L 123      31.257  -1.590 -11.230  1.00 46.36        L    O
ATOM   5288  C   GLU L 123      33.909  -4.976  -8.194  1.00 38.39        L    C
ATOM   5289  O   GLU L 123      32.986  -4.950  -7.377  1.00 39.12        L    O
ATOM   5291  N   GLN L 124      34.257  -6.075  -8.852  1.00 38.73        L    N
ATOM   5292  CA  GLN L 124      33.556  -7.339  -8.651  1.00 38.46        L    C
ATOM   5294  CB  GLN L 124      33.943  -8.338  -9.731  1.00 37.12        L    C
ATOM   5297  CG  GLN L 124      33.090  -9.590  -9.726  1.00 37.31        L    C
ATOM   5300  CD  GLN L 124      33.580 -10.631 -10.690  1.00 35.85        L    C
ATOM   5301  OE1 GLN L 124      34.568 -10.432 -11.401  1.00 31.84        L    O
ATOM   5302  NE2 GLN L 124      32.891 -11.760 -10.723  1.00 39.61        L    N
ATOM   5305  C   GLN L 124      33.868  -7.935  -7.285  1.00 37.24        L    C
ATOM   5306  O   GLN L 124      32.979  -8.459  -6.612  1.00 35.26        L    O
ATOM   5308  N   LEU L 125      35.138  -7.853  -6.896  1.00 38.97        L    N
ATOM   5309  CA  LEU L 125      35.612  -8.378  -5.611  1.00 41.13        L    C
ATOM   5311  CB  LEU L 125      37.129  -8.184  -5.477  1.00 40.21        L    C
ATOM   5314  CG  LEU L 125      37.969  -8.990  -6.479  1.00 41.05        L    C
ATOM   5316  CD1 LEU L 125      39.388  -8.455  -6.588  1.00 42.07        L    C
ATOM   5320  CD2 LEU L 125      37.985 -10.466  -6.112  1.00 41.28        L    C
ATOM   5324  C   LEU L 125      34.871  -7.764  -4.421  1.00 40.00        L    C
ATOM   5325  O   LEU L 125      34.648  -8.446  -3.430  1.00 39.35        L    O
ATOM   5327  N   LYS L 126      34.461  -6.498  -4.537  1.00 43.86        L    N
ATOM   5328  CA  LYS L 126      33.634  -5.839  -3.507  1.00 49.12        L    C
ATOM   5330  CB  LYS L 126      33.241  -4.411  -3.924  1.00 52.02        L    C
ATOM   5333  CG  LYS L 126      34.377  -3.393  -4.060  1.00 52.80        L    C
ATOM   5336  CD  LYS L 126      33.840  -2.074  -4.661  1.00 52.96        L    C
ATOM   5339  CE  LYS L 126      34.895  -1.296  -5.453  1.00 52.87        L    C
ATOM   5342  NZ  LYS L 126      34.305  -0.646  -6.670  1.00 51.35        L    N
ATOM   5346  C   LYS L 126      32.335  -6.607  -3.198  1.00 51.79        L    C
ATOM   5347  O   LYS L 126      31.798  -6.495  -2.088  1.00 54.29        L    O
ATOM   5349  N   SER L 127      31.827  -7.354  -4.182  1.00 48.78        L    N
ATOM   5350  CA  SER L 127      30.582  -8.117  -4.033  1.00 46.85        L    C
ATOM   5352  CB  SER L 127      29.758  -8.037  -5.324  1.00 47.95        L    C
ATOM   5355  OG  SER L 127      28.974  -6.861  -5.321  1.00 47.57        L    O
ATOM   5357  C   SER L 127      30.785  -9.582  -3.626  1.00 45.16        L    C
ATOM   5358  O   SER L 127      29.823 -10.349  -3.567  1.00 45.98        L    O
ATOM   5360  N   GLY L 128      32.027  -9.969  -3.349  1.00 43.56        L    N
ATOM   5361  CA  GLY L 128      32.311 -11.286  -2.781  1.00 43.85        L    C
ATOM   5364  C   GLY L 128      32.530 -12.396  -3.790  1.00 42.43        L    C
ATOM   5365  O   GLY L 128      32.705 -13.559  -3.410  1.00 40.69        L    O
ATOM   5367  N   THR L 129      32.537 -12.042  -5.071  1.00 42.97        L    N
ATOM   5368  CA  THR L 129      32.754 -13.005  -6.146  1.00 41.48        L    C
ATOM   5370  CB  THR L 129      31.480 -13.171  -7.008  1.00 44.66        L    C
ATOM   5372  OG1 THR L 129      30.706 -11.960  -6.970  1.00 46.80        L    O
ATOM   5374  CG2 THR L 129      30.625 -14.320  -6.476  1.00 44.99        L    C
ATOM   5378  C   THR L 129      33.953 -12.584  -7.000  1.00 38.90        L    C
ATOM   5379  O   THR L 129      34.250 -11.397  -7.127  1.00 37.99        L    O
ATOM   5381  N   ALA L 130      34.651 -13.569  -7.554  1.00 34.10        L    N
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ATOM   5382  CA  ALA L 130      35.852 -13.327  -8.351  1.00 34.29           L    C
ATOM   5384  CB  ALA L 130      37.081 -13.666  -7.537  1.00 32.97           L    C
ATOM   5388  C   ALA L 130      35.832 -14.166  -9.627  1.00 32.52           L    C
ATOM   5389  O   ALA L 130      35.981 -15.383  -9.556  1.00 33.28           L    O
ATOM   5391  N   SER L 131      35.655 -13.517 -10.783  1.00 32.80           L    N
ATOM   5392  CA  SER L 131      35.678 -14.197 -12.090  1.00 28.67           L    C
ATOM   5394  CB  SER L 131      34.516 -13.724 -12.969  1.00 29.42           L    C
ATOM   5397  OG  SER L 131      33.260 -14.108 -12.442  1.00 32.08           L    O
ATOM   5399  C   SER L 131      36.984 -13.914 -12.827  1.00 30.09           L    C
ATOM   5400  O   SER L 131      37.304 -12.758 -13.084  1.00 32.01           L    O
ATOM   5402  N   VAL L 132      37.724 -14.969 -13.171  1.00 29.43           L    N
ATOM   5403  CA  VAL L 132      38.941 -14.855 -13.969  1.00 23.98           L    C
ATOM   5405  CB  VAL L 132      40.074 -15.739 -13.410  1.00 19.16           L    C
ATOM   5407  CG1 VAL L 132      41.359 -15.521 -14.202  1.00 15.32           L    C
ATOM   5411  CG2 VAL L 132      40.303 -15.477 -11.894  1.00  8.18           L    C
ATOM   5415  C   VAL L 132      38.626 -15.314 -15.390  1.00 26.45           L    C
ATOM   5416  O   VAL L 132      38.149 -16.430 -15.593  1.00 26.84           L    O
ATOM   5418  N   VAL L 133      38.879 -14.463 -16.378  1.00 26.93           L    N
ATOM   5419  CA  VAL L 133      38.563 -14.812 -17.755  1.00 26.98           L    C
ATOM   5421  CB  VAL L 133      37.728 -13.716 -18.440  1.00 25.98           L    C
ATOM   5423  CG1 VAL L 133      37.400 -14.104 -19.866  1.00 23.24           L    C
ATOM   5427  CG2 VAL L 133      36.440 -13.464 -17.653  1.00 26.22           L    C
ATOM   5431  C   VAL L 133      39.837 -15.133 -18.551  1.00 28.09           L    C
ATOM   5432  O   VAL L 133      40.837 -14.432 -18.456  1.00 27.16           L    O
ATOM   5434  N   CYS L 134      39.791 -16.221 -19.310  1.00 30.80           L    N
ATOM   5435  CA  CYS L 134      40.849 -16.584 -20.245  1.00 32.10           L    C
ATOM   5437  CB  CYS L 134      41.373 -17.997 -19.921  1.00 35.55           L    C
ATOM   5440  SG  CYS L 134      42.750 -18.626 -20.943  1.00 35.42           L    S
ATOM   5442  C   CYS L 134      40.243 -16.510 -21.647  1.00 31.78           L    C
ATOM   5443  O   CYS L 134      39.175 -17.067 -21.893  1.00 31.25           L    O
ATOM   5445  N   LEU L 135      40.900 -15.787 -22.552  1.00 30.96           L    N
ATOM   5446  CA  LEU L 135      40.397 -15.604 -23.913  1.00 29.66           L    C
ATOM   5448  CB  LEU L 135      40.260 -14.107 -24.249  1.00 30.58           L    C
ATOM   5451  CG  LEU L 135      40.093 -13.684 -25.726  1.00 27.39           L    C
ATOM   5453  CD1 LEU L 135      38.713 -14.047 -26.252  1.00 24.65           L    C
ATOM   5457  CD2 LEU L 135      40.348 -12.186 -25.888  1.00 25.57           L    C
ATOM   5461  C   LEU L 135      41.334 -16.253 -24.904  1.00 31.10           L    C
ATOM   5462  O   LEU L 135      42.533 -15.981 -24.879  1.00 31.87           L    O
ATOM   5464  N   LEU L 136      40.777 -17.113 -25.761  1.00 30.69           L    N
ATOM   5465  CA  LEU L 136      41.466 -17.652 -26.927  1.00 30.68           L    C
ATOM   5467  CB  LEU L 136      41.264 -19.162 -27.038  1.00 31.92           L    C
ATOM   5470  CG  LEU L 136      41.891 -20.120 -26.032  1.00 29.90           L    C
ATOM   5472  CD1 LEU L 136      41.357 -19.906 -24.647  1.00 27.24           L    C
ATOM   5476  CD2 LEU L 136      41.604 -21.542 -26.521  1.00 28.08           L    C
ATOM   5480  C   LEU L 136      40.859 -17.006 -28.165  1.00 27.05           L    C
ATOM   5481  O   LEU L 136      39.698 -17.228 -28.467  1.00 28.40           L    O
ATOM   5483  N   ASN L 137      41.649 -16.230 -28.890  1.00 26.10           L    N
ATOM   5484  CA  ASN L 137      41.137 -15.428 -29.976  1.00 31.76           L    C
ATOM   5486  CB  ASN L 137      41.567 -13.968 -29.790  1.00 34.39           L    C
ATOM   5489  CG  ASN L 137      40.542 -12.978 -30.316  1.00 40.34           L    C
ATOM   5490  OD1 ASN L 137      39.345 -13.138 -30.104  1.00 45.63           L    O
ATOM   5491  ND2 ASN L 137      41.012 -11.936 -30.987  1.00 44.01           L    N
ATOM   5494  C   ASN L 137      41.610 -15.946 -31.324  1.00 29.12           L    C
ATOM   5495  O   ASN L 137      42.785 -16.239 -31.495  1.00 30.93           L    O
ATOM   5497  N   ASN L 138      40.672 -16.069 -32.261  1.00 31.33           L    N
ATOM   5498  CA  ASN L 138      40.963 -16.334 -33.684  1.00 32.35           L    C
ATOM   5500  CB  ASN L 138      41.600 -15.097 -34.322  1.00 34.92           L    C
ATOM   5503  CG  ASN L 138      40.653 -13.920 -34.324  1.00 40.18           L    C
ATOM   5504  OD1 ASN L 138      39.964 -13.675 -33.333  1.00 41.86           L    O
ATOM   5505  ND2 ASN L 138      40.572 -13.209 -35.453  1.00 46.55           L    N
ATOM   5508  C   ASN L 138      41.752 -17.592 -34.011  1.00 31.07           L    C
ATOM   5509  O   ASN L 138      42.846 -17.538 -34.591  1.00 31.28           L    O
ATOM   5511  N   PHE L 139      41.159 -18.735 -33.682  1.00 34.20           L    N
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ATOM   5512  CA  PHE L 139      41.803 -20.023 -33.927  1.00 31.93        L    C
ATOM   5514  CB  PHE L 139      42.160 -20.712 -32.595  1.00 29.86        L    C
ATOM   5517  CG  PHE L 139      40.978 -21.013 -31.711  1.00 25.59        L    C
ATOM   5518  CD1 PHE L 139      40.382 -22.259 -31.734  1.00 27.08        L    C
ATOM   5520  CE1 PHE L 139      39.301 -22.550 -30.925  1.00 27.23        L    C
ATOM   5522  CZ  PHE L 139      38.809 -21.594 -30.069  1.00 29.99        L    C
ATOM   5524  CE2 PHE L 139      39.404 -20.348 -30.026  1.00 29.04        L    C
ATOM   5526  CD2 PHE L 139      40.485 -20.065 -30.841  1.00 30.60        L    C
ATOM   5528  C   PHE L 139      40.993 -20.953 -34.827  1.00 30.16        L    C
ATOM   5529  O   PHE L 139      39.766 -20.924 -34.852  1.00 33.80        L    O
ATOM   5531  N   TYR L 140      41.714 -21.754 -35.598  1.00 34.42        L    N
ATOM   5532  CA  TYR L 140      41.138 -22.860 -36.349  1.00 32.43        L    C
ATOM   5534  CB  TYR L 140      40.916 -22.480 -37.822  1.00 34.39        L    C
ATOM   5537  CG  TYR L 140      40.170 -23.554 -38.564  1.00 33.08        L    C
ATOM   5538  CD1 TYR L 140      38.788 -23.590 -38.545  1.00 33.79        L    C
ATOM   5540  CE1 TYR L 140      38.088 -24.595 -39.201  1.00 33.57        L    C
ATOM   5542  CZ  TYR L 140      38.778 -25.589 -39.851  1.00 33.70        L    C
ATOM   5543  OH  TYR L 140      38.066 -26.584 -40.477  1.00 37.54        L    O
ATOM   5545  CE2 TYR L 140      40.163 -25.599 -39.855  1.00 33.95        L    C
ATOM   5547  CD2 TYR L 140      40.850 -24.587 -39.207  1.00 32.87        L    C
ATOM   5549  C   TYR L 140      42.058 -24.080 -36.232  1.00 31.20        L    C
ATOM   5550  O   TYR L 140      43.282 -23.953 -36.304  1.00 35.48        L    O
ATOM   5552  N   PRO L 141      41.485 -25.273 -36.029  1.00 33.64        L    N
ATOM   5553  CA  PRO L 141      40.074 -25.644 -35.872  1.00 34.11        L    C
ATOM   5555  CB  PRO L 141      40.076 -27.149 -36.189  1.00 35.31        L    C
ATOM   5558  CG  PRO L 141      41.448 -27.620 -35.814  1.00 32.55        L    C
ATOM   5561  CD  PRO L 141      42.378 -26.447 -35.957  1.00 33.34        L    C
ATOM   5564  C   PRO L 141      39.479 -25.373 -34.483  1.00 32.63        L    C
ATOM   5565  O   PRO L 141      40.188 -24.958 -33.561  1.00 32.58        L    O
ATOM   5566  N   ARG L 142      38.178 -25.622 -34.356  1.00 35.34        L    N
ATOM   5567  CA  ARG L 142      37.399 -25.308 -33.155  1.00 38.47        L    C
ATOM   5569  CB  ARG L 142      35.914 -25.630 -33.404  1.00 45.00        L    C
ATOM   5572  CG  ARG L 142      34.968 -25.130 -32.299  1.00 45.82        L    C
ATOM   5575  CD  ARG L 142      33.498 -25.386 -32.624  1.00 50.55        L    C
ATOM   5578  NE  ARG L 142      32.677 -25.380 -31.407  1.00 55.04        L    N
ATOM   5580  CZ  ARG L 142      31.351 -25.542 -31.374  1.00 60.18        L    C
ATOM   5581  NH1 ARG L 142      30.655 -25.719 -32.499  1.00 61.78        L    N
ATOM   5584  NH2 ARG L 142      30.709 -25.529 -30.203  1.00 57.67        L    N
ATOM   5587  C   ARG L 142      37.846 -26.001 -31.870  1.00 37.08        L    C
ATOM   5588  O   ARG L 142      37.601 -25.485 -30.770  1.00 39.36        L    O
ATOM   5590  N   GLU L 143      38.484 -27.163 -32.000  1.00 40.01        L    N
ATOM   5591  CA  GLU L 143      38.883 -27.970 -30.843  1.00 38.63        L    C
ATOM   5593  CB  GLU L 143      39.246 -29.405 -31.251  1.00 43.07        L    C
ATOM   5596  CG  GLU L 143      38.102 -30.205 -31.862  1.00 44.07        L    C
ATOM   5599  CD  GLU L 143      38.095 -30.167 -33.383  1.00 47.20        L    C
ATOM   5600  OE1 GLU L 143      39.166 -30.386 -34.006  1.00 48.86        L    O
ATOM   5601  OE2 GLU L 143      37.011 -29.939 -33.955  1.00 45.72        L    O
ATOM   5602  C   GLU L 143      40.069 -27.338 -30.133  1.00 36.32        L    C
ATOM   5603  O   GLU L 143      41.086 -27.046 -30.753  1.00 33.72        L    O
ATOM   5605  N   ALA L 144      39.907 -27.136 -28.830  1.00 34.19        L    N
ATOM   5606  CA  ALA L 144      40.903 -26.504 -27.983  1.00 39.37        L    C
ATOM   5608  CB  ALA L 144      40.823 -24.984 -28.102  1.00 37.46        L    C
ATOM   5612  C   ALA L 144      40.625 -26.937 -26.553  1.00 39.28        L    C
ATOM   5613  O   ALA L 144      39.467 -26.985 -26.139  1.00 42.41        L    O
ATOM   5615  N   LYS L 145      41.674 -27.273 -25.810  1.00 41.13        L    N
ATOM   5616  CA  LYS L 145      41.540 -27.614 -24.393  1.00 41.14        L    C
ATOM   5618  CB  LYS L 145      42.322 -28.893 -24.060  1.00 42.55        L    C
ATOM   5621  CG  LYS L 145      42.405 -29.245 -22.553  1.00 45.16        L    C
ATOM   5624  CD  LYS L 145      43.705 -30.017 -22.174  1.00 47.77        L    C
ATOM   5627  CE  LYS L 145      44.868 -29.099 -21.699  1.00 49.76        L    C
ATOM   5630  NZ  LYS L 145      45.154 -29.151 -20.227  1.00 50.73        L    N
ATOM   5634  C   LYS L 145      42.074 -26.442 -23.585  1.00 38.67        L    C
ATOM   5635  O   LYS L 145      43.158 -25.938 -23.868  1.00 37.45        L    O
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ATOM   5637  N   VAL L 146      41.320 -26.028 -22.569  1.00 38.37           L  N
ATOM   5638  CA  VAL L 146      41.733 -24.937 -21.688  1.00 36.22           L  C
ATOM   5640  CB  VAL L 146      40.886 -23.662 -21.955  1.00 34.98           L  C
ATOM   5642  CG1 VAL L 146      41.399 -22.501 -21.164  1.00 32.51           L  C
ATOM   5646  CG2 VAL L 146      40.873 -23.317 -23.453  1.00 31.37           L  C
ATOM   5650  C   VAL L 146      41.616 -25.376 -20.217  1.00 36.22           L  C
ATOM   5651  O   VAL L 146      40.511 -25.518 -19.691  1.00 34.63           L  O
ATOM   5653  N   GLN L 147      42.764 -25.593 -19.567  1.00 36.17           L  N
ATOM   5654  CA  GLN L 147      42.817 -25.995 -18.145  1.00 38.72           L  C
ATOM   5656  CB  GLN L 147      43.796 -27.165 -17.933  1.00 44.21           L  C
ATOM   5659  CG  GLN L 147      43.146 -28.563 -17.916  1.00 50.68           L  C
ATOM   5662  CD  GLN L 147      42.458 -28.915 -16.592  1.00 56.57           L  C
ATOM   5663  OE1 GLN L 147      42.831 -28.426 -15.510  1.00 57.00           L  O
ATOM   5664  NE2 GLN L 147      41.457 -29.791 -16.676  1.00 57.92           L  N
ATOM   5667  C   GLN L 147      43.248 -24.845 -17.241  1.00 36.13           L  C
ATOM   5668  O   GLN L 147      44.185 -24.116 -17.561  1.00 34.51           L  O
ATOM   5670  N   TRP L 148      42.582 -24.720 -16.099  1.00 34.21           L  N
ATOM   5671  CA  TRP L 148      42.949 -23.730 -15.094  1.00 36.62           L  C
ATOM   5673  CB  TRP L 148      41.698 -23.168 -14.416  1.00 33.63           L  C
ATOM   5676  CG  TRP L 148      40.901 -22.236 -15.274  1.00 33.25           L  C
ATOM   5677  CD1 TRP L 148      39.770 -22.535 -15.969  1.00 32.47           L  C
ATOM   5679  NE1 TRP L 148      39.315 -21.424 -16.629  1.00 32.55           L  N
ATOM   5681  CE2 TRP L 148      40.157 -20.374 -16.374  1.00 32.76           L  C
ATOM   5682  CD2 TRP L 148      41.165 -20.846 -15.514  1.00 33.28           L  C
ATOM   5683  CE3 TRP L 148      42.159 -19.958 -15.093  1.00 31.89           L  C
ATOM   5685  CZ3 TRP L 148      42.115 -18.651 -15.533  1.00 31.85           L  C
ATOM   5687  CH2 TRP L 148      41.095 -18.206 -16.377  1.00 32.35           L  C
ATOM   5689  CZ2 TRP L 148      40.110 -19.051 -16.813  1.00 32.33           L  C
ATOM   5691  C   TRP L 148      43.887 -24.314 -14.030  1.00 38.94           L  C
ATOM   5692  O   TRP L 148      43.809 -25.504 -13.700  1.00 38.01           L  O
ATOM   5694  N   LYS L 149      44.767 -23.453 -13.509  1.00 41.26           L  N
ATOM   5695  CA  LYS L 149      45.681 -23.780 -12.407  1.00 40.46           L  C
ATOM   5697  CB  LYS L 149      47.103 -24.009 -12.930  1.00 42.22           L  C
ATOM   5700  CG  LYS L 149      47.225 -25.082 -14.009  1.00 43.51           L  C
ATOM   5703  CD  LYS L 149      48.622 -25.084 -14.622  1.00 44.86           L  C
ATOM   5706  CE  LYS L 149      48.707 -25.981 -15.856  1.00 45.55           L  C
ATOM   5709  NZ  LYS L 149      48.584 -27.430 -15.504  1.00 47.43           L  N
ATOM   5713  C   LYS L 149      45.700 -22.630 -11.395  1.00 38.22           L  C
ATOM   5714  O   LYS L 149      45.929 -21.483 -11.761  1.00 35.51           L  O
ATOM   5716  N   VAL L 150      45.447 -22.947 -10.129  1.00 38.52           L  N
ATOM   5717  CA  VAL L 150      45.546 -21.976  -9.034  1.00 39.86           L  C
ATOM   5719  CB  VAL L 150      44.176 -21.759  -8.352  1.00 37.38           L  C
ATOM   5721  CG1 VAL L 150      44.297 -20.771  -7.207  1.00 35.32           L  C
ATOM   5725  CG2 VAL L 150      43.145 -21.280  -9.381  1.00 36.43           L  C
ATOM   5729  C   VAL L 150      46.589 -22.470  -8.019  1.00 40.63           L  C
ATOM   5730  O   VAL L 150      46.400 -23.505  -7.372  1.00 39.39           L  O
ATOM   5732  N   ASP L 151      47.688 -21.725  -7.894  1.00 41.61           L  N
ATOM   5733  CA  ASP L 151      48.880 -22.175  -7.163  1.00 41.95           L  C
ATOM   5735  CB  ASP L 151      48.589 -22.382  -5.657  1.00 39.46           L  C
ATOM   5738  CG  ASP L 151      48.255 -21.084  -4.930  1.00 39.50           L  C
ATOM   5739  OD1 ASP L 151      48.727 -20.012  -5.365  1.00 39.54           L  O
ATOM   5740  OD2 ASP L 151      47.538 -21.135  -3.900  1.00 38.04           L  O
ATOM   5741  C   ASP L 151      49.426 -23.458  -7.807  1.00 42.83           L  C
ATOM   5742  O   ASP L 151      49.930 -24.343  -7.122  1.00 46.78           L  O
ATOM   5744  N   ASN L 152      49.311 -23.547  -9.131  1.00 43.24           L  N
ATOM   5745  CA  ASN L 152      49.712 -24.737  -9.895  1.00 42.26           L  C
ATOM   5747  CB  ASN L 152      51.212 -25.027  -9.695  1.00 42.94           L  C
ATOM   5750  CG  ASN L 152      51.840 -25.773 -10.874  1.00 44.44           L  C
ATOM   5751  OD1 ASN L 152      51.191 -26.044 -11.885  1.00 42.74           L  O
ATOM   5752  ND2 ASN L 152      53.118 -26.110 -10.738  1.00 45.91           L  N
ATOM   5755  C   ASN L 152      48.860 -25.992  -9.603  1.00 40.47           L  C
ATOM   5756  O   ASN L 152      49.204 -27.093 -10.034  1.00 40.28           L  O
ATOM   5758  N   ALA L 153      47.744 -25.817  -8.893  1.00 38.67           L  N
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ATOM   5759  CA  ALA L 153      46.798 -26.902  -8.617  1.00 39.00        L    C
ATOM   5761  CB  ALA L 153      46.160 -26.704  -7.243  1.00 40.10        L    C
ATOM   5765  C   ALA L 153      45.715 -26.942  -9.701  1.00 38.97        L    C
ATOM   5766  O   ALA L 153      45.034 -25.943  -9.941  1.00 37.63        L    O
ATOM   5768  N   LEU L 154      45.545 -28.092 -10.346  1.00 38.02        L    N
ATOM   5769  CA  LEU L 154      44.566 -28.208 -11.427  1.00 39.82        L    C
ATOM   5771  CB  LEU L 154      44.717 -29.520 -12.193  1.00 40.00        L    C
ATOM   5774  CG  LEU L 154      45.505 -29.353 -13.483  1.00 42.88        L    C
ATOM   5776  CD1 LEU L 154      47.003 -29.325 -13.191  1.00 43.14        L    C
ATOM   5780  CD2 LEU L 154      45.124 -30.472 -14.434  1.00 42.40        L    C
ATOM   5784  C   LEU L 154      43.132 -28.063 -10.926  1.00 40.15        L    C
ATOM   5785  O   LEU L 154      42.778 -28.609  -9.877  1.00 35.98        L    O
ATOM   5787  N   GLN L 155      42.319 -27.343 -11.707  1.00 38.53        L    N
ATOM   5788  CA  GLN L 155      40.970 -26.971 -11.305  1.00 35.70        L    C
ATOM   5790  CB  GLN L 155      40.707 -25.498 -11.627  1.00 32.72        L    C
ATOM   5793  CG  GLN L 155      41.586 -24.531 -10.863  1.00 30.98        L    C
ATOM   5796  CD  GLN L 155      41.511 -24.772  -9.378  1.00 28.89        L    C
ATOM   5797  OE1 GLN L 155      42.471 -25.240  -8.765  1.00 23.19        L    O
ATOM   5798  NE2 GLN L 155      40.352 -24.499  -8.796  1.00 27.15        L    N
ATOM   5801  C   GLN L 155      39.959 -27.822 -12.026  1.00 35.34        L    C
ATOM   5802  O   GLN L 155      40.192 -28.254 -13.156  1.00 32.05        L    O
ATOM   5804  N   SER L 156      38.820 -28.041 -11.375  1.00 37.01        L    N
ATOM   5805  CA  SER L 156      37.744 -28.824 -11.975  1.00 38.33        L    C
ATOM   5807  CB  SER L 156      38.014 -30.316 -11.759  1.00 40.72        L    C
ATOM   5810  OG  SER L 156      37.128 -31.116 -12.513  1.00 41.57        L    O
ATOM   5812  C   SER L 156      36.384 -28.439 -11.394  1.00 37.32        L    C
ATOM   5813  O   SER L 156      36.248 -28.257 -10.179  1.00 36.49        L    O
ATOM   5815  N   GLY L 157      35.395 -28.299 -12.273  1.00 34.50        L    N
ATOM   5816  CA  GLY L 157      34.009 -28.042 -11.874  1.00 35.89        L    C
ATOM   5819  C   GLY L 157      33.659 -26.592 -11.574  1.00 36.75        L    C
ATOM   5820  O   GLY L 157      32.543 -26.309 -11.131  1.00 35.23        L    O
ATOM   5822  N   ASN L 158      34.596 -25.675 -11.828  1.00 35.34        L    N
ATOM   5823  CA  ASN L 158      34.441 -24.255 -11.455  1.00 33.35        L    C
ATOM   5825  CB  ASN L 158      35.394 -23.903 -10.288  1.00 32.43        L    C
ATOM   5828  CG  ASN L 158      36.873 -24.208 -10.603  1.00 32.37        L    C
ATOM   5829  OD1 ASN L 158      37.203 -24.796 -11.638  1.00 33.66        L    O
ATOM   5830  ND2 ASN L 158      37.759 -23.788  -9.713  1.00 30.38        L    N
ATOM   5833  C   ASN L 158      34.637 -23.276 -12.626  1.00 30.43        L    C
ATOM   5834  O   ASN L 158      34.738 -22.063 -12.423  1.00 23.30        L    O
ATOM   5836  N   SER L 159      34.661 -23.802 -13.849  1.00 32.33        L    N
ATOM   5837  CA  SER L 159      34.948 -22.993 -15.014  1.00 30.78        L    C
ATOM   5839  CB  SER L 159      36.415 -23.189 -15.428  1.00 32.00        L    C
ATOM   5842  OG  SER L 159      36.570 -24.162 -16.452  1.00 32.67        L    O
ATOM   5844  C   SER L 159      33.981 -23.350 -16.145  1.00 30.89        L    C
ATOM   5845  O   SER L 159      33.678 -24.525 -16.345  1.00 30.86        L    O
ATOM   5847  N   GLN L 160      33.484 -22.334 -16.856  1.00 28.29        L    N
ATOM   5848  CA  GLN L 160      32.637 -22.538 -18.032  1.00 28.38        L    C
ATOM   5850  CB  GLN L 160      31.265 -21.921 -17.807  1.00 26.44        L    C
ATOM   5853  CG  GLN L 160      30.524 -22.550 -16.671  1.00 25.96        L    C
ATOM   5856  CD  GLN L 160      29.119 -22.063 -16.572  1.00 25.84        L    C
ATOM   5857  OE1 GLN L 160      28.875 -20.926 -16.181  1.00 30.50        L    O
ATOM   5858  NE2 GLN L 160      28.173 -22.919 -16.917  1.00 26.98        L    N
ATOM   5861  C   GLN L 160      33.245 -21.941 -19.293  1.00 29.62        L    C
ATOM   5862  O   GLN L 160      33.834 -20.869 -19.249  1.00 28.77        L    O
ATOM   5864  N   GLU L 161      33.076 -22.636 -20.420  1.00 30.95        L    N
ATOM   5865  CA  GLU L 161      33.524 -22.138 -21.711  1.00 33.83        L    C
ATOM   5867  CB  GLU L 161      34.276 -23.222 -22.486  1.00 38.76        L    C
ATOM   5870  CG  GLU L 161      35.494 -23.761 -21.770  1.00 39.08        L    C
ATOM   5873  CD  GLU L 161      36.402 -24.558 -22.679  1.00 42.52        L    C
ATOM   5874  OE1 GLU L 161      35.974 -24.934 -23.798  1.00 44.52        L    O
ATOM   5875  OE2 GLU L 161      37.554 -24.816 -22.268  1.00 47.30        L    O
ATOM   5876  C   GLU L 161      32.365 -21.637 -22.570  1.00 34.87        L    C
ATOM   5877  O   GLU L 161      31.201 -21.991 -22.350  1.00 33.52        L    O
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ATOM   5879  N   SER L 162      32.719 -20.813 -23.552  1.00 33.74           L  N
ATOM   5880  CA  SER L 162      31.801 -20.322 -24.572  1.00 32.35           L  C
ATOM   5882  CB  SER L 162      31.182 -18.999 -24.128  1.00 35.98           L  C
ATOM   5885  OG  SER L 162      30.182 -18.557 -25.020  1.00 35.55           L  O
ATOM   5887  C   SER L 162      32.625 -20.124 -25.834  1.00 32.54           L  C
ATOM   5888  O   SER L 162      33.729 -19.604 -25.765  1.00 30.03           L  O
ATOM   5890  N   VAL L 163      32.122 -20.589 -26.974  1.00 33.10           L  N
ATOM   5891  CA  VAL L 163      32.826 -20.427 -28.241  1.00 33.91           L  C
ATOM   5893  CB  VAL L 163      33.243 -21.790 -28.850  1.00 32.64           L  C
ATOM   5895  CG1 VAL L 163      34.207 -21.596 -30.029  1.00 31.57           L  C
ATOM   5899  CG2 VAL L 163      33.892 -22.650 -27.798  1.00 34.29           L  C
ATOM   5903  C   VAL L 163      31.934 -19.655 -29.208  1.00 34.43           L  C
ATOM   5904  O   VAL L 163      30.721 -19.847 -29.229  1.00 31.52           L  O
ATOM   5906  N   THR L 164      32.538 -18.763 -29.990  1.00 36.47           L  N
ATOM   5907  CA  THR L 164      31.804 -18.032 -31.013  1.00 35.31           L  C
ATOM   5909  CB  THR L 164      32.556 -16.767 -31.517  1.00 33.28           L  C
ATOM   5911  OG1 THR L 164      33.743 -17.142 -32.221  1.00 30.68           L  O
ATOM   5913  CG2 THR L 164      32.904 -15.847 -30.368  1.00 28.73           L  C
ATOM   5917  C   THR L 164      31.514 -18.948 -32.197  1.00 33.32           L  C
ATOM   5918  O   THR L 164      32.104 -20.023 -32.334  1.00 32.16           L  O
ATOM   5920  N   GLU L 165      30.575 -18.522 -33.037  1.00 34.83           L  N
ATOM   5921  CA  GLU L 165      30.347 -19.193 -34.311  1.00 34.72           L  C
ATOM   5923  CB  GLU L 165      28.978 -18.841 -34.898  1.00 37.44           L  C
ATOM   5926  CG  GLU L 165      27.812 -19.471 -34.120  1.00 43.21           L  C
ATOM   5929  CD  GLU L 165      27.887 -21.000 -34.073  1.00 51.03           L  C
ATOM   5930  OE1 GLU L 165      28.070 -21.633 -35.146  1.00 51.16           L  O
ATOM   5931  OE2 GLU L 165      27.771 -21.567 -32.957  1.00 54.23           L  O
ATOM   5932  C   GLU L 165      31.489 -18.822 -35.236  1.00 29.86           L  C
ATOM   5933  O   GLU L 165      32.244 -17.900 -34.955  1.00 29.39           L  O
ATOM   5935  N   GLN L 166      31.653 -19.563 -36.319  1.00 31.36           L  N
ATOM   5936  CA  GLN L 166      32.793 -19.319 -37.186  1.00 30.42           L  C
ATOM   5938  CB  GLN L 166      32.889 -20.405 -38.243  1.00 28.77           L  C
ATOM   5941  CG  GLN L 166      34.140 -20.344 -39.035  1.00 28.12           L  C
ATOM   5944  CD  GLN L 166      34.286 -21.516 -39.981  1.00 26.48           L  C
ATOM   5945  OE1 GLN L 166      33.306 -22.100 -40.431  1.00 24.75           L  O
ATOM   5946  NE2 GLN L 166      35.522 -21.871 -40.270  1.00 25.55           L  N
ATOM   5949  C   GLN L 166      32.698 -17.926 -37.820  1.00 30.92           L  C
ATOM   5950  O   GLN L 166      31.624 -17.508 -38.248  1.00 34.91           L  O
ATOM   5952  N   ASP L 167      33.820 -17.215 -37.867  1.00 32.12           L  N
ATOM   5953  CA  ASP L 167      33.832 -15.817 -38.298  1.00 33.08           L  C
ATOM   5955  CB  ASP L 167      35.125 -15.123 -37.833  1.00 34.36           L  C
ATOM   5958  CG  ASP L 167      35.176 -13.635 -38.204  1.00 34.47           L  C
ATOM   5959  OD1 ASP L 167      34.544 -12.823 -37.502  1.00 34.75           L  O
ATOM   5960  OD2 ASP L 167      35.865 -13.281 -39.191  1.00 33.86           L  O
ATOM   5961  C   ASP L 167      33.686 -15.720 -39.808  1.00 31.48           L  C
ATOM   5962  O   ASP L 167      34.312 -16.470 -40.549  1.00 34.77           L  O
ATOM   5964  N   SER L 168      32.865 -14.781 -40.264  1.00 32.07           L  N
ATOM   5965  CA  SER L 168      32.556 -14.651 -41.683  1.00 33.45           L  C
ATOM   5967  CB  SER L 168      31.249 -13.886 -41.855  1.00 34.85           L  C
ATOM   5970  OG  SER L 168      31.439 -12.532 -41.521  1.00 40.40           L  O
ATOM   5972  C   SER L 168      33.658 -13.991 -42.527  1.00 34.80           L  C
ATOM   5973  O   SER L 168      33.551 -13.963 -43.755  1.00 39.95           L  O
ATOM   5975  N   LYS L 169      34.707 -13.468 -41.891  1.00 36.87           L  N
ATOM   5976  CA  LYS L 169      35.856 -12.897 -42.619  1.00 38.46           L  C
ATOM   5978  CB  LYS L 169      36.268 -11.537 -42.051  1.00 42.53           L  C
ATOM   5981  CG  LYS L 169      35.455 -10.363 -42.579  1.00 48.26           L  C
ATOM   5984  CD  LYS L 169      35.925  -9.016 -42.003  1.00 49.20           L  C
ATOM   5987  CE  LYS L 169      37.414  -8.710 -42.293  1.00 53.98           L  C
ATOM   5990  NZ  LYS L 169      37.830  -8.937 -43.714  1.00 54.50           L  N
ATOM   5994  C   LYS L 169      37.066 -13.818 -42.610  1.00 34.45           L  C
ATOM   5995  O   LYS L 169      37.632 -14.082 -43.667  1.00 35.19           L  O
ATOM   5997  N   ASP L 170      37.469 -14.281 -41.423  1.00 33.51           L  N
ATOM   5998  CA  ASP L 170      38.679 -15.119 -41.274  1.00 32.06           L  C
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ATOM   6000  CB  ASP L 170      39.698 -14.524 -40.258  1.00 35.84           L    C
ATOM   6003  CG  ASP L 170      39.183 -14.462 -38.806  1.00 37.71           L    C
ATOM   6004  OD1 ASP L 170      38.166 -15.083 -38.446  1.00 38.90           L    O
ATOM   6005  OD2 ASP L 170      39.828 -13.763 -38.000  1.00 43.09           L    O
ATOM   6006  C   ASP L 170      38.406 -16.594 -40.987  1.00 29.88           L    C
ATOM   6007  O   ASP L 170      39.337 -17.378 -40.902  1.00 32.35           L    O
ATOM   6009  N   SER L 171      37.136 -16.970 -40.861  1.00 26.94           L    N
ATOM   6010  CA  SER L 171      36.739 -18.377 -40.720  1.00 27.22           L    C
ATOM   6012  CB  SER L 171      37.053 -19.163 -41.999  1.00 23.36           L    C
ATOM   6015  OG  SER L 171      36.436 -18.565 -43.142  1.00 24.46           L    O
ATOM   6017  C   SER L 171      37.333 -19.050 -39.477  1.00 26.73           L    C
ATOM   6018  O   SER L 171      37.538 -20.264 -39.462  1.00 26.39           L    O
ATOM   6020  N   THR L 172      37.575 -18.250 -38.434  1.00 27.07           L    N
ATOM   6021  CA  THR L 172      38.126 -18.734 -37.169  1.00 22.43           L    C
ATOM   6023  CB  THR L 172      39.376 -17.915 -36.694  1.00 24.57           L    C
ATOM   6025  OG1 THR L 172      39.000 -16.566 -36.371  1.00 30.12           L    O
ATOM   6027  CG2 THR L 172      40.496 -17.926 -37.732  1.00 25.53           L    C
ATOM   6031  C   THR L 172      37.078 -18.673 -36.072  1.00 23.37           L    C
ATOM   6032  O   THR L 172      35.972 -18.167 -36.290  1.00 24.31           L    O
ATOM   6034  N   TYR L 173      37.448 -19.214 -34.907  1.00 24.61           L    N
ATOM   6035  CA  TYR L 173      36.643 -19.212 -33.694  1.00 23.41           L    C
ATOM   6037  CB  TYR L 173      36.412 -20.643 -33.207  1.00 29.32           L    C
ATOM   6040  CG  TYR L 173      35.761 -21.536 -34.231  1.00 31.13           L    C
ATOM   6041  CD1 TYR L 173      34.384 -21.680 -34.268  1.00 31.32           L    C
ATOM   6043  CE1 TYR L 173      33.779 -22.476 -35.211  1.00 30.88           L    C
ATOM   6045  CZ  TYR L 173      34.559 -23.141 -36.119  1.00 30.16           L    C
ATOM   6046  OH  TYR L 173      33.965 -23.930 -37.058  1.00 34.02           L    O
ATOM   6048  CE2 TYR L 173      35.935 -23.012 -36.103  1.00 30.58           L    C
ATOM   6050  CD2 TYR L 173      36.521 -22.217 -35.169  1.00 28.39           L    C
ATOM   6052  C   TYR L 173      37.370 -18.462 -32.603  1.00 23.24           L    C
ATOM   6053  O   TYR L 173      38.599 -18.321 -32.641  1.00 19.59           L    O
ATOM   6055  N   SER L 174      36.614 -17.995 -31.615  1.00 24.95           L    N
ATOM   6056  CA  SER L 174      37.192 -17.497 -30.378  1.00 26.07           L    C
ATOM   6058  CB  SER L 174      37.086 -15.976 -30.288  1.00 27.75           L    C
ATOM   6061  OG  SER L 174      37.833 -15.374 -31.331  1.00 31.20           L    O
ATOM   6063  C   SER L 174      36.483 -18.175 -29.218  1.00 29.37           L    C
ATOM   6064  O   SER L 174      35.407 -18.719 -29.389  1.00 29.88           L    O
ATOM   6066  N   LEU L 175      37.098 -18.147 -28.040  1.00 30.68           L    N
ATOM   6067  CA  LEU L 175      36.588 -18.875 -26.880  1.00 26.18           L    C
ATOM   6069  CB  LEU L 175      37.238 -20.269 -26.810  1.00 27.28           L    C
ATOM   6072  CG  LEU L 175      36.899 -21.220 -25.655  1.00 27.53           L    C
ATOM   6074  CD1 LEU L 175      37.113 -22.653 -26.077  1.00 22.57           L    C
ATOM   6078  CD2 LEU L 175      37.715 -20.931 -24.393  1.00 25.16           L    C
ATOM   6082  C   LEU L 175      36.910 -18.082 -25.640  1.00 24.86           L    C
ATOM   6083  O   LEU L 175      38.029 -17.597 -25.492  1.00 25.64           L    O
ATOM   6085  N   SER L 176      35.923 -17.916 -24.765  1.00 26.41           L    N
ATOM   6086  CA  SER L 176      36.178 -17.441 -23.416  1.00 28.55           L    C
ATOM   6088  CB  SER L 176      35.179 -16.355 -23.010  1.00 31.26           L    C
ATOM   6091  OG  SER L 176      33.862 -16.863 -22.916  1.00 32.89           L    O
ATOM   6093  C   SER L 176      36.072 -18.639 -22.482  1.00 30.96           L    C
ATOM   6094  O   SER L 176      35.328 -19.573 -22.756  1.00 35.23           L    O
ATOM   6096  N   SER L 177      36.840 -18.619 -21.399  1.00 34.04           L    N
ATOM   6097  CA  SER L 177      36.668 -19.558 -20.293  1.00 30.27           L    C
ATOM   6099  CB  SER L 177      37.781 -20.594 -20.292  1.00 31.08           L    C
ATOM   6102  OG  SER L 177      37.770 -21.294 -19.070  1.00 27.93           L    O
ATOM   6104  C   SER L 177      36.676 -18.782 -18.991  1.00 31.32           L    C
ATOM   6105  O   SER L 177      37.599 -18.023 -18.741  1.00 32.27           L    O
ATOM   6107  N   THR L 178      35.644 -18.969 -18.169  1.00 31.30           L    N
ATOM   6108  CA  THR L 178      35.489 -18.203 -16.943  1.00 30.24           L    C
ATOM   6110  CB  THR L 178      34.186 -17.384 -16.956  1.00 32.10           L    C
ATOM   6112  OG1 THR L 178      34.071 -16.684 -18.205  1.00 32.15           L    O
ATOM   6114  CG2 THR L 178      34.175 -16.393 -15.806  1.00 27.85           L    C
ATOM   6118  C   THR L 178      35.535 -19.063 -15.679  1.00 28.58           L    C
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ATOM   6119  O   THR L 178      34.609 -19.821 -15.383  1.00 23.32           L    O
ATOM   6121  N   LEU L 179      36.631 -18.905 -14.941  1.00 28.79           L    N
ATOM   6122  CA  LEU L 179      36.848 -19.529 -13.637  1.00 28.35           L    C
ATOM   6124  CB  LEU L 179      38.354 -19.644 -13.378  1.00 27.48           L    C
ATOM   6127  CG  LEU L 179      38.826 -20.264 -12.068  1.00 27.66           L    C
ATOM   6129  CD1 LEU L 179      38.584 -21.754 -12.130  1.00 29.06           L    C
ATOM   6133  CD2 LEU L 179      40.292 -19.958 -11.834  1.00 27.43           L    C
ATOM   6137  C   LEU L 179      36.229 -18.645 -12.570  1.00 26.76           L    C
ATOM   6138  O   LEU L 179      36.588 -17.478 -12.469  1.00 24.87           L    O
ATOM   6140  N   THR L 180      35.312 -19.202 -11.779  1.00 30.35           L    N
ATOM   6141  CA  THR L 180      34.630 -18.455 -10.727  1.00 33.54           L    C
ATOM   6143  CB  THR L 180      33.097 -18.483 -10.921  1.00 36.42           L    C
ATOM   6145  OG1 THR L 180      32.758 -17.860 -12.168  1.00 40.29           L    O
ATOM   6147  CG2 THR L 180      32.378 -17.742  -9.773  1.00 36.08           L    C
ATOM   6151  C   THR L 180      34.967 -19.006  -9.335  1.00 37.60           L    C
ATOM   6152  O   THR L 180      34.836 -20.207  -9.090  1.00 40.96           L    O
ATOM   6154  N   LEU L 181      35.404 -18.112  -8.442  1.00 38.42           L    N
ATOM   6155  CA  LEU L 181      35.636 -18.419  -7.027  1.00 35.46           L    C
ATOM   6157  CB  LEU L 181      37.134 -18.386  -6.688  1.00 34.84           L    C
ATOM   6160  CG  LEU L 181      38.144 -19.157  -7.545  1.00 34.65           L    C
ATOM   6162  CD1 LEU L 181      38.389 -18.453  -8.869  1.00 35.54           L    C
ATOM   6166  CD2 LEU L 181      39.449 -19.325  -6.793  1.00 32.17           L    C
ATOM   6170  C   LEU L 181      34.931 -17.384  -6.162  1.00 35.81           L    C
ATOM   6171  O   LEU L 181      34.535 -16.325  -6.642  1.00 32.20           L    O
ATOM   6173  N   SER L 182      34.789 -17.691  -4.875  1.00 38.48           L    N
ATOM   6174  CA  SER L 182      34.430 -16.677  -3.889  1.00 40.00           L    C
ATOM   6176  CB  SER L 182      34.056 -17.314  -2.550  1.00 39.97           L    C
ATOM   6179  OG  SER L 182      35.154 -18.044  -2.028  1.00 41.68           L    O
ATOM   6181  C   SER L 182      35.636 -15.765  -3.701  1.00 39.71           L    C
ATOM   6182  O   SER L 182      36.776 -16.174  -3.955  1.00 38.11           L    O
ATOM   6184  N   LYS L 183      35.376 -14.529  -3.283  1.00 40.16           L    N
ATOM   6185  CA  LYS L 183      36.433 -13.609  -2.853  1.00 41.56           L    C
ATOM   6187  CB  LYS L 183      35.820 -12.342  -2.240  1.00 41.26           L    C
ATOM   6190  CG  LYS L 183      36.828 -11.287  -1.743  1.00 41.42           L    C
ATOM   6193  CD  LYS L 183      36.135 -10.198  -0.922  1.00 40.80           L    C
ATOM   6196  CE  LYS L 183      37.086  -9.062  -0.531  1.00 40.78           L    C
ATOM   6199  NZ  LYS L 183      37.995  -9.438   0.581  1.00 35.82           L    N
ATOM   6203  C   LYS L 183      37.324 -14.300  -1.823  1.00 42.13           L    C
ATOM   6204  O   LYS L 183      38.554 -14.317  -1.964  1.00 41.13           L    O
ATOM   6206  N   ALA L 184      36.687 -14.873  -0.798  1.00 42.16           L    N
ATOM   6207  CA  ALA L 184      37.391 -15.559   0.287  1.00 42.49           L    C
ATOM   6209  CB  ALA L 184      36.400 -16.292   1.190  1.00 42.47           L    C
ATOM   6213  C   ALA L 184      38.450 -16.524  -0.243  1.00 42.76           L    C
ATOM   6214  O   ALA L 184      39.619 -16.436   0.140  1.00 41.63           L    O
ATOM   6216  N   ASP L 185      38.052 -17.426  -1.141  1.00 46.13           L    N
ATOM   6217  CA  ASP L 185      38.991 -18.415  -1.690  1.00 44.00           L    C
ATOM   6219  CB  ASP L 185      38.243 -19.597  -2.337  1.00 47.80           L    C
ATOM   6222  CG  ASP L 185      39.135 -20.840  -2.534  1.00 50.72           L    C
ATOM   6223  OD1 ASP L 185      40.083 -21.066  -1.739  1.00 52.27           L    O
ATOM   6224  OD2 ASP L 185      38.872 -21.609  -3.490  1.00 53.80           L    O
ATOM   6225  C   ASP L 185      39.972 -17.768  -2.679  1.00 40.68           L    C
ATOM   6226  O   ASP L 185      41.135 -18.169  -2.749  1.00 36.93           L    O
ATOM   6228  N   TYR L 186      39.512 -16.755  -3.416  1.00 40.48           L    N
ATOM   6229  CA  TYR L 186      40.354 -16.069  -4.410  1.00 40.75           L    C
ATOM   6231  CB  TYR L 186      39.546 -15.011  -5.196  1.00 37.27           L    C
ATOM   6234  CG  TYR L 186      40.395 -14.161  -6.133  1.00 37.30           L    C
ATOM   6235  CD1 TYR L 186      41.002 -14.718  -7.252  1.00 36.31           L    C
ATOM   6237  CE1 TYR L 186      41.788 -13.951  -8.108  1.00 36.20           L    C
ATOM   6239  CZ  TYR L 186      41.973 -12.613  -7.850  1.00 35.59           L    C
ATOM   6240  OH  TYR L 186      42.751 -11.861  -8.693  1.00 35.44           L    O
ATOM   6242  CE2 TYR L 186      41.385 -12.028  -6.744  1.00 36.61           L    C
ATOM   6244  CD2 TYR L 186      40.599 -12.803  -5.891  1.00 36.95           L    C
ATOM   6246  C   TYR L 186      41.579 -15.429  -3.747  1.00 38.71           L    C
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ATOM   6247  O   TYR L 186      42.687 -15.494  -4.285  1.00 32.86           L   O
ATOM   6249  N   GLU L 187      41.362 -14.829  -2.576  1.00 40.69           L   N
ATOM   6250  CA  GLU L 187      42.432 -14.189  -1.795  1.00 42.64           L   C
ATOM   6252  CB  GLU L 187      41.837 -13.153  -0.835  1.00 43.11           L   C
ATOM   6255  CG  GLU L 187      41.400 -11.881  -1.538  1.00 43.81           L   C
ATOM   6258  CD  GLU L 187      40.524 -10.995  -0.685  1.00 43.62           L   C
ATOM   6259  OE1 GLU L 187      40.095 -11.426   0.409  1.00 41.82           L   O
ATOM   6260  OE2 GLU L 187      40.253  -9.860  -1.127  1.00 45.57           L   O
ATOM   6261  C   GLU L 187      43.348 -15.146  -1.005  1.00 43.40           L   C
ATOM   6262  O   GLU L 187      44.389 -14.717  -0.499  1.00 44.40           L   O
ATOM   6264  N   LYS L 188      42.974 -16.421  -0.894  1.00 41.06           L   N
ATOM   6265  CA  LYS L 188      43.838 -17.414  -0.242  1.00 40.98           L   C
ATOM   6267  CB  LYS L 188      43.008 -18.590   0.310  1.00 43.40           L   C
ATOM   6270  CG  LYS L 188      42.236 -18.304   1.621  1.00 45.68           L   C
ATOM   6273  CD  LYS L 188      43.108 -17.749   2.787  1.00 46.49           L   C
ATOM   6276  CE  LYS L 188      44.301 -18.652   3.151  1.00 45.70           L   C
ATOM   6279  NZ  LYS L 188      45.100 -18.104   4.286  1.00 45.08           L   N
ATOM   6283  C   LYS L 188      44.971 -17.945  -1.142  1.00 40.44           L   C
ATOM   6284  O   LYS L 188      45.934 -18.534  -0.632  1.00 38.51           L   O
ATOM   6286  N   HIS L 189      44.865 -17.732  -2.458  1.00 39.12           L   N
ATOM   6287  CA  HIS L 189      45.828 -18.281  -3.433  1.00 37.96           L   C
ATOM   6289  CB  HIS L 189      45.114 -19.328  -4.301  1.00 34.01           L   C
ATOM   6292  CG  HIS L 189      44.418 -20.389  -3.494  1.00 34.80           L   C
ATOM   6293  ND1 HIS L 189      45.099 -21.355  -2.780  1.00 34.75           L   N
ATOM   6295  CE1 HIS L 189      44.231 -22.129  -2.150  1.00 35.27           L   C
ATOM   6297  NE2 HIS L 189      43.013 -21.697  -2.421  1.00 35.24           L   N
ATOM   6299  CD2 HIS L 189      43.102 -20.608  -3.256  1.00 34.22           L   C
ATOM   6301  C   HIS L 189      46.529 -17.167  -4.256  1.00 36.94           L   C
ATOM   6302  O   HIS L 189      46.068 -16.028  -4.267  1.00 34.07           L   O
ATOM   6304  N   LYS L 190      47.640 -17.499  -4.924  1.00 39.11           L   N
ATOM   6305  CA  LYS L 190      48.585 -16.494  -5.471  1.00 39.09           L   C
ATOM   6307  CB  LYS L 190      49.990 -16.783  -4.928  1.00 42.89           L   C
ATOM   6310  CG  LYS L 190      51.143 -15.941  -5.511  1.00 42.98           L   C
ATOM   6313  CD  LYS L 190      52.479 -16.360  -4.867  1.00 44.42           L   C
ATOM   6316  CE  LYS L 190      53.637 -15.425  -5.226  1.00 45.17           L   C
ATOM   6319  NZ  LYS L 190      54.795 -15.581  -4.288  1.00 43.96           L   N
ATOM   6323  C   LYS L 190      48.651 -16.400  -7.005  1.00 38.45           L   C
ATOM   6324  O   LYS L 190      48.343 -15.346  -7.574  1.00 36.16           L   O
ATOM   6326  N   VAL L 191      49.097 -17.475  -7.660  1.00 35.28           L   N
ATOM   6327  CA  VAL L 191      49.243 -17.491  -9.125  1.00 37.14           L   C
ATOM   6329  CB  VAL L 191      50.474 -18.311  -9.583  1.00 38.23           L   C
ATOM   6331  CG1 VAL L 191      50.602 -18.280 -11.106  1.00 37.39           L   C
ATOM   6335  CG2 VAL L 191      51.747 -17.779  -8.929  1.00 40.15           L   C
ATOM   6339  C   VAL L 191      47.996 -18.055  -9.813  1.00 34.68           L   C
ATOM   6340  O   VAL L 191      47.496 -19.121  -9.448  1.00 32.06           L   O
ATOM   6342  N   TYR L 192      47.504 -17.328 -10.812  1.00 36.70           L   N
ATOM   6343  CA  TYR L 192      46.369 -17.773 -11.624  1.00 35.58           L   C
ATOM   6345  CB  TYR L 192      45.210 -16.788 -11.491  1.00 32.47           L   C
ATOM   6348  CG  TYR L 192      44.577 -16.849 -10.121  1.00 31.96           L   C
ATOM   6349  CD1 TYR L 192      43.384 -17.536  -9.915  1.00 32.83           L   C
ATOM   6351  CE1 TYR L 192      42.809 -17.614  -8.663  1.00 31.55           L   C
ATOM   6353  CZ  TYR L 192      43.435 -17.010  -7.591  1.00 32.15           L   C
ATOM   6354  OH  TYR L 192      42.866 -17.085  -6.346  1.00 31.08           L   O
ATOM   6356  CE2 TYR L 192      44.623 -16.333  -7.768  1.00 31.22           L   C
ATOM   6358  CD2 TYR L 192      45.189 -16.262  -9.029  1.00 30.85           L   C
ATOM   6360  C   TYR L 192      46.802 -17.945 -13.078  1.00 34.78           L   C
ATOM   6361  O   TYR L 192      47.371 -17.041 -13.675  1.00 33.68           L   O
ATOM   6363  N   ALA L 193      46.539 -19.124 -13.631  1.00 36.13           L   N
ATOM   6364  CA  ALA L 193      47.005 -19.476 -14.966  1.00 37.57           L   C
ATOM   6366  CB  ALA L 193      48.306 -20.260 -14.868  1.00 36.55           L   C
ATOM   6370  C   ALA L 193      45.964 -20.292 -15.722  1.00 35.68           L   C
ATOM   6371  O   ALA L 193      45.302 -21.158 -15.155  1.00 31.77           L   O
ATOM   6373  N   CYS L 194      45.822 -20.006 -17.008  1.00 40.77           L   N
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ATOM	6374	CA	CYS	L	194	45.073	-20.886	-17.903	1.00	41.93	L	C
ATOM	6376	CB	CYS	L	194	43.895	-20.160	-18.576	1.00	43.71	L	C
ATOM	6379	SG	CYS	L	194	44.341	-18.811	-19.684	1.00	47.55	L	S
ATOM	6381	C	CYS	L	194	46.050	-21.457	-18.921	1.00	40.68	L	C
ATOM	6382	O	CYS	L	194	46.825	-20.717	-19.531	1.00	41.65	L	O
ATOM	6384	N	GLU	L	195	46.042	-22.779	-19.065	1.00	39.22	L	N
ATOM	6385	CA	GLU	L	195	46.923	-23.434	-20.013	1.00	43.03	L	C
ATOM	6387	CB	GLU	L	195	47.739	-24.553	-19.352	1.00	45.41	L	C
ATOM	6390	CG	GLU	L	195	47.064	-25.914	-19.205	1.00	49.49	L	C
ATOM	6393	CD	GLU	L	195	48.070	-27.050	-19.275	1.00	50.76	L	C
ATOM	6394	OE1	GLU	L	195	48.747	-27.166	-20.321	1.00	52.44	L	O
ATOM	6395	OE2	GLU	L	195	48.185	-27.816	-18.290	1.00	55.09	L	O
ATOM	6396	C	GLU	L	195	46.096	-23.912	-21.201	1.00	38.74	L	C
ATOM	6397	O	GLU	L	195	45.054	-24.546	-21.040	1.00	36.74	L	O
ATOM	6399	N	VAL	L	196	46.558	-23.558	-22.389	1.00	37.23	L	N
ATOM	6400	CA	VAL	L	196	45.799	-23.752	-23.606	1.00	38.19	L	C
ATOM	6402	CB	VAL	L	196	45.556	-22.407	-24.343	1.00	36.91	L	C
ATOM	6404	CG1	VAL	L	196	44.877	-22.616	-25.697	1.00	34.72	L	C
ATOM	6408	CG2	VAL	L	196	44.736	-21.471	-23.462	1.00	34.22	L	C
ATOM	6412	C	VAL	L	196	46.607	-24.670	-24.472	1.00	39.34	L	C
ATOM	6413	O	VAL	L	196	47.793	-24.431	-24.680	1.00	38.45	L	O
ATOM	6415	N	THR	L	197	45.958	-25.730	-24.950	1.00	41.60	L	N
ATOM	6416	CA	THR	L	197	46.544	-26.652	-25.908	1.00	41.60	L	C
ATOM	6418	CB	THR	L	197	46.775	-28.066	-25.293	1.00	44.28	L	C
ATOM	6420	OG1	THR	L	197	46.988	-29.021	-26.338	1.00	46.04	L	O
ATOM	6422	CG2	THR	L	197	45.597	-28.504	-24.479	1.00	42.28	L	C
ATOM	6426	C	THR	L	197	45.644	-26.696	-27.145	1.00	39.74	L	C
ATOM	6427	O	THR	L	197	44.416	-26.753	-27.046	1.00	40.14	L	O
ATOM	6429	N	HIS	L	198	46.281	-26.626	-28.307	1.00	37.75	L	N
ATOM	6430	CA	HIS	L	198	45.597	-26.526	-29.582	1.00	39.95	L	C
ATOM	6432	CB	HIS	L	198	45.162	-25.065	-29.828	1.00	36.41	L	C
ATOM	6435	CG	HIS	L	198	44.363	-24.870	-31.082	1.00	33.78	L	C
ATOM	6436	ND1	HIS	L	198	44.942	-24.569	-32.296	1.00	31.61	L	N
ATOM	6438	CE1	HIS	L	198	44.003	-24.464	-33.218	1.00	27.93	L	C
ATOM	6440	NE2	HIS	L	198	42.834	-24.693	-32.648	1.00	29.05	L	N
ATOM	6442	CD2	HIS	L	198	43.030	-24.936	-31.309	1.00	31.13	L	C
ATOM	6444	C	HIS	L	198	46.537	-27.017	-30.694	1.00	40.86	L	C
ATOM	6445	O	HIS	L	198	47.762	-27.002	-30.538	1.00	38.78	L	O
ATOM	6447	N	GLN	L	199	45.948	-27.449	-31.807	1.00	44.99	L	N
ATOM	6448	CA	GLN	L	199	46.681	-28.051	-32.918	1.00	44.13	L	C
ATOM	6450	CB	GLN	L	199	45.688	-28.475	-33.998	1.00	46.58	L	C
ATOM	6453	CG	GLN	L	199	46.252	-29.410	-35.048	1.00	49.59	L	C
ATOM	6456	CD	GLN	L	199	45.276	-29.649	-36.182	1.00	51.64	L	C
ATOM	6457	OE1	GLN	L	199	44.065	-29.791	-35.958	1.00	51.22	L	O
ATOM	6458	NE2	GLN	L	199	45.795	-29.687	-37.414	1.00	52.35	L	N
ATOM	6461	C	GLN	L	199	47.758	-27.145	-33.532	1.00	42.62	L	C
ATOM	6462	O	GLN	L	199	48.796	-27.628	-33.984	1.00	44.60	L	O
ATOM	6464	N	GLY	L	200	47.509	-25.841	-33.557	1.00	42.42	L	N
ATOM	6465	CA	GLY	L	200	48.462	-24.879	-34.117	1.00	43.36	L	C
ATOM	6468	C	GLY	L	200	49.597	-24.520	-33.171	1.00	44.08	L	C
ATOM	6469	O	GLY	L	200	50.561	-23.858	-33.574	1.00	37.85	L	O
ATOM	6471	N	LEU	L	201	49.463	-24.938	-31.909	1.00	44.57	L	N
ATOM	6472	CA	LEU	L	201	50.498	-24.760	-30.897	1.00	45.78	L	C
ATOM	6474	CB	LEU	L	201	49.870	-24.493	-29.528	1.00	40.59	L	C
ATOM	6477	CG	LEU	L	201	49.059	-23.207	-29.397	1.00	35.81	L	C
ATOM	6479	CD1	LEU	L	201	48.397	-23.176	-28.040	1.00	31.44	L	C
ATOM	6483	CD2	LEU	L	201	49.924	-21.972	-29.622	1.00	34.38	L	C
ATOM	6487	C	LEU	L	201	51.377	-26.003	-30.809	1.00	49.77	L	C
ATOM	6488	O	LEU	L	201	50.901	-27.092	-30.462	1.00	50.88	L	O
ATOM	6490	N	SER	L	202	52.661	-25.823	-31.117	1.00	52.93	L	N
ATOM	6491	CA	SER	L	202	53.657	-26.894	-31.019	1.00	51.96	L	C
ATOM	6493	CB	SER	L	202	55.055	-26.329	-31.288	1.00	54.75	L	C
ATOM	6496	OG	SER	L	202	56.043	-27.337	-31.175	1.00	56.78	L	O

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ATOM   6498  C   SER L 202      53.618 -27.552 -29.642  1.00 53.84        L    C
ATOM   6499  O   SER L 202      53.763 -28.771 -29.522  1.00 56.46        L    O
ATOM   6501  N   SER L 203      53.432 -26.727 -28.614  1.00 52.32        L    N
ATOM   6502  CA  SER L 203      53.261 -27.191 -27.248  1.00 50.89        L    C
ATOM   6504  CB  SER L 203      54.622 -27.303 -26.557  1.00 52.49        L    C
ATOM   6507  OG  SER L 203      55.283 -26.048 -26.526  1.00 52.37        L    O
ATOM   6509  C   SER L 203      52.376 -26.199 -26.493  1.00 50.47        L    C
ATOM   6510  O   SER L 203      52.338 -25.015 -26.849  1.00 50.12        L    O
ATOM   6512  N   PRO L 204      51.684 -26.667 -25.434  1.00 49.00        L    N
ATOM   6513  CA  PRO L 204      50.755 -25.831 -24.668  1.00 48.32        L    C
ATOM   6515  CB  PRO L 204      50.495 -26.661 -23.409  1.00 49.24        L    C
ATOM   6518  CG  PRO L 204      50.667 -28.059 -23.851  1.00 49.62        L    C
ATOM   6521  CD  PRO L 204      51.753 -28.036 -24.887  1.00 49.96        L    C
ATOM   6524  C   PRO L 204      51.311 -24.461 -24.280  1.00 46.81        L    C
ATOM   6525  O   PRO L 204      52.472 -24.358 -23.890  1.00 49.06        L    O
ATOM   6526  N   VAL L 205      50.473 -23.431 -24.401  1.00 46.00        L    N
ATOM   6527  CA  VAL L 205      50.804 -22.058 -24.007  1.00 44.86        L    C
ATOM   6529  CB  VAL L 205      50.323 -21.043 -25.067  1.00 43.87        L    C
ATOM   6531  CG1 VAL L 205      50.645 -19.625 -24.639  1.00 46.06        L    C
ATOM   6535  CG2 VAL L 205      50.941 -21.346 -26.421  1.00 43.83        L    C
ATOM   6539  C   VAL L 205      50.113 -21.738 -22.683  1.00 43.45        L    C
ATOM   6540  O   VAL L 205      48.940 -22.068 -22.500  1.00 42.63        L    O
ATOM   6542  N   THR L 206      50.841 -21.104 -21.764  1.00 42.55        L    N
ATOM   6543  CA  THR L 206      50.273 -20.667 -20.486  1.00 43.06        L    C
ATOM   6545  CB  THR L 206      50.985 -21.330 -19.278  1.00 42.88        L    C
ATOM   6547  OG1 THR L 206      51.035 -22.750 -19.472  1.00 45.22        L    O
ATOM   6549  CG2 THR L 206      50.254 -21.030 -17.977  1.00 39.29        L    C
ATOM   6553  C   THR L 206      50.351 -19.139 -20.364  1.00 43.20        L    C
ATOM   6554  O   THR L 206      51.353 -18.516 -20.731  1.00 41.18        L    O
ATOM   6556  N   LYS L 207      49.264 -18.550 -19.882  1.00 41.82        L    N
ATOM   6557  CA  LYS L 207      49.204 -17.132 -19.581  1.00 41.36        L    C
ATOM   6559  CB  LYS L 207      48.220 -16.423 -20.515  1.00 45.01        L    C
ATOM   6562  CG  LYS L 207      48.769 -16.159 -21.930  1.00 45.79        L    C
ATOM   6565  CD  LYS L 207      49.557 -14.843 -21.990  1.00 47.42        L    C
ATOM   6568  CE  LYS L 207      50.000 -14.473 -23.411  1.00 48.29        L    C
ATOM   6571  NZ  LYS L 207      49.741 -13.014 -23.711  1.00 48.56        L    N
ATOM   6575  C   LYS L 207      48.762 -17.033 -18.129  1.00 41.24        L    C
ATOM   6576  O   LYS L 207      47.902 -17.803 -17.683  1.00 34.79        L    O
ATOM   6578  N   SER L 208      49.362 -16.104 -17.386  1.00 41.46        L    N
ATOM   6579  CA  SER L 208      49.163 -16.058 -15.943  1.00 39.23        L    C
ATOM   6581  CB  SER L 208      50.066 -17.094 -15.273  1.00 40.60        L    C
ATOM   6584  OG  SER L 208      51.421 -16.904 -15.653  1.00 42.39        L    O
ATOM   6586  C   SER L 208      49.429 -14.693 -15.330  1.00 38.28        L    C
ATOM   6587  O   SER L 208      50.118 -13.853 -15.911  1.00 40.12        L    O
ATOM   6589  N   PHE L 209      48.865 -14.493 -14.143  1.00 38.02        L    N
ATOM   6590  CA  PHE L 209      49.111 -13.303 -13.342  1.00 36.29        L    C
ATOM   6592  CB  PHE L 209      47.970 -12.289 -13.509  1.00 34.61        L    C
ATOM   6595  CG  PHE L 209      46.630 -12.754 -12.976  1.00 33.86        L    C
ATOM   6596  CD1 PHE L 209      46.292 -12.568 -11.643  1.00 32.58        L    C
ATOM   6598  CE1 PHE L 209      45.059 -12.974 -11.153  1.00 33.77        L    C
ATOM   6600  CZ  PHE L 209      44.140 -13.557 -12.002  1.00 34.43        L    C
ATOM   6602  CE2 PHE L 209      44.456 -13.733 -13.339  1.00 33.37        L    C
ATOM   6604  CD2 PHE L 209      45.690 -13.327 -13.821  1.00 33.14        L    C
ATOM   6606  C   PHE L 209      49.269 -13.690 -11.884  1.00 36.56        L    C
ATOM   6607  O   PHE L 209      48.859 -14.781 -11.485  1.00 34.56        L    O
ATOM   6609  N   ASN L 210      49.877 -12.799 -11.098  1.00 38.51        L    N
ATOM   6610  CA  ASN L 210      49.932 -12.947  -9.640  1.00 39.31        L    C
ATOM   6612  CB  ASN L 210      51.326 -12.636  -9.108  1.00 40.43        L    C
ATOM   6615  CG  ASN L 210      52.384 -13.570  -9.653  1.00 41.74        L    C
ATOM   6616  OD1 ASN L 210      52.145 -14.766  -9.852  1.00 44.55        L    O
ATOM   6617  ND2 ASN L 210      53.573 -13.029  -9.887  1.00 42.04        L    N
ATOM   6620  C   ASN L 210      48.928 -11.994  -9.017  1.00 40.31        L    C
ATOM   6621  O   ASN L 210      48.944 -10.795  -9.313  1.00 39.80        L    O
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ATOM   6623  N   ARG L 211      48.057 -12.528  -8.162  1.00 41.37           L  N
ATOM   6624  CA  ARG L 211      46.926 -11.773  -7.625  1.00 42.74           L  C
ATOM   6626  CB  ARG L 211      46.177 -12.612  -6.583  1.00 38.76           L  C
ATOM   6629  CG  ARG L 211      45.067 -11.867  -5.843  1.00 39.89           L  C
ATOM   6632  CD  ARG L 211      44.365 -12.757  -4.836  1.00 40.10           L  C
ATOM   6635  NE  ARG L 211      45.300 -13.300  -3.853  1.00 39.72           L  N
ATOM   6637  CZ  ARG L 211      45.559 -12.783  -2.650  1.00 39.74           L  C
ATOM   6638  NH1 ARG L 211      44.947 -11.683  -2.213  1.00 37.79           L  N
ATOM   6641  NH2 ARG L 211      46.443 -13.392  -1.863  1.00 38.19           L  N
ATOM   6644  C   ARG L 211      47.391 -10.443  -7.019  1.00 47.84           L  C
ATOM   6645  O   ARG L 211      48.264 -10.422  -6.149  1.00 47.51           L  O
ATOM   6647  N   GLY L 212      46.817  -9.342  -7.504  1.00 51.81           L  N
ATOM   6648  CA  GLY L 212      47.105  -8.003  -6.981  1.00 52.44           L  C
ATOM   6651  C   GLY L 212      48.547  -7.555  -7.156  1.00 54.99           L  C
ATOM   6652  O   GLY L 212      49.141  -7.000  -6.233  1.00 57.87           L  O
ATOM   6654  N   GLU L 213      49.107  -7.782  -8.344  1.00 56.81           L  N
ATOM   6655  CA  GLU L 213      50.524  -7.511  -8.600  1.00 56.81           L  C
ATOM   6657  CB  GLU L 213      51.369  -8.697  -8.117  1.00 57.49           L  C
ATOM   6660  CG  GLU L 213      52.882  -8.502  -8.176  1.00 58.45           L  C
ATOM   6663  CD  GLU L 213      53.642  -9.789  -7.855  1.00 59.57           L  C
ATOM   6664  OE1 GLU L 213      54.234 -10.389  -8.783  1.00 59.90           L  O
ATOM   6665  OE2 GLU L 213      53.632 -10.211  -6.676  1.00 60.08           L  O
ATOM   6666  C   GLU L 213      50.766  -7.252 -10.084  1.00 56.94           L  C
ATOM   6667  O   GLU L 213      50.335  -6.230 -10.619  1.00 56.25           L  O
ATOM   6669  N   GLU H   1      10.286   1.610 -47.649  1.00 39.75           H  N
ATOM   6670  CA  GLU H   1      10.725   0.187 -47.539  1.00 41.82           H  C
ATOM   6672  CB  GLU H   1      12.220   0.107 -47.113  1.00 48.22           H  C
ATOM   6675  CG  GLU H   1      12.541  -0.356 -45.650  1.00 51.94           H  C
ATOM   6678  CD  GLU H   1      12.635   0.768 -44.592  1.00 54.37           H  C
ATOM   6679  OE1 GLU H   1      12.218   1.919 -44.846  1.00 54.80           H  O
ATOM   6680  OE2 GLU H   1      13.133   0.477 -43.477  1.00 54.44           H  O
ATOM   6681  C   GLU H   1       9.803  -0.621 -46.601  1.00 37.68           H  C
ATOM   6682  O   GLU H   1       9.233  -0.086 -45.645  1.00 34.67           H  O
ATOM   6686  N   VAL H   2       9.674  -1.917 -46.877  1.00 36.12           H  N
ATOM   6687  CA  VAL H   2       8.913  -2.810 -45.998  1.00 34.66           H  C
ATOM   6689  CB  VAL H   2       8.706  -4.214 -46.631  1.00 31.10           H  C
ATOM   6691  CG1 VAL H   2       8.009  -5.158 -45.646  1.00 25.65           H  C
ATOM   6695  CG2 VAL H   2       7.920  -4.093 -47.936  1.00 26.85           H  C
ATOM   6699  C   VAL H   2       9.622  -2.964 -44.658  1.00 33.46           H  C
ATOM   6700  O   VAL H   2      10.829  -3.172 -44.604  1.00 35.64           H  O
ATOM   6702  N   GLN H   3       8.869  -2.852 -43.578  1.00 31.66           H  N
ATOM   6703  CA  GLN H   3       9.391  -3.150 -42.259  1.00 34.98           H  C
ATOM   6705  CB  GLN H   3       9.676  -1.867 -41.484  1.00 38.83           H  C
ATOM   6708  CG  GLN H   3      11.139  -1.494 -41.359  1.00 44.13           H  C
ATOM   6711  CD  GLN H   3      11.355  -0.392 -40.303  1.00 45.42           H  C
ATOM   6712  OE1 GLN H   3      12.100  -0.577 -39.331  1.00 48.14           H  O
ATOM   6713  NE2 GLN H   3      10.680   0.748 -40.485  1.00 47.28           H  N
ATOM   6716  C   GLN H   3       8.382  -3.983 -41.487  1.00 28.77           H  C
ATOM   6717  O   GLN H   3       7.182  -3.769 -41.604  1.00 24.59           H  O
ATOM   6719  N   LEU H   4       8.900  -4.943 -40.728  1.00 30.43           H  N
ATOM   6720  CA  LEU H   4       8.152  -5.687 -39.728  1.00 29.17           H  C
ATOM   6722  CB  LEU H   4       8.052  -7.165 -40.118  1.00 32.01           H  C
ATOM   6725  CG  LEU H   4       7.346  -7.459 -41.443  1.00 30.46           H  C
ATOM   6727  CD1 LEU H   4       7.371  -8.912 -41.725  1.00 28.18           H  C
ATOM   6731  CD2 LEU H   4       5.908  -6.959 -41.395  1.00 23.08           H  C
ATOM   6735  C   LEU H   4       8.918  -5.551 -38.418  1.00 27.12           H  C
ATOM   6736  O   LEU H   4      10.064  -5.984 -38.315  1.00 31.47           H  O
ATOM   6738  N   VAL H   5       8.283  -4.951 -37.426  1.00 25.43           H  N
ATOM   6739  CA  VAL H   5       8.887  -4.724 -36.127  1.00 27.06           H  C
ATOM   6741  CB  VAL H   5       8.870  -3.222 -35.736  1.00 23.44           H  C
ATOM   6743  CG1 VAL H   5       9.419  -3.035 -34.322  1.00 19.35           H  C
ATOM   6747  CG2 VAL H   5       9.675  -2.397 -36.742  1.00 25.50           H  C
ATOM   6751  C   VAL H   5       8.093  -5.499 -35.088  1.00 28.22           H  C
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ATOM   6752  O   VAL H   5       6.910  -5.212 -34.855  1.00 19.40       H    O
ATOM   6754  N   GLN H   6       8.748  -6.475 -34.465  1.00 26.67       H    N
ATOM   6755  CA  GLN H   6       8.118  -7.273 -33.428  1.00 25.18       H    C
ATOM   6757  CB  GLN H   6       8.625  -8.699 -33.487  1.00 24.68       H    C
ATOM   6760  CG  GLN H   6       8.466  -9.320 -34.877  1.00 25.18       H    C
ATOM   6763  CD  GLN H   6       8.940 -10.737 -34.931  1.00 20.61       H    C
ATOM   6764  OE1 GLN H   6       9.741 -11.100 -35.787  1.00 25.23       H    O
ATOM   6765  NE2 GLN H   6       8.457 -11.551 -34.019  1.00 17.17       H    N
ATOM   6768  C   GLN H   6       8.384  -6.685 -32.058  1.00 25.80       H    C
ATOM   6769  O   GLN H   6       9.347  -5.950 -31.872  1.00 23.83       H    O
ATOM   6771  N   SER H   7       7.520  -7.030 -31.108  1.00 24.20       H    N
ATOM   6772  CA  SER H   7       7.614  -6.538 -29.744  1.00 26.00       H    C
ATOM   6774  CB  SER H   7       6.322  -6.863 -28.988  1.00 25.41       H    C
ATOM   6777  OG  SER H   7       5.974  -8.213 -29.218  1.00 27.49       H    O
ATOM   6779  C   SER H   7       8.828  -7.120 -29.021  1.00 23.30       H    C
ATOM   6780  O   SER H   7       9.489  -8.029 -29.521  1.00 29.43       H    O
ATOM   6782  N   GLY H   8       9.109  -6.580 -27.837  1.00 29.18       H    N
ATOM   6783  CA  GLY H   8      10.309  -6.919 -27.076  1.00 27.92       H    C
ATOM   6786  C   GLY H   8      10.301  -8.326 -26.498  1.00 27.24       H    C
ATOM   6787  O   GLY H   8       9.258  -8.974 -26.479  1.00 27.87       H    O
ATOM   6789  N   PRO H   9      11.468  -8.795 -26.006  1.00 25.98       H    N
ATOM   6790  CA  PRO H   9      11.608 -10.119 -25.419  1.00 28.15       H    C
ATOM   6792  CB  PRO H   9      13.099 -10.198 -25.078  1.00 28.95       H    C
ATOM   6795  CG  PRO H   9      13.500  -8.797 -24.873  1.00 28.98       H    C
ATOM   6798  CD  PRO H   9      12.737  -8.050 -25.930  1.00 28.19       H    C
ATOM   6801  C   PRO H   9      10.792 -10.224 -24.154  1.00 26.75       H    C
ATOM   6802  O   PRO H   9      10.654  -9.237 -23.443  1.00 29.13       H    O
ATOM   6803  N   GLU H  10      10.256 -11.408 -23.885  1.00 27.88       H    N
ATOM   6804  CA  GLU H  10       9.400 -11.613 -22.729  1.00 30.77       H    C
ATOM   6806  CB  GLU H  10       7.964 -11.875 -23.170  1.00 34.61       H    C
ATOM   6809  CG  GLU H  10       7.389 -10.792 -24.052  1.00 36.72       H    C
ATOM   6812  CD  GLU H  10       6.065 -10.269 -23.561  1.00 37.81       H    C
ATOM   6813  OE1 GLU H  10       5.379  -9.612 -24.364  1.00 43.27       H    O
ATOM   6814  OE2 GLU H  10       5.716 -10.489 -22.381  1.00 37.47       H    O
ATOM   6815  C   GLU H  10       9.861 -12.785 -21.908  1.00 28.91       H    C
ATOM   6816  O   GLU H  10      10.445 -13.731 -22.430  1.00 32.68       H    O
ATOM   6818  N   LEU H  11       9.594 -12.704 -20.612  1.00 32.05       H    N
ATOM   6819  CA  LEU H  11       9.743 -13.826 -19.707  1.00 31.21       H    C
ATOM   6821  CB  LEU H  11      10.733 -13.512 -18.595  1.00 32.30       H    C
ATOM   6824  CG  LEU H  11      10.801 -14.497 -17.420  1.00 32.01       H    C
ATOM   6826  CD1 LEU H  11      11.475 -15.788 -17.853  1.00 28.98       H    C
ATOM   6830  CD2 LEU H  11      11.533 -13.851 -16.253  1.00 28.96       H    C
ATOM   6834  C   LEU H  11       8.374 -14.083 -19.117  1.00 32.87       H    C
ATOM   6835  O   LEU H  11       7.689 -13.152 -18.673  1.00 28.57       H    O
ATOM   6837  N   LYS H  12       7.978 -15.348 -19.129  1.00 33.56       H    N
ATOM   6838  CA  LYS H  12       6.688 -15.761 -18.613  1.00 34.28       H    C
ATOM   6840  CB  LYS H  12       5.693 -15.988 -19.765  1.00 34.85       H    C
ATOM   6843  CG  LYS H  12       5.226 -14.701 -20.479  1.00 33.62       H    C
ATOM   6846  CD  LYS H  12       4.329 -13.842 -19.583  1.00 35.48       H    C
ATOM   6849  CE  LYS H  12       3.972 -12.525 -20.250  1.00 36.01       H    C
ATOM   6852  NZ  LYS H  12       3.050 -11.711 -19.416  1.00 32.22       H    N
ATOM   6856  C   LYS H  12       6.897 -17.036 -17.833  1.00 34.16       H    C
ATOM   6857  O   LYS H  12       7.882 -17.740 -18.053  1.00 35.65       H    O
ATOM   6859  N   LYS H  13       5.975 -17.329 -16.922  1.00 29.60       H    N
ATOM   6860  CA  LYS H  13       6.024 -18.574 -16.158  1.00 33.14       H    C
ATOM   6862  CB  LYS H  13       5.369 -18.375 -14.795  1.00 32.40       H    C
ATOM   6865  CG  LYS H  13       5.956 -17.211 -14.021  1.00 34.58       H    C
ATOM   6868  CD  LYS H  13       5.425 -17.159 -12.588  1.00 33.80       H    C
ATOM   6871  CE  LYS H  13       6.438 -16.513 -11.647  1.00 34.88       H    C
ATOM   6874  NZ  LYS H  13       7.718 -17.290 -11.602  1.00 30.90       H    N
ATOM   6878  C   LYS H  13       5.308 -19.684 -16.926  1.00 32.01       H    C
ATOM   6879  O   LYS H  13       4.576 -19.398 -17.875  1.00 24.84       H    O
ATOM   6881  N   PRO H  14       5.510 -20.957 -16.524  1.00 36.35       H    N
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ATOM	6882	CA	PRO	H	14	4.741	-22.022	-17.183	1.00	36.88	H	C
ATOM	6884	CB	PRO	H	14	5.432	-23.316	-16.707	1.00	39.73	H	C
ATOM	6887	CG	PRO	H	14	6.708	-22.869	-16.013	1.00	38.39	H	C
ATOM	6890	CD	PRO	H	14	6.415	-21.497	-15.495	1.00	36.38	H	C
ATOM	6893	C	PRO	H	14	3.264	-21.982	-16.765	1.00	38.06	H	C
ATOM	6894	O	PRO	H	14	2.958	-21.647	-15.617	1.00	30.24	H	O
ATOM	6895	N	GLY	H	15	2.361	-22.291	-17.696	1.00	37.19	H	N
ATOM	6896	CA	GLY	H	15	0.918	-22.159	-17.445	1.00	37.08	H	C
ATOM	6899	C	GLY	H	15	0.364	-20.762	-17.706	1.00	36.37	H	C
ATOM	6900	O	GLY	H	15	-0.838	-20.543	-17.573	1.00	33.44	H	O
ATOM	6902	N	ALA	H	16	1.235	-19.824	-18.087	1.00	33.93	H	N
ATOM	6903	CA	ALA	H	16	0.841	-18.450	-18.408	1.00	32.50	H	C
ATOM	6905	CB	ALA	H	16	1.901	-17.466	-17.900	1.00	27.00	H	C
ATOM	6909	C	ALA	H	16	0.635	-18.281	-19.917	1.00	31.31	H	C
ATOM	6910	O	ALA	H	16	0.903	-19.196	-20.689	1.00	32.02	H	O
ATOM	6912	N	SER	H	17	0.164	-17.103	-20.326	1.00	31.75	H	N
ATOM	6913	CA	SER	H	17	-0.026	-16.767	-21.744	1.00	32.59	H	C
ATOM	6915	CB	SER	H	17	-1.514	-16.487	-22.028	1.00	36.70	H	C
ATOM	6918	OG	SER	H	17	-2.346	-17.540	-21.548	1.00	38.32	H	O
ATOM	6920	C	SER	H	17	0.822	-15.545	-22.148	1.00	30.65	H	C
ATOM	6921	O	SER	H	17	1.011	-14.626	-21.350	1.00	27.89	H	O
ATOM	6923	N	VAL	H	18	1.324	-15.543	-23.384	1.00	25.46	H	N
ATOM	6924	CA	VAL	H	18	2.073	-14.401	-23.936	1.00	27.10	H	C
ATOM	6926	CB	VAL	H	18	3.575	-14.773	-24.210	1.00	29.42	H	C
ATOM	6928	CG1	VAL	H	18	3.670	-15.920	-25.163	1.00	23.50	H	C
ATOM	6932	CG2	VAL	H	18	4.361	-13.590	-24.759	1.00	28.90	H	C
ATOM	6936	C	VAL	H	18	1.414	-13.943	-25.237	1.00	29.54	H	C
ATOM	6937	O	VAL	H	18	0.820	-14.748	-25.952	1.00	29.96	H	O
ATOM	6939	N	LYS	H	19	1.525	-12.652	-25.539	1.00	30.13	H	N
ATOM	6940	CA	LYS	H	19	1.005	-12.100	-26.782	1.00	30.27	H	C
ATOM	6942	CB	LYS	H	19	-0.249	-11.269	-26.512	1.00	35.10	H	C
ATOM	6945	CG	LYS	H	19	-1.151	-11.030	-27.727	1.00	34.09	H	C
ATOM	6948	CD	LYS	H	19	-2.403	-10.251	-27.282	1.00	35.85	H	C
ATOM	6951	CE	LYS	H	19	-3.426	-10.039	-28.411	1.00	37.19	H	C
ATOM	6954	NZ	LYS	H	19	-4.539	-9.080	-28.018	1.00	32.60	H	N
ATOM	6958	C	LYS	H	19	2.098	-11.253	-27.434	1.00	31.79	H	C
ATOM	6959	O	LYS	H	19	2.430	-10.177	-26.938	1.00	33.02	H	O
ATOM	6961	N	VAL	H	20	2.661	-11.762	-28.533	1.00	26.35	H	N
ATOM	6962	CA	VAL	H	20	3.730	-11.098	-29.259	1.00	27.87	H	C
ATOM	6964	CB	VAL	H	20	4.776	-12.133	-29.702	1.00	31.05	H	C
ATOM	6966	CG1	VAL	H	20	5.744	-11.543	-30.734	1.00	33.46	H	C
ATOM	6970	CG2	VAL	H	20	5.511	-12.682	-28.481	1.00	29.03	H	C
ATOM	6974	C	VAL	H	20	3.147	-10.397	-30.485	1.00	28.99	H	C
ATOM	6975	O	VAL	H	20	2.319	-10.969	-31.176	1.00	28.18	H	O
ATOM	6977	N	SER	H	21	3.582	-9.168	-30.761	1.00	28.88	H	N
ATOM	6978	CA	SER	H	21	3.043	-8.398	-31.889	1.00	29.76	H	C
ATOM	6980	CB	SER	H	21	2.573	-7.009	-31.427	1.00	35.28	H	C
ATOM	6983	OG	SER	H	21	3.658	-6.157	-31.111	1.00	39.69	H	O
ATOM	6985	C	SER	H	21	4.029	-8.277	-33.049	1.00	27.68	H	C
ATOM	6986	O	SER	H	21	5.225	-8.480	-32.881	1.00	25.72	H	O
ATOM	6988	N	CYS	H	22	3.502	-7.964	-34.229	1.00	28.49	H	N
ATOM	6989	CA	CYS	H	22	4.304	-7.812	-35.441	1.00	27.06	H	C
ATOM	6991	CB	CYS	H	22	4.354	-9.129	-36.211	1.00	27.55	H	C
ATOM	6994	SG	CYS	H	22	5.200	-9.020	-37.835	1.00	25.45	H	S
ATOM	6996	C	CYS	H	22	3.734	-6.653	-36.294	1.00	29.35	H	C
ATOM	6997	O	CYS	H	22	2.932	-6.849	-37.203	1.00	29.28	H	O
ATOM	6999	N	LYS	H	23	4.150	-5.437	-35.962	1.00	30.17	H	N
ATOM	7000	CA	LYS	H	23	3.722	-4.235	-36.664	1.00	26.52	H	C
ATOM	7002	CB	LYS	H	23	4.114	-2.998	-35.853	1.00	30.79	H	C
ATOM	7005	CG	LYS	H	23	3.898	-1.647	-36.553	1.00	31.86	H	C
ATOM	7008	CD	LYS	H	23	2.435	-1.286	-36.647	1.00	32.60	H	C
ATOM	7011	CE	LYS	H	23	2.215	0.056	-37.352	1.00	31.86	H	C
ATOM	7014	NZ	LYS	H	23	2.105	-0.122	-38.834	1.00	30.34	H	N

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ATOM	7018	C	LYS	H	23	4.346	-4.166	-38.039	1.00	24.60	H	C
ATOM	7019	O	LYS	H	23	5.569	-4.167	-38.164	1.00	26.34	H	O
ATOM	7021	N	ALA	H	24	3.507	-4.092	-39.069	1.00	25.08	H	N
ATOM	7022	CA	ALA	H	24	3.975	-4.065	-40.455	1.00	24.99	H	C
ATOM	7024	CB	ALA	H	24	3.108	-4.977	-41.320	1.00	23.97	H	C
ATOM	7028	C	ALA	H	24	3.942	-2.648	-41.006	1.00	21.49	H	C
ATOM	7029	O	ALA	H	24	3.073	-1.881	-40.647	1.00	19.24	H	O
ATOM	7031	N	SER	H	25	4.891	-2.300	-41.875	1.00	22.75	H	N
ATOM	7032	CA	SER	H	25	4.850	-0.998	-42.553	1.00	28.27	H	C
ATOM	7034	CB	SER	H	25	5.467	0.116	-41.671	1.00	31.66	H	C
ATOM	7037	OG	SER	H	25	6.819	-0.133	-41.321	1.00	34.02	H	O
ATOM	7039	C	SER	H	25	5.468	-1.023	-43.947	1.00	29.64	H	C
ATOM	7040	O	SER	H	25	6.185	-1.961	-44.325	1.00	28.38	H	O
ATOM	7042	N	GLY	H	26	5.124	-0.016	-44.740	1.00	29.77	H	N
ATOM	7043	CA	GLY	H	26	5.691	0.120	-46.075	1.00	30.39	H	C
ATOM	7046	C	GLY	H	26	5.097	-0.799	-47.119	1.00	30.05	H	C
ATOM	7047	O	GLY	H	26	5.678	-0.981	-48.192	1.00	30.89	H	O
ATOM	7049	N	TYR	H	27	3.945	-1.385	-46.804	1.00	30.64	H	N
ATOM	7050	CA	TYR	H	27	3.145	-2.141	-47.778	1.00	29.71	H	C
ATOM	7052	CB	TYR	H	27	3.740	-3.544	-48.015	1.00	27.92	H	C
ATOM	7055	CG	TYR	H	27	3.486	-4.516	-46.884	1.00	25.96	H	C
ATOM	7056	CD1	TYR	H	27	2.454	-5.445	-46.950	1.00	28.29	H	C
ATOM	7058	CE1	TYR	H	27	2.200	-6.326	-45.889	1.00	26.48	H	C
ATOM	7060	CZ	TYR	H	27	2.998	-6.284	-44.771	1.00	26.96	H	C
ATOM	7061	OH	TYR	H	27	2.793	-7.152	-43.721	1.00	28.81	H	O
ATOM	7063	CE2	TYR	H	27	4.016	-5.363	-44.687	1.00	28.69	H	C
ATOM	7065	CD2	TYR	H	27	4.264	-4.497	-45.742	1.00	27.47	H	C
ATOM	7067	C	TYR	H	27	1.704	-2.235	-47.246	1.00	28.80	H	C
ATOM	7068	O	TYR	H	27	1.456	-1.890	-46.087	1.00	23.70	H	O
ATOM	7070	N	THR	H	28	0.769	-2.704	-48.077	1.00	29.08	H	N
ATOM	7071	CA	THR	H	28	-0.626	-2.857	-47.655	1.00	26.82	H	C
ATOM	7073	CB	THR	H	28	-1.639	-2.833	-48.835	1.00	31.54	H	C
ATOM	7075	OG1	THR	H	28	-1.405	-1.692	-49.666	1.00	37.18	H	O
ATOM	7077	CG2	THR	H	28	-3.070	-2.745	-48.312	1.00	29.93	H	C
ATOM	7081	C	THR	H	28	-0.748	-4.165	-46.892	1.00	24.49	H	C
ATOM	7082	O	THR	H	28	-0.569	-5.248	-47.446	1.00	19.85	H	O
ATOM	7084	N	PHE	H	29	-1.035	-4.042	-45.602	1.00	21.30	H	N
ATOM	7085	CA	PHE	H	29	-1.041	-5.164	-44.673	1.00	20.29	H	C
ATOM	7087	CB	PHE	H	29	-1.545	-4.658	-43.308	1.00	17.82	H	C
ATOM	7090	CG	PHE	H	29	-1.486	-5.671	-42.192	1.00	16.83	H	C
ATOM	7091	CD1	PHE	H	29	-0.294	-6.274	-41.842	1.00	18.76	H	C
ATOM	7093	CE1	PHE	H	29	-0.237	-7.174	-40.798	1.00	18.63	H	C
ATOM	7095	CZ	PHE	H	29	-1.387	-7.456	-40.070	1.00	19.20	H	C
ATOM	7097	CE2	PHE	H	29	-2.568	-6.851	-40.396	1.00	16.13	H	C
ATOM	7099	CD2	PHE	H	29	-2.617	-5.954	-41.436	1.00	17.98	H	C
ATOM	7101	C	PHE	H	29	-1.927	-6.279	-45.195	1.00	22.64	H	C
ATOM	7102	O	PHE	H	29	-1.487	-7.408	-45.335	1.00	26.18	H	O
ATOM	7104	N	THR	H	30	-3.170	-5.936	-45.526	1.00	24.43	H	N
ATOM	7105	CA	THR	H	30	-4.206	-6.921	-45.885	1.00	22.13	H	C
ATOM	7107	CB	THR	H	30	-5.580	-6.268	-45.795	1.00	22.87	H	C
ATOM	7109	OG1	THR	H	30	-5.601	-5.111	-46.641	1.00	26.55	H	O
ATOM	7111	CG2	THR	H	30	-5.871	-5.856	-44.342	1.00	16.64	H	C
ATOM	7115	C	THR	H	30	-4.056	-7.567	-47.274	1.00	23.27	H	C
ATOM	7116	O	THR	H	30	-4.857	-8.415	-47.639	1.00	22.74	H	O
ATOM	7118	N	ASN	H	31	-3.018	-7.184	-48.019	1.00	21.42	H	N
ATOM	7119	CA	ASN	H	31	-2.749	-7.716	-49.344	1.00	23.38	H	C
ATOM	7121	CB	ASN	H	31	-2.259	-6.593	-50.267	1.00	25.98	H	C
ATOM	7124	CG	ASN	H	31	-3.378	-5.716	-50.778	1.00	28.74	H	C
ATOM	7125	OD1	ASN	H	31	-4.555	-5.857	-50.404	1.00	38.11	H	O
ATOM	7126	ND2	ASN	H	31	-3.017	-4.794	-51.637	1.00	31.93	H	N
ATOM	7129	C	ASN	H	31	-1.720	-8.848	-49.365	1.00	23.17	H	C
ATOM	7130	O	ASN	H	31	-1.523	-9.489	-50.412	1.00	23.34	H	O
ATOM	7132	N	TYR	H	32	-1.040	-9.047	-48.240	1.00	21.70	H	N

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ATOM	7133	CA	TYR	H	32	-0.125	-10.163	-48.036	1.00	25.03	H	C
ATOM	7135	CB	TYR	H	32	1.323	-9.686	-47.940	1.00	25.90	H	C
ATOM	7138	CG	TYR	H	32	1.841	-8.978	-49.158	1.00	26.41	H	C
ATOM	7139	CD1	TYR	H	32	2.727	-9.594	-50.023	1.00	28.29	H	C
ATOM	7141	CE1	TYR	H	32	3.205	-8.939	-51.133	1.00	24.73	H	C
ATOM	7143	CZ	TYR	H	32	2.803	-7.638	-51.360	1.00	26.55	H	C
ATOM	7144	OH	TYR	H	32	3.249	-6.942	-52.449	1.00	31.83	H	O
ATOM	7146	CE2	TYR	H	32	1.944	-7.022	-50.518	1.00	23.42	H	C
ATOM	7148	CD2	TYR	H	32	1.469	-7.685	-49.427	1.00	25.06	H	C
ATOM	7150	C	TYR	H	32	-0.460	-10.801	-46.715	1.00	22.75	H	C
ATOM	7151	O	TYR	H	32	-0.673	-10.091	-45.753	1.00	23.83	H	O
ATOM	7153	N	GLY	H	33	-0.472	-12.129	-46.647	1.00	23.62	H	N
ATOM	7154	CA	GLY	H	33	-0.644	-12.815	-45.370	1.00	23.53	H	C
ATOM	7157	C	GLY	H	33	0.623	-12.766	-44.532	1.00	25.13	H	C
ATOM	7158	O	GLY	H	33	1.635	-12.194	-44.951	1.00	23.95	H	O
ATOM	7160	N	MET	H	34	0.566	-13.358	-43.341	1.00	26.29	H	N
ATOM	7161	CA	MET	H	34	1.709	-13.380	-42.426	1.00	24.74	H	C
ATOM	7163	CB	MET	H	34	1.425	-12.494	-41.207	1.00	27.32	H	C
ATOM	7166	CG	MET	H	34	2.668	-12.129	-40.366	1.00	25.13	H	C
ATOM	7169	SD	MET	H	34	3.708	-10.917	-41.189	1.00	25.78	H	S
ATOM	7170	CE	MET	H	34	2.842	-9.410	-40.934	1.00	22.76	H	C
ATOM	7174	C	MET	H	34	2.012	-14.806	-41.956	1.00	23.02	H	C
ATOM	7175	O	MET	H	34	1.120	-15.518	-41.524	1.00	15.73	H	O
ATOM	7177	N	ASN	H	35	3.271	-15.232	-42.041	1.00	24.66	H	N
ATOM	7178	CA	ASN	H	35	3.647	-16.491	-41.401	1.00	23.84	H	C
ATOM	7180	CB	ASN	H	35	4.590	-17.289	-42.278	1.00	21.17	H	C
ATOM	7183	CG	ASN	H	35	4.083	-17.434	-43.675	1.00	23.27	H	C
ATOM	7184	OD1	ASN	H	35	2.878	-17.536	-43.919	1.00	26.93	H	O
ATOM	7185	ND2	ASN	H	35	4.989	-17.426	-44.607	1.00	16.57	H	N
ATOM	7188	C	ASN	H	35	4.273	-16.268	-40.038	1.00	21.88	H	C
ATOM	7189	O	ASN	H	35	4.813	-15.194	-39.748	1.00	20.56	H	O
ATOM	7191	N	TRP	H	36	4.171	-17.292	-39.198	1.00	25.58	H	N
ATOM	7192	CA	TRP	H	36	4.910	-17.350	-37.948	1.00	25.77	H	C
ATOM	7194	CB	TRP	H	36	3.968	-17.429	-36.753	1.00	23.88	H	C
ATOM	7197	CG	TRP	H	36	3.217	-16.165	-36.544	1.00	27.31	H	C
ATOM	7198	CD1	TRP	H	36	1.997	-15.858	-37.056	1.00	26.05	H	C
ATOM	7200	NE1	TRP	H	36	1.621	-14.608	-36.667	1.00	24.40	H	N
ATOM	7202	CE2	TRP	H	36	2.591	-14.069	-35.865	1.00	24.27	H	C
ATOM	7203	CD2	TRP	H	36	3.622	-15.025	-35.761	1.00	26.62	H	C
ATOM	7204	CE3	TRP	H	36	4.756	-14.718	-34.993	1.00	27.01	H	C
ATOM	7206	CZ3	TRP	H	36	4.809	-13.469	-34.343	1.00	26.89	H	C
ATOM	7208	CH2	TRP	H	36	3.760	-12.542	-34.471	1.00	25.94	H	C
ATOM	7210	CZ2	TRP	H	36	2.646	-12.823	-35.223	1.00	25.33	H	C
ATOM	7212	C	TRP	H	36	5.852	-18.544	-37.972	1.00	22.47	H	C
ATOM	7213	O	TRP	H	36	5.453	-19.649	-38.322	1.00	22.97	H	O
ATOM	7215	N	VAL	H	37	7.100	-18.291	-37.596	1.00	24.90	H	N
ATOM	7216	CA	VAL	H	37	8.165	-19.291	-37.549	1.00	26.36	H	C
ATOM	7218	CB	VAL	H	37	9.235	-18.937	-38.593	1.00	24.69	H	C
ATOM	7220	CG1	VAL	H	37	10.385	-19.927	-38.577	1.00	30.64	H	C
ATOM	7224	CG2	VAL	H	37	8.603	-18.874	-39.985	1.00	22.71	H	C
ATOM	7228	C	VAL	H	37	8.767	-19.296	-36.125	1.00	25.33	H	C
ATOM	7229	O	VAL	H	37	9.062	-18.238	-35.600	1.00	17.47	H	O
ATOM	7231	N	ARG	H	38	8.941	-20.459	-35.493	1.00	24.74	H	N
ATOM	7232	CA	ARG	H	38	9.720	-20.515	-34.249	1.00	22.87	H	C
ATOM	7234	CB	ARG	H	38	8.899	-21.121	-33.094	1.00	20.73	H	C
ATOM	7237	CG	ARG	H	38	9.215	-22.518	-32.622	1.00	19.62	H	C
ATOM	7240	CD	ARG	H	38	8.796	-22.683	-31.163	1.00	27.00	H	C
ATOM	7243	NE	ARG	H	38	8.378	-24.049	-30.874	1.00	28.33	H	N
ATOM	7245	CZ	ARG	H	38	9.041	-24.932	-30.126	1.00	35.42	H	C
ATOM	7246	NH1	ARG	H	38	10.190	-24.633	-29.535	1.00	39.60	H	N
ATOM	7249	NH2	ARG	H	38	8.526	-26.145	-29.956	1.00	38.05	H	N
ATOM	7252	C	ARG	H	38	11.102	-21.177	-34.381	1.00	18.54	H	C
ATOM	7253	O	ARG	H	38	11.282	-22.103	-35.127	1.00	26.96	H	O

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ATOM   7255  N   GLN H  39      12.074 -20.651 -33.636  1.00 26.17           H    N
ATOM   7256  CA  GLN H  39      13.370 -21.276 -33.442  1.00 23.54           H    C
ATOM   7258  CB  GLN H  39      14.439 -20.463 -34.160  1.00 26.29           H    C
ATOM   7261  CG  GLN H  39      15.665 -21.253 -34.550  1.00 25.57           H    C
ATOM   7264  CD  GLN H  39      16.622 -20.431 -35.359  1.00 25.96           H    C
ATOM   7265  OE1 GLN H  39      16.725 -19.217 -35.166  1.00 25.15           H    O
ATOM   7266  NE2 GLN H  39      17.327 -21.077 -36.282  1.00 24.26           H    N
ATOM   7269  C   GLN H  39      13.707 -21.429 -31.937  1.00 26.24           H    C
ATOM   7270  O   GLN H  39      13.967 -20.459 -31.227  1.00 19.16           H    O
ATOM   7272  N   ALA H  40      13.683 -22.664 -31.454  1.00 28.95           H    N
ATOM   7273  CA  ALA H  40      14.158 -22.963 -30.120  1.00 27.06           H    C
ATOM   7275  CB  ALA H  40      13.771 -24.384 -29.720  1.00 27.79           H    C
ATOM   7279  C   ALA H  40      15.681 -22.779 -30.093  1.00 26.83           H    C
ATOM   7280  O   ALA H  40      16.332 -22.867 -31.148  1.00 28.37           H    O
ATOM   7282  N   PRO H  41      16.246 -22.479 -28.900  1.00 30.34           H    N
ATOM   7283  CA  PRO H  41      17.676 -22.244 -28.702  1.00 30.06           H    C
ATOM   7285  CB  PRO H  41      17.816 -22.188 -27.179  1.00 33.23           H    C
ATOM   7288  CG  PRO H  41      16.504 -21.696 -26.714  1.00 32.08           H    C
ATOM   7291  CD  PRO H  41      15.494 -22.288 -27.640  1.00 31.46           H    C
ATOM   7294  C   PRO H  41      18.572 -23.323 -29.284  1.00 31.23           H    C
ATOM   7295  O   PRO H  41      18.616 -24.442 -28.774  1.00 31.51           H    O
ATOM   7296  N   GLY H  42      19.270 -22.971 -30.357  1.00 28.45           H    N
ATOM   7297  CA  GLY H  42      20.223 -23.872 -30.978  1.00 31.51           H    C
ATOM   7300  C   GLY H  42      19.611 -24.771 -32.028  1.00 34.49           H    C
ATOM   7301  O   GLY H  42      20.324 -25.546 -32.656  1.00 34.19           H    O
ATOM   7303  N   GLN H  43      18.299 -24.637 -32.245  1.00 37.22           H    N
ATOM   7304  CA  GLN H  43      17.541 -25.573 -33.074  1.00 32.28           H    C
ATOM   7306  CB  GLN H  43      16.246 -25.976 -32.356  1.00 39.11           H    C
ATOM   7309  CG  GLN H  43      16.298 -27.359 -31.730  1.00 45.11           H    C
ATOM   7312  CD  GLN H  43      17.330 -27.455 -30.644  1.00 50.05           H    C
ATOM   7313  OE1 GLN H  43      17.215 -26.800 -29.608  1.00 54.70           H    O
ATOM   7314  NE2 GLN H  43      18.355 -28.271 -30.870  1.00 48.78           H    N
ATOM   7317  C   GLN H  43      17.237 -25.008 -34.459  1.00 30.10           H    C
ATOM   7318  O   GLN H  43      17.662 -23.901 -34.796  1.00 34.64           H    O
ATOM   7320  N   GLY H  44      16.534 -25.797 -35.270  1.00 27.70           H    N
ATOM   7321  CA  GLY H  44      16.124 -25.380 -36.611  1.00 22.82           H    C
ATOM   7324  C   GLY H  44      14.866 -24.515 -36.625  1.00 18.17           H    C
ATOM   7325  O   GLY H  44      14.155 -24.384 -35.612  1.00 22.53           H    O
ATOM   7327  N   LEU H  45      14.579 -23.974 -37.804  1.00 18.71           H    N
ATOM   7328  CA  LEU H  45      13.366 -23.218 -38.087  1.00 20.81           H    C
ATOM   7330  CB  LEU H  45      13.550 -22.443 -39.383  1.00 17.43           H    C
ATOM   7333  CG  LEU H  45      14.633 -21.370 -39.276  1.00 19.51           H    C
ATOM   7335  CD1 LEU H  45      14.816 -20.667 -40.590  1.00 13.98           H    C
ATOM   7339  CD2 LEU H  45      14.293 -20.356 -38.172  1.00 11.48           H    C
ATOM   7343  C   LEU H  45      12.117 -24.117 -38.163  1.00 24.73           H    C
ATOM   7344  O   LEU H  45      12.117 -25.117 -38.881  1.00 18.23           H    O
ATOM   7346  N   GLU H  46      11.077 -23.778 -37.389  1.00 25.74           H    N
ATOM   7347  CA  GLU H  46       9.801 -24.499 -37.446  1.00 24.08           H    C
ATOM   7349  CB  GLU H  46       9.391 -25.030 -36.066  1.00 31.02           H    C
ATOM   7352  CG  GLU H  46      10.488 -25.709 -35.274  1.00 31.47           H    C
ATOM   7355  CD  GLU H  46       9.956 -26.402 -34.045  1.00 31.32           H    C
ATOM   7356  OE1 GLU H  46       9.406 -27.519 -34.197  1.00 31.09           H    O
ATOM   7357  OE2 GLU H  46      10.083 -25.834 -32.926  1.00 35.35           H    O
ATOM   7358  C   GLU H  46       8.709 -23.568 -37.976  1.00 21.65           H    C
ATOM   7359  O   GLU H  46       8.481 -22.493 -37.429  1.00 17.40           H    O
ATOM   7361  N   TRP H  47       8.036 -23.986 -39.046  1.00 23.74           H    N
ATOM   7362  CA  TRP H  47       6.926 -23.223 -39.614  1.00 21.45           H    C
ATOM   7364  CB  TRP H  47       6.734 -23.583 -41.080  1.00 21.53           H    C
ATOM   7367  CG  TRP H  47       6.060 -22.532 -41.864  1.00 20.32           H    C
ATOM   7368  CD1 TRP H  47       6.642 -21.464 -42.483  1.00 21.59           H    C
ATOM   7370  NE1 TRP H  47       5.690 -20.724 -43.136  1.00 23.15           H    N
ATOM   7372  CE2 TRP H  47       4.465 -21.299 -42.926  1.00 23.37           H    C
ATOM   7373  CD2 TRP H  47       4.664 -22.447 -42.140  1.00 20.67           H    C
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ATOM   7374  CE3 TRP H  47       3.561 -23.229 -41.794  1.00 19.53           H     C
ATOM   7376  CZ3 TRP H  47       2.326 -22.851 -42.247  1.00 22.17           H     C
ATOM   7378  CH2 TRP H  47       2.162 -21.701 -43.038  1.00 20.89           H     C
ATOM   7380  CZ2 TRP H  47       3.212 -20.911 -43.367  1.00 23.65           H     C
ATOM   7382  C   TRP H  47       5.647 -23.494 -38.819  1.00 24.29           H     C
ATOM   7383  O   TRP H  47       5.116 -24.610 -38.815  1.00 28.46           H     O
ATOM   7385  N   MET H  48       5.162 -22.468 -38.137  1.00 23.62           H     N
ATOM   7386  CA  MET H  48       4.093 -22.646 -37.159  1.00 21.38           H     C
ATOM   7388  CB  MET H  48       4.180 -21.587 -36.074  1.00 22.58           H     C
ATOM   7391  CG  MET H  48       5.488 -21.571 -35.333  1.00 19.63           H     C
ATOM   7394  SD  MET H  48       5.577 -20.232 -34.132  1.00 20.72           H     S
ATOM   7395  CE  MET H  48       3.984 -20.347 -33.283  1.00 12.31           H     C
ATOM   7399  C   MET H  48       2.749 -22.554 -37.840  1.00 19.36           H     C
ATOM   7400  O   MET H  48       1.873 -23.379 -37.608  1.00 25.05           H     O
ATOM   7402  N   GLY H  49       2.589 -21.534 -38.680  1.00 21.93           H     N
ATOM   7403  CA  GLY H  49       1.358 -21.359 -39.418  1.00 24.71           H     C
ATOM   7406  C   GLY H  49       1.284 -20.098 -40.244  1.00 26.87           H     C
ATOM   7407  O   GLY H  49       2.285 -19.406 -40.445  1.00 21.71           H     O
ATOM   7409  N   TRP H  50       0.059 -19.801 -40.685  1.00 30.50           H     N
ATOM   7410  CA  TRP H  50      -0.256 -18.638 -41.522  1.00 24.26           H     C
ATOM   7412  CB  TRP H  50      -0.321 -19.057 -43.000  1.00 20.38           H     C
ATOM   7415  CG  TRP H  50      -1.455 -18.532 -43.842  1.00 22.04           H     C
ATOM   7416  CD1 TRP H  50      -2.777 -18.915 -43.775  1.00 25.29           H     C
ATOM   7418  NE1 TRP H  50      -3.508 -18.258 -44.735  1.00 25.11           H     N
ATOM   7420  CE2 TRP H  50      -2.678 -17.435 -45.450  1.00 19.79           H     C
ATOM   7421  CD2 TRP H  50      -1.376 -17.579 -44.923  1.00 22.68           H     C
ATOM   7422  CE3 TRP H  50      -0.338 -16.830 -45.484  1.00 22.50           H     C
ATOM   7424  CZ3 TRP H  50      -0.624 -15.987 -46.529  1.00 22.77           H     C
ATOM   7426  CH2 TRP H  50      -1.936 -15.850 -47.022  1.00 21.95           H     C
ATOM   7428  CZ2 TRP H  50      -2.968 -16.566 -46.492  1.00 19.52           H     C
ATOM   7430  C   TRP H  50      -1.560 -17.994 -41.071  1.00 18.83           H     C
ATOM   7431  O   TRP H  50      -2.474 -18.678 -40.644  1.00 22.40           H     O
ATOM   7433  N   ILE H  51      -1.615 -16.667 -41.147  1.00 17.04           H     N
ATOM   7434  CA  ILE H  51      -2.874 -15.956 -40.991  1.00 19.17           H     C
ATOM   7436  CB  ILE H  51      -2.930 -15.039 -39.739  1.00 16.35           H     C
ATOM   7438  CG1 ILE H  51      -4.363 -14.472 -39.557  1.00 18.38           H     C
ATOM   7441  CD1 ILE H  51      -4.785 -14.220 -38.133  1.00 13.32           H     C
ATOM   7445  CG2 ILE H  51      -1.892 -13.920 -39.855  1.00 13.56           H     C
ATOM   7449  C   ILE H  51      -3.078 -15.149 -42.253  1.00 18.45           H     C
ATOM   7450  O   ILE H  51      -2.139 -14.555 -42.795  1.00 18.62           H     O
ATOM   7452  N   ASN H  52      -4.315 -15.177 -42.728  1.00 22.79           H     N
ATOM   7453  CA  ASN H  52      -4.746 -14.367 -43.838  1.00 22.85           H     C
ATOM   7455  CB  ASN H  52      -5.982 -14.997 -44.493  1.00 25.31           H     C
ATOM   7458  CG  ASN H  52      -6.297 -14.392 -45.847  1.00 24.08           H     C
ATOM   7459  OD1 ASN H  52      -6.431 -13.179 -45.972  1.00 24.50           H     O
ATOM   7460  ND2 ASN H  52      -6.438 -15.239 -46.863  1.00 22.24           H     N
ATOM   7463  C   ASN H  52      -5.063 -12.989 -43.285  1.00 22.32           H     C
ATOM   7464  O   ASN H  52      -6.002 -12.816 -42.500  1.00 18.42           H     O
ATOM   7466  N   THR H  53      -4.274 -12.000 -43.673  1.00 20.16           H     N
ATOM   7467  CA  THR H  53      -4.508 -10.639 -43.188  1.00 20.19           H     C
ATOM   7469  CB  THR H  53      -3.327  -9.761 -43.530  1.00 17.32           H     C
ATOM   7471  OG1 THR H  53      -3.031  -9.924 -44.915  1.00 15.86           H     O
ATOM   7473  CG2 THR H  53      -2.117 -10.177 -42.691  1.00 16.93           H     C
ATOM   7477  C   THR H  53      -5.805 -10.005 -43.728  1.00 22.94           H     C
ATOM   7478  O   THR H  53      -6.332  -9.073 -43.124  1.00 20.07           H     O
ATOM   7480  N   TYR H  54      -6.313 -10.530 -44.846  1.00 25.39           H     N
ATOM   7481  CA  TYR H  54      -7.495  -9.993 -45.518  1.00 25.81           H     C
ATOM   7483  CB  TYR H  54      -7.450 -10.262 -47.037  1.00 20.45           H     C
ATOM   7486  CG  TYR H  54      -8.396  -9.359 -47.817  1.00 23.67           H     C
ATOM   7487  CD1 TYR H  54      -7.922  -8.239 -48.510  1.00 21.14           H     C
ATOM   7489  CE1 TYR H  54      -8.790  -7.398 -49.198  1.00 21.54           H     C
ATOM   7491  CZ  TYR H  54     -10.153  -7.669 -49.186  1.00 20.89           H     C
ATOM   7492  OH  TYR H  54     -11.023  -6.860 -49.876  1.00 20.50           H     O
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ATOM   7494  CE2 TYR H  54     -10.643  -8.755 -48.492  1.00 19.32      H    C
ATOM   7496  CD2 TYR H  54      -9.779  -9.584 -47.804  1.00 21.20      H    C
ATOM   7498  C   TYR H  54      -8.786 -10.573 -44.964  1.00 24.04      H    C
ATOM   7499  O   TYR H  54      -9.732  -9.832 -44.705  1.00 29.33      H    O
ATOM   7501  N   THR H  55      -8.827 -11.895 -44.813  1.00 24.83      H    N
ATOM   7502  CA  THR H  55     -10.036 -12.597 -44.372  1.00 25.12      H    C
ATOM   7504  CB  THR H  55     -10.283 -13.853 -45.227  1.00 23.67      H    C
ATOM   7506  OG1 THR H  55      -9.232 -14.781 -44.984  1.00 24.23      H    O
ATOM   7508  CG2 THR H  55     -10.334 -13.525 -46.725  1.00 19.80      H    C
ATOM   7512  C   THR H  55      -9.985 -13.060 -42.914  1.00 24.11      H    C
ATOM   7513  O   THR H  55     -11.027 -13.378 -42.332  1.00 18.81      H    O
ATOM   7515  N   GLY H  56      -8.788 -13.142 -42.333  1.00 25.62      H    N
ATOM   7516  CA  GLY H  56      -8.631 -13.592 -40.939  1.00 26.35      H    C
ATOM   7519  C   GLY H  56      -8.577 -15.099 -40.739  1.00 26.20      H    C
ATOM   7520  O   GLY H  56      -8.577 -15.589 -39.599  1.00 21.98      H    O
ATOM   7522  N   GLU H  57      -8.523 -15.840 -41.843  1.00 26.88      H    N
ATOM   7523  CA  GLU H  57      -8.382 -17.294 -41.801  1.00 30.37      H    C
ATOM   7525  CB  GLU H  57      -8.704 -17.895 -43.180  1.00 36.01      H    C
ATOM   7528  CG  GLU H  57     -10.131 -17.667 -43.698  1.00 36.91      H    C
ATOM   7531  CD  GLU H  57     -10.236 -17.915 -45.207  1.00 37.68      H    C
ATOM   7532  OE1 GLU H  57      -9.777 -17.056 -45.987  1.00 38.05      H    O
ATOM   7533  OE2 GLU H  57     -10.767 -18.971 -45.619  1.00 40.24      H    O
ATOM   7534  C   GLU H  57      -6.958 -17.733 -41.375  1.00 31.10      H    C
ATOM   7535  O   GLU H  57      -5.942 -17.099 -41.723  1.00 27.03      H    O
ATOM   7537  N   THR H  58      -6.884 -18.851 -40.660  1.00 28.13      H    N
ATOM   7538  CA  THR H  58      -5.612 -19.350 -40.178  1.00 28.33      H    C
ATOM   7540  CB  THR H  58      -5.493 -19.084 -38.675  1.00 25.12      H    C
ATOM   7542  OG1 THR H  58      -6.554 -19.753 -37.993  1.00 25.52      H    O
ATOM   7544  CG2 THR H  58      -5.579 -17.585 -38.392  1.00 19.47      H    C
ATOM   7548  C   THR H  58      -5.444 -20.844 -40.436  1.00 29.10      H    C
ATOM   7549  O   THR H  58      -6.372 -21.623 -40.211  1.00 34.54      H    O
ATOM   7551  N   THR H  59      -4.260 -21.222 -40.911  1.00 24.53      H    N
ATOM   7552  CA  THR H  59      -3.818 -22.621 -40.964  1.00 26.92      H    C
ATOM   7554  CB  THR H  59      -3.363 -23.038 -42.382  1.00 24.01      H    C
ATOM   7556  OG1 THR H  59      -4.394 -22.739 -43.322  1.00 27.05      H    O
ATOM   7558  CG2 THR H  59      -3.086 -24.520 -42.446  1.00 18.89      H    C
ATOM   7562  C   THR H  59      -2.622 -22.820 -40.042  1.00 29.23      H    C
ATOM   7563  O   THR H  59      -1.672 -22.039 -40.082  1.00 32.74      H    O
ATOM   7565  N   TYR H  60      -2.651 -23.879 -39.236  1.00 30.77      H    N
ATOM   7566  CA  TYR H  60      -1.501 -24.235 -38.384  1.00 29.69      H    C
ATOM   7568  CB  TYR H  60      -1.952 -24.357 -36.932  1.00 26.89      H    C
ATOM   7571  CG  TYR H  60      -2.638 -23.123 -36.404  1.00 27.41      H    C
ATOM   7572  CD1 TYR H  60      -1.935 -22.161 -35.692  1.00 26.28      H    C
ATOM   7574  CE1 TYR H  60      -2.578 -21.029 -35.194  1.00 26.66      H    C
ATOM   7576  CZ  TYR H  60      -3.929 -20.843 -35.432  1.00 26.31      H    C
ATOM   7577  OH  TYR H  60      -4.578 -19.715 -34.959  1.00 25.99      H    O
ATOM   7579  CE2 TYR H  60      -4.643 -21.794 -36.138  1.00 26.28      H    C
ATOM   7581  CD2 TYR H  60      -4.004 -22.922 -36.610  1.00 26.38      H    C
ATOM   7583  C   TYR H  60      -0.836 -25.541 -38.813  1.00 24.94      H    C
ATOM   7584  O   TYR H  60      -1.515 -26.456 -39.251  1.00 28.65      H    O
ATOM   7586  N   ALA H  61       0.488 -25.626 -38.685  1.00 22.23      H    N
ATOM   7587  CA  ALA H  61       1.179 -26.908 -38.813  1.00 23.97      H    C
ATOM   7589  CB  ALA H  61       2.695 -26.722 -38.848  1.00 20.02      H    C
ATOM   7593  C   ALA H  61       0.800 -27.778 -37.634  1.00 24.18      H    C
ATOM   7594  O   ALA H  61       0.682 -27.272 -36.529  1.00 22.83      H    O
ATOM   7596  N   ASP H  62       0.662 -29.083 -37.868  1.00 29.72      H    N
ATOM   7597  CA  ASP H  62       0.184 -30.034 -36.853  1.00 30.55      H    C
ATOM   7599  CB  ASP H  62       0.423 -31.493 -37.279  1.00 36.78      H    C
ATOM   7602  CG  ASP H  62      -0.337 -31.882 -38.542  1.00 42.66      H    C
ATOM   7603  OD1 ASP H  62       0.086 -32.854 -39.206  1.00 48.86      H    O
ATOM   7604  OD2 ASP H  62      -1.341 -31.223 -38.876  1.00 45.60      H    O
ATOM   7605  C   ASP H  62       0.799 -29.828 -35.473  1.00 33.39      H    C
ATOM   7606  O   ASP H  62       0.086 -29.844 -34.475  1.00 26.25      H    O
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ATOM   7608  N   ASP H  63       2.114 -29.630 -35.412  1.00 34.21           H    N
ATOM   7609  CA  ASP H  63       2.799 -29.439 -34.114  1.00 33.08           H    C
ATOM   7611  CB  ASP H  63       4.321 -29.312 -34.312  1.00 36.54           H    C
ATOM   7614  CG  ASP H  63       4.973 -30.615 -34.723  1.00 39.40           H    C
ATOM   7615  OD1 ASP H  63       4.320 -31.677 -34.627  1.00 42.54           H    O
ATOM   7616  OD2 ASP H  63       6.153 -30.574 -35.142  1.00 43.14           H    O
ATOM   7617  C   ASP H  63       2.320 -28.218 -33.342  1.00 29.06           H    C
ATOM   7618  O   ASP H  63       2.589 -28.117 -32.142  1.00 35.08           H    O
ATOM   7620  N   PHE H  64       1.651 -27.283 -34.025  1.00 24.95           H    N
ATOM   7621  CA  PHE H  64       1.203 -26.025 -33.411  1.00 29.59           H    C
ATOM   7623  CB  PHE H  64       1.857 -24.841 -34.122  1.00 25.55           H    C
ATOM   7626  CG  PHE H  64       3.332 -24.797 -33.911  1.00 26.64           H    C
ATOM   7627  CD1 PHE H  64       3.843 -24.285 -32.734  1.00 25.89           H    C
ATOM   7629  CE1 PHE H  64       5.188 -24.286 -32.502  1.00 28.03           H    C
ATOM   7631  CZ  PHE H  64       6.056 -24.813 -33.454  1.00 22.34           H    C
ATOM   7633  CE2 PHE H  64       5.561 -25.349 -34.611  1.00 27.49           H    C
ATOM   7635  CD2 PHE H  64       4.200 -25.353 -34.833  1.00 26.85           H    C
ATOM   7637  C   PHE H  64      -0.308 -25.850 -33.326  1.00 31.84           H    C
ATOM   7638  O   PHE H  64      -0.800 -24.728 -33.241  1.00 32.77           H    O
ATOM   7640  N   LYS H  65      -1.027 -26.970 -33.304  1.00 34.72           H    N
ATOM   7641  CA  LYS H  65      -2.479 -26.977 -33.141  1.00 33.85           H    C
ATOM   7643  CB  LYS H  65      -3.103 -28.113 -33.966  1.00 34.04           H    C
ATOM   7646  CG  LYS H  65      -3.149 -27.841 -35.455  1.00 32.54           H    C
ATOM   7649  CD  LYS H  65      -3.572 -29.075 -36.250  1.00 34.58           H    C
ATOM   7652  CE  LYS H  65      -3.723 -28.750 -37.749  1.00 36.60           H    C
ATOM   7655  NZ  LYS H  65      -3.539 -29.929 -38.656  1.00 33.54           H    N
ATOM   7659  C   LYS H  65      -2.827 -27.163 -31.671  1.00 34.99           H    C
ATOM   7660  O   LYS H  65      -2.423 -28.147 -31.047  1.00 35.09           H    O
ATOM   7662  N   GLY H  66      -3.576 -26.219 -31.115  1.00 35.89           H    N
ATOM   7663  CA  GLY H  66      -4.011 -26.318 -29.733  1.00 35.07           H    C
ATOM   7666  C   GLY H  66      -3.775 -25.042 -28.956  1.00 34.11           H    C
ATOM   7667  O   GLY H  66      -4.719 -24.303 -28.658  1.00 31.70           H    O
ATOM   7669  N   ARG H  67      -2.511 -24.771 -28.646  1.00 33.37           H    N
ATOM   7670  CA  ARG H  67      -2.172 -23.708 -27.693  1.00 34.72           H    C
ATOM   7672  CB  ARG H  67      -1.004 -24.161 -26.816  1.00 35.74           H    C
ATOM   7675  CG  ARG H  67      -1.395 -25.295 -25.870  1.00 38.35           H    C
ATOM   7678  CD  ARG H  67      -0.288 -25.688 -24.902  1.00 38.45           H    C
ATOM   7681  NE  ARG H  67       0.951 -26.079 -25.581  1.00 38.91           H    N
ATOM   7683  CZ  ARG H  67       2.049 -25.327 -25.670  1.00 39.41           H    C
ATOM   7684  NH1 ARG H  67       2.096 -24.111 -25.122  1.00 38.90           H    N
ATOM   7687  NH2 ARG H  67       3.114 -25.801 -26.310  1.00 39.58           H    N
ATOM   7690  C   ARG H  67      -1.869 -22.371 -28.354  1.00 32.06           H    C
ATOM   7691  O   ARG H  67      -1.681 -21.363 -27.672  1.00 30.72           H    O
ATOM   7693  N   PHE H  68      -1.855 -22.363 -29.682  1.00 31.26           H    N
ATOM   7694  CA  PHE H  68      -1.384 -21.219 -30.450  1.00 33.08           H    C
ATOM   7696  CB  PHE H  68      -0.285 -21.659 -31.418  1.00 31.68           H    C
ATOM   7699  CG  PHE H  68       0.874 -22.365 -30.754  1.00 32.76           H    C
ATOM   7700  CD1 PHE H  68       2.080 -21.709 -30.547  1.00 34.03           H    C
ATOM   7702  CE1 PHE H  68       3.148 -22.356 -29.931  1.00 33.41           H    C
ATOM   7704  CZ  PHE H  68       3.019 -23.672 -29.523  1.00 30.62           H    C
ATOM   7706  CE2 PHE H  68       1.825 -24.339 -29.727  1.00 33.43           H    C
ATOM   7708  CD2 PHE H  68       0.759 -23.685 -30.341  1.00 33.54           H    C
ATOM   7710  C   PHE H  68      -2.528 -20.585 -31.236  1.00 34.14           H    C
ATOM   7711  O   PHE H  68      -3.262 -21.282 -31.949  1.00 36.64           H    O
ATOM   7713  N   VAL H  69      -2.654 -19.263 -31.118  1.00 28.53           H    N
ATOM   7714  CA  VAL H  69      -3.685 -18.512 -31.808  1.00 27.57           H    C
ATOM   7716  CB  VAL H  69      -4.795 -18.102 -30.815  1.00 29.40           H    C
ATOM   7718  CG1 VAL H  69      -5.781 -17.138 -31.453  1.00 29.42           H    C
ATOM   7722  CG2 VAL H  69      -5.506 -19.334 -30.301  1.00 26.52           H    C
ATOM   7726  C   VAL H  69      -3.084 -17.271 -32.462  1.00 28.71           H    C
ATOM   7727  O   VAL H  69      -2.507 -16.431 -31.782  1.00 37.87           H    O
ATOM   7729  N   PHE H  70      -3.214 -17.164 -33.779  1.00 20.00           H    N
ATOM   7730  CA  PHE H  70      -2.905 -15.925 -34.502  1.00 23.65           H    C
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ATOM   7732  CB  PHE H  70      -2.488 -16.195 -35.968  1.00 21.54      H    C
ATOM   7735  CG  PHE H  70      -1.537 -17.309 -36.134  1.00 25.31      H    C
ATOM   7736  CD1 PHE H  70      -0.509 -17.520 -35.219  1.00 24.70      H    C
ATOM   7738  CE1 PHE H  70       0.384 -18.565 -35.402  1.00 24.33      H    C
ATOM   7740  CZ  PHE H  70       0.252 -19.393 -36.502  1.00 21.33      H    C
ATOM   7742  CE2 PHE H  70      -0.762 -19.180 -37.418  1.00 21.21      H    C
ATOM   7744  CD2 PHE H  70      -1.631 -18.148 -37.250  1.00 26.15      H    C
ATOM   7746  C   PHE H  70      -4.132 -15.029 -34.530  1.00 26.86      H    C
ATOM   7747  O   PHE H  70      -5.247 -15.520 -34.715  1.00 30.76      H    O
ATOM   7749  N   SER H  71      -3.922 -13.724 -34.344  1.00 29.42      H    N
ATOM   7750  CA  SER H  71      -4.977 -12.726 -34.425  1.00 24.86      H    C
ATOM   7752  CB  SER H  71      -5.467 -12.338 -33.030  1.00 29.42      H    C
ATOM   7755  OG  SER H  71      -4.532 -11.555 -32.302  1.00 27.89      H    O
ATOM   7757  C   SER H  71      -4.481 -11.512 -35.206  1.00 26.32      H    C
ATOM   7758  O   SER H  71      -3.320 -11.453 -35.624  1.00 27.03      H    O
ATOM   7760  N   LEU H  72      -5.370 -10.553 -35.439  1.00 27.76      H    N
ATOM   7761  CA  LEU H  72      -5.011  -9.349 -36.187  1.00 26.98      H    C
ATOM   7763  CB  LEU H  72      -5.560  -9.412 -37.613  1.00 25.65      H    C
ATOM   7766  CG  LEU H  72      -5.125 -10.492 -38.591  1.00 26.00      H    C
ATOM   7768  CD1 LEU H  72      -6.125 -10.581 -39.730  1.00 25.54      H    C
ATOM   7772  CD2 LEU H  72      -3.712 -10.247 -39.131  1.00 25.52      H    C
ATOM   7776  C   LEU H  72      -5.563  -8.093 -35.534  1.00 29.78      H    C
ATOM   7777  O   LEU H  72      -6.494  -8.151 -34.731  1.00 30.42      H    O
ATOM   7779  N   ASP H  73      -4.951  -6.961 -35.870  1.00 29.04      H    N
ATOM   7780  CA  ASP H  73      -5.595  -5.661 -35.752  1.00 26.85      H    C
ATOM   7782  CB  ASP H  73      -5.189  -4.901 -34.474  1.00 26.53      H    C
ATOM   7785  CG  ASP H  73      -6.038  -3.652 -34.242  1.00 29.22      H    C
ATOM   7786  OD1 ASP H  73      -6.648  -3.168 -35.225  1.00 24.50      H    O
ATOM   7787  OD2 ASP H  73      -6.102  -3.156 -33.084  1.00 28.46      H    O
ATOM   7788  C   ASP H  73      -5.227  -4.903 -37.028  1.00 25.01      H    C
ATOM   7789  O   ASP H  73      -4.163  -4.288 -37.137  1.00 26.61      H    O
ATOM   7791  N   THR H  74      -6.116  -5.013 -38.005  1.00 26.98      H    N
ATOM   7792  CA  THR H  74      -5.948  -4.412 -39.328  1.00 31.65      H    C
ATOM   7794  CB  THR H  74      -7.112  -4.848 -40.263  1.00 33.32      H    C
ATOM   7796  OG1 THR H  74      -6.599  -5.709 -41.287  1.00 35.29      H    O
ATOM   7798  CG2 THR H  74      -7.801  -3.658 -40.902  1.00 37.45      H    C
ATOM   7802  C   THR H  74      -5.833  -2.882 -39.291  1.00 34.76      H    C
ATOM   7803  O   THR H  74      -5.165  -2.291 -40.141  1.00 35.38      H    O
ATOM   7805  N   SER H  75      -6.468  -2.259 -38.296  1.00 32.35      H    N
ATOM   7806  CA  SER H  75      -6.448  -0.804 -38.128  1.00 33.79      H    C
ATOM   7808  CB  SER H  75      -7.464  -0.394 -37.063  1.00 34.77      H    C
ATOM   7811  OG  SER H  75      -7.111  -0.944 -35.807  1.00 34.63      H    O
ATOM   7813  C   SER H  75      -5.081  -0.238 -37.737  1.00 34.99      H    C
ATOM   7814  O   SER H  75      -4.862   0.967 -37.838  1.00 34.06      H    O
ATOM   7816  N   VAL H  76      -4.181  -1.099 -37.259  1.00 36.77      H    N
ATOM   7817  CA  VAL H  76      -2.827  -0.687 -36.896  1.00 32.83      H    C
ATOM   7819  CB  VAL H  76      -2.678  -0.593 -35.329  1.00 34.68      H    C
ATOM   7821  CG1 VAL H  76      -2.899  -1.946 -34.657  1.00 30.49      H    C
ATOM   7825  CG2 VAL H  76      -1.334   0.012 -34.933  1.00 36.70      H    C
ATOM   7829  C   VAL H  76      -1.781  -1.598 -37.554  1.00 34.93      H    C
ATOM   7830  O   VAL H  76      -0.633  -1.661 -37.106  1.00 35.98      H    O
ATOM   7832  N   SER H  77      -2.186  -2.269 -38.640  1.00 30.14      H    N
ATOM   7833  CA  SER H  77      -1.327  -3.139 -39.441  1.00 29.12      H    C
ATOM   7835  CB  SER H  77      -0.485  -2.307 -40.421  1.00 30.46      H    C
ATOM   7838  OG  SER H  77      -1.313  -1.711 -41.407  1.00 29.38      H    O
ATOM   7840  C   SER H  77      -0.444  -4.092 -38.620  1.00 24.19      H    C
ATOM   7841  O   SER H  77       0.749  -4.217 -38.877  1.00 30.85      H    O
ATOM   7843  N   THR H  78      -1.066  -4.799 -37.679  1.00 22.85      H    N
ATOM   7844  CA  THR H  78      -0.361  -5.623 -36.707  1.00 23.30      H    C
ATOM   7846  CB  THR H  78      -0.455  -4.983 -35.321  1.00 25.09      H    C
ATOM   7848  OG1 THR H  78       0.059  -3.648 -35.389  1.00 23.52      H    O
ATOM   7850  CG2 THR H  78       0.330  -5.787 -34.276  1.00 21.29      H    C
ATOM   7854  C   THR H  78      -0.885  -7.065 -36.636  1.00 24.37      H    C
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ATOM	7855	O	THR	H	78	-2.083	-7.298	-36.529	1.00	25.74	H	O
ATOM	7857	N	ALA	H	79	0.042	-8.022	-36.702	1.00	26.34	H	N
ATOM	7858	CA	ALA	H	79	-0.245	-9.440	-36.473	1.00	23.73	H	C
ATOM	7860	CB	ALA	H	79	0.473	-10.276	-37.484	1.00	22.08	H	C
ATOM	7864	C	ALA	H	79	0.175	-9.831	-35.053	1.00	20.53	H	C
ATOM	7865	O	ALA	H	79	1.174	-9.343	-34.544	1.00	22.24	H	O
ATOM	7867	N	TYR	H	80	-0.614	-10.684	-34.408	1.00	23.67	H	N
ATOM	7868	CA	TYR	H	80	-0.349	-11.111	-33.038	1.00	25.45	H	C
ATOM	7870	CB	TYR	H	80	-1.427	-10.602	-32.062	1.00	29.91	H	C
ATOM	7873	CG	TYR	H	80	-1.599	-9.099	-32.054	1.00	30.58	H	C
ATOM	7874	CD1	TYR	H	80	-0.927	-8.298	-31.124	1.00	30.74	H	C
ATOM	7876	CE1	TYR	H	80	-1.082	-6.911	-31.126	1.00	30.71	H	C
ATOM	7878	CZ	TYR	H	80	-1.915	-6.318	-32.065	1.00	30.99	H	C
ATOM	7879	OH	TYR	H	80	-2.077	-4.952	-32.094	1.00	31.41	H	O
ATOM	7881	CE2	TYR	H	80	-2.584	-7.098	-32.996	1.00	31.37	H	C
ATOM	7883	CD2	TYR	H	80	-2.428	-8.474	-32.981	1.00	30.50	H	C
ATOM	7885	C	TYR	H	80	-0.284	-12.629	-32.960	1.00	25.34	H	C
ATOM	7886	O	TYR	H	80	-1.025	-13.324	-33.646	1.00	27.64	H	O
ATOM	7888	N	LEU	H	81	0.637	-13.126	-32.133	1.00	27.47	H	N
ATOM	7889	CA	LEU	H	81	0.715	-14.532	-31.751	1.00	23.83	H	C
ATOM	7891	CB	LEU	H	81	2.101	-15.098	-32.060	1.00	26.44	H	C
ATOM	7894	CG	LEU	H	81	2.456	-16.504	-31.551	1.00	24.85	H	C
ATOM	7896	CD1	LEU	H	81	1.578	-17.592	-32.203	1.00	16.74	H	C
ATOM	7900	CD2	LEU	H	81	3.931	-16.758	-31.775	1.00	18.19	H	C
ATOM	7904	C	LEU	H	81	0.440	-14.576	-30.264	1.00	28.02	H	C
ATOM	7905	O	LEU	H	81	1.071	-13.867	-29.489	1.00	25.39	H	O
ATOM	7907	N	GLN	H	82	-0.547	-15.374	-29.884	1.00	29.78	H	N
ATOM	7908	CA	GLN	H	82	-0.836	-15.643	-28.501	1.00	28.43	H	C
ATOM	7910	CB	GLN	H	82	-2.273	-15.248	-28.175	1.00	30.83	H	C
ATOM	7913	CG	GLN	H	82	-2.696	-15.577	-26.751	1.00	34.26	H	C
ATOM	7916	CD	GLN	H	82	-3.715	-14.612	-26.192	1.00	35.39	H	C
ATOM	7917	OE1	GLN	H	82	-4.453	-13.955	-26.936	1.00	38.91	H	O
ATOM	7918	NE2	GLN	H	82	-3.751	-14.506	-24.868	1.00	37.56	H	N
ATOM	7921	C	GLN	H	82	-0.603	-17.126	-28.267	1.00	28.40	H	C
ATOM	7922	O	GLN	H	82	-1.162	-17.960	-28.976	1.00	33.56	H	O
ATOM	7924	N	ILE	H	83	0.263	-17.441	-27.303	1.00	27.74	H	N
ATOM	7925	CA	ILE	H	83	0.572	-18.820	-26.920	1.00	27.63	H	C
ATOM	7927	CB	ILE	H	83	2.095	-19.071	-26.851	1.00	24.57	H	C
ATOM	7929	CG1	ILE	H	83	2.766	-18.679	-28.175	1.00	24.23	H	C
ATOM	7932	CD1	ILE	H	83	4.277	-18.740	-28.147	1.00	26.68	H	C
ATOM	7936	CG2	ILE	H	83	2.376	-20.521	-26.507	1.00	24.12	H	C
ATOM	7940	C	ILE	H	83	-0.028	-19.006	-25.541	1.00	29.51	H	C
ATOM	7941	O	ILE	H	83	0.241	-18.194	-24.657	1.00	33.13	H	O
ATOM	7943	N	SER	H	84	-0.844	-20.051	-25.364	1.00	30.58	H	N
ATOM	7944	CA	SER	H	84	-1.512	-20.334	-24.080	1.00	32.14	H	C
ATOM	7946	CB	SER	H	84	-3.016	-20.527	-24.284	1.00	32.52	H	C
ATOM	7949	OG	SER	H	84	-3.659	-19.271	-24.366	1.00	36.26	H	O
ATOM	7951	C	SER	H	84	-0.938	-21.551	-23.364	1.00	30.87	H	C
ATOM	7952	O	SER	H	84	-0.371	-22.435	-23.992	1.00	31.03	H	O
ATOM	7954	N	SER	H	85	-1.130	-21.582	-22.044	1.00	34.35	H	N
ATOM	7955	CA	SER	H	85	-0.602	-22.637	-21.159	1.00	34.09	H	C
ATOM	7957	CB	SER	H	85	-1.422	-23.925	-21.297	1.00	34.24	H	C
ATOM	7960	OG	SER	H	85	-2.705	-23.727	-20.732	1.00	37.26	H	O
ATOM	7962	C	SER	H	85	0.895	-22.898	-21.375	1.00	28.97	H	C
ATOM	7963	O	SER	H	85	1.308	-24.040	-21.589	1.00	30.16	H	O
ATOM	7965	N	LEU	H	86	1.681	-21.823	-21.260	1.00	22.60	H	N
ATOM	7966	CA	LEU	H	86	3.116	-21.814	-21.578	1.00	32.94	H	C
ATOM	7968	CB	LEU	H	86	3.754	-20.469	-21.176	1.00	29.80	H	C
ATOM	7971	CG	LEU	H	86	3.938	-19.446	-22.312	1.00	28.47	H	C
ATOM	7973	CD1	LEU	H	86	2.980	-19.686	-23.468	1.00	31.08	H	C
ATOM	7977	CD2	LEU	H	86	3.818	-18.012	-21.827	1.00	28.39	H	C
ATOM	7981	C	LEU	H	86	3.911	-22.967	-20.976	1.00	34.29	H	C
ATOM	7982	O	LEU	H	86	3.667	-23.368	-19.848	1.00	25.73	H	O

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ATOM   7984  N   LYS H  87       4.850 -23.500 -21.757  1.00 32.06      H    N
ATOM   7985  CA  LYS H  87       5.719 -24.585 -21.303  1.00 37.94      H    C
ATOM   7987  CB  LYS H  87       5.423 -25.855 -22.106  1.00 43.35      H    C
ATOM   7990  CG  LYS H  87       4.077 -26.520 -21.790  1.00 45.90      H    C
ATOM   7993  CD  LYS H  87       3.521 -27.306 -22.994  1.00 45.57      H    C
ATOM   7996  CE  LYS H  87       4.511 -28.327 -23.578  1.00 47.22      H    C
ATOM   7999  NZ  LYS H  87       4.844 -29.430 -22.627  1.00 50.73      H    N
ATOM   8003  C   LYS H  87       7.186 -24.194 -21.480  1.00 37.32      H    C
ATOM   8004  O   LYS H  87       7.498 -23.305 -22.265  1.00 41.73      H    O
ATOM   8006  N   ALA H  88       8.083 -24.868 -20.763  1.00 36.49      H    N
ATOM   8007  CA  ALA H  88       9.522 -24.584 -20.850  1.00 33.56      H    C
ATOM   8009  CB  ALA H  88      10.286 -25.472 -19.896  1.00 29.59      H    C
ATOM   8013  C   ALA H  88      10.057 -24.744 -22.282  1.00 35.50      H    C
ATOM   8014  O   ALA H  88      10.938 -23.990 -22.717  1.00 32.47      H    O
ATOM   8016  N   GLU H  89       9.490 -25.705 -23.012  1.00 36.02      H    N
ATOM   8017  CA  GLU H  89       9.877 -25.999 -24.406  1.00 34.85      H    C
ATOM   8019  CB  GLU H  89       9.394 -27.388 -24.865  1.00 40.24      H    C
ATOM   8022  CG  GLU H  89       8.329 -28.073 -23.995  1.00 42.76      H    C
ATOM   8025  CD  GLU H  89       8.891 -28.615 -22.687  1.00 46.41      H    C
ATOM   8026  OE1 GLU H  89       8.148 -28.613 -21.674  1.00 44.25      H    O
ATOM   8027  OE2 GLU H  89      10.078 -29.025 -22.668  1.00 47.20      H    O
ATOM   8028  C   GLU H  89       9.422 -24.930 -25.406  1.00 31.29      H    C
ATOM   8029  O   GLU H  89       9.911 -24.888 -26.530  1.00 33.83      H    O
ATOM   8031  N   ASP H  90       8.497 -24.068 -24.995  1.00 30.11      H    N
ATOM   8032  CA  ASP H  90       8.141 -22.888 -25.789  1.00 28.57      H    C
ATOM   8034  CB  ASP H  90       6.783 -22.359 -25.377  1.00 28.15      H    C
ATOM   8037  CG  ASP H  90       5.706 -23.378 -25.563  1.00 25.63      H    C
ATOM   8038  OD1 ASP H  90       5.786 -24.151 -26.549  1.00  6.66      H    O
ATOM   8039  OD2 ASP H  90       4.795 -23.412 -24.717  1.00  2.00      H    O
ATOM   8040  C   ASP H  90       9.142 -21.750 -25.695  1.00 28.95      H    C
ATOM   8041  O   ASP H  90       8.898 -20.673 -26.247  1.00 36.03      H    O
ATOM   8043  N   THR H  91      10.246 -21.964 -24.985  1.00 26.59      H    N
ATOM   8044  CA  THR H  91      11.308 -20.980 -24.937  1.00 24.21      H    C
ATOM   8046  CB  THR H  91      12.339 -21.303 -23.845  1.00 22.44      H    C
ATOM   8048  OG1 THR H  91      11.709 -21.251 -22.553  1.00 26.55      H    O
ATOM   8050  CG2 THR H  91      13.511 -20.309 -23.909  1.00 23.69      H    C
ATOM   8054  C   THR H  91      11.939 -21.007 -26.326  1.00 22.91      H    C
ATOM   8055  O   THR H  91      12.536 -22.003 -26.703  1.00 23.54      H    O
ATOM   8057  N   ALA H  92      11.734 -19.935 -27.088  1.00 21.73      H    N
ATOM   8058  CA  ALA H  92      12.217 -19.849 -28.475  1.00 24.07      H    C
ATOM   8060  CB  ALA H  92      11.421 -20.776 -29.367  1.00 14.67      H    C
ATOM   8064  C   ALA H  92      12.085 -18.419 -28.995  1.00 25.06      H    C
ATOM   8065  O   ALA H  92      11.316 -17.612 -28.455  1.00 28.86      H    O
ATOM   8067  N   VAL H  93      12.847 -18.114 -30.034  1.00 28.61      H    N
ATOM   8068  CA  VAL H  93      12.578 -16.929 -30.830  1.00 25.63      H    C
ATOM   8070  CB  VAL H  93      13.769 -16.482 -31.660  1.00 18.28      H    C
ATOM   8072  CG1 VAL H  93      13.443 -15.175 -32.350  1.00  9.83      H    C
ATOM   8076  CG2 VAL H  93      14.993 -16.317 -30.775  1.00 18.78      H    C
ATOM   8080  C   VAL H  93      11.403 -17.239 -31.751  1.00 24.01      H    C
ATOM   8081  O   VAL H  93      11.335 -18.316 -32.338  1.00 20.21      H    O
ATOM   8083  N   TYR H  94      10.468 -16.294 -31.798  1.00 25.45      H    N
ATOM   8084  CA  TYR H  94       9.279 -16.332 -32.627  1.00 22.08      H    C
ATOM   8086  CB  TYR H  94       8.031 -16.119 -31.747  1.00 19.33      H    C
ATOM   8089  CG  TYR H  94       7.781 -17.302 -30.864  1.00 16.65      H    C
ATOM   8090  CD1 TYR H  94       7.088 -18.400 -31.349  1.00 18.77      H    C
ATOM   8092  CE1 TYR H  94       6.884 -19.527 -30.576  1.00 18.65      H    C
ATOM   8094  CZ  TYR H  94       7.369 -19.570 -29.295  1.00 17.90      H    C
ATOM   8095  OH  TYR H  94       7.156 -20.710 -28.562  1.00 19.11      H    O
ATOM   8097  CE2 TYR H  94       8.087 -18.488 -28.773  1.00 18.42      H    C
ATOM   8099  CD2 TYR H  94       8.295 -17.365 -29.566  1.00 20.37      H    C
ATOM   8101  C   TYR H  94       9.417 -15.205 -33.637  1.00 22.15      H    C
ATOM   8102  O   TYR H  94       9.566 -14.050 -33.259  1.00 26.25      H    O
ATOM   8104  N   TYR H  95       9.388 -15.550 -34.917  1.00 24.17      H    N
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ATOM	8105	CA	TYR	H	95	9.444	-14.575	-36.000	1.00	24.88	H	C
ATOM	8107	CB	TYR	H	95	10.419	-15.025	-37.068	1.00	24.21	H	C
ATOM	8110	CG	TYR	H	95	11.872	-15.137	-36.687	1.00	27.68	H	C
ATOM	8111	CD1	TYR	H	95	12.701	-14.024	-36.746	1.00	29.70	H	C
ATOM	8113	CE1	TYR	H	95	14.054	-14.119	-36.468	1.00	27.47	H	C
ATOM	8115	CZ	TYR	H	95	14.592	-15.334	-36.133	1.00	25.18	H	C
ATOM	8116	OH	TYR	H	95	15.923	-15.377	-35.853	1.00	26.94	H	O
ATOM	8118	CE2	TYR	H	95	13.799	-16.474	-36.075	1.00	23.47	H	C
ATOM	8120	CD2	TYR	H	95	12.447	-16.373	-36.369	1.00	23.66	H	C
ATOM	8122	C	TYR	H	95	8.107	-14.451	-36.720	1.00	27.83	H	C
ATOM	8123	O	TYR	H	95	7.320	-15.401	-36.776	1.00	28.13	H	O
ATOM	8125	N	CYS	H	96	7.882	-13.282	-37.311	1.00	28.29	H	N
ATOM	8126	CA	CYS	H	96	6.873	-13.133	-38.351	1.00	27.75	H	C
ATOM	8128	CB	CYS	H	96	5.953	-11.955	-38.049	1.00	29.00	H	C
ATOM	8131	SG	CYS	H	96	6.759	-10.339	-37.808	1.00	28.42	H	S
ATOM	8133	C	CYS	H	96	7.596	-12.927	-39.672	1.00	23.39	H	C
ATOM	8134	O	CYS	H	96	8.631	-12.269	-39.691	1.00	22.91	H	O
ATOM	8136	N	GLU	H	97	7.088	-13.527	-40.749	1.00	24.86	H	N
ATOM	8137	CA	GLU	H	97	7.499	-13.146	-42.110	1.00	28.71	H	C
ATOM	8139	CB	GLU	H	97	8.492	-14.120	-42.801	1.00	28.02	H	C
ATOM	8142	CG	GLU	H	97	8.072	-15.550	-42.863	1.00	30.58	H	C
ATOM	8145	CD	GLU	H	97	8.371	-16.258	-44.205	1.00	28.90	H	C
ATOM	8146	OE1	GLU	H	97	9.353	-15.977	-44.942	1.00	26.45	H	O
ATOM	8147	OE2	GLU	H	97	7.578	-17.146	-44.515	1.00	33.22	H	O
ATOM	8148	C	GLU	H	97	6.303	-12.931	-43.004	1.00	26.95	H	C
ATOM	8149	O	GLU	H	97	5.275	-13.619	-42.911	1.00	28.62	H	O
ATOM	8151	N	ARG	H	98	6.459	-11.958	-43.885	1.00	25.24	H	N
ATOM	8152	CA	ARG	H	98	5.380	-11.568	-44.755	1.00	26.03	H	C
ATOM	8154	CB	ARG	H	98	5.588	-10.135	-45.268	1.00	19.72	H	C
ATOM	8157	CG	ARG	H	98	4.460	-9.687	-46.156	1.00	23.64	H	C
ATOM	8160	CD	ARG	H	98	4.737	-8.400	-46.870	1.00	24.21	H	C
ATOM	8163	NE	ARG	H	98	5.776	-8.516	-47.882	1.00	23.55	H	N
ATOM	8165	CZ	ARG	H	98	6.033	-7.588	-48.796	1.00	26.06	H	C
ATOM	8166	NH1	ARG	H	98	5.322	-6.461	-48.839	1.00	25.80	H	N
ATOM	8169	NH2	ARG	H	98	7.007	-7.778	-49.670	1.00	24.64	H	N
ATOM	8172	C	ARG	H	98	5.375	-12.590	-45.882	1.00	25.96	H	C
ATOM	8173	O	ARG	H	98	6.432	-12.892	-46.428	1.00	19.43	H	O
ATOM	8175	N	GLU	H	99	4.199	-13.146	-46.180	1.00	24.19	H	N
ATOM	8176	CA	GLU	H	99	3.993	-14.056	-47.314	1.00	25.74	H	C
ATOM	8178	CB	GLU	H	99	2.913	-15.053	-46.896	1.00	25.41	H	C
ATOM	8181	CG	GLU	H	99	2.658	-16.148	-47.897	1.00	26.70	H	C
ATOM	8184	CD	GLU	H	99	3.901	-16.907	-48.290	1.00	26.55	H	C
ATOM	8185	OE1	GLU	H	99	4.844	-16.951	-47.485	1.00	25.94	H	O
ATOM	8186	OE2	GLU	H	99	3.926	-17.477	-49.396	1.00	20.58	H	O
ATOM	8187	C	GLU	H	99	3.520	-13.166	-48.461	1.00	26.84	H	C
ATOM	8188	O	GLU	H	99	2.323	-12.940	-48.624	1.00	32.10	H	O
ATOM	8190	N	GLY	H	100	4.403	-12.620	-49.285	1.00	33.16	H	N
ATOM	8191	CA	GLY	H	100	5.128	-13.282	-50.386	1.00	22.73	H	C
ATOM	8194	C	GLY	H	100	5.721	-11.963	-50.904	1.00	22.89	H	C
ATOM	8195	O	GLY	H	100	6.007	-11.080	-50.090	1.00	23.35	H	O
ATOM	8197	N	GLY	H	101	5.898	-11.758	-52.203	1.00	25.39	H	N
ATOM	8198	CA	GLY	H	101	6.686	-10.601	-52.665	1.00	27.71	H	C
ATOM	8201	C	GLY	H	101	8.165	-10.701	-52.249	1.00	33.17	H	C
ATOM	8202	O	GLY	H	101	8.648	-11.799	-51.922	1.00	30.77	H	O
ATOM	8204	N	VAL	H	108	8.882	-9.567	-52.282	1.00	30.83	H	N
ATOM	8205	CA	VAL	H	108	10.258	-9.468	-51.775	1.00	27.55	H	C
ATOM	8207	CB	VAL	H	108	10.829	-8.011	-51.914	1.00	27.41	H	C
ATOM	8209	CG1	VAL	H	108	12.227	-7.873	-51.289	1.00	17.94	H	C
ATOM	8213	CG2	VAL	H	108	10.882	-7.599	-53.385	1.00	28.02	H	C
ATOM	8217	C	VAL	H	108	10.205	-9.894	-50.316	1.00	32.10	H	C
ATOM	8218	O	VAL	H	108	9.407	-9.360	-49.551	1.00	33.42	H	O
ATOM	8220	N	ASN	H	109	11.032	-10.872	-49.937	1.00	31.28	H	N
ATOM	8221	CA	ASN	H	109	10.868	-11.548	-48.648	1.00	27.01	H	C

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ATOM   8223  CB  ASN H 109      11.589 -12.902 -48.676  1.00 26.72        H    C
ATOM   8226  CG  ASN H 109      11.203 -13.812 -47.519  1.00 24.94        H    C
ATOM   8227  OD1 ASN H 109      10.090 -14.318 -47.456  1.00 26.44        H    O
ATOM   8228  ND2 ASN H 109      12.142 -14.060 -46.630  1.00 25.17        H    N
ATOM   8231  C   ASN H 109      11.331 -10.710 -47.452  1.00 26.64        H    C
ATOM   8232  O   ASN H 109      12.497 -10.318 -47.361  1.00 24.08        H    O
ATOM   8234  N   ASN H 110      10.395 -10.441 -46.542  1.00 26.69        H    N
ATOM   8235  CA  ASN H 110      10.681  -9.710 -45.323  1.00 28.03        H    C
ATOM   8237  CB  ASN H 110       9.995  -8.342 -45.320  1.00 27.80        H    C
ATOM   8240  CG  ASN H 110      10.616  -7.379 -46.301  1.00 27.42        H    C
ATOM   8241  OD1 ASN H 110      11.457  -6.566 -45.934  1.00 32.21        H    O
ATOM   8242  ND2 ASN H 110      10.204  -7.464 -47.555  1.00 22.21        H    N
ATOM   8245  C   ASN H 110      10.287 -10.482 -44.074  1.00 26.90        H    C
ATOM   8246  O   ASN H 110       9.257 -11.158 -44.034  1.00 27.05        H    O
ATOM   8248  N   TRP H 111      11.139 -10.355 -43.063  1.00 27.87        H    N
ATOM   8249  CA  TRP H 111      10.959 -10.970 -41.764  1.00 28.11        H    C
ATOM   8251  CB  TRP H 111      12.104 -11.936 -41.497  1.00 24.76        H    C
ATOM   8254  CG  TRP H 111      12.001 -13.247 -42.198  1.00 20.76        H    C
ATOM   8255  CD1 TRP H 111      11.996 -13.469 -43.543  1.00 23.07        H    C
ATOM   8257  NE1 TRP H 111      11.905 -14.812 -43.799  1.00 24.95        H    N
ATOM   8259  CE2 TRP H 111      11.841 -15.485 -42.612  1.00 20.80        H    C
ATOM   8260  CD2 TRP H 111      11.908 -14.526 -41.580  1.00 16.55        H    C
ATOM   8261  CE3 TRP H 111      11.889 -14.958 -40.250  1.00 21.08        H    C
ATOM   8263  CZ3 TRP H 111      11.799 -16.313 -40.000  1.00 23.79        H    C
ATOM   8265  CH2 TRP H 111      11.751 -17.253 -41.060  1.00 23.87        H    C
ATOM   8267  CZ2 TRP H 111      11.756 -16.855 -42.362  1.00 22.29        H    C
ATOM   8269  C   TRP H 111      11.000  -9.892 -40.692  1.00 28.71        H    C
ATOM   8270  O   TRP H 111      11.654  -8.862 -40.856  1.00 27.45        H    O
ATOM   8272  N   GLY H 112      10.321 -10.149 -39.582  1.00 26.40        H    N
ATOM   8273  CA  GLY H 112      10.537  -9.381 -38.382  1.00 26.14        H    C
ATOM   8276  C   GLY H 112      11.850  -9.791 -37.740  1.00 23.03        H    C
ATOM   8277  O   GLY H 112      12.415 -10.796 -38.102  1.00 26.04        H    O
ATOM   8279  N   GLN H 113      12.301  -9.019 -36.753  1.00 29.04        H    N
ATOM   8280  CA  GLN H 113      13.587  -9.258 -36.080  1.00 28.04        H    C
ATOM   8282  CB  GLN H 113      14.095  -7.966 -35.379  1.00 26.51        H    C
ATOM   8285  CG  GLN H 113      13.579  -7.666 -33.949  1.00 26.20        H    C
ATOM   8288  CD  GLN H 113      12.229  -6.976 -33.914  1.00 26.07        H    C
ATOM   8289  OE1 GLN H 113      11.545  -6.853 -34.941  1.00 24.30        H    O
ATOM   8290  NE2 GLN H 113      11.841  -6.506 -32.733  1.00 25.24        H    N
ATOM   8293  C   GLN H 113      13.559 -10.441 -35.099  1.00 27.87        H    C
ATOM   8294  O   GLN H 113      14.615 -10.938 -34.695  1.00 24.88        H    O
ATOM   8296  N   GLY H 114      12.358 -10.888 -34.737  1.00 26.83        H    N
ATOM   8297  CA  GLY H 114      12.175 -11.930 -33.735  1.00 25.49        H    C
ATOM   8300  C   GLY H 114      11.842 -11.386 -32.370  1.00 28.17        H    C
ATOM   8301  O   GLY H 114      12.221 -10.274 -32.041  1.00 31.34        H    O
ATOM   8303  N   THR H 115      11.087 -12.172 -31.600  1.00 28.55        H    N
ATOM   8304  CA  THR H 115      10.838 -11.953 -30.181  1.00 25.21        H    C
ATOM   8306  CB  THR H 115       9.316 -11.733 -29.891  1.00 27.30        H    C
ATOM   8308  OG1 THR H 115       8.819 -10.600 -30.629  1.00 26.56        H    O
ATOM   8310  CG2 THR H 115       9.065 -11.518 -28.418  1.00 24.09        H    C
ATOM   8314  C   THR H 115      11.313 -13.233 -29.453  1.00 27.22        H    C
ATOM   8315  O   THR H 115      10.913 -14.331 -29.827  1.00 27.51        H    O
ATOM   8317  N   LEU H 116      12.179 -13.106 -28.444  1.00 26.19        H    N
ATOM   8318  CA  LEU H 116      12.580 -14.274 -27.647  1.00 25.35        H    C
ATOM   8320  CB  LEU H 116      14.056 -14.211 -27.185  1.00 24.29        H    C
ATOM   8323  CG  LEU H 116      14.620 -15.254 -26.185  1.00 24.64        H    C
ATOM   8325  CD1 LEU H 116      14.480 -16.702 -26.604  1.00 21.54        H    C
ATOM   8329  CD2 LEU H 116      16.091 -14.995 -25.904  1.00 26.59        H    C
ATOM   8333  C   LEU H 116      11.644 -14.327 -26.466  1.00 25.68        H    C
ATOM   8334  O   LEU H 116      11.549 -13.374 -25.706  1.00 25.56        H    O
ATOM   8336  N   VAL H 117      10.921 -15.433 -26.348  1.00 25.43        H    N
ATOM   8337  CA  VAL H 117      10.101 -15.696 -25.182  1.00 17.92        H    C
ATOM   8339  CB  VAL H 117       8.679 -16.133 -25.576  1.00 17.75        H    C
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ATOM   8341  CG1 VAL H 117       7.822 -16.410 -24.318  1.00 14.64           H    C
ATOM   8345  CG2 VAL H 117       8.034 -15.077 -26.455  1.00 17.75           H    C
ATOM   8349  C   VAL H 117      10.767 -16.794 -24.364  1.00 17.37           H    C
ATOM   8350  O   VAL H 117      11.029 -17.882 -24.870  1.00 12.33           H    O
ATOM   8352  N   THR H 118      11.033 -16.505 -23.091  1.00 23.95           H    N
ATOM   8353  CA  THR H 118      11.612 -17.474 -22.172  1.00 22.92           H    C
ATOM   8355  CB  THR H 118      12.809 -16.857 -21.406  1.00 27.19           H    C
ATOM   8357  OG1 THR H 118      13.689 -16.202 -22.330  1.00 25.50           H    O
ATOM   8359  CG2 THR H 118      13.578 -17.919 -20.628  1.00 26.58           H    C
ATOM   8363  C   THR H 118      10.521 -17.888 -21.185  1.00 24.48           H    C
ATOM   8364  O   THR H 118       9.863 -17.032 -20.590  1.00 23.34           H    O
ATOM   8366  N   VAL H 119      10.286 -19.190 -21.049  1.00 24.92           H    N
ATOM   8367  CA  VAL H 119       9.358 -19.673 -20.031  1.00 23.47           H    C
ATOM   8369  CB  VAL H 119       8.319 -20.684 -20.569  1.00 15.83           H    C
ATOM   8371  CG1 VAL H 119       7.400 -21.149 -19.426  1.00 20.19           H    C
ATOM   8375  CG2 VAL H 119       7.473 -20.048 -21.679  1.00 11.41           H    C
ATOM   8379  C   VAL H 119      10.154 -20.290 -18.885  1.00 25.93           H    C
ATOM   8380  O   VAL H 119      10.779 -21.336 -19.051  1.00 23.45           H    O
ATOM   8382  N   SER H 120      10.139 -19.622 -17.731  1.00 29.66           H    N
ATOM   8383  CA  SER H 120      10.841 -20.115 -16.538  1.00 33.71           H    C
ATOM   8385  CB  SER H 120      12.296 -19.631 -16.546  1.00 35.78           H    C
ATOM   8388  OG  SER H 120      12.978 -20.008 -15.361  1.00 35.68           H    O
ATOM   8390  C   SER H 120      10.149 -19.636 -15.270  1.00 32.74           H    C
ATOM   8391  O   SER H 120       9.485 -18.600 -15.292  1.00 33.43           H    O
ATOM   8393  N   SER H 121      10.307 -20.388 -14.176  1.00 35.59           H    N
ATOM   8394  CA  SER H 121       9.823 -19.942 -12.848  1.00 40.05           H    C
ATOM   8396  CB  SER H 121       9.795 -21.097 -11.832  1.00 41.66           H    C
ATOM   8399  OG  SER H 121       8.549 -21.773 -11.851  1.00 42.51           H    O
ATOM   8401  C   SER H 121      10.679 -18.809 -12.284  1.00 41.69           H    C
ATOM   8402  O   SER H 121      10.228 -18.079 -11.409  1.00 42.91           H    O
ATOM   8404  N   ALA H 122      11.912 -18.680 -12.782  1.00 44.09           H    N
ATOM   8405  CA  ALA H 122      12.863 -17.670 -12.307  1.00 43.86           H    C
ATOM   8407  CB  ALA H 122      14.224 -17.882 -12.963  1.00 44.95           H    C
ATOM   8411  C   ALA H 122      12.380 -16.248 -12.565  1.00 45.54           H    C
ATOM   8412  O   ALA H 122      11.695 -15.983 -13.556  1.00 47.85           H    O
ATOM   8414  N   SER H 123      12.739 -15.338 -11.662  1.00 45.30           H    N
ATOM   8415  CA  SER H 123      12.402 -13.920 -11.803  1.00 45.61           H    C
ATOM   8417  CB  SER H 123      12.273 -13.270 -10.427  1.00 47.10           H    C
ATOM   8420  OG  SER H 123      13.268 -13.766  -9.548  1.00 49.06           H    O
ATOM   8422  C   SER H 123      13.444 -13.181 -12.655  1.00 44.44           H    C
ATOM   8423  O   SER H 123      14.572 -13.660 -12.839  1.00 40.43           H    O
ATOM   8425  N   THR H 124      13.053 -12.017 -13.171  1.00 45.08           H    N
ATOM   8426  CA  THR H 124      13.932 -11.201 -14.010  1.00 46.45           H    C
ATOM   8428  CB  THR H 124      13.131 -10.126 -14.806  1.00 49.48           H    C
ATOM   8430  OG1 THR H 124      13.984  -9.503 -15.777  1.00 51.02           H    O
ATOM   8432  CG2 THR H 124      12.539  -9.060 -13.877  1.00 50.62           H    C
ATOM   8436  C   THR H 124      15.043 -10.537 -13.180  1.00 46.82           H    C
ATOM   8437  O   THR H 124      14.781  -9.976 -12.106  1.00 48.27           H    O
ATOM   8439  N   LYS H 125      16.280 -10.630 -13.670  1.00 44.93           H    N
ATOM   8440  CA  LYS H 125      17.426  -9.981 -13.032  1.00 43.78           H    C
ATOM   8442  CB  LYS H 125      18.288 -10.999 -12.269  1.00 45.93           H    C
ATOM   8445  CG  LYS H 125      18.972 -10.411 -11.018  1.00 45.78           H    C
ATOM   8448  CD  LYS H 125      20.118 -11.290 -10.503  1.00 46.44           H    C
ATOM   8451  CE  LYS H 125      20.175 -11.316  -8.970  1.00 47.72           H    C
ATOM   8454  NZ  LYS H 125      20.117  -9.956  -8.344  1.00 47.92           H    N
ATOM   8458  C   LYS H 125      18.282  -9.264 -14.076  1.00 42.52           H    C
ATOM   8459  O   LYS H 125      18.628  -9.849 -15.110  1.00 37.91           H    O
ATOM   8461  N   GLY H 126      18.623  -8.004 -13.788  1.00 39.38           H    N
ATOM   8462  CA  GLY H 126      19.497  -7.206 -14.643  1.00 37.54           H    C
ATOM   8465  C   GLY H 126      20.952  -7.521 -14.360  1.00 35.67           H    C
ATOM   8466  O   GLY H 126      21.295  -7.850 -13.223  1.00 34.54           H    O
ATOM   8468  N   PRO H 127      21.820  -7.419 -15.386  1.00 35.15           H    N
ATOM   8469  CA  PRO H 127      23.225  -7.806 -15.243  1.00 36.68           H    C
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ATOM   8471  CB  PRO H 127      23.735  -7.849 -16.691  1.00 36.51           H     C
ATOM   8474  CG  PRO H 127      22.860  -6.921 -17.437  1.00 36.24           H     C
ATOM   8477  CD  PRO H 127      21.521  -6.921 -16.742  1.00 36.45           H     C
ATOM   8480  C   PRO H 127      24.086  -6.832 -14.438  1.00 38.63           H     C
ATOM   8481  O   PRO H 127      23.705  -5.677 -14.222  1.00 40.90           H     O
ATOM   8482  N   SER H 128      25.236  -7.335 -13.998  1.00 36.31           H     N
ATOM   8483  CA  SER H 128      26.320  -6.519 -13.493  1.00 34.83           H     C
ATOM   8485  CB  SER H 128      26.834  -7.080 -12.165  1.00 33.89           H     C
ATOM   8488  OG  SER H 128      25.866  -6.929 -11.137  1.00 31.42           H     O
ATOM   8490  C   SER H 128      27.420  -6.540 -14.551  1.00 34.96           H     C
ATOM   8491  O   SER H 128      27.811  -7.602 -15.021  1.00 30.40           H     O
ATOM   8493  N   VAL H 129      27.895  -5.363 -14.943  1.00 36.06           H     N
ATOM   8494  CA  VAL H 129      28.932  -5.253 -15.964  1.00 34.28           H     C
ATOM   8496  CB  VAL H 129      28.555  -4.218 -17.054  1.00 33.77           H     C
ATOM   8498  CG1 VAL H 129      29.584  -4.213 -18.178  1.00 35.46           H     C
ATOM   8502  CG2 VAL H 129      27.170  -4.498 -17.601  1.00 30.77           H     C
ATOM   8506  C   VAL H 129      30.242  -4.855 -15.284  1.00 32.58           H     C
ATOM   8507  O   VAL H 129      30.314  -3.824 -14.611  1.00 34.17           H     O
ATOM   8509  N   PHE H 130      31.256  -5.701 -15.447  1.00 32.41           H     N
ATOM   8510  CA  PHE H 130      32.592  -5.465 -14.917  1.00 33.72           H     C
ATOM   8512  CB  PHE H 130      33.018  -6.606 -13.981  1.00 33.49           H     C
ATOM   8515  CG  PHE H 130      32.019  -6.918 -12.898  1.00 32.75           H     C
ATOM   8516  CD1 PHE H 130      31.769  -6.007 -11.883  1.00 32.01           H     C
ATOM   8518  CE1 PHE H 130      30.846  -6.288 -10.883  1.00 32.30           H     C
ATOM   8520  CZ  PHE H 130      30.171  -7.491 -10.886  1.00 32.77           H     C
ATOM   8522  CE2 PHE H 130      30.414  -8.412 -11.893  1.00 33.10           H     C
ATOM   8524  CD2 PHE H 130      31.338  -8.127 -12.888  1.00 32.02           H     C
ATOM   8526  C   PHE H 130      33.576  -5.379 -16.082  1.00 34.31           H     C
ATOM   8527  O   PHE H 130      33.401  -6.056 -17.088  1.00 35.96           H     O
ATOM   8529  N   PRO H 131      34.618  -4.540 -15.954  1.00 35.83           H     N
ATOM   8530  CA  PRO H 131      35.599  -4.412 -17.033  1.00 34.25           H     C
ATOM   8532  CB  PRO H 131      36.390  -3.163 -16.634  1.00 35.48           H     C
ATOM   8535  CG  PRO H 131      36.292  -3.113 -15.147  1.00 34.74           H     C
ATOM   8538  CD  PRO H 131      34.929  -3.656 -14.811  1.00 33.90           H     C
ATOM   8541  C   PRO H 131      36.540  -5.602 -17.138  1.00 31.80           H     C
ATOM   8542  O   PRO H 131      36.770  -6.297 -16.156  1.00 32.76           H     O
ATOM   8543  N   LEU H 132      37.054  -5.832 -18.339  1.00 33.15           H     N
ATOM   8544  CA  LEU H 132      38.171  -6.740 -18.563  1.00 36.33           H     C
ATOM   8546  CB  LEU H 132      37.803  -7.848 -19.560  1.00 36.81           H     C
ATOM   8549  CG  LEU H 132      36.663  -8.793 -19.159  1.00 35.77           H     C
ATOM   8551  CD1 LEU H 132      36.248  -9.650 -20.337  1.00 32.21           H     C
ATOM   8555  CD2 LEU H 132      37.060  -9.660 -17.977  1.00 32.93           H     C
ATOM   8559  C   LEU H 132      39.284  -5.859 -19.104  1.00 35.97           H     C
ATOM   8560  O   LEU H 132      39.373  -5.617 -20.306  1.00 36.14           H     O
ATOM   8562  N   ALA H 133      40.105  -5.352 -18.193  1.00 39.87           H     N
ATOM   8563  CA  ALA H 133      41.058  -4.293 -18.503  1.00 43.26           H     C
ATOM   8565  CB  ALA H 133      41.570  -3.654 -17.216  1.00 42.36           H     C
ATOM   8569  C   ALA H 133      42.229  -4.803 -19.334  1.00 46.24           H     C
ATOM   8570  O   ALA H 133      42.669  -5.942 -19.157  1.00 46.65           H     O
ATOM   8572  N   PRO H 134      42.751  -3.952 -20.238  1.00 49.34           H     N
ATOM   8573  CA  PRO H 134      43.908  -4.344 -21.036  1.00 51.17           H     C
ATOM   8575  CB  PRO H 134      43.853  -3.384 -22.228  1.00 48.58           H     C
ATOM   8578  CG  PRO H 134      43.136  -2.179 -21.730  1.00 47.99           H     C
ATOM   8581  CD  PRO H 134      42.299  -2.580 -20.548  1.00 47.37           H     C
ATOM   8584  C   PRO H 134      45.213  -4.195 -20.255  1.00 55.13           H     C
ATOM   8585  O   PRO H 134      45.265  -3.457 -19.272  1.00 57.14           H     O
ATOM   8586  N   SER H 135      46.254  -4.894 -20.690  1.00 59.44           H     N
ATOM   8587  CA  SER H 135      47.546  -4.863 -20.004  1.00 64.17           H     C
ATOM   8589  CB  SER H 135      47.508  -5.803 -18.794  1.00 63.79           H     C
ATOM   8592  OG  SER H 135      47.188  -7.126 -19.191  1.00 62.73           H     O
ATOM   8594  C   SER H 135      48.662  -5.261 -20.973  1.00 69.77           H     C
ATOM   8595  O   SER H 135      48.429  -5.335 -22.183  1.00 70.48           H     O
ATOM   8597  N   SER H 136      49.871  -5.493 -20.455  1.00 74.01           H     N
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ATOM   8598  CA  SER H 136      50.955  -6.075 -21.260  1.00 76.51           H     C
ATOM   8600  CB  SER H 136      52.310  -5.910 -20.561  1.00 75.21           H     C
ATOM   8603  OG  SER H 136      52.475  -6.860 -19.520  1.00 73.40           H     O
ATOM   8605  C   SER H 136      50.699  -7.565 -21.570  1.00 81.86           H     C
ATOM   8606  O   SER H 136      51.169  -8.073 -22.595  1.00 82.53           H     O
ATOM   8608  N   LYS H 137      49.962  -8.249 -20.681  1.00 85.95           H     N
ATOM   8609  CA  LYS H 137      49.586  -9.677 -20.851  1.00 85.58           H     C
ATOM   8611  CB  LYS H 137      49.404 -10.380 -19.489  1.00 85.07           H     C
ATOM   8614  CG  LYS H 137      50.663 -11.056 -18.938  1.00 83.96           H     C
ATOM   8617  CD  LYS H 137      50.949 -12.389 -19.621  1.00 83.33           H     C
ATOM   8620  CE  LYS H 137      52.144 -13.094 -18.991  1.00 83.38           H     C
ATOM   8623  NZ  LYS H 137      52.350 -14.469 -19.528  1.00 81.97           H     N
ATOM   8627  C   LYS H 137      48.319  -9.864 -21.701  1.00 87.99           H     C
ATOM   8628  O   LYS H 137      48.094 -10.953 -22.246  1.00 87.19           H     O
ATOM   8630  N   SER H 138      47.492  -8.816 -21.789  1.00 89.89           H     N
ATOM   8631  CA  SER H 138      46.409  -8.759 -22.786  1.00 89.19           H     C
ATOM   8633  CB  SER H 138      45.152  -8.063 -22.240  1.00 87.09           H     C
ATOM   8636  OG  SER H 138      44.981  -6.777 -22.805  1.00 85.82           H     O
ATOM   8638  C   SER H 138      46.901  -8.067 -24.076  1.00 90.89           H     C
ATOM   8639  O   SER H 138      46.111  -7.837 -24.993  1.00 91.36           H     O
ATOM   8641  N   THR H 139      48.198  -7.735 -24.123  1.00 91.70           H     N
ATOM   8642  CA  THR H 139      48.863  -7.192 -25.315  1.00 90.51           H     C
ATOM   8644  CB  THR H 139      49.881  -6.047 -24.953  1.00 91.36           H     C
ATOM   8646  OG1 THR H 139      49.175  -4.836 -24.640  1.00 90.80           H     O
ATOM   8648  CG2 THR H 139      50.854  -5.774 -26.105  1.00 90.91           H     C
ATOM   8652  C   THR H 139      49.586  -8.321 -26.057  1.00 89.25           H     C
ATOM   8653  O   THR H 139      50.165  -9.216 -25.433  1.00 88.53           H     O
ATOM   8655  N   SER H 140      49.537  -8.268 -27.388  1.00 88.72           H     N
ATOM   8656  CA  SER H 140      50.203  -9.239 -28.260  1.00 87.83           H     C
ATOM   8658  CB  SER H 140      49.166  -9.896 -29.187  1.00 88.22           H     C
ATOM   8661  OG  SER H 140      49.601 -11.168 -29.637  1.00 88.23           H     O
ATOM   8663  C   SER H 140      51.307  -8.524 -29.064  1.00 87.24           H     C
ATOM   8664  O   SER H 140      51.348  -8.590 -30.300  1.00 86.84           H     O
ATOM   8666  N   GLY H 141      52.202  -7.843 -28.343  1.00 84.48           H     N
ATOM   8667  CA  GLY H 141      53.181  -6.941 -28.955  1.00 80.57           H     C
ATOM   8670  C   GLY H 141      52.551  -5.596 -29.299  1.00 79.17           H     C
ATOM   8671  O   GLY H 141      52.744  -4.607 -28.579  1.00 80.70           H     O
ATOM   8673  N   GLY H 142      51.787  -5.570 -30.394  1.00 73.79           H     N
ATOM   8674  CA  GLY H 142      51.143  -4.346 -30.892  1.00 68.18           H     C
ATOM   8677  C   GLY H 142      49.621  -4.282 -30.787  1.00 64.43           H     C
ATOM   8678  O   GLY H 142      49.046  -3.201 -30.948  1.00 64.56           H     O
ATOM   8680  N   THR H 143      48.967  -5.424 -30.540  1.00 58.05           H     N
ATOM   8681  CA  THR H 143      47.507  -5.486 -30.356  1.00 53.53           H     C
ATOM   8683  CB  THR H 143      46.874  -6.581 -31.214  1.00 52.89           H     C
ATOM   8685  OG1 THR H 143      46.968  -6.213 -32.592  1.00 53.54           H     O
ATOM   8687  CG2 THR H 143      45.409  -6.766 -30.855  1.00 54.98           H     C
ATOM   8691  C   THR H 143      47.155  -5.781 -28.908  1.00 48.91           H     C
ATOM   8692  O   THR H 143      47.838  -6.556 -28.255  1.00 47.43           H     O
ATOM   8694  N   ALA H 144      46.078  -5.168 -28.420  1.00 46.93           H     N
ATOM   8695  CA  ALA H 144      45.628  -5.345 -27.040  1.00 43.98           H     C
ATOM   8697  CB  ALA H 144      45.801  -4.056 -26.254  1.00 44.69           H     C
ATOM   8701  C   ALA H 144      44.173  -5.798 -27.000  1.00 42.19           H     C
ATOM   8702  O   ALA H 144      43.333  -5.312 -27.764  1.00 39.08           H     O
ATOM   8704  N   ALA H 145      43.878  -6.727 -26.098  1.00 40.02           H     N
ATOM   8705  CA  ALA H 145      42.515  -7.190 -25.896  1.00 36.52           H     C
ATOM   8707  CB  ALA H 145      42.483  -8.692 -25.714  1.00 35.06           H     C
ATOM   8711  C   ALA H 145      41.930  -6.503 -24.677  1.00 35.07           H     C
ATOM   8712  O   ALA H 145      42.610  -6.330 -23.658  1.00 31.26           H     O
ATOM   8714  N   LEU H 146      40.673  -6.090 -24.795  1.00 32.96           H     N
ATOM   8715  CA  LEU H 146      39.916  -5.599 -23.649  1.00 31.62           H     C
ATOM   8717  CB  LEU H 146      39.994  -4.065 -23.540  1.00 32.12           H     C
ATOM   8720  CG  LEU H 146      39.458  -3.147 -24.653  1.00 31.54           H     C
ATOM   8722  CD1 LEU H 146      38.004  -2.754 -24.416  1.00 31.93           H     C
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ATOM   8726  CD2 LEU H 146      40.304  -1.889 -24.740  1.00 31.46      H     C
ATOM   8730  C   LEU H 146      38.493  -6.107 -23.816  1.00 30.16      H     C
ATOM   8731  O   LEU H 146      38.157  -6.658 -24.863  1.00 29.67      H     O
ATOM   8733  N   GLY H 147      37.670  -5.962 -22.784  1.00 25.21      H     N
ATOM   8734  CA  GLY H 147      36.299  -6.412 -22.872  1.00 24.17      H     C
ATOM   8737  C   GLY H 147      35.433  -6.016 -21.704  1.00 24.31      H     C
ATOM   8738  O   GLY H 147      35.834  -5.225 -20.862  1.00 28.77      H     O
ATOM   8740  N   CYS H 148      34.221  -6.551 -21.685  1.00 26.43      H     N
ATOM   8741  CA  CYS H 148      33.313  -6.393 -20.563  1.00 27.92      H     C
ATOM   8743  CB  CYS H 148      32.165  -5.448 -20.926  1.00 33.54      H     C
ATOM   8746  SG  CYS H 148      32.656  -3.722 -20.942  1.00 40.27      H     S
ATOM   8748  C   CYS H 148      32.755  -7.750 -20.196  1.00 24.83      H     C
ATOM   8749  O   CYS H 148      32.440  -8.540 -21.078  1.00 24.93      H     O
ATOM   8751  N   LEU H 149      32.650  -8.011 -18.895  1.00 26.36      H     N
ATOM   8752  CA  LEU H 149      32.001  -9.212 -18.381  1.00 26.22      H     C
ATOM   8754  CB  LEU H 149      32.773  -9.778 -17.181  1.00 23.19      H     C
ATOM   8757  CG  LEU H 149      32.149 -10.967 -16.435  1.00 23.06      H     C
ATOM   8759  CD1 LEU H 149      32.183 -12.250 -17.259  1.00 15.50      H     C
ATOM   8763  CD2 LEU H 149      32.845 -11.174 -15.100  1.00 23.82      H     C
ATOM   8767  C   LEU H 149      30.580  -8.835 -17.981  1.00 24.48      H     C
ATOM   8768  O   LEU H 149      30.372  -8.039 -17.066  1.00 26.66      H     O
ATOM   8770  N   VAL H 150      29.600  -9.385 -18.686  1.00 27.87      H     N
ATOM   8771  CA  VAL H 150      28.199  -9.146 -18.358  1.00 28.86      H     C
ATOM   8773  CB  VAL H 150      27.338  -8.937 -19.625  1.00 27.47      H     C
ATOM   8775  CG1 VAL H 150      25.948  -8.463 -19.244  1.00 26.91      H     C
ATOM   8779  CG2 VAL H 150      28.000  -7.938 -20.563  1.00 26.57      H     C
ATOM   8783  C   VAL H 150      27.737 -10.371 -17.582  1.00 30.06      H     C
ATOM   8784  O   VAL H 150      27.628 -11.442 -18.148  1.00 29.12      H     O
ATOM   8786  N   LYS H 151      27.489 -10.205 -16.284  1.00 31.47      H     N
ATOM   8787  CA  LYS H 151      27.308 -11.332 -15.369  1.00 31.13      H     C
ATOM   8789  CB  LYS H 151      28.487 -11.381 -14.393  1.00 33.71      H     C
ATOM   8792  CG  LYS H 151      28.454 -12.559 -13.441  1.00 34.95      H     C
ATOM   8795  CD  LYS H 151      29.817 -12.867 -12.861  1.00 36.04      H     C
ATOM   8798  CE  LYS H 151      29.733 -14.029 -11.884  1.00 36.42      H     C
ATOM   8801  NZ  LYS H 151      28.924 -13.662 -10.695  1.00 36.41      H     N
ATOM   8805  C   LYS H 151      25.988 -11.268 -14.597  1.00 26.95      H     C
ATOM   8806  O   LYS H 151      25.433 -10.199 -14.406  1.00 24.48      H     O
ATOM   8808  N   ASP H 152      25.494 -12.439 -14.196  1.00 28.87      H     N
ATOM   8809  CA  ASP H 152      24.293 -12.607 -13.355  1.00 30.95      H     C
ATOM   8811  CB  ASP H 152      24.611 -12.269 -11.889  1.00 30.79      H     C
ATOM   8814  CG  ASP H 152      25.612 -13.245 -11.256  1.00 32.61      H     C
ATOM   8815  OD1 ASP H 152      25.662 -14.424 -11.665  1.00 30.49      H     O
ATOM   8816  OD2 ASP H 152      26.339 -12.833 -10.323  1.00 35.78      H     O
ATOM   8817  C   ASP H 152      23.023 -11.873 -13.818  1.00 30.02      H     C
ATOM   8818  O   ASP H 152      22.449 -11.074 -13.073  1.00 29.03      H     O
ATOM   8820  N   TYR H 153      22.579 -12.182 -15.039  1.00 31.11      H     N
ATOM   8821  CA  TYR H 153      21.302 -11.685 -15.564  1.00 28.57      H     C
ATOM   8823  CB  TYR H 153      21.523 -10.717 -16.728  1.00 25.83      H     C
ATOM   8826  CG  TYR H 153      22.111 -11.333 -17.974  1.00 25.30      H     C
ATOM   8827  CD1 TYR H 153      21.290 -11.823 -18.987  1.00 25.48      H     C
ATOM   8829  CE1 TYR H 153      21.817 -12.383 -20.129  1.00 23.23      H     C
ATOM   8831  CZ  TYR H 153      23.185 -12.451 -20.285  1.00 25.09      H     C
ATOM   8832  OH  TYR H 153      23.714 -13.006 -21.437  1.00 23.64      H     O
ATOM   8834  CE2 TYR H 153      24.027 -11.963 -19.296  1.00 22.64      H     C
ATOM   8836  CD2 TYR H 153      23.485 -11.410 -18.150  1.00 25.88      H     C
ATOM   8838  C   TYR H 153      20.387 -12.806 -16.031  1.00 27.96      H     C
ATOM   8839  O   TYR H 153      20.839 -13.895 -16.392  1.00 26.67      H     O
ATOM   8841  N   PHE H 154      19.094 -12.509 -16.038  1.00 31.15      H     N
ATOM   8842  CA  PHE H 154      18.081 -13.432 -16.536  1.00 31.14      H     C
ATOM   8844  CB  PHE H 154      17.779 -14.487 -15.469  1.00 36.10      H     C
ATOM   8847  CG  PHE H 154      16.937 -15.633 -15.957  1.00 33.94      H     C
ATOM   8848  CD1 PHE H 154      17.529 -16.763 -16.495  1.00 35.71      H     C
ATOM   8850  CE1 PHE H 154      16.752 -17.831 -16.944  1.00 37.65      H     C
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ATOM   8852  CZ  PHE H 154      15.368 -17.773 -16.839  1.00 37.20           H    C
ATOM   8854  CE2 PHE H 154      14.769 -16.656 -16.293  1.00 36.49           H    C
ATOM   8856  CD2 PHE H 154      15.552 -15.592 -15.850  1.00 36.52           H    C
ATOM   8858  C   PHE H 154      16.811 -12.655 -16.891  1.00 29.72           H    C
ATOM   8859  O   PHE H 154      16.451 -11.692 -16.196  1.00 34.72           H    O
ATOM   8861  N   PRO H 155      16.122 -13.051 -17.971  1.00 28.19           H    N
ATOM   8862  CA  PRO H 155      16.424 -14.094 -18.977  1.00 29.98           H    C
ATOM   8864  CB  PRO H 155      15.056 -14.339 -19.617  1.00 31.81           H    C
ATOM   8867  CG  PRO H 155      14.393 -12.997 -19.557  1.00 30.17           H    C
ATOM   8870  CD  PRO H 155      14.824 -12.403 -18.238  1.00 28.41           H    C
ATOM   8873  C   PRO H 155      17.403 -13.624 -20.046  1.00 30.23           H    C
ATOM   8874  O   PRO H 155      18.026 -12.588 -19.897  1.00 32.39           H    O
ATOM   8875  N   GLU H 156      17.541 -14.387 -21.121  1.00 30.02           H    N
ATOM   8876  CA  GLU H 156      18.088 -13.837 -22.346  1.00 29.65           H    C
ATOM   8878  CB  GLU H 156      18.420 -14.957 -23.334  1.00 28.94           H    C
ATOM   8881  CG  GLU H 156      19.667 -15.759 -22.979  1.00 28.50           H    C
ATOM   8884  CD  GLU H 156      20.933 -15.184 -23.591  1.00 32.86           H    C
ATOM   8885  OE1 GLU H 156      21.147 -13.954 -23.502  1.00 33.46           H    O
ATOM   8886  OE2 GLU H 156      21.714 -15.970 -24.169  1.00 35.71           H    O
ATOM   8887  C   GLU H 156      17.043 -12.875 -22.942  1.00 30.49           H    C
ATOM   8888  O   GLU H 156      15.865 -12.927 -22.568  1.00 27.37           H    O
ATOM   8890  N   PRO H 157      17.463 -11.990 -23.871  1.00 29.67           H    N
ATOM   8891  CA  PRO H 157      18.823 -11.747 -24.334  1.00 30.63           H    C
ATOM   8893  CB  PRO H 157      18.641 -11.662 -25.850  1.00 28.90           H    C
ATOM   8896  CG  PRO H 157      17.218 -11.160 -26.033  1.00 28.41           H    C
ATOM   8899  CD  PRO H 157      16.527 -11.188 -24.662  1.00 26.70           H    C
ATOM   8902  C   PRO H 157      19.435 -10.445 -23.820  1.00 30.25           H    C
ATOM   8903  O   PRO H 157      18.745  -9.581 -23.286  1.00 30.38           H    O
ATOM   8904  N   VAL H 158      20.743 -10.335 -23.993  1.00 33.31           H    N
ATOM   8905  CA  VAL H 158      21.472  -9.110 -23.742  1.00 35.79           H    C
ATOM   8907  CB  VAL H 158      22.574  -9.346 -22.672  1.00 36.57           H    C
ATOM   8909  CG1 VAL H 158      23.718  -8.354 -22.807  1.00 35.84           H    C
ATOM   8913  CG2 VAL H 158      21.964  -9.270 -21.280  1.00 39.04           H    C
ATOM   8917  C   VAL H 158      22.065  -8.670 -25.076  1.00 38.64           H    C
ATOM   8918  O   VAL H 158      22.383  -9.511 -25.917  1.00 38.95           H    O
ATOM   8920  N   THR H 159      22.171  -7.360 -25.285  1.00 38.90           H    N
ATOM   8921  CA  THR H 159      22.879  -6.821 -26.448  1.00 37.16           H    C
ATOM   8923  CB  THR H 159      21.970  -5.923 -27.314  1.00 38.92           H    C
ATOM   8925  OG1 THR H 159      21.381  -4.906 -26.497  1.00 41.56           H    O
ATOM   8927  CG2 THR H 159      20.869  -6.742 -27.963  1.00 39.04           H    C
ATOM   8931  C   THR H 159      24.085  -6.020 -25.963  1.00 37.27           H    C
ATOM   8932  O   THR H 159      24.012  -5.326 -24.947  1.00 32.88           H    O
ATOM   8934  N   VAL H 160      25.198  -6.136 -26.677  1.00 34.27           H    N
ATOM   8935  CA  VAL H 160      26.406  -5.400 -26.339  1.00 32.63           H    C
ATOM   8937  CB  VAL H 160      27.470  -6.292 -25.654  1.00 28.82           H    C
ATOM   8939  CG1 VAL H 160      28.608  -5.433 -25.087  1.00 27.01           H    C
ATOM   8943  CG2 VAL H 160      26.846  -7.136 -24.548  1.00 26.36           H    C
ATOM   8947  C   VAL H 160      26.996  -4.769 -27.599  1.00 33.92           H    C
ATOM   8948  O   VAL H 160      27.255  -5.457 -28.600  1.00 33.73           H    O
ATOM   8950  N   SER H 161      27.187  -3.454 -27.543  1.00 38.78           H    N
ATOM   8951  CA  SER H 161      27.907  -2.712 -28.577  1.00 38.50           H    C
ATOM   8953  CB  SER H 161      26.962  -1.744 -29.318  1.00 41.32           H    C
ATOM   8956  OG  SER H 161      26.289  -0.859 -28.428  1.00 40.60           H    O
ATOM   8958  C   SER H 161      29.089  -1.966 -27.938  1.00 36.58           H    C
ATOM   8959  O   SER H 161      29.195  -1.877 -26.713  1.00 28.41           H    O
ATOM   8961  N   TRP H 162      29.979  -1.454 -28.782  1.00 38.67           H    N
ATOM   8962  CA  TRP H 162      31.176  -0.761 -28.330  1.00 40.23           H    C
ATOM   8964  CB  TRP H 162      32.414  -1.546 -28.744  1.00 39.85           H    C
ATOM   8967  CG  TRP H 162      32.665  -2.733 -27.892  1.00 40.70           H    C
ATOM   8968  CD1 TRP H 162      32.249  -4.013 -28.122  1.00 39.62           H    C
ATOM   8970  NE1 TRP H 162      32.672  -4.836 -27.106  1.00 40.17           H    N
ATOM   8972  CE2 TRP H 162      33.381  -4.094 -26.198  1.00 40.23           H    C
ATOM   8973  CD2 TRP H 162      33.394  -2.759 -26.662  1.00 39.34           H    C
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ATOM   8974  CE3 TRP H 162      34.057  -1.786 -25.905  1.00 39.41      H    C
ATOM   8976  CZ3 TRP H 162      34.682  -2.171 -24.725  1.00 39.91      H    C
ATOM   8978  CH2 TRP H 162      34.653  -3.507 -24.290  1.00 40.48      H    C
ATOM   8980  CZ2 TRP H 162      34.007  -4.480 -25.009  1.00 39.65      H    C
ATOM   8982  C   TRP H 162      31.233   0.638 -28.928  1.00 40.19      H    C
ATOM   8983  O   TRP H 162      31.178   0.780 -30.151  1.00 40.20      H    O
ATOM   8985  N   ASN H 163      31.357   1.653 -28.070  1.00 39.33      H    N
ATOM   8986  CA  ASN H 163      31.370   3.057 -28.498  1.00 41.89      H    C
ATOM   8988  CB  ASN H 163      32.620   3.367 -29.339  1.00 40.11      H    C
ATOM   8991  CG  ASN H 163      33.911   3.215 -28.569  1.00 38.26      H    C
ATOM   8992  OD1 ASN H 163      33.926   3.170 -27.342  1.00 36.78      H    O
ATOM   8993  ND2 ASN H 163      35.016   3.156 -29.301  1.00 39.32      H    N
ATOM   8996  C   ASN H 163      30.118   3.421 -29.302  1.00 43.33      H    C
ATOM   8997  O   ASN H 163      30.221   3.864 -30.448  1.00 47.68      H    O
ATOM   8999  N   SER H 164      28.946   3.234 -28.694  1.00 44.23      H    N
ATOM   9000  CA  SER H 164      27.637   3.355 -29.373  1.00 45.69      H    C
ATOM   9002  CB  SER H 164      27.146   4.807 -29.339  1.00 46.17      H    C
ATOM   9005  OG  SER H 164      26.996   5.257 -28.005  1.00 46.29      H    O
ATOM   9007  C   SER H 164      27.603   2.829 -30.819  1.00 47.27      H    C
ATOM   9008  O   SER H 164      26.992   3.442 -31.696  1.00 50.59      H    O
ATOM   9010  N   GLY H 165      28.246   1.692 -31.062  1.00 47.27      H    N
ATOM   9011  CA  GLY H 165      28.259   1.074 -32.392  1.00 47.10      H    C
ATOM   9014  C   GLY H 165      29.407   1.515 -33.287  1.00 48.35      H    C
ATOM   9015  O   GLY H 165      29.586   0.961 -34.374  1.00 49.52      H    O
ATOM   9017  N   ALA H 166      30.186   2.503 -32.836  1.00 49.45      H    N
ATOM   9018  CA  ALA H 166      31.331   3.017 -33.601  1.00 48.41      H    C
ATOM   9020  CB  ALA H 166      31.922   4.227 -32.914  1.00 46.76      H    C
ATOM   9024  C   ALA H 166      32.409   1.960 -33.793  1.00 48.52      H    C
ATOM   9025  O   ALA H 166      33.027   1.885 -34.857  1.00 48.82      H    O
ATOM   9027  N   LEU H 167      32.639   1.163 -32.751  1.00 48.29      H    N
ATOM   9028  CA  LEU H 167      33.620   0.079 -32.782  1.00 49.19      H    C
ATOM   9030  CB  LEU H 167      34.402   0.049 -31.464  1.00 47.51      H    C
ATOM   9033  CG  LEU H 167      35.550  -0.954 -31.316  1.00 47.32      H    C
ATOM   9035  CD1 LEU H 167      36.635  -0.742 -32.372  1.00 46.59      H    C
ATOM   9039  CD2 LEU H 167      36.134  -0.868 -29.914  1.00 45.00      H    C
ATOM   9043  C   LEU H 167      32.907  -1.257 -33.032  1.00 50.84      H    C
ATOM   9044  O   LEU H 167      32.134  -1.724 -32.191  1.00 52.27      H    O
ATOM   9046  N   THR H 168      33.138  -1.842 -34.205  1.00 50.59      H    N
ATOM   9047  CA  THR H 168      32.535  -3.130 -34.561  1.00 50.34      H    C
ATOM   9049  CB  THR H 168      31.543  -3.002 -35.742  1.00 51.41      H    C
ATOM   9051  OG1 THR H 168      32.250  -2.610 -36.923  1.00 53.75      H    O
ATOM   9053  CG2 THR H 168      30.451  -1.995 -35.438  1.00 49.48      H    C
ATOM   9057  C   THR H 168      33.576  -4.189 -34.929  1.00 52.27      H    C
ATOM   9058  O   THR H 168      33.372  -5.373 -34.655  1.00 55.41      H    O
ATOM   9060  N   SER H 169      34.671  -3.770 -35.563  1.00 51.37      H    N
ATOM   9061  CA  SER H 169      35.729  -4.690 -35.987  1.00 49.68      H    C
ATOM   9063  CB  SER H 169      36.619  -4.018 -37.040  1.00 53.49      H    C
ATOM   9066  OG  SER H 169      37.749  -4.816 -37.347  1.00 56.68      H    O
ATOM   9068  C   SER H 169      36.582  -5.176 -34.804  1.00 47.96      H    C
ATOM   9069  O   SER H 169      36.931  -4.403 -33.918  1.00 48.63      H    O
ATOM   9071  N   GLY H 170      36.907  -6.470 -34.803  1.00 47.65      H    N
ATOM   9072  CA  GLY H 170      37.636  -7.097 -33.704  1.00 43.21      H    C
ATOM   9075  C   GLY H 170      36.758  -7.537 -32.539  1.00 39.10      H    C
ATOM   9076  O   GLY H 170      37.227  -8.268 -31.671  1.00 37.37      H    O
ATOM   9078  N   VAL H 171      35.491  -7.107 -32.521  1.00 36.51      H    N
ATOM   9079  CA  VAL H 171      34.548  -7.432 -31.441  1.00 36.21      H    C
ATOM   9081  CB  VAL H 171      33.284  -6.518 -31.464  1.00 34.32      H    C
ATOM   9083  CG1 VAL H 171      32.200  -7.046 -30.516  1.00 34.84      H    C
ATOM   9087  CG2 VAL H 171      33.643  -5.078 -31.118  1.00 29.74      H    C
ATOM   9091  C   VAL H 171      34.096  -8.891 -31.532  1.00 36.36      H    C
ATOM   9092  O   VAL H 171      33.739  -9.374 -32.604  1.00 38.22      H    O
ATOM   9094  N   HIS H 172      34.143  -9.580 -30.394  1.00 37.16      H    N
ATOM   9095  CA  HIS H 172      33.632 -10.933 -30.260  1.00 31.63      H    C
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ATOM   9097  CB  HIS H 172      34.780 -11.928 -30.126  1.00 30.84           H     C
ATOM   9100  CG  HIS H 172      35.543 -12.152 -31.391  1.00 29.89           H     C
ATOM   9101  ND1 HIS H 172      34.947 -12.611 -32.545  1.00 31.55           H     N
ATOM   9103  CE1 HIS H 172      35.860 -12.733 -33.492  1.00 31.14           H     C
ATOM   9105  NE2 HIS H 172      37.029 -12.379 -32.991  1.00 32.03           H     N
ATOM   9107  CD2 HIS H 172      36.857 -12.008 -31.678  1.00 31.79           H     C
ATOM   9109  C   HIS H 172      32.793 -10.961 -28.998  1.00 30.29           H     C
ATOM   9110  O   HIS H 172      33.321 -10.888 -27.905  1.00 28.68           H     O
ATOM   9112  N   THR H 173      31.477 -11.014 -29.153  1.00 32.85           H     N
ATOM   9113  CA  THR H 173      30.574 -11.195 -28.019  1.00 30.63           H     C
ATOM   9115  CB  THR H 173      29.316 -10.324 -28.173  1.00 31.25           H     C
ATOM   9117  OG1 THR H 173      29.707  -8.946 -28.322  1.00 29.82           H     O
ATOM   9119  CG2 THR H 173      28.394 -10.485 -26.969  1.00 28.11           H     C
ATOM   9123  C   THR H 173      30.232 -12.691 -27.986  1.00 28.88           H     C
ATOM   9124  O   THR H 173      29.845 -13.258 -29.000  1.00 25.13           H     O
ATOM   9126  N   PHE H 174      30.409 -13.325 -26.829  1.00 27.87           H     N
ATOM   9127  CA  PHE H 174      30.294 -14.780 -26.721  1.00 26.01           H     C
ATOM   9129  CB  PHE H 174      31.280 -15.335 -25.686  1.00 23.16           H     C
ATOM   9132  CG  PHE H 174      32.707 -15.185 -26.087  1.00 22.10           H     C
ATOM   9133  CD1 PHE H 174      33.282 -16.071 -26.965  1.00 22.06           H     C
ATOM   9135  CE1 PHE H 174      34.591 -15.923 -27.343  1.00 24.20           H     C
ATOM   9137  CZ  PHE H 174      35.341 -14.882 -26.868  1.00 21.23           H     C
ATOM   9139  CE2 PHE H 174      34.781 -13.992 -26.012  1.00 24.45           H     C
ATOM   9141  CD2 PHE H 174      33.464 -14.139 -25.624  1.00 22.54           H     C
ATOM   9143  C   PHE H 174      28.887 -15.183 -26.343  1.00 23.27           H     C
ATOM   9144  O   PHE H 174      28.229 -14.471 -25.571  1.00 29.38           H     O
ATOM   9146  N   PRO H 175      28.416 -16.328 -26.876  1.00 24.86           H     N
ATOM   9147  CA  PRO H 175      27.127 -16.855 -26.466  1.00 25.91           H     C
ATOM   9149  CB  PRO H 175      27.142 -18.283 -27.026  1.00 29.50           H     C
ATOM   9152  CG  PRO H 175      27.971 -18.179 -28.263  1.00 29.48           H     C
ATOM   9155  CD  PRO H 175      29.054 -17.192 -27.897  1.00 29.12           H     C
ATOM   9158  C   PRO H 175      27.029 -16.895 -24.960  1.00 23.47           H     C
ATOM   9159  O   PRO H 175      27.975 -17.326 -24.307  1.00 17.17           H     O
ATOM   9160  N   ALA H 176      25.914 -16.423 -24.416  1.00 29.78           H     N
ATOM   9161  CA  ALA H 176      25.651 -16.552 -22.981  1.00 31.63           H     C
ATOM   9163  CB  ALA H 176      24.312 -15.929 -22.636  1.00 29.92           H     C
ATOM   9167  C   ALA H 176      25.666 -18.035 -22.608  1.00 36.78           H     C
ATOM   9168  O   ALA H 176      25.227 -18.887 -23.398  1.00 42.01           H     O
ATOM   9170  N   VAL H 177      26.211 -18.340 -21.433  1.00 38.99           H     N
ATOM   9171  CA  VAL H 177      26.134 -19.683 -20.856  1.00 37.55           H     C
ATOM   9173  CB  VAL H 177      27.535 -20.337 -20.632  1.00 39.73           H     C
ATOM   9175  CG1 VAL H 177      28.296 -20.424 -21.949  1.00 42.86           H     C
ATOM   9179  CG2 VAL H 177      28.356 -19.583 -19.576  1.00 43.69           H     C
ATOM   9183  C   VAL H 177      25.399 -19.561 -19.542  1.00 34.96           H     C
ATOM   9184  O   VAL H 177      25.551 -18.565 -18.842  1.00 36.75           H     O
ATOM   9186  N   LEU H 178      24.585 -20.560 -19.219  1.00 36.02           H     N
ATOM   9187  CA  LEU H 178      23.877 -20.581 -17.939  1.00 37.20           H     C
ATOM   9189  CB  LEU H 178      22.613 -21.447 -18.006  1.00 35.83           H     C
ATOM   9192  CG  LEU H 178      21.592 -21.185 -16.892  1.00 36.22           H     C
ATOM   9194  CD1 LEU H 178      20.875 -19.859 -17.116  1.00 34.05           H     C
ATOM   9198  CD2 LEU H 178      20.584 -22.326 -16.785  1.00 36.81           H     C
ATOM   9202  C   LEU H 178      24.830 -21.092 -16.862  1.00 37.16           H     C
ATOM   9203  O   LEU H 178      25.556 -22.066 -17.071  1.00 38.80           H     O
ATOM   9205  N   GLN H 179      24.842 -20.403 -15.728  1.00 36.47           H     N
ATOM   9206  CA  GLN H 179      25.704 -20.752 -14.607  1.00 38.38           H     C
ATOM   9208  CB  GLN H 179      26.153 -19.494 -13.859  1.00 37.22           H     C
ATOM   9211  CG  GLN H 179      26.936 -18.507 -14.712  1.00 35.37           H     C
ATOM   9214  CD  GLN H 179      27.083 -17.156 -14.053  1.00 36.16           H     C
ATOM   9215  OE1 GLN H 179      26.099 -16.558 -13.608  1.00 32.55           H     O
ATOM   9216  NE2 GLN H 179      28.315 -16.655 -14.001  1.00 35.83           H     N
ATOM   9219  C   GLN H 179      24.942 -21.652 -13.657  1.00 39.66           H     C
ATOM   9220  O   GLN H 179      23.717 -21.757 -13.739  1.00 39.79           H     O
ATOM   9222  N   SER H 180      25.667 -22.279 -12.735  1.00 39.11           H     N
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ATOM   9223  CA  SER H 180      25.050 -23.176 -11.761  1.00 38.91      H    C
ATOM   9225  CB  SER H 180      26.114 -23.761 -10.836  1.00 39.16      H    C
ATOM   9228  OG  SER H 180      25.860 -25.134 -10.615  1.00 42.49      H    O
ATOM   9230  C   SER H 180      23.961 -22.440 -10.967  1.00 37.72      H    C
ATOM   9231  O   SER H 180      22.995 -23.039 -10.487  1.00 35.14      H    O
ATOM   9233  N   SER H 181      24.135 -21.126 -10.863  1.00 39.95      H    N
ATOM   9234  CA  SER H 181      23.162 -20.216 -10.273  1.00 40.21      H    C
ATOM   9236  CB  SER H 181      23.768 -18.808 -10.262  1.00 41.56      H    C
ATOM   9239  OG  SER H 181      22.832 -17.854  -9.809  1.00 45.06      H    O
ATOM   9241  C   SER H 181      21.793 -20.162 -10.978  1.00 39.65      H    C
ATOM   9242  O   SER H 181      20.800 -19.742 -10.371  1.00 36.62      H    O
ATOM   9244  N   GLY H 182      21.739 -20.572 -12.247  1.00 39.36      H    N
ATOM   9245  CA  GLY H 182      20.548 -20.375 -13.081  1.00 37.39      H    C
ATOM   9248  C   GLY H 182      20.442 -18.941 -13.592  1.00 38.25      H    C
ATOM   9249  O   GLY H 182      19.343 -18.460 -13.907  1.00 38.14      H    O
ATOM   9251  N   LEU H 183      21.587 -18.256 -13.655  1.00 37.01      H    N
ATOM   9252  CA  LEU H 183      21.682 -16.887 -14.168  1.00 34.15      H    C
ATOM   9254  CB  LEU H 183      22.129 -15.916 -13.076  1.00 34.54      H    C
ATOM   9257  CG  LEU H 183      21.222 -15.677 -11.876  1.00 33.56      H    C
ATOM   9259  CD1 LEU H 183      21.883 -14.688 -10.940  1.00 33.42      H    C
ATOM   9263  CD2 LEU H 183      19.861 -15.172 -12.313  1.00 36.28      H    C
ATOM   9267  C   LEU H 183      22.705 -16.869 -15.295  1.00 33.79      H    C
ATOM   9268  O   LEU H 183      23.712 -17.581 -15.240  1.00 32.18      H    O
ATOM   9270  N   TYR H 184      22.453 -16.046 -16.307  1.00 31.66      H    N
ATOM   9271  CA  TYR H 184      23.315 -16.006 -17.475  1.00 30.92      H    C
ATOM   9273  CB  TYR H 184      22.541 -15.510 -18.720  1.00 34.29      H    C
ATOM   9276  CG  TYR H 184      21.650 -16.575 -19.328  1.00 33.02      H    C
ATOM   9277  CD1 TYR H 184      22.198 -17.611 -20.071  1.00 33.13      H    C
ATOM   9279  CE1 TYR H 184      21.402 -18.602 -20.622  1.00 33.68      H    C
ATOM   9281  CZ  TYR H 184      20.038 -18.567 -20.427  1.00 33.95      H    C
ATOM   9282  OH  TYR H 184      19.263 -19.560 -20.982  1.00 34.13      H    O
ATOM   9284  CE2 TYR H 184      19.462 -17.549 -19.684  1.00 33.90      H    C
ATOM   9286  CD2 TYR H 184      20.269 -16.560 -19.137  1.00 32.94      H    C
ATOM   9288  C   TYR H 184      24.561 -15.164 -17.228  1.00 26.66      H    C
ATOM   9289  O   TYR H 184      24.586 -14.315 -16.340  1.00 23.69      H    O
ATOM   9291  N   SER H 185      25.596 -15.444 -18.014  1.00 24.96      H    N
ATOM   9292  CA  SER H 185      26.819 -14.662 -18.025  1.00 27.07      H    C
ATOM   9294  CB  SER H 185      27.820 -15.218 -17.014  1.00 31.24      H    C
ATOM   9297  OG  SER H 185      28.687 -14.211 -16.526  1.00 29.97      H    O
ATOM   9299  C   SER H 185      27.408 -14.744 -19.417  1.00 26.32      H    C
ATOM   9300  O   SER H 185      27.370 -15.795 -20.020  1.00 22.17      H    O
ATOM   9302  N   LEU H 186      27.898 -13.625 -19.940  1.00 26.06      H    N
ATOM   9303  CA  LEU H 186      28.757 -13.637 -21.123  1.00 27.04      H    C
ATOM   9305  CB  LEU H 186      27.949 -13.451 -22.417  1.00 27.30      H    C
ATOM   9308  CG  LEU H 186      27.073 -12.213 -22.628  1.00 26.09      H    C
ATOM   9310  CD1 LEU H 186      27.921 -11.031 -23.040  1.00 27.47      H    C
ATOM   9314  CD2 LEU H 186      25.996 -12.494 -23.688  1.00 27.16      H    C
ATOM   9318  C   LEU H 186      29.822 -12.559 -20.987  1.00 29.25      H    C
ATOM   9319  O   LEU H 186      29.758 -11.710 -20.098  1.00 28.27      H    O
ATOM   9321  N   SER H 187      30.826 -12.632 -21.846  1.00 28.56      H    N
ATOM   9322  CA  SER H 187      31.824 -11.584 -21.960  1.00 29.45      H    C
ATOM   9324  CB  SER H 187      33.225 -12.113 -21.629  1.00 31.43      H    C
ATOM   9327  OG  SER H 187      33.390 -12.319 -20.230  1.00 34.09      H    O
ATOM   9329  C   SER H 187      31.770 -11.075 -23.396  1.00 29.63      H    C
ATOM   9330  O   SER H 187      31.396 -11.807 -24.308  1.00 22.96      H    O
ATOM   9332  N   SER H 188      32.104  -9.802 -23.575  1.00 31.30      H    N
ATOM   9333  CA  SER H 188      32.293  -9.235 -24.889  1.00 30.41      H    C
ATOM   9335  CB  SER H 188      31.291  -8.114 -25.158  1.00 30.88      H    C
ATOM   9338  OG  SER H 188      31.378  -7.715 -26.515  1.00 33.80      H    O
ATOM   9340  C   SER H 188      33.696  -8.683 -24.928  1.00 30.01      H    C
ATOM   9341  O   SER H 188      34.050  -7.844 -24.121  1.00 29.88      H    O
ATOM   9343  N   VAL H 189      34.498  -9.152 -25.865  1.00 29.49      H    N
ATOM   9344  CA  VAL H 189      35.867  -8.690 -25.953  1.00 30.73      H    C
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ATOM	9346	CB	VAL	H	189	36.877	-9.848	-25.851	1.00	25.82	H	C
ATOM	9348	CG1	VAL	H	189	36.718	-10.576	-24.515	1.00	21.43	H	C
ATOM	9352	CG2	VAL	H	189	36.723	-10.815	-27.032	1.00	25.88	H	C
ATOM	9356	C	VAL	H	189	36.064	-7.945	-27.255	1.00	31.03	H	C
ATOM	9357	O	VAL	H	189	35.262	-8.053	-28.174	1.00	30.72	H	O
ATOM	9359	N	VAL	H	190	37.129	-7.161	-27.304	1.00	37.49	H	N
ATOM	9360	CA	VAL	H	190	37.534	-6.496	-28.526	1.00	38.09	H	C
ATOM	9362	CB	VAL	H	190	36.823	-5.122	-28.709	1.00	38.25	H	C
ATOM	9364	CG1	VAL	H	190	37.301	-4.109	-27.693	1.00	40.15	H	C
ATOM	9368	CG2	VAL	H	190	37.021	-4.608	-30.123	1.00	38.47	H	C
ATOM	9372	C	VAL	H	190	39.058	-6.378	-28.538	1.00	39.18	H	C
ATOM	9373	O	VAL	H	190	39.705	-6.232	-27.494	1.00	35.47	H	O
ATOM	9375	N	THR	H	191	39.617	-6.492	-29.735	1.00	39.82	H	N
ATOM	9376	CA	THR	H	191	41.046	-6.412	-29.940	1.00	40.25	H	C
ATOM	9378	CB	THR	H	191	41.528	-7.660	-30.733	1.00	41.71	H	C
ATOM	9380	OG1	THR	H	191	42.788	-8.091	-30.225	1.00	43.68	H	O
ATOM	9382	CG2	THR	H	191	41.623	-7.401	-32.238	1.00	43.13	H	C
ATOM	9386	C	THR	H	191	41.329	-5.071	-30.641	1.00	40.06	H	C
ATOM	9387	O	THR	H	191	40.665	-4.725	-31.631	1.00	37.80	H	O
ATOM	9389	N	VAL	H	192	42.265	-4.293	-30.088	1.00	42.79	H	N
ATOM	9390	CA	VAL	H	192	42.561	-2.935	-30.583	1.00	43.28	H	C
ATOM	9392	CB	VAL	H	192	41.786	-1.850	-29.780	1.00	39.99	H	C
ATOM	9394	CG1	VAL	H	192	40.281	-2.119	-29.818	1.00	36.90	H	C
ATOM	9398	CG2	VAL	H	192	42.297	-1.765	-28.336	1.00	37.65	H	C
ATOM	9402	C	VAL	H	192	44.073	-2.629	-30.538	1.00	46.49	H	C
ATOM	9403	O	VAL	H	192	44.816	-3.319	-29.848	1.00	46.83	H	O
ATOM	9405	N	PRO	H	193	44.533	-1.598	-31.278	1.00	49.11	H	N
ATOM	9406	CA	PRO	H	193	45.952	-1.249	-31.233	1.00	48.46	H	C
ATOM	9408	CB	PRO	H	193	46.068	-0.093	-32.236	1.00	50.63	H	C
ATOM	9411	CG	PRO	H	193	44.853	-0.167	-33.079	1.00	50.70	H	C
ATOM	9414	CD	PRO	H	193	43.788	-0.720	-32.200	1.00	51.30	H	C
ATOM	9417	C	PRO	H	193	46.391	-0.782	-29.853	1.00	49.46	H	C
ATOM	9418	O	PRO	H	193	45.711	0.041	-29.242	1.00	49.52	H	O
ATOM	9419	N	SER	H	194	47.524	-1.292	-29.376	1.00	50.04	H	N
ATOM	9420	CA	SER	H	194	48.049	-0.923	-28.060	1.00	52.64	H	C
ATOM	9422	CB	SER	H	194	49.153	-1.895	-27.648	1.00	54.75	H	C
ATOM	9425	OG	SER	H	194	50.029	-2.135	-28.732	1.00	58.42	H	O
ATOM	9427	C	SER	H	194	48.561	0.530	-28.002	1.00	54.25	H	C
ATOM	9428	O	SER	H	194	48.720	1.094	-26.919	1.00	53.05	H	O
ATOM	9430	N	SER	H	195	48.823	1.118	-29.169	1.00	54.90	H	N
ATOM	9431	CA	SER	H	195	49.124	2.539	-29.281	1.00	53.83	H	C
ATOM	9433	CB	SER	H	195	49.516	2.893	-30.724	1.00	53.59	H	C
ATOM	9436	OG	SER	H	195	48.427	2.715	-31.620	1.00	51.84	H	O
ATOM	9438	C	SER	H	195	47.920	3.383	-28.856	1.00	55.17	H	C
ATOM	9439	O	SER	H	195	48.086	4.441	-28.243	1.00	57.09	H	O
ATOM	9441	N	SER	H	196	46.715	2.903	-29.169	1.00	52.07	H	N
ATOM	9442	CA	SER	H	196	45.484	3.678	-28.966	1.00	51.60	H	C
ATOM	9444	CB	SER	H	196	44.396	3.196	-29.927	1.00	49.97	H	C
ATOM	9447	OG	SER	H	196	43.749	2.048	-29.409	1.00	49.21	H	O
ATOM	9449	C	SER	H	196	44.921	3.645	-27.540	1.00	50.21	H	C
ATOM	9450	O	SER	H	196	43.903	4.273	-27.273	1.00	49.96	H	O
ATOM	9452	N	LEU	H	197	45.560	2.913	-26.635	1.00	50.19	H	N
ATOM	9453	CA	LEU	H	197	45.056	2.798	-25.269	1.00	49.85	H	C
ATOM	9455	CB	LEU	H	197	45.903	1.811	-24.456	1.00	50.12	H	C
ATOM	9458	CG	LEU	H	197	45.521	0.322	-24.553	1.00	50.11	H	C
ATOM	9460	CD1	LEU	H	197	45.037	-0.081	-25.938	1.00	47.91	H	C
ATOM	9464	CD2	LEU	H	197	46.693	-0.555	-24.118	1.00	49.12	H	C
ATOM	9468	C	LEU	H	197	44.976	4.160	-24.569	1.00	50.90	H	C
ATOM	9469	O	LEU	H	197	43.951	4.485	-23.978	1.00	51.36	H	O
ATOM	9471	N	GLY	H	198	46.042	4.956	-24.649	1.00	50.28	H	N
ATOM	9472	CA	GLY	H	198	46.054	6.296	-24.049	1.00	48.80	H	C
ATOM	9475	C	GLY	H	198	45.179	7.328	-24.757	1.00	47.41	H	C
ATOM	9476	O	GLY	H	198	44.683	8.264	-24.131	1.00	44.62	H	O

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ATOM   9478  N   THR H 199      44.996   7.152 -26.063  1.00 48.80           H     N
ATOM   9479  CA  THR H 199      44.210   8.070 -26.893  1.00 48.64           H     C
ATOM   9481  CB  THR H 199      44.681   8.005 -28.368  1.00 51.11           H     C
ATOM   9483  OG1 THR H 199      46.031   8.473 -28.465  1.00 54.24           H     O
ATOM   9485  CG2 THR H 199      43.789   8.850 -29.262  1.00 52.40           H     C
ATOM   9489  C   THR H 199      42.712   7.755 -26.863  1.00 47.77           H     C
ATOM   9490  O   THR H 199      41.911   8.552 -26.380  1.00 44.62           H     O
ATOM   9492  N   GLN H 200      42.351   6.582 -27.384  1.00 47.14           H     N
ATOM   9493  CA  GLN H 200      40.955   6.209 -27.621  1.00 46.51           H     C
ATOM   9495  CB  GLN H 200      40.895   5.138 -28.717  1.00 44.42           H     C
ATOM   9498  CG  GLN H 200      39.499   4.738 -29.182  1.00 45.90           H     C
ATOM   9501  CD  GLN H 200      38.848   5.762 -30.098  1.00 45.82           H     C
ATOM   9502  OE1 GLN H 200      38.205   6.700 -29.635  1.00 47.41           H     O
ATOM   9503  NE2 GLN H 200      38.985   5.565 -31.405  1.00 42.97           H     N
ATOM   9506  C   GLN H 200      40.243   5.710 -26.357  1.00 45.65           H     C
ATOM   9507  O   GLN H 200      40.792   4.933 -25.572  1.00 43.98           H     O
ATOM   9509  N   THR H 201      39.005   6.161 -26.189  1.00 47.58           H     N
ATOM   9510  CA  THR H 201      38.143   5.726 -25.095  1.00 47.21           H     C
ATOM   9512  CB  THR H 201      37.309   6.911 -24.540  1.00 48.57           H     C
ATOM   9514  OG1 THR H 201      36.771   6.566 -23.259  1.00 50.58           H     O
ATOM   9516  CG2 THR H 201      36.175   7.288 -25.489  1.00 49.30           H     C
ATOM   9520  C   THR H 201      37.229   4.580 -25.568  1.00 48.00           H     C
ATOM   9521  O   THR H 201      36.686   4.615 -26.684  1.00 51.43           H     O
ATOM   9523  N   TYR H 202      37.081   3.559 -24.724  1.00 44.88           H     N
ATOM   9524  CA  TYR H 202      36.286   2.372 -25.058  1.00 39.70           H     C
ATOM   9526  CB  TYR H 202      37.185   1.140 -25.124  1.00 35.33           H     C
ATOM   9529  CG  TYR H 202      38.255   1.254 -26.172  1.00 34.47           H     C
ATOM   9530  CD1 TYR H 202      37.925   1.257 -27.518  1.00 34.73           H     C
ATOM   9532  CE1 TYR H 202      38.895   1.373 -28.497  1.00 34.69           H     C
ATOM   9534  CZ  TYR H 202      40.221   1.482 -28.132  1.00 34.96           H     C
ATOM   9535  OH  TYR H 202      41.177   1.593 -29.119  1.00 36.42           H     O
ATOM   9537  CE2 TYR H 202      40.583   1.480 -26.792  1.00 35.40           H     C
ATOM   9539  CD2 TYR H 202      39.597   1.370 -25.821  1.00 34.99           H     C
ATOM   9541  C   TYR H 202      35.197   2.152 -24.022  1.00 36.55           H     C
ATOM   9542  O   TYR H 202      35.485   1.823 -22.869  1.00 34.23           H     O
ATOM   9544  N   ILE H 203      33.950   2.356 -24.432  1.00 36.39           H     N
ATOM   9545  CA  ILE H 203      32.796   2.077 -23.580  1.00 37.78           H     C
ATOM   9547  CB  ILE H 203      31.865   3.303 -23.431  1.00 39.65           H     C
ATOM   9549  CG1 ILE H 203      32.619   4.490 -22.816  1.00 42.19           H     C
ATOM   9552  CD1 ILE H 203      33.625   5.152 -23.748  1.00 44.25           H     C
ATOM   9556  CG2 ILE H 203      30.655   2.953 -22.571  1.00 36.04           H     C
ATOM   9560  C   ILE H 203      32.008   0.916 -24.181  1.00 35.64           H     C
ATOM   9561  O   ILE H 203      31.814   0.857 -25.399  1.00 36.87           H     O
ATOM   9563  N   CYS H 204      31.578  -0.017 -23.334  1.00 34.14           H     N
ATOM   9564  CA  CYS H 204      30.712  -1.102 -23.782  1.00 35.14           H     C
ATOM   9566  CB  CYS H 204      31.141  -2.470 -23.221  1.00 35.57           H     C
ATOM   9569  SG  CYS H 204      30.976  -2.706 -21.433  1.00 36.48           H     S
ATOM   9571  C   CYS H 204      29.272  -0.764 -23.415  1.00 33.78           H     C
ATOM   9572  O   CYS H 204      28.963  -0.446 -22.262  1.00 31.37           H     O
ATOM   9574  N   ASN H 205      28.406  -0.818 -24.422  1.00 32.13           H     N
ATOM   9575  CA  ASN H 205      27.006  -0.466 -24.265  1.00 34.14           H     C
ATOM   9577  CB  ASN H 205      26.497   0.346 -25.468  1.00 32.25           H     C
ATOM   9580  CG  ASN H 205      27.581   1.213 -26.101  1.00 30.36           H     C
ATOM   9581  OD1 ASN H 205      28.058   2.172 -25.500  1.00 30.91           H     O
ATOM   9582  ND2 ASN H 205      27.968   0.873 -27.322  1.00 29.84           H     N
ATOM   9585  C   ASN H 205      26.227  -1.761 -24.119  1.00 35.10           H     C
ATOM   9586  O   ASN H 205      26.039  -2.500 -25.095  1.00 37.58           H     O
ATOM   9588  N   VAL H 206      25.825  -2.048 -22.886  1.00 33.48           H     N
ATOM   9589  CA  VAL H 206      25.077  -3.250 -22.561  1.00 34.28           H     C
ATOM   9591  CB  VAL H 206      25.601  -3.891 -21.249  1.00 33.76           H     C
ATOM   9593  CG1 VAL H 206      24.809  -5.158 -20.909  1.00 31.24           H     C
ATOM   9597  CG2 VAL H 206      27.097  -4.189 -21.367  1.00 29.08           H     C
ATOM   9601  C   VAL H 206      23.609  -2.880 -22.388  1.00 34.22           H     C
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ATOM	9602	O	VAL	H	206	23.291	-1.995	-21.599	1.00	26.04	H	O
ATOM	9604	N	ASN	H	207	22.724	-3.547	-23.134	1.00	35.45	H	N
ATOM	9605	CA	ASN	H	207	21.279	-3.390	-22.943	1.00	38.10	H	C
ATOM	9607	CB	ASN	H	207	20.614	-2.859	-24.220	1.00	43.60	H	C
ATOM	9610	CG	ASN	H	207	19.430	-1.934	-23.932	1.00	47.66	H	C
ATOM	9611	OD1	ASN	H	207	18.623	-2.177	-23.025	1.00	48.62	H	O
ATOM	9612	ND2	ASN	H	207	19.322	-0.866	-24.715	1.00	50.96	H	N
ATOM	9615	C	ASN	H	207	20.625	-4.709	-22.523	1.00	36.03	H	C
ATOM	9616	O	ASN	H	207	20.903	-5.758	-23.089	1.00	30.00	H	O
ATOM	9618	N	HIS	H	208	19.766	-4.645	-21.511	1.00	36.32	H	N
ATOM	9619	CA	HIS	H	208	18.966	-5.794	-21.090	1.00	36.55	H	C
ATOM	9621	CB	HIS	H	208	19.536	-6.377	-19.790	1.00	34.97	H	C
ATOM	9624	CG	HIS	H	208	18.887	-7.652	-19.354	1.00	34.50	H	C
ATOM	9625	ND1	HIS	H	208	18.871	-8.785	-20.137	1.00	35.85	H	N
ATOM	9627	CE1	HIS	H	208	18.234	-9.748	-19.498	1.00	34.42	H	C
ATOM	9629	NE2	HIS	H	208	17.850	-9.288	-18.321	1.00	34.44	H	N
ATOM	9631	CD2	HIS	H	208	18.250	-7.981	-18.205	1.00	33.47	H	C
ATOM	9633	C	HIS	H	208	17.495	-5.348	-20.946	1.00	36.02	H	C
ATOM	9634	O	HIS	H	208	17.093	-4.825	-19.907	1.00	31.60	H	O
ATOM	9636	N	LYS	H	209	16.717	-5.550	-22.013	1.00	36.40	H	N
ATOM	9637	CA	LYS	H	209	15.322	-5.094	-22.088	1.00	39.34	H	C
ATOM	9639	CB	LYS	H	209	14.723	-5.362	-23.478	1.00	40.78	H	C
ATOM	9642	CG	LYS	H	209	15.095	-4.345	-24.557	1.00	42.53	H	C
ATOM	9645	CD	LYS	H	209	14.731	-4.862	-25.953	1.00	42.18	H	C
ATOM	9648	CE	LYS	H	209	15.193	-3.922	-27.067	1.00	43.81	H	C
ATOM	9651	NZ	LYS	H	209	15.378	-4.642	-28.368	1.00	42.37	H	N
ATOM	9655	C	LYS	H	209	14.381	-5.682	-21.029	1.00	39.21	H	C
ATOM	9656	O	LYS	H	209	13.537	-4.960	-20.516	1.00	38.49	H	O
ATOM	9658	N	PRO	H	210	14.486	-6.995	-20.734	1.00	40.00	H	N
ATOM	9659	CA	PRO	H	210	13.590	-7.612	-19.745	1.00	40.15	H	C
ATOM	9661	CB	PRO	H	210	14.137	-9.037	-19.619	1.00	38.91	H	C
ATOM	9664	CG	PRO	H	210	14.787	-9.297	-20.910	1.00	37.78	H	C
ATOM	9667	CD	PRO	H	210	15.393	-7.994	-21.325	1.00	37.78	H	C
ATOM	9670	C	PRO	H	210	13.564	-6.940	-18.377	1.00	42.64	H	C
ATOM	9671	O	PRO	H	210	12.498	-6.859	-17.761	1.00	43.72	H	O
ATOM	9672	N	SER	H	211	14.720	-6.478	-17.906	1.00	43.72	H	N
ATOM	9673	CA	SER	H	211	14.808	-5.760	-16.632	1.00	43.75	H	C
ATOM	9675	CB	SER	H	211	16.027	-6.222	-15.841	1.00	43.73	H	C
ATOM	9678	OG	SER	H	211	17.226	-5.828	-16.485	1.00	43.23	H	O
ATOM	9680	C	SER	H	211	14.887	-4.253	-16.844	1.00	45.26	H	C
ATOM	9681	O	SER	H	211	14.859	-3.495	-15.878	1.00	43.07	H	O
ATOM	9683	N	ASN	H	212	14.984	-3.822	-18.102	1.00	46.57	H	N
ATOM	9684	CA	ASN	H	212	15.077	-2.402	-18.433	1.00	47.42	H	C
ATOM	9686	CB	ASN	H	212	13.867	-1.635	-17.842	1.00	49.69	H	C
ATOM	9689	CG	ASN	H	212	13.478	-0.403	-18.655	1.00	50.40	H	C
ATOM	9690	OD1	ASN	H	212	13.703	-0.337	-19.867	1.00	54.65	H	O
ATOM	9691	ND2	ASN	H	212	12.865	0.568	-17.989	1.00	51.36	H	N
ATOM	9694	C	ASN	H	212	16.410	-1.831	-17.929	1.00	47.98	H	C
ATOM	9695	O	ASN	H	212	16.453	-0.766	-17.303	1.00	47.48	H	O
ATOM	9697	N	THR	H	213	17.494	-2.560	-18.193	1.00	46.12	H	N
ATOM	9698	CA	THR	H	213	18.836	-2.130	-17.805	1.00	46.73	H	C
ATOM	9700	CB	THR	H	213	19.696	-3.305	-17.298	1.00	46.85	H	C
ATOM	9702	OG1	THR	H	213	19.026	-3.965	-16.220	1.00	47.58	H	O
ATOM	9704	CG2	THR	H	213	21.048	-2.815	-16.806	1.00	47.12	H	C
ATOM	9708	C	THR	H	213	19.547	-1.501	-18.994	1.00	46.65	H	C
ATOM	9709	O	THR	H	213	19.424	-1.974	-20.124	1.00	44.64	H	O
ATOM	9711	N	LYS	H	214	20.283	-0.428	-18.724	1.00	47.98	H	N
ATOM	9712	CA	LYS	H	214	21.147	0.204	-19.714	1.00	49.55	H	C
ATOM	9714	CB	LYS	H	214	20.443	1.411	-20.355	1.00	54.40	H	C
ATOM	9717	CG	LYS	H	214	20.610	1.519	-21.876	1.00	56.26	H	C
ATOM	9720	CD	LYS	H	214	22.076	1.619	-22.322	1.00	57.59	H	C
ATOM	9723	CE	LYS	H	214	22.204	1.567	-23.850	1.00	57.70	H	C
ATOM	9726	NZ	LYS	H	214	23.594	1.832	-24.322	1.00	57.48	H	N

ATOM	9730	C	LYS	H	214	22.424	0.629	-18.991	1.00	48.04	H	C
ATOM	9731	O	LYS	H	214	22.390	1.522	-18.149	1.00	47.50	H	O
ATOM	9733	N	VAL	H	215	23.538	-0.036	-19.297	1.00	46.44	H	N
ATOM	9734	CA	VAL	H	215	24.801	0.213	-18.600	1.00	45.66	H	C
ATOM	9736	CB	VAL	H	215	25.198	-0.978	-17.694	1.00	43.78	H	C
ATOM	9738	CG1	VAL	H	215	26.599	-0.790	-17.127	1.00	42.93	H	C
ATOM	9742	CG2	VAL	H	215	24.193	-1.147	-16.568	1.00	44.07	H	C
ATOM	9746	C	VAL	H	215	25.910	0.477	-19.605	1.00	45.12	H	C
ATOM	9747	O	VAL	H	215	26.222	-0.378	-20.430	1.00	47.07	H	O
ATOM	9749	N	ASP	H	216	26.494	1.668	-19.532	1.00	45.31	H	N
ATOM	9750	CA	ASP	H	216	27.629	2.034	-20.366	1.00	45.40	H	C
ATOM	9752	CB	ASP	H	216	27.395	3.395	-21.022	1.00	47.46	H	C
ATOM	9755	CG	ASP	H	216	26.442	3.317	-22.202	1.00	51.27	H	C
ATOM	9756	OD1	ASP	H	216	25.317	3.853	-22.099	1.00	55.80	H	O
ATOM	9757	OD2	ASP	H	216	26.813	2.713	-23.232	1.00	51.16	H	O
ATOM	9758	C	ASP	H	216	28.874	2.060	-19.493	1.00	45.86	H	C
ATOM	9759	O	ASP	H	216	29.077	3.003	-18.724	1.00	47.40	H	O
ATOM	9761	N	LYS	H	217	29.694	1.014	-19.599	1.00	45.23	H	N
ATOM	9762	CA	LYS	H	217	30.909	0.884	-18.787	1.00	44.11	H	C
ATOM	9764	CB	LYS	H	217	31.039	-0.536	-18.215	1.00	45.21	H	C
ATOM	9767	CG	LYS	H	217	31.840	-0.623	-16.896	1.00	45.31	H	C
ATOM	9770	CD	LYS	H	217	30.948	-0.338	-15.680	1.00	46.34	H	C
ATOM	9773	CE	LYS	H	217	31.671	-0.555	-14.368	1.00	47.49	H	C
ATOM	9776	NZ	LYS	H	217	32.317	0.691	-13.844	1.00	49.31	H	N
ATOM	9780	C	LYS	H	217	32.145	1.223	-19.617	1.00	41.31	H	C
ATOM	9781	O	LYS	H	217	32.324	0.697	-20.720	1.00	33.85	H	O
ATOM	9783	N	LYS	H	218	32.979	2.110	-19.075	1.00	41.50	H	N
ATOM	9784	CA	LYS	H	218	34.271	2.451	-19.665	1.00	43.00	H	C
ATOM	9786	CB	LYS	H	218	34.733	3.836	-19.178	1.00	43.94	H	C
ATOM	9789	CG	LYS	H	218	36.054	4.359	-19.774	1.00	43.12	H	C
ATOM	9792	CD	LYS	H	218	36.530	5.590	-18.992	1.00	45.50	H	C
ATOM	9795	CE	LYS	H	218	37.821	6.222	-19.547	1.00	46.28	H	C
ATOM	9798	NZ	LYS	H	218	38.435	7.213	-18.577	1.00	43.55	H	N
ATOM	9802	C	LYS	H	218	35.273	1.383	-19.252	1.00	41.55	H	C
ATOM	9803	O	LYS	H	218	35.274	0.947	-18.101	1.00	38.50	H	O
ATOM	9805	N	VAL	H	219	36.110	0.959	-20.197	1.00	42.56	H	N
ATOM	9806	CA	VAL	H	219	37.134	-0.050	-19.934	1.00	42.78	H	C
ATOM	9808	CB	VAL	H	219	36.937	-1.324	-20.788	1.00	36.43	H	C
ATOM	9810	CG1	VAL	H	219	37.850	-2.420	-20.282	1.00	34.30	H	C
ATOM	9814	CG2	VAL	H	219	35.495	-1.782	-20.742	1.00	33.17	H	C
ATOM	9818	C	VAL	H	219	38.522	0.516	-20.208	1.00	43.97	H	C
ATOM	9819	O	VAL	H	219	38.885	0.783	-21.357	1.00	42.87	H	O
ATOM	9821	N	GLU	H	220	39.304	0.662	-19.145	1.00	46.37	H	N
ATOM	9822	CA	GLU	H	220	40.593	1.329	-19.228	1.00	50.43	H	C
ATOM	9824	CB	GLU	H	220	40.500	2.722	-18.603	1.00	51.55	H	C
ATOM	9827	CG	GLU	H	220	39.891	2.750	-17.200	1.00	53.31	H	C
ATOM	9830	CD	GLU	H	220	39.661	4.155	-16.677	1.00	54.48	H	C
ATOM	9831	OE1	GLU	H	220	39.765	5.120	-17.464	1.00	57.13	H	O
ATOM	9832	OE2	GLU	H	220	39.369	4.294	-15.470	1.00	55.85	H	O
ATOM	9833	C	GLU	H	220	41.674	0.507	-18.538	1.00	50.59	H	C
ATOM	9834	O	GLU	H	220	41.364	-0.283	-17.644	1.00	50.30	H	O
ATOM	9836	N	PRO	H	221	42.947	0.684	-18.960	1.00	52.89	H	N
ATOM	9837	CA	PRO	H	221	44.087	0.041	-18.304	1.00	54.91	H	C
ATOM	9839	CB	PRO	H	221	45.303	0.653	-19.013	1.00	53.94	H	C
ATOM	9842	CG	PRO	H	221	44.808	1.140	-20.302	1.00	53.01	H	C
ATOM	9845	CD	PRO	H	221	43.373	1.510	-20.107	1.00	53.35	H	C
ATOM	9848	C	PRO	H	221	44.142	0.372	-16.819	1.00	56.11	H	C
ATOM	9849	O	PRO	H	221	43.910	1.519	-16.449	1.00	55.83	H	O
ATOM	9850	N	LYS	H	222	44.438	-0.620	-15.983	1.00	59.29	H	N
ATOM	9851	CA	LYS	H	222	44.555	-0.389	-14.539	1.00	62.16	H	C
ATOM	9853	CB	LYS	H	222	44.428	-1.700	-13.751	1.00	64.18	H	C
ATOM	9856	CG	LYS	H	222	43.021	-1.984	-13.230	1.00	65.03	H	C
ATOM	9859	CD	LYS	H	222	43.057	-2.728	-11.898	1.00	64.95	H	C

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ATOM   9862  CE  LYS H 222      43.390  -1.787 -10.741  1.00 65.52           H  C
ATOM   9865  NZ  LYS H 222      43.536  -2.515  -9.454  1.00 65.67           H  N
ATOM   9869  C   LYS H 222      45.877   0.295 -14.197  1.00 64.49           H  C
ATOM   9870  O   LYS H 222      46.949  -0.256 -14.444  1.00 66.76           H  O
ATOM   9872  N   ILE B  16      37.740 -46.441 -92.900  1.00 25.44           B  N
ATOM   9873  CA  ILE B  16      39.099 -45.944 -92.536  1.00 27.26           B  C
ATOM   9875  CB  ILE B  16      40.140 -46.281 -93.651  1.00 22.90           B  C
ATOM   9877  CG1 ILE B  16      40.364 -47.802 -93.774  1.00 21.87           B  C
ATOM   9880  CD1 ILE B  16      40.973 -48.473 -92.567  1.00 20.02           B  C
ATOM   9884  CG2 ILE B  16      41.485 -45.579 -93.430  1.00 17.84           B  C
ATOM   9888  C   ILE B  16      39.048 -44.424 -92.294  1.00 31.54           B  C
ATOM   9889  O   ILE B  16      38.798 -43.663 -93.228  1.00 29.23           B  O
ATOM   9893  N   LEU B  17      39.281 -44.003 -91.039  1.00 31.68           B  N
ATOM   9894  CA  LEU B  17      39.487 -42.589 -90.691  1.00 29.30           B  C
ATOM   9896  CB  LEU B  17      39.167 -42.308 -89.217  1.00 28.35           B  C
ATOM   9899  CG  LEU B  17      39.747 -40.994 -88.653  1.00 31.53           B  C
ATOM   9901  CD1 LEU B  17      39.782 -40.958 -87.112  1.00 26.18           B  C
ATOM   9905  CD2 LEU B  17      39.010 -39.774 -89.199  1.00 30.41           B  C
ATOM   9909  C   LEU B  17      40.931 -42.182 -90.950  1.00 31.79           B  C
ATOM   9910  O   LEU B  17      41.848 -42.898 -90.565  1.00 31.22           B  O
ATOM   9912  N   GLY B  18      41.123 -41.027 -91.591  1.00 33.28           B  N
ATOM   9913  CA  GLY B  18      42.432 -40.383 -91.663  1.00 30.51           B  C
ATOM   9916  C   GLY B  18      43.394 -40.929 -92.692  1.00 33.23           B  C
ATOM   9917  O   GLY B  18      44.611 -40.714 -92.589  1.00 31.68           B  O
ATOM   9919  N   GLY B  19      42.864 -41.623 -93.694  1.00 35.58           B  N
ATOM   9920  CA  GLY B  19      43.698 -42.179 -94.750  1.00 36.21           B  C
ATOM   9923  C   GLY B  19      43.545 -41.485 -96.086  1.00 37.50           B  C
ATOM   9924  O   GLY B  19      43.090 -40.345 -96.167  1.00 36.36           B  O
ATOM   9926  N   ARG B  20      43.961 -42.192 -97.130  1.00 39.95           B  N
ATOM   9927  CA  ARG B  20      43.799 -41.764 -98.520  1.00 43.76           B  C
ATOM   9929  CB  ARG B  20      45.145 -41.318 -99.100  1.00 47.17           B  C
ATOM   9932  CG  ARG B  20      45.663 -39.976 -98.589  1.00 52.03           B  C
ATOM   9935  CD  ARG B  20      47.189 -39.873 -98.754  1.00 53.23           B  C
ATOM   9938  NE  ARG B  20      47.655 -40.208-100.107  1.00 57.29           B  N
ATOM   9940  CZ  ARG B  20      48.939 -40.305-100.466  1.00 57.53           B  C
ATOM   9941  NH1 ARG B  20      49.914 -40.092 -99.583  1.00 60.12           B  N
ATOM   9944  NH2 ARG B  20      49.258 -40.613-101.719  1.00 57.77           B  N
ATOM   9947  C   ARG B  20      43.276 -42.949 -99.339  1.00 42.11           B  C
ATOM   9948  O   ARG B  20      43.316 -44.100 -98.884  1.00 35.76           B  O
ATOM   9950  N   GLU B  21      42.799 -42.667-100.546  1.00 44.21           B  N
ATOM   9951  CA  GLU B  21      42.431 -43.725-101.483  1.00 43.86           B  C
ATOM   9953  CB  GLU B  21      41.935 -43.136-102.804  1.00 43.96           B  C
ATOM   9956  CG  GLU B  21      41.593 -44.182-103.871  1.00 44.58           B  C
ATOM   9959  CD  GLU B  21      40.995 -43.578-105.132  1.00 44.42           B  C
ATOM   9960  OE1 GLU B  21      40.356 -42.506-105.046  1.00 48.25           B  O
ATOM   9961  OE2 GLU B  21      41.161 -44.183-106.208  1.00 44.53           B  O
ATOM   9962  C   GLU B  21      43.624 -44.638-101.730  1.00 42.83           B  C
ATOM   9963  O   GLU B  21      44.755 -44.170-101.883  1.00 42.95           B  O
ATOM   9965  N   ALA B  22      43.361 -45.942-101.763  1.00 44.73           B  N
ATOM   9966  CA  ALA B  22      44.398 -46.933-102.006  1.00 44.29           B  C
ATOM   9968  CB  ALA B  22      43.941 -48.314-101.532  1.00 43.86           B  C
ATOM   9972  C   ALA B  22      44.761 -46.977-103.486  1.00 47.13           B  C
ATOM   9973  O   ALA B  22      43.900 -46.863-104.356  1.00 49.13           B  O
ATOM   9975  N   GLU B  23      46.055 -47.106-103.755  1.00 45.62           B  N
ATOM   9976  CA  GLU B  23      46.556 -47.438-105.082  1.00 45.94           B  C
ATOM   9978  CB  GLU B  23      48.086 -47.632-105.037  1.00 48.26           B  C
ATOM   9981  CG  GLU B  23      48.633 -48.541-103.884  1.00 51.48           B  C
ATOM   9984  CD  GLU B  23      48.945 -47.813-102.554  1.00 51.54           B  C
ATOM   9985  OE1 GLU B  23      48.041 -47.168-101.974  1.00 51.14           B  O
ATOM   9986  OE2 GLU B  23      50.094 -47.924-102.073  1.00 53.70           B  O
ATOM   9987  C   GLU B  23      45.825 -48.699-105.597  1.00 45.66           B  C
ATOM   9988  O   GLU B  23      45.889 -49.756-104.968  1.00 43.12           B  O
ATOM   9990  N   ALA B  24      45.124 -48.573-106.726  1.00 43.66           B  N
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ATOM   9991  CA  ALA B  24      44.090 -49.550-107.123  1.00 43.72      B    C
ATOM   9993  CB  ALA B  24      43.303 -49.032-108.321  1.00 46.29      B    C
ATOM   9997  C   ALA B  24      44.638 -50.943-107.421  1.00 42.34      B    C
ATOM   9998  O   ALA B  24      45.588 -51.087-108.192  1.00 44.36      B    O
ATOM  10000  N   HIS B  25      44.024 -51.955-106.799  1.00 41.10      B    N
ATOM  10001  CA  HIS B  25      44.450 -53.370-106.893  1.00 41.44      B    C
ATOM  10003  CB  HIS B  25      44.211 -53.916-108.313  1.00 42.00      B    C
ATOM  10006  CG  HIS B  25      42.789 -53.804-108.776  1.00 42.94      B    C
ATOM  10007  ND1 HIS B  25      42.404 -52.984-109.815  1.00 42.34      B    N
ATOM  10009  CE1 HIS B  25      41.100 -53.091-109.997  1.00 42.23      B    C
ATOM  10011  NE2 HIS B  25      40.623 -53.944-109.111  1.00 43.22      B    N
ATOM  10013  CD2 HIS B  25      41.659 -54.408-108.337  1.00 43.34      B    C
ATOM  10015  C   HIS B  25      45.905 -53.655-106.444  1.00 41.05      B    C
ATOM  10016  O   HIS B  25      46.492 -54.669-106.837  1.00 39.79      B    O
ATOM  10018  N   ALA B  26      46.467 -52.777-105.606  1.00 40.97      B    N
ATOM  10019  CA  ALA B  26      47.825 -52.955-105.063  1.00 38.44      B    C
ATOM  10021  CB  ALA B  26      48.497 -51.618-104.851  1.00 37.53      B    C
ATOM  10025  C   ALA B  26      47.815 -53.755-103.757  1.00 37.97      B    C
ATOM  10026  O   ALA B  26      48.880 -54.163-103.276  1.00 35.67      B    O
ATOM  10028  N   ARG B  27      46.614 -53.961-103.198  1.00 37.39      B    N
ATOM  10029  CA  ARG B  27      46.367 -54.917-102.114  1.00 33.76      B    C
ATOM  10031  CB  ARG B  27      45.733 -54.211-100.916  1.00 35.17      B    C
ATOM  10034  CG  ARG B  27      46.688 -53.261-100.242  1.00 35.76      B    C
ATOM  10037  CD  ARG B  27      46.012 -52.290 -99.315  1.00 36.72      B    C
ATOM  10040  NE  ARG B  27      46.961 -51.252 -98.911  1.00 40.13      B    N
ATOM  10042  CZ  ARG B  27      47.322 -50.208 -99.662  1.00 42.42      B    C
ATOM  10043  NH1 ARG B  27      46.821 -50.035-100.882  1.00 44.67      B    N
ATOM  10046  NH2 ARG B  27      48.196 -49.327 -99.185  1.00 42.63      B    N
ATOM  10049  C   ARG B  27      45.446 -56.035-102.623  1.00 29.29      B    C
ATOM  10050  O   ARG B  27      44.267 -56.100-102.258  1.00 28.48      B    O
ATOM  10052  N   PRO B  28      45.990 -56.937-103.453  1.00 24.06      B    N
ATOM  10053  CA  PRO B  28      45.188 -57.936-104.184  1.00 27.75      B    C
ATOM  10055  CB  PRO B  28      46.191 -58.540-105.175  1.00 23.04      B    C
ATOM  10058  CG  PRO B  28      47.517 -58.313-104.590  1.00 20.43      B    C
ATOM  10061  CD  PRO B  28      47.433 -57.082-103.728  1.00 25.44      B    C
ATOM  10064  C   PRO B  28      44.594 -59.035-103.309  1.00 30.78      B    C
ATOM  10065  O   PRO B  28      43.809 -59.845-103.793  1.00 33.44      B    O
ATOM  10066  N   TYR B  29      44.974 -59.054-102.034  1.00 30.08      B    N
ATOM  10067  CA  TYR B  29      44.411 -59.975-101.050  1.00 27.56      B    C
ATOM  10069  CB  TYR B  29      45.421 -60.210 -99.916  1.00 27.47      B    C
ATOM  10072  CG  TYR B  29      46.026 -58.939 -99.364  1.00 27.98      B    C
ATOM  10073  CD1 TYR B  29      45.369 -58.204 -98.389  1.00 22.35      B    C
ATOM  10075  CE1 TYR B  29      45.903 -57.033 -97.898  1.00 26.78      B    C
ATOM  10077  CZ  TYR B  29      47.124 -56.583 -98.359  1.00 26.15      B    C
ATOM  10078  OH  TYR B  29      47.643 -55.414 -97.852  1.00 28.87      B    O
ATOM  10080  CE2 TYR B  29      47.807 -57.285 -99.333  1.00 26.84      B    C
ATOM  10082  CD2 TYR B  29      47.257 -58.466 -99.829  1.00 27.81      B    C
ATOM  10084  C   TYR B  29      43.089 -59.463-100.482  1.00 25.94      B    C
ATOM  10085  O   TYR B  29      42.353 -60.209 -99.846  1.00 27.05      B    O
ATOM  10087  N   MET B  30      42.782 -58.195-100.742  1.00 28.87      B    N
ATOM  10088  CA  MET B  30      41.681 -57.496-100.084  1.00 26.23      B    C
ATOM  10090  CB  MET B  30      41.847 -55.983-100.298  1.00 24.84      B    C
ATOM  10093  CG  MET B  30      40.893 -55.121 -99.475  1.00 26.92      B    C
ATOM  10096  SD  MET B  30      41.238 -55.209 -97.719  1.00 28.47      B    S
ATOM  10097  CE  MET B  30      39.598 -55.021 -97.022  1.00 16.99      B    C
ATOM  10101  C   MET B  30      40.300 -57.948-100.573  1.00 29.35      B    C
ATOM  10102  O   MET B  30      40.048 -58.006-101.783  1.00 31.19      B    O
ATOM  10104  N   ALA B  31      39.404 -58.221 -99.619  1.00 29.61      B    N
ATOM  10105  CA  ALA B  31      38.071 -58.752 -99.903  1.00 29.14      B    C
ATOM  10107  CB  ALA B  31      37.978 -60.197 -99.454  1.00 26.12      B    C
ATOM  10111  C   ALA B  31      36.989 -57.946 -99.208  1.00 32.79      B    C
ATOM  10112  O   ALA B  31      37.211 -57.381 -98.126  1.00 38.34      B    O
ATOM  10114  N   SER B  32      35.810 -57.920 -99.828  1.00 33.73      B    N
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ATOM  10115  CA  SER B  32      34.633 -57.255 -99.271  1.00 34.44           B     C
ATOM  10117  CB  SER B  32      34.071 -56.241-100.280  1.00 33.21           B     C
ATOM  10120  OG  SER B  32      32.768 -55.805 -99.935  1.00 34.27           B     O
ATOM  10122  C   SER B  32      33.581 -58.298 -98.917  1.00 35.41           B     C
ATOM  10123  O   SER B  32      33.181 -59.088 -99.767  1.00 38.54           B     O
ATOM  10125  N   VAL B  33      33.134 -58.293 -97.668  1.00 36.32           B     N
ATOM  10126  CA  VAL B  33      32.161 -59.270 -97.192  1.00 37.62           B     C
ATOM  10128  CB  VAL B  33      32.592 -59.855 -95.828  1.00 35.15           B     C
ATOM  10130  CG1 VAL B  33      31.480 -60.686 -95.184  1.00 32.81           B     C
ATOM  10134  CG2 VAL B  33      33.851 -60.694 -96.022  1.00 31.95           B     C
ATOM  10138  C   VAL B  33      30.768 -58.624 -97.178  1.00 40.86           B     C
ATOM  10139  O   VAL B  33      30.497 -57.690 -96.414  1.00 39.96           B     O
ATOM  10141  N   GLN B  34      29.903 -59.132 -98.058  1.00 44.03           B     N
ATOM  10142  CA  GLN B  34      28.619 -58.510 -98.377  1.00 44.84           B     C
ATOM  10144  CB  GLN B  34      28.548 -58.195 -99.876  1.00 45.16           B     C
ATOM  10147  CG  GLN B  34      29.813 -57.603-100.457  1.00 45.06           B     C
ATOM  10150  CD  GLN B  34      29.623 -57.108-101.869  1.00 47.25           B     C
ATOM  10151  OE1 GLN B  34      28.623 -57.427-102.520  1.00 50.56           B     O
ATOM  10152  NE2 GLN B  34      30.589 -56.328-102.362  1.00 46.11           B     N
ATOM  10155  C   GLN B  34      27.444 -59.414 -98.032  1.00 45.84           B     C
ATOM  10156  O   GLN B  34      27.442 -60.599 -98.372  1.00 44.34           B     O
ATOM  10158  N   VAL B  35      26.456 -58.846 -97.351  1.00 47.01           B     N
ATOM  10159  CA  VAL B  35      25.135 -59.448 -97.251  1.00 50.74           B     C
ATOM  10161  CB  VAL B  35      24.570 -59.411 -95.797  1.00 50.19           B     C
ATOM  10163  CG1 VAL B  35      24.611 -58.001 -95.215  1.00 49.71           B     C
ATOM  10167  CG2 VAL B  35      23.154 -59.972 -95.754  1.00 48.79           B     C
ATOM  10171  C   VAL B  35      24.233 -58.695 -98.244  1.00 54.44           B     C
ATOM  10172  O   VAL B  35      24.034 -57.479 -98.118  1.00 55.41           B     O
ATOM  10174  N   ASN B  36      23.736 -59.416 -99.254  1.00 55.06           B     N
ATOM  10175  CA  ASN B  36      22.794 -58.875-100.247  1.00 55.30           B     C
ATOM  10177  CB  ASN B  36      21.499 -58.375 -99.569  1.00 54.25           B     C
ATOM  10180  CG  ASN B  36      20.713 -59.493 -98.900  1.00 52.40           B     C
ATOM  10181  OD1 ASN B  36      20.768 -60.657 -99.318  1.00 50.89           B     O
ATOM  10182  ND2 ASN B  36      19.957 -59.138 -97.868  1.00 46.40           B     N
ATOM  10185  C   ASN B  36      23.393 -57.764-101.118  1.00 58.49           B     C
ATOM  10186  O   ASN B  36      22.795 -56.687-101.273  1.00 60.12           B     O
ATOM  10188  N   GLY B  37      24.578 -58.022-101.673  1.00 57.49           B     N
ATOM  10189  CA  GLY B  37      25.234 -57.072-102.578  1.00 55.35           B     C
ATOM  10192  C   GLY B  37      25.725 -55.766-101.960  1.00 54.30           B     C
ATOM  10193  O   GLY B  37      26.347 -54.962-102.651  1.00 53.82           B     O
ATOM  10195  N   GLU B  38      25.445 -55.552-100.671  1.00 54.27           B     N
ATOM  10196  CA  GLU B  38      25.910 -54.365 -99.932  1.00 54.49           B     C
ATOM  10198  CB  GLU B  38      24.753 -53.720 -99.156  1.00 57.56           B     C
ATOM  10201  CG  GLU B  38      23.798 -52.911-100.031  1.00 61.34           B     C
ATOM  10204  CD  GLU B  38      22.734 -52.162 -99.236  1.00 63.69           B     C
ATOM  10205  OE1 GLU B  38      22.447 -52.548 -98.079  1.00 66.52           B     O
ATOM  10206  OE2 GLU B  38      22.177 -51.184 -99.784  1.00 67.77           B     O
ATOM  10207  C   GLU B  38      27.027 -54.743 -98.954  1.00 51.59           B     C
ATOM  10208  O   GLU B  38      26.809 -55.545 -98.043  1.00 53.44           B     O
ATOM  10210  N   HIS B  39      28.215 -54.164 -99.153  1.00 45.66           B     N
ATOM  10211  CA  HIS B  39      29.347 -54.315 -98.229  1.00 42.86           B     C
ATOM  10213  CB  HIS B  39      30.449 -53.302 -98.584  1.00 39.93           B     C
ATOM  10216  CG  HIS B  39      31.598 -53.278 -97.620  1.00 38.99           B     C
ATOM  10217  ND1 HIS B  39      31.508 -52.700 -96.370  1.00 36.86           B     N
ATOM  10219  CE1 HIS B  39      32.666 -52.823 -95.747  1.00 34.48           B     C
ATOM  10221  NE2 HIS B  39      33.510 -53.448 -96.551  1.00 32.04           B     N
ATOM  10223  CD2 HIS B  39      32.869 -53.738 -97.730  1.00 34.29           B     C
ATOM  10225  C   HIS B  39      28.929 -54.167 -96.748  1.00 40.49           B     C
ATOM  10226  O   HIS B  39      28.206 -53.238 -96.375  1.00 39.27           B     O
ATOM  10228  N   LEU B  40      29.378 -55.116 -95.929  1.00 38.74           B     N
ATOM  10229  CA  LEU B  40      29.152 -55.110 -94.480  1.00 38.17           B     C
ATOM  10231  CB  LEU B  40      28.334 -56.340 -94.074  1.00 36.78           B     C
ATOM  10234  CG  LEU B  40      28.118 -56.623 -92.588  1.00 37.93           B     C
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ATOM  10236  CD1 LEU B  40      27.140 -55.623 -91.933  1.00 41.67      B    C
ATOM  10240  CD2 LEU B  40      27.651 -58.054 -92.391  1.00 40.25      B    C
ATOM  10244  C   LEU B  40      30.484 -55.104 -93.716  1.00 39.13      B    C
ATOM  10245  O   LEU B  40      30.627 -54.381 -92.713  1.00 37.41      B    O
ATOM  10247  N   CYS B  41      31.432 -55.920 -94.190  1.00 35.09      B    N
ATOM  10248  CA  CYS B  41      32.718 -56.143 -93.529  1.00 35.01      B    C
ATOM  10250  CB  CYS B  41      32.672 -57.450 -92.735  1.00 39.73      B    C
ATOM  10253  SG  CYS B  41      31.959 -57.264 -91.099  1.00 44.11      B    S
ATOM  10255  C   CYS B  41      33.846 -56.245 -94.536  1.00 30.78      B    C
ATOM  10256  O   CYS B  41      33.612 -56.546 -95.697  1.00 33.34      B    O
ATOM  10258  N   GLY B  42      35.070 -56.001 -94.077  1.00 29.05      B    N
ATOM  10259  CA  GLY B  42      36.264 -56.362 -94.829  1.00 27.22      B    C
ATOM  10262  C   GLY B  42      36.564 -57.843 -94.619  1.00 25.68      B    C
ATOM  10263  O   GLY B  42      35.987 -58.507 -93.744  1.00 27.95      B    O
ATOM  10265  N   GLY B  43      37.458 -58.362 -95.441  1.00 21.25      B    N
ATOM  10266  CA  GLY B  43      38.007 -59.693 -95.258  1.00 25.48      B    C
ATOM  10269  C   GLY B  43      39.326 -59.717 -96.001  1.00 26.84      B    C
ATOM  10270  O   GLY B  43      39.730 -58.702 -96.582  1.00 22.17      B    O
ATOM  10272  N   VAL B  44      39.974 -60.876 -96.001  1.00 28.47      B    N
ATOM  10273  CA  VAL B  44      41.301 -61.033 -96.588  1.00 30.81      B    C
ATOM  10275  CB  VAL B  44      42.411 -60.688 -95.554  1.00 34.36      B    C
ATOM  10277  CG1 VAL B  44      42.115 -61.332 -94.198  1.00 36.04      B    C
ATOM  10281  CG2 VAL B  44      43.778 -61.091 -96.079  1.00 28.87      B    C
ATOM  10285  C   VAL B  44      41.499 -62.458 -97.100  1.00 31.86      B    C
ATOM  10286  O   VAL B  44      41.210 -63.418 -96.391  1.00 35.40      B    O
ATOM  10288  N   LEU B  45      41.998 -62.574 -98.331  1.00 28.42      B    N
ATOM  10289  CA  LEU B  45      42.223 -63.858 -98.970  1.00 29.75      B    C
ATOM  10291  CB  LEU B  45      42.390 -63.662-100.495  1.00 26.37      B    C
ATOM  10294  CG  LEU B  45      42.378 -64.822-101.510  1.00 26.08      B    C
ATOM  10296  CD1 LEU B  45      41.005 -65.479-101.649  1.00 21.26      B    C
ATOM  10300  CD2 LEU B  45      42.861 -64.339-102.881  1.00 24.35      B    C
ATOM  10304  C   LEU B  45      43.466 -64.473 -98.330  1.00 33.62      B    C
ATOM  10305  O   LEU B  45      44.574 -63.945 -98.472  1.00 34.99      B    O
ATOM  10307  N   VAL B  46      43.273 -65.576 -97.604  1.00 35.94      B    N
ATOM  10308  CA  VAL B  46      44.387 -66.307 -96.972  1.00 32.69      B    C
ATOM  10310  CB  VAL B  46      44.124 -66.576 -95.452  1.00 31.73      B    C
ATOM  10312  CG1 VAL B  46      44.368 -65.307 -94.651  1.00 27.65      B    C
ATOM  10316  CG2 VAL B  46      42.708 -67.123 -95.186  1.00 27.32      B    C
ATOM  10320  C   VAL B  46      44.786 -67.608 -97.703  1.00 36.51      B    C
ATOM  10321  O   VAL B  46      45.856 -68.156 -97.438  1.00 35.05      B    O
ATOM  10323  N   ALA B  47      43.947 -68.084 -98.627  1.00 36.31      B    N
ATOM  10324  CA  ALA B  47      44.247 -69.280 -99.429  1.00 37.71      B    C
ATOM  10326  CB  ALA B  47      43.607 -70.515 -98.804  1.00 33.79      B    C
ATOM  10330  C   ALA B  47      43.746 -69.088-100.862  1.00 40.80      B    C
ATOM  10331  O   ALA B  47      43.374 -67.980-101.251  1.00 43.21      B    O
ATOM  10333  N   GLU B  48      43.731 -70.162-101.645  1.00 44.49      B    N
ATOM  10334  CA  GLU B  48      43.173 -70.106-102.999  1.00 44.53      B    C
ATOM  10336  CB  GLU B  48      43.706 -71.270-103.849  1.00 46.73      B    C
ATOM  10339  CG  GLU B  48      43.980 -70.917-105.322  1.00 48.61      B    C
ATOM  10342  CD  GLU B  48      45.100 -71.752-105.957  1.00 50.86      B    C
ATOM  10343  OE1 GLU B  48      45.445 -72.836-105.426  1.00 54.50      B    O
ATOM  10344  OE2 GLU B  48      45.640 -71.317-107.002  1.00 52.98      B    O
ATOM  10345  C   GLU B  48      41.629 -70.085-102.944  1.00 45.72      B    C
ATOM  10346  O   GLU B  48      40.987 -69.596-103.876  1.00 49.32      B    O
ATOM  10348  N   GLN B  49      41.051 -70.566-101.836  1.00 42.23      B    N
ATOM  10349  CA  GLN B  49      39.596 -70.722-101.684  1.00 40.07      B    C
ATOM  10351  CB  GLN B  49      39.249 -72.213-101.799  1.00 42.74      B    C
ATOM  10354  CG  GLN B  49      37.753 -72.541-101.957  1.00 42.70      B    C
ATOM  10357  CD  GLN B  49      37.501 -73.778-102.822  1.00 42.73      B    C
ATOM  10358  OE1 GLN B  49      38.373 -74.639-102.976  1.00 41.86      B    O
ATOM  10359  NE2 GLN B  49      36.304 -73.862-103.393  1.00 43.64      B    N
ATOM  10362  C   GLN B  49      39.049 -70.197-100.355  1.00 38.48      B    C
ATOM  10363  O   GLN B  49      37.893 -70.465-100.013  1.00 36.98      B    O
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ATOM	10365	N	TRP	B	50	39.859	-69.439	-99.614	1.00	39.16	B	N
ATOM	10366	CA	TRP	B	50	39.511	-69.054	-98.240	1.00	37.11	B	C
ATOM	10368	CB	TRP	B	50	40.310	-69.904	-97.255	1.00	37.00	B	C
ATOM	10371	CG	TRP	B	50	39.878	-71.330	-97.249	1.00	35.91	B	C
ATOM	10372	CD1	TRP	B	50	40.410	-72.359	-97.978	1.00	36.02	B	C
ATOM	10374	NE1	TRP	B	50	39.733	-73.525	-97.709	1.00	35.72	B	N
ATOM	10376	CE2	TRP	B	50	38.737	-73.260	-96.803	1.00	35.45	B	C
ATOM	10377	CD2	TRP	B	50	38.802	-71.886	-96.490	1.00	33.75	B	C
ATOM	10378	CE3	TRP	B	50	37.881	-71.353	-95.581	1.00	34.88	B	C
ATOM	10380	CZ3	TRP	B	50	36.944	-72.195	-95.011	1.00	36.28	B	C
ATOM	10382	CH2	TRP	B	50	36.909	-73.563	-95.334	1.00	35.59	B	C
ATOM	10384	CZ2	TRP	B	50	37.792	-74.111	-96.228	1.00	35.62	B	C
ATOM	10386	C	TRP	B	50	39.739	-67.576	-97.948	1.00	35.98	B	C
ATOM	10387	O	TRP	B	50	40.752	-67.002	-98.351	1.00	39.42	B	O
ATOM	10389	N	VAL	B	51	38.780	-66.983	-97.239	1.00	32.08	B	N
ATOM	10390	CA	VAL	B	51	38.814	-65.575	-96.860	1.00	31.41	B	C
ATOM	10392	CB	VAL	B	51	37.803	-64.752	-97.697	1.00	30.05	B	C
ATOM	10394	CG1	VAL	B	51	37.700	-63.318	-97.170	1.00	31.04	B	C
ATOM	10398	CG2	VAL	B	51	38.206	-64.771	-99.168	1.00	29.64	B	C
ATOM	10402	C	VAL	B	51	38.510	-65.401	-95.360	1.00	30.22	B	C
ATOM	10403	O	VAL	B	51	37.450	-65.819	-94.878	1.00	27.25	B	O
ATOM	10405	N	LEU	B	52	39.444	-64.760	-94.648	1.00	28.01	B	N
ATOM	10406	CA	LEU	B	52	39.348	-64.536	-93.202	1.00	25.12	B	C
ATOM	10408	CB	LEU	B	52	40.755	-64.612	-92.572	1.00	26.22	B	C
ATOM	10411	CG	LEU	B	52	41.004	-64.452	-91.057	1.00	26.17	B	C
ATOM	10413	CD1	LEU	B	52	40.288	-65.496	-90.213	1.00	22.03	B	C
ATOM	10417	CD2	LEU	B	52	42.514	-64.511	-90.808	1.00	22.32	B	C
ATOM	10421	C	LEU	B	52	38.711	-63.176	-92.946	1.00	25.46	B	C
ATOM	10422	O	LEU	B	52	39.041	-62.190	-93.608	1.00	23.81	B	O
ATOM	10424	N	SER	B	53	37.795	-63.141	-91.983	1.00	23.96	B	N
ATOM	10425	CA	SER	B	53	37.074	-61.948	-91.630	1.00	26.54	B	C
ATOM	10427	CB	SER	B	53	35.765	-61.884	-92.406	1.00	29.00	B	C
ATOM	10430	OG	SER	B	53	35.073	-60.676	-92.156	1.00	30.28	B	O
ATOM	10432	C	SER	B	53	36.808	-61.990	-90.128	1.00	28.54	B	C
ATOM	10433	O	SER	B	53	37.444	-62.756	-89.409	1.00	33.43	B	O
ATOM	10435	N	ALA	B	54	35.878	-61.174	-89.659	1.00	30.74	B	N
ATOM	10436	CA	ALA	B	54	35.540	-61.128	-88.237	1.00	35.56	B	C
ATOM	10438	CB	ALA	B	54	35.390	-59.697	-87.783	1.00	30.25	B	C
ATOM	10442	C	ALA	B	54	34.264	-61.928	-87.971	1.00	40.11	B	C
ATOM	10443	O	ALA	B	54	33.421	-62.083	-88.855	1.00	41.26	B	O
ATOM	10445	N	ALA	B	55	34.136	-62.438	-86.750	1.00	43.29	B	N
ATOM	10446	CA	ALA	B	55	33.062	-63.363	-86.395	1.00	44.50	B	C
ATOM	10448	CB	ALA	B	55	33.397	-64.090	-85.103	1.00	43.96	B	C
ATOM	10452	C	ALA	B	55	31.712	-62.678	-86.272	1.00	47.71	B	C
ATOM	10453	O	ALA	B	55	30.699	-63.259	-86.642	1.00	50.05	B	O
ATOM	10455	N	HIS	B	56	31.697	-61.452	-85.760	1.00	52.45	B	N
ATOM	10456	CA	HIS	B	56	30.448	-60.717	-85.540	1.00	54.47	B	C
ATOM	10458	CB	HIS	B	56	30.665	-59.580	-84.525	1.00	60.79	B	C
ATOM	10461	CG	HIS	B	56	29.429	-59.172	-83.773	1.00	63.96	B	C
ATOM	10462	ND1	HIS	B	56	28.947	-59.875	-82.687	1.00	68.14	B	N
ATOM	10464	CE1	HIS	B	56	27.864	-59.277	-82.220	1.00	68.81	B	C
ATOM	10466	NE2	HIS	B	56	27.633	-58.203	-82.954	1.00	70.12	B	N
ATOM	10468	CD2	HIS	B	56	28.600	-58.111	-83.928	1.00	68.83	B	C
ATOM	10470	C	HIS	B	56	29.840	-60.167	-86.841	1.00	55.04	B	C
ATOM	10471	O	HIS	B	56	28.730	-59.648	-86.816	1.00	59.17	B	O
ATOM	10473	N	CYS	B	57	30.554	-60.268	-87.963	1.00	54.05	B	N
ATOM	10474	CA	CYS	B	57	29.960	-59.997	-89.280	1.00	58.67	B	C
ATOM	10476	CB	CYS	B	57	31.013	-60.072	-90.395	1.00	55.09	B	C
ATOM	10479	SG	CYS	B	57	32.453	-59.001	-90.167	1.00	53.83	B	S
ATOM	10481	C	CYS	B	57	28.835	-60.995	-89.588	1.00	63.07	B	C
ATOM	10482	O	CYS	B	57	27.773	-60.615	-90.084	1.00	63.91	B	O
ATOM	10484	N	LEU	B	58	29.098	-62.271	-89.302	1.00	68.35	B	N
ATOM	10485	CA	LEU	B	58	28.111	-63.350	-89.411	1.00	69.66	B	C

ATOM	10487	CB	LEU	B	58	28.703	-64.650	-88.845	1.00	70.39	B	C
ATOM	10490	CG	LEU	B	58	27.943	-65.972	-89.012	1.00	69.34	B	C
ATOM	10492	CD1	LEU	B	58	28.465	-66.757	-90.211	1.00	67.83	B	C
ATOM	10496	CD2	LEU	B	58	28.063	-66.802	-87.738	1.00	69.82	B	C
ATOM	10500	C	LEU	B	58	26.821	-63.003	-88.662	1.00	73.25	B	C
ATOM	10501	O	LEU	B	58	25.732	-63.068	-89.234	1.00	74.73	B	O
ATOM	10503	N	GLU	B	59	26.955	-62.633	-87.388	1.00	76.02	B	N
ATOM	10504	CA	GLU	B	59	25.810	-62.239	-86.552	1.00	78.84	B	C
ATOM	10506	CB	GLU	B	59	26.269	-61.891	-85.126	1.00	81.51	B	C
ATOM	10509	CG	GLU	B	59	26.472	-63.104	-84.204	1.00	83.71	B	C
ATOM	10512	CD	GLU	B	59	25.318	-63.320	-83.226	1.00	84.97	B	C
ATOM	10513	OE1	GLU	B	59	24.787	-64.451	-83.162	1.00	86.12	B	O
ATOM	10514	OE2	GLU	B	59	24.948	-62.360	-82.518	1.00	85.36	B	O
ATOM	10515	C	GLU	B	59	25.034	-61.058	-87.141	1.00	81.28	B	C
ATOM	10516	O	GLU	B	59	23.806	-61.107	-87.243	1.00	82.12	B	O
ATOM	10518	N	ASP	B	60	25.755	-60.006	-87.525	1.00	82.96	B	N
ATOM	10519	CA	ASP	B	60	25.143	-58.795	-88.093	1.00	82.97	B	C
ATOM	10521	CB	ASP	B	60	26.168	-57.648	-88.155	1.00	83.36	B	C
ATOM	10524	CG	ASP	B	60	26.540	-57.106	-86.776	1.00	83.92	B	C
ATOM	10525	OD1	ASP	B	60	25.890	-57.480	-85.771	1.00	84.33	B	O
ATOM	10526	OD2	ASP	B	60	27.489	-56.294	-86.703	1.00	82.79	B	O
ATOM	10527	C	ASP	B	60	24.523	-59.014	-89.483	1.00	83.48	B	C
ATOM	10528	O	ASP	B	60	23.625	-58.268	-89.881	1.00	83.47	B	O
ATOM	10530	N	ALA	B	61	24.992	-60.031	-90.210	1.00	83.73	B	N
ATOM	10531	CA	ALA	B	61	24.459	-60.356	-91.546	1.00	84.10	B	C
ATOM	10533	CB	ALA	B	61	25.361	-61.371	-92.249	1.00	84.18	B	C
ATOM	10537	C	ALA	B	61	23.014	-60.875	-91.524	1.00	85.40	B	C
ATOM	10538	O	ALA	B	61	22.353	-60.913	-92.568	1.00	86.87	B	O
ATOM	10540	N	ALA	B	62	22.544	-61.287	-90.344	1.00	83.95	B	N
ATOM	10541	CA	ALA	B	62	21.169	-61.756	-90.137	1.00	81.99	B	C
ATOM	10543	CB	ALA	B	62	20.154	-60.643	-90.461	1.00	81.06	B	C
ATOM	10547	C	ALA	B	62	20.864	-63.039	-90.923	1.00	80.25	B	C
ATOM	10548	O	ALA	B	62	20.969	-64.137	-90.377	1.00	78.78	B	O
ATOM	10550	N	ASP	B	63	20.501	-62.901	-92.196	1.00	79.84	B	N
ATOM	10551	CA	ASP	B	63	20.071	-64.057	-93.002	1.00	78.87	B	C
ATOM	10553	CB	ASP	B	63	18.614	-64.414	-92.645	1.00	80.66	B	C
ATOM	10556	CG	ASP	B	63	17.714	-63.183	-92.539	1.00	82.27	B	C
ATOM	10557	OD1	ASP	B	63	17.276	-62.856	-91.412	1.00	82.06	B	O
ATOM	10558	OD2	ASP	B	63	17.459	-62.536	-93.579	1.00	82.85	B	O
ATOM	10559	C	ASP	B	63	20.225	-63.917	-94.534	1.00	77.32	B	C
ATOM	10560	O	ASP	B	63	19.946	-64.872	-95.265	1.00	77.78	B	O
ATOM	10562	N	GLY	B	64	20.675	-62.757	-95.018	1.00	73.64	B	N
ATOM	10563	CA	GLY	B	64	20.837	-62.530	-96.456	1.00	70.44	B	C
ATOM	10566	C	GLY	B	64	21.958	-63.357	-97.059	1.00	66.74	B	C
ATOM	10567	O	GLY	B	64	22.793	-63.909	-96.338	1.00	63.69	B	O
ATOM	10569	N	LYS	B	65	21.976	-63.453	-98.386	1.00	64.90	B	N
ATOM	10570	CA	LYS	B	65	23.012	-64.225	-99.069	1.00	63.63	B	C
ATOM	10572	CB	LYS	B	65	22.731	-64.367	-100.577	1.00	63.74	B	C
ATOM	10575	CG	LYS	B	65	23.587	-65.448	-101.251	1.00	64.33	B	C
ATOM	10578	CD	LYS	B	65	23.229	-65.673	-102.721	1.00	64.55	B	C
ATOM	10581	CE	LYS	B	65	23.361	-67.153	-103.101	1.00	64.73	B	C
ATOM	10584	NZ	LYS	B	65	23.335	-67.416	-104.584	1.00	63.36	B	N
ATOM	10588	C	LYS	B	65	24.366	-63.558	-98.830	1.00	61.58	B	C
ATOM	10589	O	LYS	B	65	24.615	-62.441	-99.305	1.00	61.04	B	O
ATOM	10591	N	VAL	B	66	25.220	-64.237	-98.064	1.00	57.01	B	N
ATOM	10592	CA	VAL	B	66	26.576	-63.766	-97.829	1.00	53.61	B	C
ATOM	10594	CB	VAL	B	66	27.210	-64.410	-96.582	1.00	52.73	B	C
ATOM	10596	CG1	VAL	B	66	28.705	-64.126	-96.538	1.00	52.64	B	C
ATOM	10600	CG2	VAL	B	66	26.527	-63.900	-95.317	1.00	51.29	B	C
ATOM	10604	C	VAL	B	66	27.429	-64.068	-99.055	1.00	51.01	B	C
ATOM	10605	O	VAL	B	66	27.424	-65.188	-99.573	1.00	51.68	B	O
ATOM	10607	N	GLN	B	67	28.145	-63.051	-99.517	1.00	47.80	B	N
ATOM	10608	CA	GLN	B	67	29.021	-63.166	-100.665	1.00	46.92	B	C

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ATOM  10610  CB  GLN B  67      28.331 -62.566-101.890  1.00 49.23       B     C
ATOM  10613  CG  GLN B  67      27.111 -63.356-102.372  1.00 48.49       B     C
ATOM  10616  CD  GLN B  67      26.428 -62.719-103.567  1.00 47.51       B     C
ATOM  10617  OE1 GLN B  67      26.217 -61.501-103.607  1.00 45.66       B     O
ATOM  10618  NE2 GLN B  67      26.070 -63.545-104.552  1.00 46.56       B     N
ATOM  10621  C   GLN B  67      30.329 -62.434-100.383  1.00 43.71       B     C
ATOM  10622  O   GLN B  67      30.394 -61.591 -99.498  1.00 46.76       B     O
ATOM  10624  N   VAL B  68      31.358 -62.756-101.152  1.00 41.06       B     N
ATOM  10625  CA  VAL B  68      32.683 -62.174-100.988  1.00 40.46       B     C
ATOM  10627  CB  VAL B  68      33.684 -63.251-100.507  1.00 39.79       B     C
ATOM  10629  CG1 VAL B  68      35.116 -62.729-100.536  1.00 39.65       B     C
ATOM  10633  CG2 VAL B  68      33.298 -63.748 -99.113  1.00 35.87       B     C
ATOM  10637  C   VAL B  68      33.154 -61.581-102.321  1.00 37.53       B     C
ATOM  10638  O   VAL B  68      33.271 -62.293-103.314  1.00 32.48       B     O
ATOM  10640  N   LEU B  69      33.416 -60.277-102.342  1.00 38.13       B     N
ATOM  10641  CA  LEU B  69      33.859 -59.594-103.568  1.00 38.71       B     C
ATOM  10643  CB  LEU B  69      33.212 -58.198-103.671  1.00 39.39       B     C
ATOM  10646  CG  LEU B  69      33.567 -57.339-104.891  1.00 38.23       B     C
ATOM  10648  CD1 LEU B  69      33.055 -58.009-106.151  1.00 39.44       B     C
ATOM  10652  CD2 LEU B  69      33.001 -55.915-104.742  1.00 40.33       B     C
ATOM  10656  C   LEU B  69      35.384 -59.472-103.621  1.00 36.12       B     C
ATOM  10657  O   LEU B  69      35.982 -58.654-102.912  1.00 38.17       B     O
ATOM  10659  N   LEU B  70      36.011 -60.292-104.452  1.00 32.95       B     N
ATOM  10660  CA  LEU B  70      37.452 -60.198-104.648  1.00 33.88       B     C
ATOM  10662  CB  LEU B  70      38.074 -61.584-104.831  1.00 32.44       B     C
ATOM  10665  CG  LEU B  70      37.897 -62.601-103.697  1.00 30.43       B     C
ATOM  10667  CD1 LEU B  70      38.680 -63.864-104.050  1.00 31.19       B     C
ATOM  10671  CD2 LEU B  70      38.339 -62.040-102.347  1.00 29.11       B     C
ATOM  10675  C   LEU B  70      37.745 -59.315-105.856  1.00 35.58       B     C
ATOM  10676  O   LEU B  70      36.823 -58.921-106.581  1.00 35.91       B     O
ATOM  10678  N   GLY B  71      39.029 -58.999-106.049  1.00 36.24       B     N
ATOM  10679  CA  GLY B  71      39.505 -58.156-107.156  1.00 34.22       B     C
ATOM  10682  C   GLY B  71      38.973 -56.726-107.263  1.00 36.34       B     C
ATOM  10683  O   GLY B  71      39.074 -56.123-108.334  1.00 43.02       B     O
ATOM  10685  N   ALA B  72      38.434 -56.161-106.180  1.00 32.78       B     N
ATOM  10686  CA  ALA B  72      37.756 -54.857-106.255  1.00 31.64       B     C
ATOM  10688  CB  ALA B  72      36.463 -54.871-105.428  1.00 29.09       B     C
ATOM  10692  C   ALA B  72      38.621 -53.684-105.821  1.00 35.79       B     C
ATOM  10693  O   ALA B  72      39.355 -53.758-104.827  1.00 44.04       B     O
ATOM  10695  N   HIS B  73      38.528 -52.589-106.566  1.00 35.36       B     N
ATOM  10696  CA  HIS B  73      38.888 -51.283-106.027  1.00 34.64       B     C
ATOM  10698  CB  HIS B  73      39.859 -50.517-106.920  1.00 33.76       B     C
ATOM  10701  CG  HIS B  73      40.312 -49.226-106.314  1.00 34.97       B     C
ATOM  10702  ND1 HIS B  73      40.630 -49.110-104.978  1.00 32.16       B     N
ATOM  10704  CE1 HIS B  73      40.975 -47.863-104.718  1.00 34.95       B     C
ATOM  10706  NE2 HIS B  73      40.895 -47.165-105.837  1.00 36.36       B     N
ATOM  10708  CD2 HIS B  73      40.487 -47.996-106.852  1.00 34.88       B     C
ATOM  10710  C   HIS B  73      37.618 -50.474-105.761  1.00 33.41       B     C
ATOM  10711  O   HIS B  73      37.455 -49.962-104.668  1.00 29.64       B     O
ATOM  10713  N   SER B  74      36.727 -50.394-106.753  1.00 34.60       B     N
ATOM  10714  CA  SER B  74      35.398 -49.784-106.596  1.00 35.84       B     C
ATOM  10716  CB  SER B  74      34.988 -49.063-107.893  1.00 38.62       B     C
ATOM  10719  OG  SER B  74      33.634 -48.618-107.839  1.00 39.81       B     O
ATOM  10721  C   SER B  74      34.303 -50.803-106.234  1.00 34.63       B     C
ATOM  10722  O   SER B  74      34.206 -51.867-106.837  1.00 36.48       B     O
ATOM  10724  N   LEU B  75      33.470 -50.453-105.257  1.00 37.65       B     N
ATOM  10725  CA  LEU B  75      32.287 -51.251-104.909  1.00 39.72       B     C
ATOM  10727  CB  LEU B  75      31.670 -50.784-103.571  1.00 36.30       B     C
ATOM  10730  CG  LEU B  75      31.871 -51.631-102.298  1.00 37.89       B     C
ATOM  10732  CD1 LEU B  75      33.285 -52.172-102.152  1.00 37.78       B     C
ATOM  10736  CD2 LEU B  75      31.484 -50.852-101.039  1.00 37.56       B     C
ATOM  10740  C   LEU B  75      31.236 -51.205-106.039  1.00 44.65       B     C
ATOM  10741  O   LEU B  75      30.641 -52.231-106.366  1.00 47.52       B     O
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ATOM  10743  N   SER B  76      31.033 -50.026-106.637  1.00 45.22      B    N
ATOM  10744  CA  SER B  76      29.980 -49.816-107.650  1.00 45.43      B    C
ATOM  10746  CB  SER B  76      29.489 -48.366-107.622  1.00 42.98      B    C
ATOM  10749  OG  SER B  76      28.624 -48.140-106.524  1.00 44.06      B    O
ATOM  10751  C   SER B  76      30.415 -50.140-109.078  1.00 48.68      B    C
ATOM  10752  O   SER B  76      29.780 -50.931-109.775  1.00 47.16      B    O
ATOM  10754  N   GLN B  77      31.496 -49.509-109.511  1.00 51.43      B    N
ATOM  10755  CA  GLN B  77      31.885 -49.550-110.911  1.00 52.24      B    C
ATOM  10757  CB  GLN B  77      32.910 -48.455-111.203  1.00 54.35      B    C
ATOM  10760  CG  GLN B  77      32.380 -47.047-110.949  1.00 56.59      B    C
ATOM  10763  CD  GLN B  77      33.034 -46.007-111.839  1.00 59.71      B    C
ATOM  10764  OE1 GLN B  77      34.168 -46.179-112.301  1.00 65.21      B    O
ATOM  10765  NE2 GLN B  77      32.316 -44.919-112.092  1.00 62.48      B    N
ATOM  10768  C   GLN B  77      32.436 -50.916-111.318  1.00 52.78      B    C
ATOM  10769  O   GLN B  77      33.045 -51.609-110.498  1.00 50.73      B    O
ATOM  10771  N   PRO B  78      32.208 -51.314-112.587  1.00 51.87      B    N
ATOM  10772  CA  PRO B  78      32.768 -52.561-113.084  1.00 51.17      B    C
ATOM  10774  CB  PRO B  78      31.922 -52.850-114.323  1.00 53.24      B    C
ATOM  10777  CG  PRO B  78      31.574 -51.498-114.843  1.00 53.16      B    C
ATOM  10780  CD  PRO B  78      31.410 -50.625-113.619  1.00 52.36      B    C
ATOM  10783  C   PRO B  78      34.237 -52.400-113.469  1.00 51.68      B    C
ATOM  10784  O   PRO B  78      34.638 -51.339-113.954  1.00 51.10      B    O
ATOM  10785  N   GLU B  79      35.022 -53.450-113.230  1.00 51.32      B    N
ATOM  10786  CA  GLU B  79      36.442 -53.491-113.587  1.00 50.10      B    C
ATOM  10788  CB  GLU B  79      37.343 -53.141-112.393  1.00 50.71      B    C
ATOM  10791  CG  GLU B  79      36.867 -51.977-111.522  1.00 51.07      B    C
ATOM  10794  CD  GLU B  79      37.676 -51.847-110.246  1.00 50.71      B    C
ATOM  10795  OE1 GLU B  79      37.238 -52.404-109.219  1.00 47.87      B    O
ATOM  10796  OE2 GLU B  79      38.749 -51.204-110.277  1.00 52.10      B    O
ATOM  10797  C   GLU B  79      36.766 -54.908-114.050  1.00 50.42      B    C
ATOM  10798  O   GLU B  79      36.056 -55.854-113.686  1.00 49.26      B    O
ATOM  10800  N   PRO B  80      37.854 -55.071-114.827  1.00 50.66      B    N
ATOM  10801  CA  PRO B  80      38.137 -56.411-115.340  1.00 50.02      B    C
ATOM  10803  CB  PRO B  80      39.454 -56.235-116.123  1.00 49.95      B    C
ATOM  10806  CG  PRO B  80      39.571 -54.771-116.392  1.00 50.08      B    C
ATOM  10809  CD  PRO B  80      38.878 -54.091-115.241  1.00 51.02      B    C
ATOM  10812  C   PRO B  80      38.312 -57.415-114.203  1.00 50.32      B    C
ATOM  10813  O   PRO B  80      37.763 -58.516-114.264  1.00 51.01      B    O
ATOM  10814  N   SER B  81      39.036 -57.008-113.159  1.00 49.68      B    N
ATOM  10815  CA  SER B  81      39.451 -57.918-112.090  1.00 46.44      B    C
ATOM  10817  CB  SER B  81      40.692 -57.365-111.388  1.00 47.39      B    C
ATOM  10820  OG  SER B  81      41.824 -57.496-112.238  1.00 49.26      B    O
ATOM  10822  C   SER B  81      38.359 -58.244-111.073  1.00 42.87      B    C
ATOM  10823  O   SER B  81      38.431 -59.271-110.401  1.00 43.41      B    O
ATOM  10825  N   LYS B  82      37.348 -57.394-110.963  1.00 41.44      B    N
ATOM  10826  CA  LYS B  82      36.255 -57.648-110.023  1.00 43.60      B    C
ATOM  10828  CB  LYS B  82      35.181 -56.548-110.102  1.00 44.07      B    C
ATOM  10831  CG  LYS B  82      35.574 -55.204-109.497  1.00 43.51      B    C
ATOM  10834  CD  LYS B  82      34.430 -54.194-109.573  1.00 43.53      B    C
ATOM  10837  CE  LYS B  82      33.345 -54.458-108.535  1.00 43.93      B    C
ATOM  10840  NZ  LYS B  82      32.353 -53.333-108.456  1.00 43.72      B    N
ATOM  10844  C   LYS B  82      35.600 -59.000-110.295  1.00 43.44      B    C
ATOM  10845  O   LYS B  82      35.435 -59.392-111.448  1.00 46.25      B    O
ATOM  10847  N   ARG B  83      35.254 -59.710-109.225  1.00 43.81      B    N
ATOM  10848  CA  ARG B  83      34.359 -60.859-109.308  1.00 44.23      B    C
ATOM  10850  CB  ARG B  83      35.082 -62.101-109.814  1.00 46.54      B    C
ATOM  10853  CG  ARG B  83      34.240 -63.352-109.627  1.00 47.37      B    C
ATOM  10856  CD  ARG B  83      34.614 -64.466-110.564  1.00 49.39      B    C
ATOM  10859  NE  ARG B  83      33.843 -65.661-110.233  1.00 50.24      B    N
ATOM  10861  CZ  ARG B  83      33.730 -66.730-111.011  1.00 53.60      B    C
ATOM  10862  NH1 ARG B  83      34.336 -66.776-112.196  1.00 53.54      B    N
ATOM  10865  NH2 ARG B  83      32.995 -67.761-110.597  1.00 54.70      B    N
ATOM  10868  C   ARG B  83      33.718 -61.189-107.964  1.00 44.24      B    C
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ATOM	10869	O	ARG	B	83	34.420	-61.415	-106.976	1.00	46.63	B	O
ATOM	10871	N	LEU	B	84	32.387	-61.244	-107.951	1.00	42.37	B	N
ATOM	10872	CA	LEU	B	84	31.615	-61.652	-106.782	1.00	40.91	B	C
ATOM	10874	CB	LEU	B	84	30.180	-61.121	-106.913	1.00	41.66	B	C
ATOM	10877	CG	LEU	B	84	29.233	-61.185	-105.708	1.00	42.19	B	C
ATOM	10879	CD1	LEU	B	84	29.977	-60.904	-104.425	1.00	41.22	B	C
ATOM	10883	CD2	LEU	B	84	28.075	-60.198	-105.877	1.00	41.26	B	C
ATOM	10887	C	LEU	B	84	31.630	-63.185	-106.657	1.00	41.57	B	C
ATOM	10888	O	LEU	B	84	31.649	-63.891	-107.675	1.00	39.59	B	O
ATOM	10890	N	TYR	B	85	31.658	-63.684	-105.415	1.00	41.98	B	N
ATOM	10891	CA	TYR	B	85	31.714	-65.130	-105.114	1.00	41.55	B	C
ATOM	10893	CB	TYR	B	85	33.092	-65.521	-104.579	1.00	37.99	B	C
ATOM	10896	CG	TYR	B	85	34.205	-65.556	-105.598	1.00	37.60	B	C
ATOM	10897	CD1	TYR	B	85	34.540	-66.734	-106.257	1.00	36.48	B	C
ATOM	10899	CE1	TYR	B	85	35.586	-66.768	-107.179	1.00	37.61	B	C
ATOM	10901	CZ	TYR	B	85	36.311	-65.611	-107.437	1.00	37.65	B	C
ATOM	10902	OH	TYR	B	85	37.349	-65.607	-108.345	1.00	38.79	B	O
ATOM	10904	CE2	TYR	B	85	36.001	-64.444	-106.786	1.00	37.52	B	C
ATOM	10906	CD2	TYR	B	85	34.957	-64.422	-105.868	1.00	38.01	B	C
ATOM	10908	C	TYR	B	85	30.651	-65.506	-104.074	1.00	42.35	B	C
ATOM	10909	O	TYR	B	85	29.925	-64.649	-103.589	1.00	40.36	B	O
ATOM	10911	N	ASP	B	86	30.568	-66.788	-103.726	1.00	45.39	B	N
ATOM	10912	CA	ASP	B	86	29.494	-67.279	-102.861	1.00	48.04	B	C
ATOM	10914	CB	ASP	B	86	28.464	-68.043	-103.715	1.00	51.98	B	C
ATOM	10917	CG	ASP	B	86	27.019	-67.680	-103.375	1.00	55.44	B	C
ATOM	10918	OD1	ASP	B	86	26.702	-67.485	-102.172	1.00	55.49	B	O
ATOM	10919	OD2	ASP	B	86	26.204	-67.599	-104.326	1.00	56.18	B	O
ATOM	10920	C	ASP	B	86	30.025	-68.173	-101.728	1.00	47.18	B	C
ATOM	10921	O	ASP	B	86	31.009	-68.899	-101.893	1.00	44.10	B	O
ATOM	10923	N	VAL	B	87	29.344	-68.123	-100.588	1.00	51.42	B	N
ATOM	10924	CA	VAL	B	87	29.763	-68.846	-99.388	1.00	53.62	B	C
ATOM	10926	CB	VAL	B	87	29.495	-68.011	-98.088	1.00	52.27	B	C
ATOM	10928	CG1	VAL	B	87	28.004	-67.973	-97.729	1.00	50.27	B	C
ATOM	10932	CG2	VAL	B	87	30.293	-68.572	-96.925	1.00	53.70	B	C
ATOM	10936	C	VAL	B	87	29.060	-70.204	-99.282	1.00	56.34	B	C
ATOM	10937	O	VAL	B	87	27.860	-70.266	-98.998	1.00	59.22	B	O
ATOM	10939	N	LEU	B	88	29.802	-71.285	-99.513	1.00	56.61	B	N
ATOM	10940	CA	LEU	B	88	29.291	-72.628	-99.208	1.00	56.36	B	C
ATOM	10942	CB	LEU	B	88	30.135	-73.743	-99.828	1.00	55.73	B	C
ATOM	10945	CG	LEU	B	88	30.927	-73.474	-101.101	1.00	57.16	B	C
ATOM	10947	CD1	LEU	B	88	32.233	-72.804	-100.738	1.00	57.21	B	C
ATOM	10951	CD2	LEU	B	88	31.194	-74.772	-101.852	1.00	56.77	B	C
ATOM	10955	C	LEU	B	88	29.279	-72.816	-97.696	1.00	58.15	B	C
ATOM	10956	O	LEU	B	88	28.382	-73.460	-97.148	1.00	59.20	B	O
ATOM	10958	N	ARG	B	89	30.279	-72.240	-97.031	1.00	58.02	B	N
ATOM	10959	CA	ARG	B	89	30.506	-72.476	-95.615	1.00	56.49	B	C
ATOM	10961	CB	ARG	B	89	31.493	-73.637	-95.462	1.00	56.31	B	C
ATOM	10964	CG	ARG	B	89	31.111	-74.655	-94.403	1.00	58.01	B	C
ATOM	10967	CD	ARG	B	89	32.308	-75.519	-94.014	1.00	58.69	B	C
ATOM	10970	NE	ARG	B	89	32.954	-76.161	-95.165	1.00	59.80	B	N
ATOM	10972	CZ	ARG	B	89	34.171	-76.716	-95.142	1.00	59.60	B	C
ATOM	10973	NH1	ARG	B	89	34.903	-76.713	-94.029	1.00	59.72	B	N
ATOM	10976	NH2	ARG	B	89	34.667	-77.275	-96.242	1.00	59.64	B	N
ATOM	10979	C	ARG	B	89	31.059	-71.213	-94.936	1.00	55.64	B	C
ATOM	10980	O	ARG	B	89	32.066	-70.659	-95.379	1.00	55.70	B	O
ATOM	10982	N	ALA	B	90	30.383	-70.761	-93.879	1.00	53.33	B	N
ATOM	10983	CA	ALA	B	90	30.890	-69.707	-93.007	1.00	53.35	B	C
ATOM	10985	CB	ALA	B	90	29.846	-68.626	-92.805	1.00	51.34	B	C
ATOM	10989	C	ALA	B	90	31.248	-70.361	-91.676	1.00	54.21	B	C
ATOM	10990	O	ALA	B	90	30.362	-70.827	-90.960	1.00	55.99	B	O
ATOM	10992	N	VAL	B	91	32.544	-70.405	-91.362	1.00	53.95	B	N
ATOM	10993	CA	VAL	B	91	33.053	-71.093	-90.168	1.00	52.71	B	C
ATOM	10995	CB	VAL	B	91	34.194	-72.075	-90.532	1.00	51.83	B	C

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ATOM  10997  CG1 VAL B  91      34.645 -72.862 -89.299  1.00 49.35      B    C
ATOM  11001  CG2 VAL B  91      33.757 -73.014 -91.651  1.00 52.30      B    C
ATOM  11005  C   VAL B  91      33.585 -70.090 -89.139  1.00 52.51      B    C
ATOM  11006  O   VAL B  91      34.754 -69.693 -89.209  1.00 51.51      B    O
ATOM  11008  N   PRO B  92      32.736 -69.681 -88.175  1.00 53.51      B    N
ATOM  11009  CA  PRO B  92      33.224 -68.806 -87.114  1.00 51.85      B    C
ATOM  11011  CB  PRO B  92      31.939 -68.294 -86.452  1.00 53.50      B    C
ATOM  11014  CG  PRO B  92      30.949 -69.371 -86.674  1.00 54.78      B    C
ATOM  11017  CD  PRO B  92      31.309 -70.016 -87.997  1.00 54.99      B    C
ATOM  11020  C   PRO B  92      34.040 -69.619 -86.131  1.00 53.38      B    C
ATOM  11021  O   PRO B  92      33.904 -70.847 -86.091  1.00 55.30      B    O
ATOM  11022  N   HIS B  93      34.887 -68.954 -85.352  1.00 49.46      B    N
ATOM  11023  CA  HIS B  93      35.687 -69.656 -84.364  1.00 50.17      B    C
ATOM  11025  CB  HIS B  93      36.722 -68.729 -83.736  1.00 44.28      B    C
ATOM  11028  CG  HIS B  93      37.747 -69.441 -82.913  1.00 43.03      B    C
ATOM  11029  ND1 HIS B  93      37.558 -69.741 -81.580  1.00 40.49      B    N
ATOM  11031  CE1 HIS B  93      38.625 -70.367 -81.119  1.00 39.25      B    C
ATOM  11033  NE2 HIS B  93      39.499 -70.477 -82.100  1.00 40.46      B    N
ATOM  11035  CD2 HIS B  93      38.974 -69.910 -83.234  1.00 39.10      B    C
ATOM  11037  C   HIS B  93      34.739 -70.223 -83.307  1.00 51.86      B    C
ATOM  11038  O   HIS B  93      33.852 -69.508 -82.838  1.00 49.69      B    O
ATOM  11040  N   PRO B  94      34.906 -71.518 -82.948  1.00 56.85      B    N
ATOM  11041  CA  PRO B  94      33.962 -72.200 -82.044  1.00 57.28      B    C
ATOM  11043  CB  PRO B  94      34.512 -73.632 -81.966  1.00 58.38      B    C
ATOM  11046  CG  PRO B  94      35.934 -73.540 -82.418  1.00 59.16      B    C
ATOM  11049  CD  PRO B  94      35.977 -72.426 -83.407  1.00 57.31      B    C
ATOM  11052  C   PRO B  94      33.813 -71.613 -80.639  1.00 59.70      B    C
ATOM  11053  O   PRO B  94      32.944 -72.058 -79.888  1.00 61.05      B    O
ATOM  11054  N   ASP B  95      34.644 -70.633 -80.291  1.00 62.36      B    N
ATOM  11055  CA  ASP B  95      34.550 -69.943 -79.006  1.00 62.17      B    C
ATOM  11057  CB  ASP B  95      35.897 -70.022 -78.291  1.00 62.64      B    C
ATOM  11060  CG  ASP B  95      36.443 -71.448 -78.239  1.00 64.10      B    C
ATOM  11061  OD1 ASP B  95      35.639 -72.379 -78.025  1.00 64.82      B    O
ATOM  11062  OD2 ASP B  95      37.667 -71.642 -78.414  1.00 62.75      B    O
ATOM  11063  C   ASP B  95      34.091 -68.488 -79.160  1.00 62.12      B    C
ATOM  11064  O   ASP B  95      34.092 -67.733 -78.190  1.00 62.21      B    O
ATOM  11066  N   SER B  96      33.686 -68.108 -80.373  1.00 64.12      B    N
ATOM  11067  CA  SER B  96      33.072 -66.801 -80.622  1.00 67.86      B    C
ATOM  11069  CB  SER B  96      32.769 -66.610 -82.114  1.00 67.27      B    C
ATOM  11072  OG  SER B  96      33.944 -66.581 -82.896  1.00 69.32      B    O
ATOM  11074  C   SER B  96      31.756 -66.690 -79.868  1.00 71.20      B    C
ATOM  11075  O   SER B  96      30.903 -67.566 -79.995  1.00 73.91      B    O
ATOM  11077  N   ARG B  97      31.585 -65.618 -79.100  1.00 72.33      B    N
ATOM  11078  CA  ARG B  97      30.307 -65.338 -78.443  1.00 74.80      B    C
ATOM  11080  CB  ARG B  97      30.452 -65.464 -76.920  1.00 77.11      B    C
ATOM  11083  CG  ARG B  97      30.883 -66.859 -76.437  1.00 78.58      B    C
ATOM  11086  CD  ARG B  97      29.812 -67.931 -76.689  1.00 78.97      B    C
ATOM  11089  NE  ARG B  97      30.189 -69.250 -76.160  1.00 78.73      B    N
ATOM  11091  CZ  ARG B  97      30.803 -70.224 -76.841  1.00 78.40      B    C
ATOM  11092  NH1 ARG B  97      31.143 -70.073 -78.115  1.00 78.11      B    N
ATOM  11095  NH2 ARG B  97      31.081 -71.374 -76.238  1.00 78.88      B    N
ATOM  11098  C   ARG B  97      29.808 -63.942 -78.848  1.00 77.20      B    C
ATOM  11099  O   ARG B  97      30.611 -63.069 -79.192  1.00 78.19      B    O
ATOM  11101  N   PRO B  98      28.478 -63.725 -78.820  1.00 79.22      B    N
ATOM  11102  CA  PRO B  98      27.922 -62.438 -79.259  1.00 77.99      B    C
ATOM  11104  CB  PRO B  98      26.412 -62.708 -79.303  1.00 79.41      B    C
ATOM  11107  CG  PRO B  98      26.194 -63.786 -78.299  1.00 80.09      B    C
ATOM  11110  CD  PRO B  98      27.421 -64.654 -78.373  1.00 80.51      B    C
ATOM  11113  C   PRO B  98      28.224 -61.273 -78.314  1.00 77.83      B    C
ATOM  11114  O   PRO B  98      28.195 -60.115 -78.738  1.00 81.07      B    O
ATOM  11115  N   ASP B  99      28.520 -61.584 -77.055  1.00 75.45      B    N
ATOM  11116  CA  ASP B  99      28.696 -60.567 -76.018  1.00 74.68      B    C
ATOM  11118  CB  ASP B  99      27.808 -60.903 -74.806  1.00 75.42      B    C
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ATOM  11121  CG  ASP B  99      28.062 -62.305 -74.242  1.00 75.50      B      C
ATOM  11122  OD1 ASP B  99      28.493 -63.208 -74.998  1.00 75.59      B      O
ATOM  11123  OD2 ASP B  99      27.816 -62.501 -73.034  1.00 74.97      B      O
ATOM  11124  C   ASP B  99      30.166 -60.370 -75.590  1.00 74.55      B      C
ATOM  11125  O   ASP B  99      30.433 -59.783 -74.529  1.00 73.12      B      O
ATOM  11127  N   THR B 100      31.102 -60.857 -76.416  1.00 71.97      B      N
ATOM  11128  CA  THR B 100      32.549 -60.683 -76.191  1.00 68.31      B      C
ATOM  11130  CB  THR B 100      33.209 -61.940 -75.531  1.00 68.10      B      C
ATOM  11132  OG1 THR B 100      33.318 -63.007 -76.485  1.00 67.69      B      O
ATOM  11134  CG2 THR B 100      32.413 -62.419 -74.319  1.00 67.27      B      C
ATOM  11138  C   THR B 100      33.269 -60.388 -77.512  1.00 66.00      B      C
ATOM  11139  O   THR B 100      32.760 -60.730 -78.586  1.00 65.38      B      O
ATOM  11141  N   ILE B 101      34.446 -59.760 -77.423  1.00 62.94      B      N
ATOM  11142  CA  ILE B 101      35.312 -59.518 -78.606  1.00 60.61      B      C
ATOM  11144  CB  ILE B 101      36.047 -58.113 -78.585  1.00 60.32      B      C
ATOM  11146  CG1 ILE B 101      36.571 -57.713 -77.191  1.00 60.38      B      C
ATOM  11149  CD1 ILE B 101      37.460 -58.737 -76.504  1.00 61.59      B      C
ATOM  11153  CG2 ILE B 101      35.111 -57.023 -79.090  1.00 62.64      B      C
ATOM  11157  C   ILE B 101      36.344 -60.637 -78.832  1.00 56.19      B      C
ATOM  11158  O   ILE B 101      37.126 -60.580 -79.792  1.00 52.05      B      O
ATOM  11160  N   ASP B 102      36.323 -61.650 -77.961  1.00 54.84      B      N
ATOM  11161  CA  ASP B 102      37.302 -62.744 -77.994  1.00 53.53      B      C
ATOM  11163  CB  ASP B 102      37.281 -63.526 -76.678  1.00 53.90      B      C
ATOM  11166  CG  ASP B 102      37.603 -62.660 -75.467  1.00 54.72      B      C
ATOM  11167  OD1 ASP B 102      38.778 -62.275 -75.287  1.00 53.14      B      O
ATOM  11168  OD2 ASP B 102      36.676 -62.381 -74.680  1.00 57.45      B      O
ATOM  11169  C   ASP B 102      37.032 -63.707 -79.140  1.00 52.43      B      C
ATOM  11170  O   ASP B 102      35.880 -63.999 -79.452  1.00 53.84      B      O
ATOM  11172  N   HIS B 103      38.105 -64.210 -79.750  1.00 52.18      B      N
ATOM  11173  CA  HIS B 103      38.029 -65.200 -80.840  1.00 50.40      B      C
ATOM  11175  CB  HIS B 103      37.534 -66.562 -80.306  1.00 46.91      B      C
ATOM  11178  CG  HIS B 103      37.967 -66.840 -78.901  1.00 43.50      B      C
ATOM  11179  ND1 HIS B 103      39.270 -67.144 -78.569  1.00 39.79      B      N
ATOM  11181  CE1 HIS B 103      39.365 -67.292 -77.260  1.00 40.28      B      C
ATOM  11183  NE2 HIS B 103      38.173 -67.086 -76.729  1.00 42.73      B      N
ATOM  11185  CD2 HIS B 103      37.284 -66.786 -77.732  1.00 43.67      B      C
ATOM  11187  C   HIS B 103      37.169 -64.695 -82.002  1.00 50.92      B      C
ATOM  11188  O   HIS B 103      36.416 -65.457 -82.606  1.00 52.58      B      O
ATOM  11190  N   ASP B 104      37.318 -63.408 -82.320  1.00 48.05      B      N
ATOM  11191  CA  ASP B 104      36.531 -62.752 -83.362  1.00 45.62      B      C
ATOM  11193  CB  ASP B 104      36.468 -61.237 -83.082  1.00 49.77      B      C
ATOM  11196  CG  ASP B 104      35.301 -60.539 -83.798  1.00 51.56      B      C
ATOM  11197  OD1 ASP B 104      34.758 -61.095 -84.781  1.00 49.90      B      O
ATOM  11198  OD2 ASP B 104      34.932 -59.422 -83.364  1.00 51.77      B      O
ATOM  11199  C   ASP B 104      37.096 -63.039 -84.763  1.00 42.55      B      C
ATOM  11200  O   ASP B 104      37.383 -62.124 -85.544  1.00 44.53      B      O
ATOM  11202  N   LEU B 105      37.243 -64.318 -85.078  1.00 38.63      B      N
ATOM  11203  CA  LEU B 105      37.646 -64.736 -86.408  1.00 39.07      B      C
ATOM  11205  CB  LEU B 105      38.946 -65.551 -86.365  1.00 36.49      B      C
ATOM  11208  CG  LEU B 105      40.246 -64.834 -85.975  1.00 35.30      B      C
ATOM  11210  CD1 LEU B 105      41.428 -65.680 -86.418  1.00 30.02      B      C
ATOM  11214  CD2 LEU B 105      40.350 -63.419 -86.564  1.00 27.58      B      C
ATOM  11218  C   LEU B 105      36.529 -65.531 -87.084  1.00 37.85      B      C
ATOM  11219  O   LEU B 105      35.570 -65.987 -86.451  1.00 36.57      B      O
ATOM  11221  N   LEU B 106      36.672 -65.669 -88.392  1.00 38.28      B      N
ATOM  11222  CA  LEU B 106      35.652 -66.253 -89.236  1.00 37.87      B      C
ATOM  11224  CB  LEU B 106      34.492 -65.269 -89.425  1.00 37.41      B      C
ATOM  11227  CG  LEU B 106      33.396 -65.570 -90.451  1.00 38.93      B      C
ATOM  11229  CD1 LEU B 106      32.659 -66.829 -90.070  1.00 40.78      B      C
ATOM  11233  CD2 LEU B 106      32.418 -64.421 -90.557  1.00 38.72      B      C
ATOM  11237  C   LEU B 106      36.332 -66.526 -90.549  1.00 35.77      B      C
ATOM  11238  O   LEU B 106      36.895 -65.617 -91.139  1.00 36.74      B      O
ATOM  11240  N   LEU B 107      36.332 -67.788 -90.967  1.00 37.47      B      N
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ATOM  11241  CA  LEU B 107      36.800 -68.161 -92.291  1.00 37.61      B    C
ATOM  11243  CB  LEU B 107      37.690 -69.408 -92.245  1.00 33.00      B    C
ATOM  11246  CG  LEU B 107      39.217 -69.303 -92.192  1.00 30.37      B    C
ATOM  11248  CD1 LEU B 107      39.749 -68.219 -93.101  1.00 24.93      B    C
ATOM  11252  CD2 LEU B 107      39.684 -69.095 -90.771  1.00 33.70      B    C
ATOM  11256  C   LEU B 107      35.590 -68.431 -93.186  1.00 40.15      B    C
ATOM  11257  O   LEU B 107      34.655 -69.141 -92.802  1.00 38.93      B    O
ATOM  11259  N   LEU B 108      35.617 -67.851 -94.379  1.00 42.05      B    N
ATOM  11260  CA  LEU B 108      34.572 -68.061 -95.367  1.00 40.63      B    C
ATOM  11262  CB  LEU B 108      34.027 -66.720 -95.868  1.00 41.05      B    C
ATOM  11265  CG  LEU B 108      33.297 -65.870 -94.834  1.00 38.75      B    C
ATOM  11267  CD1 LEU B 108      32.967 -64.503 -95.423  1.00 38.60      B    C
ATOM  11271  CD2 LEU B 108      32.049 -66.577 -94.335  1.00 38.22      B    C
ATOM  11275  C   LEU B 108      35.175 -68.825 -96.517  1.00 38.65      B    C
ATOM  11276  O   LEU B 108      36.215 -68.425 -97.034  1.00 34.86      B    O
ATOM  11278  N   GLN B 109      34.528 -69.931 -96.894  1.00 41.50      B    N
ATOM  11279  CA  GLN B 109      34.919 -70.715 -98.058  1.00 41.30      B    C
ATOM  11281  CB  GLN B 109      34.588 -72.181 -97.835  1.00 42.46      B    C
ATOM  11284  CG  GLN B 109      35.153 -73.091 -98.902  1.00 40.86      B    C
ATOM  11287  CD  GLN B 109      34.876 -74.548 -98.621  1.00 41.42      B    C
ATOM  11288  OE1 GLN B 109      35.635 -75.423 -99.043  1.00 39.42      B    O
ATOM  11289  NE2 GLN B 109      33.790 -74.820 -97.895  1.00 39.58      B    N
ATOM  11292  C   GLN B 109      34.175 -70.249 -99.300  1.00 40.95      B    C
ATOM  11293  O   GLN B 109      32.957 -70.094 -99.273  1.00 42.76      B    O
ATOM  11295  N   LEU B 110      34.910 -70.059-100.389  1.00 40.96      B    N
ATOM  11296  CA  LEU B 110      34.327 -69.643-101.659  1.00 42.75      B    C
ATOM  11298  CB  LEU B 110      35.320 -68.784-102.443  1.00 40.37      B    C
ATOM  11301  CG  LEU B 110      35.955 -67.610-101.699  1.00 37.73      B    C
ATOM  11303  CD1 LEU B 110      36.882 -66.842-102.633  1.00 37.30      B    C
ATOM  11307  CD2 LEU B 110      34.893 -66.707-101.107  1.00 33.94      B    C
ATOM  11311  C   LEU B 110      33.934 -70.865-102.495  1.00 45.66      B    C
ATOM  11312  O   LEU B 110      34.657 -71.866-102.530  1.00 46.73      B    O
ATOM  11314  N   SER B 111      32.791 -70.767-103.176  1.00 49.04      B    N
ATOM  11315  CA  SER B 111      32.243 -71.863-103.998  1.00 48.62      B    C
ATOM  11317  CB  SER B 111      30.957 -71.411-104.699  1.00 49.22      B    C
ATOM  11320  OG  SER B 111      29.899 -71.270-103.764  1.00 48.64      B    O
ATOM  11322  C   SER B 111      33.218 -72.434-105.024  1.00 48.30      B    C
ATOM  11323  O   SER B 111      33.028 -73.552-105.491  1.00 50.90      B    O
ATOM  11325  N   GLU B 112      34.239 -71.662-105.386  1.00 49.02      B    N
ATOM  11326  CA  GLU B 112      35.342 -72.168-106.191  1.00 52.04      B    C
ATOM  11328  CB  GLU B 112      34.983 -72.126-107.681  1.00 54.27      B    C
ATOM  11331  CG  GLU B 112      34.484 -70.771-108.181  1.00 56.58      B    C
ATOM  11334  CD  GLU B 112      34.564 -70.635-109.697  1.00 57.28      B    C
ATOM  11335  OE1 GLU B 112      34.192 -71.591-110.417  1.00 57.99      B    O
ATOM  11336  OE2 GLU B 112      35.007 -69.565-110.165  1.00 59.49      B    O
ATOM  11337  C   GLU B 112      36.631 -71.387-105.929  1.00 51.93      B    C
ATOM  11338  O   GLU B 112      36.595 -70.249-105.455  1.00 52.44      B    O
ATOM  11340  N   LYS B 113      37.766 -72.017-106.233  1.00 52.83      B    N
ATOM  11341  CA  LYS B 113      39.072 -71.364-106.149  1.00 52.48      B    C
ATOM  11343  CB  LYS B 113      40.196 -72.328-106.543  1.00 53.45      B    C
ATOM  11346  CG  LYS B 113      40.395 -73.504-105.584  1.00 54.09      B    C
ATOM  11349  CD  LYS B 113      41.302 -74.583-106.178  1.00 54.33      B    C
ATOM  11352  CE  LYS B 113      42.759 -74.143-106.229  1.00 54.82      B    C
ATOM  11355  NZ  LYS B 113      43.638 -75.165-106.881  1.00 53.92      B    N
ATOM  11359  C   LYS B 113      39.092 -70.151-107.073  1.00 53.27      B    C
ATOM  11360  O   LYS B 113      38.843 -70.275-108.272  1.00 57.18      B    O
ATOM  11362  N   ALA B 114      39.381 -68.985-106.505  1.00 51.39      B    N
ATOM  11363  CA  ALA B 114      39.364 -67.724-107.240  1.00 49.30      B    C
ATOM  11365  CB  ALA B 114      39.438 -66.543-106.252  1.00 50.14      B    C
ATOM  11369  C   ALA B 114      40.510 -67.646-108.238  1.00 46.01      B    C
ATOM  11370  O   ALA B 114      41.560 -68.261-108.036  1.00 43.29      B    O
ATOM  11372  N   THR B 115      40.315 -66.886-109.313  1.00 46.36      B    N
ATOM  11373  CA  THR B 115      41.363 -66.748-110.329  1.00 48.03      B    C
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ATOM  11375  CB  THR B 115      40.816 -66.289-111.710  1.00 48.67       B      C
ATOM  11377  OG1 THR B 115      39.528 -66.873-111.944  1.00 50.37       B      O
ATOM  11379  CG2 THR B 115      41.782 -66.692-112.842  1.00 45.96       B      C
ATOM  11383  C   THR B 115      42.426 -65.768-109.838  1.00 46.66       B      C
ATOM  11384  O   THR B 115      42.138 -64.596-109.582  1.00 46.92       B      O
ATOM  11386  N   LEU B 116      43.646 -66.276-109.695  1.00 46.90       B      N
ATOM  11387  CA  LEU B 116      44.787 -65.481-109.254  1.00 48.21       B      C
ATOM  11389  CB  LEU B 116      45.867 -66.379-108.619  1.00 47.80       B      C
ATOM  11392  CG  LEU B 116      45.751 -66.649-107.114  1.00 46.50       B      C
ATOM  11394  CD1 LEU B 116      44.349 -67.133-106.714  1.00 45.05       B      C
ATOM  11398  CD2 LEU B 116      46.821 -67.645-106.683  1.00 47.63       B      C
ATOM  11402  C   LEU B 116      45.393 -64.680-110.412  1.00 50.28       B      C
ATOM  11403  O   LEU B 116      45.627 -65.215-111.505  1.00 51.04       B      O
ATOM  11405  N   GLY B 117      45.640 -63.398-110.155  1.00 50.18       B      N
ATOM  11406  CA  GLY B 117      46.328 -62.514-111.099  1.00 49.80       B      C
ATOM  11409  C   GLY B 117      46.903 -61.316-110.363  1.00 51.23       B      C
ATOM  11410  O   GLY B 117      46.903 -61.284-109.128  1.00 52.42       B      O
ATOM  11412  N   PRO B 118      47.411 -60.321-111.109  1.00 50.57       B      N
ATOM  11413  CA  PRO B 118      47.839 -59.053-110.508  1.00 48.91       B      C
ATOM  11415  CB  PRO B 118      47.901 -58.112-111.720  1.00 49.04       B      C
ATOM  11418  CG  PRO B 118      48.293 -59.008-112.856  1.00 50.73       B      C
ATOM  11421  CD  PRO B 118      47.652 -60.349-112.567  1.00 51.39       B      C
ATOM  11424  C   PRO B 118      46.892 -58.489-109.416  1.00 47.46       B      C
ATOM  11425  O   PRO B 118      47.365 -57.899-108.435  1.00 49.48       B      O
ATOM  11426  N   ALA B 119      45.582 -58.693-109.583  1.00 44.58       B      N
ATOM  11427  CA  ALA B 119      44.566 -58.084-108.720  1.00 42.93       B      C
ATOM  11429  CB  ALA B 119      43.510 -57.395-109.582  1.00 41.17       B      C
ATOM  11433  C   ALA B 119      43.884 -59.040-107.738  1.00 39.52       B      C
ATOM  11434  O   ALA B 119      43.041 -58.607-106.952  1.00 37.52       B      O
ATOM  11436  N   VAL B 120      44.217 -60.328-107.790  1.00 38.53       B      N
ATOM  11437  CA  VAL B 120      43.726 -61.292-106.791  1.00 40.55       B      C
ATOM  11439  CB  VAL B 120      42.462 -62.067-107.281  1.00 36.70       B      C
ATOM  11441  CG1 VAL B 120      41.940 -63.001-106.186  1.00 35.55       B      C
ATOM  11445  CG2 VAL B 120      41.356 -61.100-107.718  1.00 30.29       B      C
ATOM  11449  C   VAL B 120      44.858 -62.260-106.379  1.00 41.98       B      C
ATOM  11450  O   VAL B 120      45.413 -62.971-107.215  1.00 42.33       B      O
ATOM  11452  N   ARG B 121      45.205 -62.261-105.090  1.00 44.37       B      N
ATOM  11453  CA  ARG B 121      46.329 -63.059-104.584  1.00 44.25       B      C
ATOM  11455  CB  ARG B 121      47.656 -62.403-104.978  1.00 45.39       B      C
ATOM  11458  CG  ARG B 121      48.897 -63.289-104.806  1.00 47.79       B      C
ATOM  11461  CD  ARG B 121      50.160 -62.514-105.159  1.00 50.33       B      C
ATOM  11464  NE  ARG B 121      49.955 -61.682-106.349  1.00 53.92       B      N
ATOM  11466  CZ  ARG B 121      50.021 -62.112-107.615  1.00 56.26       B      C
ATOM  11467  NH1 ARG B 121      50.305 -63.384-107.904  1.00 57.13       B      N
ATOM  11470  NH2 ARG B 121      49.808 -61.254-108.611  1.00 55.53       B      N
ATOM  11473  C   ARG B 121      46.248 -63.168-103.063  1.00 40.77       B      C
ATOM  11474  O   ARG B 121      46.069 -62.153-102.401  1.00 43.84       B      O
ATOM  11476  N   PRO B 122      46.406 -64.385-102.500  1.00 39.83       B      N
ATOM  11477  CA  PRO B 122      46.275 -64.491-101.045  1.00 40.66       B      C
ATOM  11479  CB  PRO B 122      46.121 -66.004-100.790  1.00 40.42       B      C
ATOM  11482  CG  PRO B 122      46.283 -66.689-102.114  1.00 40.82       B      C
ATOM  11485  CD  PRO B 122      46.745 -65.681-103.119  1.00 41.88       B      C
ATOM  11488  C   PRO B 122      47.496 -63.927-100.307  1.00 39.03       B      C
ATOM  11489  O   PRO B 122      48.611 -63.920-100.850  1.00 39.15       B      O
ATOM  11490  N   LEU B 123      47.270 -63.458 -99.083  1.00 37.40       B      N
ATOM  11491  CA  LEU B 123      48.318 -62.808 -98.293  1.00 36.54       B      C
ATOM  11493  CB  LEU B 123      47.740 -61.604 -97.553  1.00 34.60       B      C
ATOM  11496  CG  LEU B 123      48.687 -60.681 -96.784  1.00 32.58       B      C
ATOM  11498  CD1 LEU B 123      47.860 -59.601 -96.160  1.00 25.32       B      C
ATOM  11502  CD2 LEU B 123      49.779 -60.082 -97.690  1.00 32.13       B      C
ATOM  11506  C   LEU B 123      48.936 -63.770 -97.283  1.00 34.27       B      C
ATOM  11507  O   LEU B 123      48.206 -64.391 -96.498  1.00 31.78       B      O
ATOM  11509  N   PRO B 124      50.280 -63.893 -97.297  1.00 32.59       B      N
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ATOM  11510  CA  PRO B 124      50.990 -64.591 -96.225  1.00 34.78      B    C
ATOM  11512  CB  PRO B 124      52.472 -64.328 -96.541  1.00 34.18      B    C
ATOM  11515  CG  PRO B 124      52.506 -64.085 -97.999  1.00 35.47      B    C
ATOM  11518  CD  PRO B 124      51.205 -63.409 -98.339  1.00 33.59      B    C
ATOM  11521  C   PRO B 124      50.630 -64.034 -94.847  1.00 32.21      B    C
ATOM  11522  O   PRO B 124      50.732 -62.826 -94.619  1.00 27.23      B    O
ATOM  11523  N   TRP B 125      50.217 -64.924 -93.953  1.00 32.05      B    N
ATOM  11524  CA  TRP B 125      49.784 -64.554 -92.615  1.00 34.23      B    C
ATOM  11526  CB  TRP B 125      48.371 -65.103 -92.331  1.00 34.29      B    C
ATOM  11529  CG  TRP B 125      48.195 -66.586 -92.482  1.00 35.41      B    C
ATOM  11530  CD1 TRP B 125      47.992 -67.282 -93.646  1.00 36.40      B    C
ATOM  11532  NE1 TRP B 125      47.873 -68.627 -93.380  1.00 36.37      B    N
ATOM  11534  CE2 TRP B 125      47.992 -68.822 -92.030  1.00 37.31      B    C
ATOM  11535  CD2 TRP B 125      48.193 -67.557 -91.434  1.00 36.10      B    C
ATOM  11536  CE3 TRP B 125      48.358 -67.485 -90.052  1.00 35.45      B    C
ATOM  11538  CZ3 TRP B 125      48.309 -68.650 -89.316  1.00 35.37      B    C
ATOM  11540  CH2 TRP B 125      48.099 -69.887 -89.927  1.00 34.82      B    C
ATOM  11542  CZ2 TRP B 125      47.940 -69.997 -91.284  1.00 36.30      B    C
ATOM  11544  C   TRP B 125      50.815 -64.998 -91.564  1.00 35.21      B    C
ATOM  11545  O   TRP B 125      51.567 -65.952 -91.786  1.00 39.04      B    O
ATOM  11547  N   GLN B 126      50.874 -64.279 -90.440  1.00 33.62      B    N
ATOM  11548  CA  GLN B 126      51.883 -64.552 -89.406  1.00 33.70      B    C
ATOM  11550  CB  GLN B 126      52.055 -63.396 -88.407  1.00 31.61      B    C
ATOM  11553  CG  GLN B 126      53.242 -63.609 -87.424  1.00 28.87      B    C
ATOM  11556  CD  GLN B 126      54.593 -63.756 -88.130  1.00 28.85      B    C
ATOM  11557  OE1 GLN B 126      55.110 -64.859 -88.285  1.00 30.93      B    O
ATOM  11558  NE2 GLN B 126      55.150 -62.645 -88.573  1.00 30.67      B    N
ATOM  11561  C   GLN B 126      51.566 -65.813 -88.630  1.00 33.71      B    C
ATOM  11562  O   GLN B 126      50.486 -65.950 -88.037  1.00 33.51      B    O
ATOM  11564  N   ARG B 127      52.563 -66.688 -88.608  1.00 31.77      B    N
ATOM  11565  CA  ARG B 127      52.469 -68.033 -88.072  1.00 33.43      B    C
ATOM  11567  CB  ARG B 127      53.161 -68.965 -89.068  1.00 33.90      B    C
ATOM  11570  CG  ARG B 127      53.176 -70.433 -88.690  1.00 39.72      B    C
ATOM  11573  CD  ARG B 127      53.622 -71.280 -89.881  1.00 41.87      B    C
ATOM  11576  NE  ARG B 127      52.650 -71.168 -90.970  1.00 45.09      B    N
ATOM  11578  CZ  ARG B 127      51.514 -71.856 -91.048  1.00 44.24      B    C
ATOM  11579  NH1 ARG B 127      51.193 -72.740 -90.109  1.00 43.32      B    N
ATOM  11582  NH2 ARG B 127      50.695 -71.659 -92.075  1.00 42.33      B    N
ATOM  11585  C   ARG B 127      53.129 -68.168 -86.695  1.00 30.09      B    C
ATOM  11586  O   ARG B 127      52.744 -69.034 -85.892  1.00 26.87      B    O
ATOM  11588  N   VAL B 128      54.142 -67.330 -86.455  1.00 26.17      B    N
ATOM  11589  CA  VAL B 128      54.966 -67.381 -85.247  1.00 24.60      B    C
ATOM  11591  CB  VAL B 128      56.424 -66.916 -85.551  1.00 20.93      B    C
ATOM  11593  CG1 VAL B 128      57.298 -66.974 -84.310  1.00 17.45      B    C
ATOM  11597  CG2 VAL B 128      57.041 -67.748 -86.713  1.00 17.68      B    C
ATOM  11601  C   VAL B 128      54.311 -66.450 -84.232  1.00 21.94      B    C
ATOM  11602  O   VAL B 128      54.173 -65.252 -84.491  1.00 22.55      B    O
ATOM  11604  N   ASP B 129      53.875 -67.011 -83.109  1.00 18.70      B    N
ATOM  11605  CA  ASP B 129      53.161 -66.257 -82.092  1.00 23.72      B    C
ATOM  11607  CB  ASP B 129      52.415 -67.214 -81.159  1.00 24.41      B    C
ATOM  11610  CG  ASP B 129      51.400 -66.528 -80.296  1.00 25.51      B    C
ATOM  11611  OD1 ASP B 129      51.250 -65.297 -80.378  1.00 29.26      B    O
ATOM  11612  OD2 ASP B 129      50.727 -67.224 -79.519  1.00 26.23      B    O
ATOM  11613  C   ASP B 129      54.168 -65.391 -81.336  1.00 23.86      B    C
ATOM  11614  O   ASP B 129      54.766 -65.810 -80.348  1.00 21.25      B    O
ATOM  11616  N   ARG B 130      54.382 -64.196 -81.865  1.00 26.50      B    N
ATOM  11617  CA  ARG B 130      55.261 -63.200 -81.269  1.00 28.45      B    C
ATOM  11619  CB  ARG B 130      56.670 -63.300 -81.867  1.00 28.36      B    C
ATOM  11622  CG  ARG B 130      57.737 -62.612 -81.035  1.00 32.41      B    C
ATOM  11625  CD  ARG B 130      59.078 -62.489 -81.761  1.00 39.23      B    C
ATOM  11628  NE  ARG B 130      59.910 -63.697 -81.704  1.00 43.31      B    N
ATOM  11630  CZ  ARG B 130      60.155 -64.511 -82.734  1.00 46.13      B    C
ATOM  11631  NH1 ARG B 130      59.630 -64.278 -83.942  1.00 45.77      B    N
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ATOM  11634  NH2 ARG B 130      60.937 -65.577 -82.555  1.00 46.50           B    N
ATOM  11637  C   ARG B 130      54.657 -61.838 -81.581  1.00 25.04           B    C
ATOM  11638  O   ARG B 130      54.446 -61.515 -82.749  1.00 21.19           B    O
ATOM  11640  N   ASP B 131      54.362 -61.064 -80.543  1.00 24.39           B    N
ATOM  11641  CA  ASP B 131      53.761 -59.739 -80.689  1.00 23.69           B    C
ATOM  11643  CB  ASP B 131      53.849 -58.962 -79.380  1.00 23.97           B    C
ATOM  11646  CG  ASP B 131      52.866 -59.419 -78.369  1.00 22.63           B    C
ATOM  11647  OD1 ASP B 131      51.935 -60.139 -78.743  1.00 25.98           B    O
ATOM  11648  OD2 ASP B 131      53.020 -59.044 -77.192  1.00 25.21           B    O
ATOM  11649  C   ASP B 131      54.455 -58.904 -81.732  1.00 22.63           B    C
ATOM  11650  O   ASP B 131      55.676 -58.942 -81.840  1.00 25.47           B    O
ATOM  11652  N   VAL B 132      53.672 -58.159 -82.503  1.00 20.80           B    N
ATOM  11653  CA  VAL B 132      54.218 -57.057 -83.278  1.00 19.03           B    C
ATOM  11655  CB  VAL B 132      53.214 -56.499 -84.325  1.00 19.19           B    C
ATOM  11657  CG1 VAL B 132      53.756 -55.225 -84.981  1.00 18.01           B    C
ATOM  11661  CG2 VAL B 132      52.940 -57.543 -85.412  1.00 14.19           B    C
ATOM  11665  C   VAL B 132      54.614 -56.005 -82.245  1.00 22.76           B    C
ATOM  11666  O   VAL B 132      53.875 -55.718 -81.290  1.00 16.29           B    O
ATOM  11668  N   GLU B 133      55.806 -55.459 -82.407  1.00 22.76           B    N
ATOM  11669  CA  GLU B 133      56.359 -54.556 -81.401  1.00 20.31           B    C
ATOM  11671  CB  GLU B 133      57.835 -54.332 -81.681  1.00 18.25           B    C
ATOM  11674  CG  GLU B 133      58.627 -55.540 -81.396  1.00 17.67           B    C
ATOM  11677  CD  GLU B 133      60.012 -55.429 -81.911  1.00 15.27           B    C
ATOM  11678  OE1 GLU B 133      60.338 -54.365 -82.482  1.00 18.17           B    O
ATOM  11679  OE2 GLU B 133      60.766 -56.403 -81.738  1.00 14.57           B    O
ATOM  11680  C   GLU B 133      55.673 -53.223 -81.407  1.00 16.40           B    C
ATOM  11681  O   GLU B 133      55.391 -52.713 -82.486  1.00 11.97           B    O
ATOM  11683  N   PRO B 134      55.412 -52.650 -80.201  1.00 15.37           B    N
ATOM  11684  CA  PRO B 134      54.860 -51.315 -80.076  1.00 17.80           B    C
ATOM  11686  CB  PRO B 134      55.137 -50.949 -78.609  1.00 16.82           B    C
ATOM  11689  CG  PRO B 134      55.266 -52.233 -77.898  1.00 17.07           B    C
ATOM  11692  CD  PRO B 134      55.671 -53.265 -78.882  1.00 16.65           B    C
ATOM  11695  C   PRO B 134      55.577 -50.332 -80.987  1.00 17.30           B    C
ATOM  11696  O   PRO B 134      56.811 -50.343 -81.073  1.00 21.19           B    O
ATOM  11697  N   GLY B 135      54.807 -49.501 -81.668  1.00 18.47           B    N
ATOM  11698  CA  GLY B 135      55.370 -48.488 -82.531  1.00 19.00           B    C
ATOM  11701  C   GLY B 135      55.460 -48.896 -83.977  1.00 17.35           B    C
ATOM  11702  O   GLY B 135      55.489 -48.036 -84.845  1.00 27.90           B    O
ATOM  11704  N   THR B 136      55.497 -50.194 -84.266  1.00 20.52           B    N
ATOM  11705  CA  THR B 136      55.588 -50.629 -85.661  1.00 22.00           B    C
ATOM  11707  CB  THR B 136      55.579 -52.179 -85.827  1.00 18.31           B    C
ATOM  11709  OG1 THR B 136      56.321 -52.804 -84.762  1.00 13.04           B    O
ATOM  11711  CG2 THR B 136      56.203 -52.574 -87.172  1.00 18.38           B    C
ATOM  11715  C   THR B 136      54.414 -50.034 -86.443  1.00 23.24           B    C
ATOM  11716  O   THR B 136      53.261 -50.090 -85.986  1.00 24.17           B    O
ATOM  11718  N   LEU B 137      54.718 -49.440 -87.595  1.00 23.72           B    N
ATOM  11719  CA  LEU B 137      53.699 -48.917 -88.496  1.00 24.22           B    C
ATOM  11721  CB  LEU B 137      54.286 -47.849 -89.424  1.00 25.95           B    C
ATOM  11724  CG  LEU B 137      54.947 -46.636 -88.754  1.00 30.15           B    C
ATOM  11726  CD1 LEU B 137      55.655 -45.771 -89.793  1.00 29.17           B    C
ATOM  11730  CD2 LEU B 137      53.939 -45.810 -87.979  1.00 26.86           B    C
ATOM  11734  C   LEU B 137      53.117 -50.047 -89.337  1.00 23.10           B    C
ATOM  11735  O   LEU B 137      53.832 -50.670 -90.122  1.00 27.08           B    O
ATOM  11737  N   CYS B 138      51.818 -50.287 -89.183  1.00 25.84           B    N
ATOM  11738  CA  CYS B 138      51.112 -51.326 -89.933  1.00 27.63           B    C
ATOM  11740  CB  CYS B 138      50.395 -52.288 -88.979  1.00 27.57           B    C
ATOM  11743  SG  CYS B 138      51.412 -53.304 -87.825  1.00 29.65           B    S
ATOM  11745  C   CYS B 138      50.084 -50.696 -90.877  1.00 24.10           B    C
ATOM  11746  O   CYS B 138      49.595 -49.608 -90.627  1.00 19.77           B    O
ATOM  11748  N   ASP B 139      49.753 -51.392 -91.960  1.00 23.67           B    N
ATOM  11749  CA  ASP B 139      48.785 -50.902 -92.941  1.00 22.41           B    C
ATOM  11751  CB  ASP B 139      49.328 -51.204 -94.344  1.00 30.30           B    C
ATOM  11754  CG  ASP B 139      48.369 -50.804 -95.445  1.00 31.38           B    C
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ATOM  11755  OD1 ASP B 139      48.266 -49.593 -95.735  1.00 31.27      B    O
ATOM  11756  OD2 ASP B 139      47.732 -51.720 -96.016  1.00 37.08      B    O
ATOM  11757  C   ASP B 139      47.424 -51.582 -92.715  1.00 21.74      B    C
ATOM  11758  O   ASP B 139      47.369 -52.791 -92.620  1.00 25.00      B    O
ATOM  11760  N   VAL B 140      46.340 -50.806 -92.571  1.00 27.87      B    N
ATOM  11761  CA  VAL B 140      44.958 -51.351 -92.520  1.00 23.33      B    C
ATOM  11763  CB  VAL B 140      44.256 -51.057 -91.178  1.00 23.44      B    C
ATOM  11765  CG1 VAL B 140      44.178 -49.566 -90.929  1.00 23.51      B    C
ATOM  11769  CG2 VAL B 140      42.862 -51.662 -91.187  1.00 23.35      B    C
ATOM  11773  C   VAL B 140      44.095 -50.762 -93.644  1.00 25.55      B    C
ATOM  11774  O   VAL B 140      44.131 -49.556 -93.878  1.00 26.66      B    O
ATOM  11776  N   ALA B 141      43.317 -51.611 -94.321  1.00 28.46      B    N
ATOM  11777  CA  ALA B 141      42.506 -51.212 -95.481  1.00 27.18      B    C
ATOM  11779  CB  ALA B 141      43.079 -51.819 -96.741  1.00 25.46      B    C
ATOM  11783  C   ALA B 141      41.035 -51.604 -95.327  1.00 28.30      B    C
ATOM  11784  O   ALA B 141      40.699 -52.565 -94.632  1.00 26.48      B    O
ATOM  11786  N   GLY B 142      40.154 -50.848 -95.979  1.00 31.86      B    N
ATOM  11787  CA  GLY B 142      38.715 -51.118 -95.914  1.00 31.54      B    C
ATOM  11790  C   GLY B 142      37.807 -50.119 -96.635  1.00 33.87      B    C
ATOM  11791  O   GLY B 142      38.220 -49.012 -97.000  1.00 33.90      B    O
ATOM  11793  N   TRP B 143      36.564 -50.545 -96.851  1.00 32.79      B    N
ATOM  11794  CA  TRP B 143      35.511 -49.701 -97.408  1.00 29.63      B    C
ATOM  11796  CB  TRP B 143      34.685 -50.448 -98.474  1.00 26.76      B    C
ATOM  11799  CG  TRP B 143      35.401 -50.828 -99.744  1.00 26.59      B    C
ATOM  11800  CD1 TRP B 143      35.463 -50.107-100.896  1.00 25.81      B    C
ATOM  11802  NE1 TRP B 143      36.190 -50.791-101.850  1.00 28.24      B    N
ATOM  11804  CE2 TRP B 143      36.600 -51.986-101.320  1.00 30.12      B    C
ATOM  11805  CD2 TRP B 143      36.109 -52.049 -99.993  1.00 28.49      B    C
ATOM  11806  CE3 TRP B 143      36.391 -53.183 -99.220  1.00 27.79      B    C
ATOM  11808  CZ3 TRP B 143      37.141 -54.207 -99.789  1.00 26.22      B    C
ATOM  11810  CH2 TRP B 143      37.611 -54.117-101.109  1.00 26.40      B    C
ATOM  11812  CZ2 TRP B 143      37.353 -53.016-101.888  1.00 27.88      B    C
ATOM  11814  C   TRP B 143      34.589 -49.300 -96.264  1.00 28.31      B    C
ATOM  11815  O   TRP B 143      33.396 -49.120 -96.471  1.00 31.03      B    O
ATOM  11817  N   GLY B 144      35.138 -49.170 -95.057  1.00 30.95      B    N
ATOM  11818  CA  GLY B 144      34.359 -48.766 -93.887  1.00 28.10      B    C
ATOM  11821  C   GLY B 144      34.142 -47.272 -93.898  1.00 25.72      B    C
ATOM  11822  O   GLY B 144      34.825 -46.555 -94.639  1.00 23.47      B    O
ATOM  11824  N   ILE B 145      33.214 -46.798 -93.063  1.00 29.43      B    N
ATOM  11825  CA  ILE B 145      32.906 -45.360 -92.970  1.00 33.48      B    C
ATOM  11827  CB  ILE B 145      31.805 -45.016 -91.875  1.00 34.96      B    C
ATOM  11829  CG1 ILE B 145      32.240 -45.405 -90.455  1.00 35.09      B    C
ATOM  11832  CD1 ILE B 145      31.175 -45.095 -89.339  1.00 30.59      B    C
ATOM  11836  CG2 ILE B 145      30.473 -45.698 -92.215  1.00 34.74      B    C
ATOM  11840  C   ILE B 145      34.202 -44.570 -92.754  1.00 37.06      B    C
ATOM  11841  O   ILE B 145      35.143 -45.046 -92.102  1.00 42.92      B    O
ATOM  11843  N   VAL B 146      34.256 -43.373 -93.326  1.00 37.33      B    N
ATOM  11844  CA  VAL B 146      35.512 -42.631 -93.458  1.00 38.16      B    C
ATOM  11846  CB  VAL B 146      35.520 -41.823 -94.788  1.00 39.60      B    C
ATOM  11848  CG1 VAL B 146      35.030 -40.390 -94.567  1.00 40.07      B    C
ATOM  11852  CG2 VAL B 146      36.896 -41.862 -95.437  1.00 40.03      B    C
ATOM  11856  C   VAL B 146      35.765 -41.754 -92.224  1.00 38.99      B    C
ATOM  11857  O   VAL B 146      36.832 -41.151 -92.075  1.00 36.62      B    O
ATOM  11859  N   SER B 147      34.761 -41.716 -91.348  1.00 37.10      B    N
ATOM  11860  CA  SER B 147      34.805 -41.049 -90.060  1.00 41.77      B    C
ATOM  11862  CB  SER B 147      34.767 -39.519 -90.218  1.00 43.69      B    C
ATOM  11865  OG  SER B 147      33.446 -39.012 -90.142  1.00 43.39      B    O
ATOM  11867  C   SER B 147      33.568 -41.601 -89.317  1.00 43.56      B    C
ATOM  11868  O   SER B 147      32.815 -42.394 -89.901  1.00 42.52      B    O
ATOM  11870  N   HIS B 148      33.334 -41.210 -88.066  1.00 44.75      B    N
ATOM  11871  CA  HIS B 148      32.315 -41.909 -87.264  1.00 49.26      B    C
ATOM  11873  CB  HIS B 148      32.634 -41.872 -85.758  1.00 51.25      B    C
ATOM  11876  CG  HIS B 148      31.931 -40.790 -84.991  1.00 52.87      B    C
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ATOM  11877  ND1 HIS B 148      32.541 -39.601 -84.651  1.00 51.31           B      N
ATOM  11879  CE1 HIS B 148      31.694 -38.861 -83.957  1.00 53.25           B      C
ATOM  11881  NE2 HIS B 148      30.561 -39.528 -83.826  1.00 52.81           B      N
ATOM  11883  CD2 HIS B 148      30.686 -40.743 -84.456  1.00 53.25           B      C
ATOM  11885  C   HIS B 148      30.859 -41.494 -87.539  1.00 55.00           B      C
ATOM  11886  O   HIS B 148      29.949 -42.323 -87.386  1.00 56.71           B      O
ATOM  11888  N   ALA B 149      30.631 -40.230 -87.911  1.00 56.32           B      N
ATOM  11889  CA  ALA B 149      29.295 -39.782 -88.339  1.00 56.03           B      C
ATOM  11891  CB  ALA B 149      29.225 -38.259 -88.442  1.00 58.52           B      C
ATOM  11895  C   ALA B 149      29.047 -40.441 -89.689  1.00 56.29           B      C
ATOM  11896  O   ALA B 149      27.959 -40.947 -89.964  1.00 59.70           B      O
ATOM  11898  N   GLY B 150      30.077 -40.399 -90.527  1.00 54.27           B      N
ATOM  11899  CA  GLY B 150      30.397 -41.517 -91.400  1.00 52.28           B      C
ATOM  11902  C   GLY B 150      29.803 -41.613 -92.779  1.00 49.92           B      C
ATOM  11903  O   GLY B 150      28.659 -42.041 -92.938  1.00 53.45           B      O
ATOM  11905  N   ARG B 151      30.619 -41.264 -93.771  1.00 47.78           B      N
ATOM  11906  CA  ARG B 151      30.311 -41.498 -95.179  1.00 50.13           B      C
ATOM  11908  CB  ARG B 151      30.808 -40.298 -96.009  1.00 50.96           B      C
ATOM  11911  CG  ARG B 151      31.381 -40.595 -97.407  1.00 49.67           B      C
ATOM  11914  CD  ARG B 151      32.576 -39.689 -97.676  1.00 52.44           B      C
ATOM  11917  NE  ARG B 151      32.994 -39.687 -99.079  1.00 52.08           B      N
ATOM  11919  CZ  ARG B 151      34.252 -39.772 -99.519  1.00 54.56           B      C
ATOM  11920  NH1 ARG B 151      35.283 -39.873 -98.684  1.00 56.41           B      N
ATOM  11923  NH2 ARG B 151      34.489 -39.743-100.827  1.00 55.57           B      N
ATOM  11926  C   ARG B 151      30.972 -42.811 -95.631  1.00 47.73           B      C
ATOM  11927  O   ARG B 151      32.181 -42.976 -95.480  1.00 44.04           B      O
ATOM  11929  N   ARG B 152      30.174 -43.736 -96.175  1.00 49.35           B      N
ATOM  11930  CA  ARG B 152      30.678 -44.996 -96.760  1.00 48.01           B      C
ATOM  11932  CB  ARG B 152      29.527 -45.995 -96.963  1.00 54.94           B      C
ATOM  11935  CG  ARG B 152      28.912 -46.567 -95.677  1.00 59.29           B      C
ATOM  11938  CD  ARG B 152      29.523 -47.943 -95.296  1.00 63.53           B      C
ATOM  11941  NE  ARG B 152      28.917 -48.530 -94.087  1.00 63.81           B      N
ATOM  11943  CZ  ARG B 152      29.251 -49.708 -93.555  1.00 63.55           B      C
ATOM  11944  NH1 ARG B 152      30.198 -50.456 -94.116  1.00 65.67           B      N
ATOM  11947  NH2 ARG B 152      28.634 -50.142 -92.458  1.00 63.17           B      N
ATOM  11950  C   ARG B 152      31.324 -44.717 -98.118  1.00 43.24           B      C
ATOM  11951  O   ARG B 152      30.646 -44.214 -99.008  1.00 44.71           B      O
ATOM  11953  N   PRO B 153      32.625 -45.037 -98.294  1.00 38.63           B      N
ATOM  11954  CA  PRO B 153      33.263 -44.787 -99.592  1.00 39.93           B      C
ATOM  11956  CB  PRO B 153      34.747 -44.648 -99.235  1.00 35.61           B      C
ATOM  11959  CG  PRO B 153      34.917 -45.520 -98.042  1.00 38.02           B      C
ATOM  11962  CD  PRO B 153      33.581 -45.599 -97.325  1.00 38.62           B      C
ATOM  11965  C   PRO B 153      33.079 -45.906-100.620  1.00 43.13           B      C
ATOM  11966  O   PRO B 153      32.858 -47.070-100.264  1.00 44.56           B      O
ATOM  11967  N   ASP B 154      33.193 -45.530-101.891  1.00 41.28           B      N
ATOM  11968  CA  ASP B 154      33.048 -46.460-102.989  1.00 40.63           B      C
ATOM  11970  CB  ASP B 154      32.655 -45.723-104.270  1.00 39.03           B      C
ATOM  11973  CG  ASP B 154      32.139 -46.660-105.326  1.00 37.49           B      C
ATOM  11974  OD1 ASP B 154      31.084 -47.279-105.064  1.00 35.40           B      O
ATOM  11975  OD2 ASP B 154      32.794 -46.789-106.390  1.00 36.37           B      O
ATOM  11976  C   ASP B 154      34.348 -47.220-103.226  1.00 39.41           B      C
ATOM  11977  O   ASP B 154      34.325 -48.436-103.395  1.00 40.01           B      O
ATOM  11979  N   ARG B 155      35.471 -46.501-103.246  1.00 40.14           B      N
ATOM  11980  CA  ARG B 155      36.781 -47.121-103.488  1.00 39.29           B      C
ATOM  11982  CB  ARG B 155      37.623 -46.398-104.562  1.00 41.67           B      C
ATOM  11985  CG  ARG B 155      37.232 -44.963-104.934  1.00 45.16           B      C
ATOM  11988  CD  ARG B 155      37.405 -44.699-106.437  1.00 44.03           B      C
ATOM  11991  NE  ARG B 155      37.971 -43.378-106.697  1.00 47.23           B      N
ATOM  11993  CZ  ARG B 155      37.330 -42.218-106.543  1.00 47.79           B      C
ATOM  11994  NH1 ARG B 155      36.060 -42.178-106.132  1.00 46.07           B      N
ATOM  11997  NH2 ARG B 155      37.972 -41.081-106.808  1.00 47.12           B      N
ATOM  12000  C   ARG B 155      37.566 -47.332-102.193  1.00 38.26           B      C
ATOM  12001  O   ARG B 155      37.285 -46.721-101.156  1.00 36.67           B      O
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ATOM  12003  N   LEU B 156      38.534 -48.239-102.257  1.00 35.66      B    N
ATOM  12004  CA  LEU B 156      39.175 -48.737-101.045  1.00 34.73      B    C
ATOM  12006  CB  LEU B 156      39.864 -50.073-101.325  1.00 32.14      B    C
ATOM  12009  CG  LEU B 156      40.467 -50.836-100.140  1.00 26.36      B    C
ATOM  12011  CD1 LEU B 156      39.442 -51.728 -99.469  1.00 17.99      B    C
ATOM  12015  CD2 LEU B 156      41.650 -51.649-100.636  1.00 26.90      B    C
ATOM  12019  C   LEU B 156      40.173 -47.725-100.483  1.00 34.63      B    C
ATOM  12020  O   LEU B 156      41.003 -47.174-101.219  1.00 30.74      B    O
ATOM  12022  N   GLN B 157      40.080 -47.509 -99.171  1.00 36.08      B    N
ATOM  12023  CA  GLN B 157      40.979 -46.615 -98.437  1.00 34.90      B    C
ATOM  12025  CB  GLN B 157      40.168 -45.775 -97.448  1.00 35.63      B    C
ATOM  12028  CG  GLN B 157      38.941 -45.075 -98.050  1.00 35.50      B    C
ATOM  12031  CD  GLN B 157      39.305 -44.060 -99.118  1.00 38.58      B    C
ATOM  12032  OE1 GLN B 157      40.058 -43.118 -98.868  1.00 40.61      B    O
ATOM  12033  NE2 GLN B 157      38.761 -44.243-100.314  1.00 36.91      B    N
ATOM  12036  C   GLN B 157      42.045 -47.417 -97.675  1.00 34.47      B    C
ATOM  12037  O   GLN B 157      41.819 -48.572 -97.325  1.00 33.08      B    O
ATOM  12039  N   HIS B 158      43.201 -46.794 -97.429  1.00 36.49      B    N
ATOM  12040  CA  HIS B 158      44.249 -47.359 -96.562  1.00 32.94      B    C
ATOM  12042  CB  HIS B 158      45.387 -47.963 -97.397  1.00 37.16      B    C
ATOM  12045  CG  HIS B 158      46.402 -46.968 -97.876  1.00 40.13      B    C
ATOM  12046  ND1 HIS B 158      46.132 -46.037 -98.859  1.00 43.82      B    N
ATOM  12048  CE1 HIS B 158      47.216 -45.317 -99.092  1.00 45.85      B    C
ATOM  12050  NE2 HIS B 158      48.181 -45.748 -98.298  1.00 46.63      B    N
ATOM  12052  CD2 HIS B 158      47.701 -46.786 -97.535  1.00 41.53      B    C
ATOM  12054  C   HIS B 158      44.810 -46.313 -95.593  1.00 30.83      B    C
ATOM  12055  O   HIS B 158      44.766 -45.113 -95.864  1.00 30.21      B    O
ATOM  12057  N   VAL B 159      45.315 -46.775 -94.451  1.00 28.83      B    N
ATOM  12058  CA  VAL B 159      46.049 -45.909 -93.528  1.00 26.54      B    C
ATOM  12060  CB  VAL B 159      45.093 -45.257 -92.522  1.00 26.57      B    C
ATOM  12062  CG1 VAL B 159      44.635 -46.274 -91.487  1.00 27.69      B    C
ATOM  12066  CG2 VAL B 159      45.746 -44.038 -91.881  1.00 24.34      B    C
ATOM  12070  C   VAL B 159      47.180 -46.679 -92.830  1.00 26.07      B    C
ATOM  12071  O   VAL B 159      47.078 -47.891 -92.628  1.00 28.36      B    O
ATOM  12073  N   LEU B 160      48.283 -45.986 -92.536  1.00 24.54      B    N
ATOM  12074  CA  LEU B 160      49.342 -46.517 -91.679  1.00 24.67      B    C
ATOM  12076  CB  LEU B 160      50.710 -45.956 -92.071  1.00 27.75      B    C
ATOM  12079  CG  LEU B 160      51.447 -46.636 -93.221  1.00 27.59      B    C
ATOM  12081  CD1 LEU B 160      51.907 -48.043 -92.822  1.00 25.42      B    C
ATOM  12085  CD2 LEU B 160      50.567 -46.679 -94.470  1.00 33.94      B    C
ATOM  12089  C   LEU B 160      49.038 -46.158 -90.219  1.00 21.89      B    C
ATOM  12090  O   LEU B 160      48.829 -44.997 -89.906  1.00 26.59      B    O
ATOM  12092  N   LEU B 161      49.008 -47.162 -89.346  1.00 23.53      B    N
ATOM  12093  CA  LEU B 161      48.791 -46.973 -87.911  1.00 25.23      B    C
ATOM  12095  CB  LEU B 161      47.552 -47.743 -87.450  1.00 23.78      B    C
ATOM  12098  CG  LEU B 161      46.246 -47.365 -88.125  1.00 24.72      B    C
ATOM  12100  CD1 LEU B 161      45.036 -47.866 -87.322  1.00 26.57      B    C
ATOM  12104  CD2 LEU B 161      46.208 -45.877 -88.273  1.00 23.48      B    C
ATOM  12108  C   LEU B 161      49.991 -47.504 -87.155  1.00 22.81      B    C
ATOM  12109  O   LEU B 161      50.573 -48.487 -87.566  1.00 25.80      B    O
ATOM  12111  N   PRO B 162      50.374 -46.848 -86.050  1.00 22.63      B    N
ATOM  12112  CA  PRO B 162      51.381 -47.438 -85.186  1.00 20.52      B    C
ATOM  12114  CB  PRO B 162      51.980 -46.229 -84.490  1.00 22.63      B    C
ATOM  12117  CG  PRO B 162      50.854 -45.248 -84.426  1.00 22.79      B    C
ATOM  12120  CD  PRO B 162      49.945 -45.523 -85.574  1.00 22.15      B    C
ATOM  12123  C   PRO B 162      50.758 -48.403 -84.183  1.00 16.88      B    C
ATOM  12124  O   PRO B 162      49.707 -48.113 -83.622  1.00 19.29      B    O
ATOM  12125  N   VAL B 163      51.393 -49.551 -83.975  1.00 16.91      B    N
ATOM  12126  CA  VAL B 163      50.907 -50.488 -82.974  1.00 19.29      B    C
ATOM  12128  CB  VAL B 163      51.605 -51.841 -83.073  1.00 18.42      B    C
ATOM  12130  CG1 VAL B 163      51.273 -52.731 -81.885  1.00 18.20      B    C
ATOM  12134  CG2 VAL B 163      51.232 -52.528 -84.391  1.00 24.14      B    C
ATOM  12138  C   VAL B 163      51.076 -49.868 -81.572  1.00 16.32      B    C
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ATOM	12139	O	VAL	B	163	52.063	-49.218	-81.278	1.00	18.15	B	O
ATOM	12141	N	LEU	B	164	50.073	-50.066	-80.740	1.00	18.44	B	N
ATOM	12142	CA	LEU	B	164	50.048	-49.563	-79.374	1.00	18.92	B	C
ATOM	12144	CB	LEU	B	164	48.727	-48.852	-79.113	1.00	19.12	B	C
ATOM	12147	CG	LEU	B	164	48.601	-48.201	-77.735	1.00	21.31	B	C
ATOM	12149	CD1	LEU	B	164	49.470	-46.942	-77.734	1.00	20.79	B	C
ATOM	12153	CD2	LEU	B	164	47.154	-47.885	-77.389	1.00	21.95	B	C
ATOM	12157	C	LEU	B	164	50.177	-50.763	-78.448	1.00	20.38	B	C
ATOM	12158	O	LEU	B	164	49.498	-51.770	-78.633	1.00	25.37	B	O
ATOM	12160	N	ASP	B	165	51.050	-50.659	-77.451	1.00	21.20	B	N
ATOM	12161	CA	ASP	B	165	51.314	-51.786	-76.558	1.00	17.79	B	C
ATOM	12163	CB	ASP	B	165	52.502	-51.489	-75.631	1.00	17.93	B	C
ATOM	12166	CG	ASP	B	165	52.165	-50.507	-74.533	1.00	23.72	B	C
ATOM	12167	OD1	ASP	B	165	52.180	-49.270	-74.802	1.00	21.53	B	O
ATOM	12168	OD2	ASP	B	165	51.911	-50.980	-73.397	1.00	26.78	B	O
ATOM	12169	C	ASP	B	165	50.077	-52.186	-75.742	1.00	17.72	B	C
ATOM	12170	O	ASP	B	165	49.190	-51.360	-75.488	1.00	23.00	B	O
ATOM	12172	N	ARG	B	166	50.077	-53.427	-75.273	1.00	18.47	B	N
ATOM	12173	CA	ARG	B	166	48.905	-54.035	-74.649	1.00	21.81	B	C
ATOM	12175	CB	ARG	B	166	49.093	-55.552	-74.539	1.00	23.30	B	C
ATOM	12178	CG	ARG	B	166	47.814	-56.307	-74.170	1.00	21.17	B	C
ATOM	12181	CD	ARG	B	166	47.975	-57.833	-74.337	1.00	19.88	B	C
ATOM	12184	NE	ARG	B	166	48.142	-58.193	-75.738	1.00	20.21	B	N
ATOM	12186	CZ	ARG	B	166	49.283	-58.588	-76.293	1.00	18.27	B	C
ATOM	12187	NH1	ARG	B	166	50.391	-58.711	-75.564	1.00	15.42	B	N
ATOM	12190	NH2	ARG	B	166	49.315	-58.873	-77.592	1.00	22.32	B	N
ATOM	12193	C	ARG	B	166	48.599	-53.469	-73.278	1.00	23.19	B	C
ATOM	12194	O	ARG	B	166	47.424	-53.413	-72.882	1.00	21.62	B	O
ATOM	12196	N	ALA	B	167	49.635	-53.049	-72.554	1.00	24.76	B	N
ATOM	12197	CA	ALA	B	167	49.430	-52.494	-71.204	1.00	23.05	B	C
ATOM	12199	CB	ALA	B	167	50.733	-52.511	-70.403	1.00	20.45	B	C
ATOM	12203	C	ALA	B	167	48.809	-51.098	-71.255	1.00	17.95	B	C
ATOM	12204	O	ALA	B	167	47.945	-50.778	-70.442	1.00	22.75	B	O
ATOM	12206	N	THR	B	168	49.235	-50.271	-72.212	1.00	22.33	B	N
ATOM	12207	CA	THR	B	168	48.580	-48.977	-72.463	1.00	21.21	B	C
ATOM	12209	CB	THR	B	168	49.291	-48.134	-73.567	1.00	20.43	B	C
ATOM	12211	OG1	THR	B	168	50.653	-47.940	-73.206	1.00	19.10	B	O
ATOM	12213	CG2	THR	B	168	48.618	-46.758	-73.743	1.00	21.56	B	C
ATOM	12217	C	THR	B	168	47.156	-49.235	-72.888	1.00	24.35	B	C
ATOM	12218	O	THR	B	168	46.228	-48.652	-72.346	1.00	23.26	B	O
ATOM	12220	N	CYS	B	169	46.988	-50.133	-73.858	1.00	28.46	B	N
ATOM	12221	CA	CYS	B	169	45.666	-50.477	-74.337	1.00	24.45	B	C
ATOM	12223	CB	CYS	B	169	45.731	-51.501	-75.456	1.00	26.91	B	C
ATOM	12226	SG	CYS	B	169	44.380	-51.286	-76.564	1.00	32.16	B	S
ATOM	12228	C	CYS	B	169	44.735	-50.985	-73.245	1.00	18.16	B	C
ATOM	12229	O	CYS	B	169	43.534	-50.754	-73.300	1.00	27.91	B	O
ATOM	12231	N	ASN	B	170	45.287	-51.656	-72.245	1.00	24.91	B	N
ATOM	12232	CA	ASN	B	170	44.491	-52.114	-71.100	1.00	23.60	B	C
ATOM	12234	CB	ASN	B	170	45.022	-53.458	-70.602	1.00	22.63	B	C
ATOM	12237	CG	ASN	B	170	44.463	-54.601	-71.377	1.00	21.06	B	C
ATOM	12238	OD1	ASN	B	170	43.301	-54.565	-71.770	1.00	21.33	B	O
ATOM	12239	ND2	ASN	B	170	45.287	-55.618	-71.639	1.00	18.34	B	N
ATOM	12242	C	ASN	B	170	44.327	-51.167	-69.923	1.00	25.41	B	C
ATOM	12243	O	ASN	B	170	43.759	-51.558	-68.902	1.00	27.31	B	O
ATOM	12245	N	ARG	B	171	44.775	-49.917	-70.040	1.00	27.23	B	N
ATOM	12246	CA	ARG	B	171	44.409	-48.938	-69.014	1.00	24.14	B	C
ATOM	12248	CB	ARG	B	171	45.077	-47.602	-69.243	1.00	25.06	B	C
ATOM	12251	CG	ARG	B	171	46.561	-47.644	-69.196	1.00	26.07	B	C
ATOM	12254	CD	ARG	B	171	47.132	-46.326	-68.647	1.00	33.56	B	C
ATOM	12257	NE	ARG	B	171	48.183	-45.876	-69.544	1.00	38.34	B	N
ATOM	12259	CZ	ARG	B	171	48.044	-44.923	-70.451	1.00	38.14	B	C
ATOM	12260	NH1	ARG	B	171	49.065	-44.604	-71.227	1.00	39.48	B	N
ATOM	12263	NH2	ARG	B	171	46.910	-44.268	-70.555	1.00	38.60	B	N

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ATOM  12266  C   ARG B 171      42.908 -48.711 -68.995  1.00 22.38      B    C
ATOM  12267  O   ARG B 171      42.233 -48.847 -70.027  1.00 18.23      B    O
ATOM  12269  N   ARG B 172      42.386 -48.323 -67.829  1.00 17.09      B    N
ATOM  12270  CA  ARG B 172      40.950 -48.174 -67.652  1.00 16.72      B    C
ATOM  12272  CB  ARG B 172      40.620 -47.768 -66.186  1.00 13.48      B    C
ATOM  12275  CG  ARG B 172      41.042 -46.385 -65.795  1.00 15.41      B    C
ATOM  12278  CD  ARG B 172      40.744 -46.151 -64.309  1.00 22.79      B    C
ATOM  12281  NE  ARG B 172      41.772 -46.781 -63.537  1.00 18.11      B    N
ATOM  12283  CZ  ARG B 172      41.808 -46.893 -62.220  1.00 21.10      B    C
ATOM  12284  NH1 ARG B 172      40.811 -46.488 -61.457  1.00 23.33      B    N
ATOM  12287  NH2 ARG B 172      42.855 -47.485 -61.676  1.00 18.99      B    N
ATOM  12290  C   ARG B 172      40.326 -47.160 -68.601  1.00 21.22      B    C
ATOM  12291  O   ARG B 172      39.203 -47.346 -69.045  1.00 31.84      B    O
ATOM  12293  N   THR B 173      41.039 -46.065 -68.865  1.00 27.38      B    N
ATOM  12294  CA  THR B 173      40.655 -45.062 -69.865  1.00 25.19      B    C
ATOM  12296  CB  THR B 173      41.852 -44.099 -70.131  1.00 25.98      B    C
ATOM  12298  OG1 THR B 173      42.487 -43.778 -68.887  1.00 21.76      B    O
ATOM  12300  CG2 THR B 173      41.415 -42.811 -70.859  1.00 23.23      B    C
ATOM  12304  C   THR B 173      40.338 -45.726 -71.197  1.00 28.05      B    C
ATOM  12305  O   THR B 173      39.479 -45.268 -71.961  1.00 32.99      B    O
ATOM  12307  N   HIS B 174      41.077 -46.785 -71.480  1.00 24.13      B    N
ATOM  12308  CA  HIS B 174      41.041 -47.454 -72.782  1.00 22.58      B    C
ATOM  12310  CB  HIS B 174      42.477 -47.697 -73.221  1.00 19.66      B    C
ATOM  12313  CG  HIS B 174      43.280 -46.437 -73.315  1.00 21.51      B    C
ATOM  12314  ND1 HIS B 174      44.624 -46.379 -73.023  1.00 25.60      B    N
ATOM  12316  CE1 HIS B 174      45.056 -45.137 -73.184  1.00 27.46      B    C
ATOM  12318  NE2 HIS B 174      44.036 -44.386 -73.560  1.00 28.22      B    N
ATOM  12320  CD2 HIS B 174      42.914 -45.174 -73.647  1.00 25.46      B    C
ATOM  12322  C   HIS B 174      40.170 -48.726 -72.767  1.00 20.04      B    C
ATOM  12323  O   HIS B 174      38.981 -48.626 -72.511  1.00 31.31      B    O
ATOM  12325  N   HIS B 175      40.736 -49.904 -73.024  1.00 25.30      B    N
ATOM  12326  CA  HIS B 175      39.938 -51.140 -73.070  1.00 22.04      B    C
ATOM  12328  CB  HIS B 175      40.278 -51.949 -74.300  1.00 22.74      B    C
ATOM  12331  CG  HIS B 175      40.013 -51.212 -75.570  1.00 21.64      B    C
ATOM  12332  ND1 HIS B 175      38.822 -50.568 -75.813  1.00 17.46      B    N
ATOM  12334  CE1 HIS B 175      38.872 -49.995 -76.999  1.00 23.38      B    C
ATOM  12336  NE2 HIS B 175      40.056 -50.238 -77.534  1.00 25.28      B    N
ATOM  12338  CD2 HIS B 175      40.790 -50.998 -76.659  1.00 23.73      B    C
ATOM  12340  C   HIS B 175      40.025 -51.989 -71.816  1.00 24.97      B    C
ATOM  12341  O   HIS B 175      39.580 -53.145 -71.824  1.00 20.13      B    O
ATOM  12343  N   ASP B 176      40.622 -51.411 -70.763  1.00 26.50      B    N
ATOM  12344  CA  ASP B 176      40.388 -51.789 -69.363  1.00 23.45      B    C
ATOM  12346  CB  ASP B 176      39.004 -51.262 -68.952  1.00 25.86      B    C
ATOM  12349  CG  ASP B 176      38.836 -51.121 -67.440  1.00 25.83      B    C
ATOM  12350  OD1 ASP B 176      39.826 -51.257 -66.687  1.00 23.55      B    O
ATOM  12351  OD2 ASP B 176      37.714 -50.820 -67.002  1.00 27.35      B    O
ATOM  12352  C   ASP B 176      40.492 -53.293 -69.057  1.00 29.03      B    C
ATOM  12353  O   ASP B 176      39.699 -53.813 -68.283  1.00 27.39      B    O
ATOM  12355  N   GLY B 177      41.460 -53.988 -69.661  1.00 24.47      B    N
ATOM  12356  CA  GLY B 177      41.682 -55.410 -69.374  1.00 26.75      B    C
ATOM  12359  C   GLY B 177      41.184 -56.381 -70.429  1.00 30.00      B    C
ATOM  12360  O   GLY B 177      41.541 -57.547 -70.419  1.00 31.57      B    O
ATOM  12362  N   ALA B 178      40.360 -55.896 -71.347  1.00 32.65      B    N
ATOM  12363  CA  ALA B 178      39.756 -56.736 -72.363  1.00 28.75      B    C
ATOM  12365  CB  ALA B 178      38.616 -55.991 -73.037  1.00 28.68      B    C
ATOM  12369  C   ALA B 178      40.744 -57.238 -73.409  1.00 25.30      B    C
ATOM  12370  O   ALA B 178      40.424 -58.135 -74.170  1.00 29.04      B    O
ATOM  12372  N   ILE B 179      41.944 -56.671 -73.438  1.00 25.89      B    N
ATOM  12373  CA  ILE B 179      42.917 -56.989 -74.474  1.00 25.51      B    C
ATOM  12375  CB  ILE B 179      43.754 -55.758 -74.874  1.00 24.88      B    C
ATOM  12377  CG1 ILE B 179      42.851 -54.565 -75.194  1.00 16.41      B    C
ATOM  12380  CD1 ILE B 179      41.709 -54.860 -76.195  1.00 19.54      B    C
ATOM  12384  CG2 ILE B 179      44.628 -56.103 -76.034  1.00 13.47      B    C
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ATOM	12388	C	ILE	B	179	43.853	-58.090	-74.020	1.00	23.13	B	C
ATOM	12389	O	ILE	B	179	44.753	-57.876	-73.203	1.00	25.10	B	O
ATOM	12391	N	THR	B	180	43.648	-59.273	-74.583	1.00	22.84	B	N
ATOM	12392	CA	THR	B	180	44.400	-60.448	-74.193	1.00	25.44	B	C
ATOM	12394	CB	THR	B	180	43.504	-61.712	-74.271	1.00	27.04	B	C
ATOM	12396	OG1	THR	B	180	43.033	-61.878	-75.603	1.00	24.83	B	O
ATOM	12398	CG2	THR	B	180	42.294	-61.572	-73.344	1.00	25.63	B	C
ATOM	12402	C	THR	B	180	45.618	-60.588	-75.108	1.00	24.43	B	C
ATOM	12403	O	THR	B	180	45.783	-59.820	-76.054	1.00	22.80	B	O
ATOM	12405	N	GLN	B	181	46.453	-61.584	-74.830	1.00	27.19	B	N
ATOM	12406	CA	GLN	B	181	47.626	-61.878	-75.655	1.00	27.49	B	C
ATOM	12408	CB	GLN	B	181	48.516	-62.904	-74.972	1.00	29.96	B	C
ATOM	12411	CG	GLN	B	181	49.174	-62.420	-73.716	1.00	32.90	B	C
ATOM	12414	CD	GLN	B	181	49.737	-63.566	-72.900	1.00	36.57	B	C
ATOM	12415	OE1	GLN	B	181	48.989	-64.415	-72.387	1.00	39.84	B	O
ATOM	12416	NE2	GLN	B	181	51.058	-63.608	-72.784	1.00	36.06	B	N
ATOM	12419	C	GLN	B	181	47.271	-62.401	-77.037	1.00	24.29	B	C
ATOM	12420	O	GLN	B	181	48.156	-62.538	-77.886	1.00	18.67	B	O
ATOM	12422	N	ARG	B	182	45.985	-62.671	-77.264	1.00	25.40	B	N
ATOM	12423	CA	ARG	B	182	45.494	-63.100	-78.567	1.00	30.47	B	C
ATOM	12425	CB	ARG	B	182	44.379	-64.141	-78.387	1.00	35.17	B	C
ATOM	12428	CG	ARG	B	182	44.669	-65.173	-77.273	1.00	40.82	B	C
ATOM	12431	CD	ARG	B	182	43.646	-66.313	-77.211	1.00	41.00	B	C
ATOM	12434	NE	ARG	B	182	43.829	-67.276	-78.294	1.00	43.02	B	N
ATOM	12436	CZ	ARG	B	182	43.155	-68.422	-78.415	1.00	46.17	B	C
ATOM	12437	NH1	ARG	B	182	42.226	-68.767	-77.526	1.00	47.48	B	N
ATOM	12440	NH2	ARG	B	182	43.409	-69.234	-79.443	1.00	44.75	B	N
ATOM	12443	C	ARG	B	182	45.008	-61.886	-79.376	1.00	25.77	B	C
ATOM	12444	O	ARG	B	182	44.527	-62.024	-80.503	1.00	23.74	B	O
ATOM	12446	N	MET	B	183	45.162	-60.697	-78.795	1.00	26.60	B	N
ATOM	12447	CA	MET	B	183	44.725	-59.449	-79.395	1.00	23.37	B	C
ATOM	12449	CB	MET	B	183	43.602	-58.856	-78.560	1.00	23.04	B	C
ATOM	12452	CG	MET	B	183	42.279	-59.552	-78.753	1.00	28.87	B	C
ATOM	12455	SD	MET	B	183	41.228	-59.441	-77.311	1.00	27.27	B	S
ATOM	12456	CE	MET	B	183	40.440	-57.869	-77.602	1.00	26.41	B	C
ATOM	12460	C	MET	B	183	45.879	-58.460	-79.423	1.00	23.18	B	C
ATOM	12461	O	MET	B	183	46.832	-58.628	-78.684	1.00	18.39	B	O
ATOM	12463	N	MET	B	184	45.766	-57.436	-80.274	1.00	22.51	B	N
ATOM	12464	CA	MET	B	184	46.714	-56.328	-80.343	1.00	19.16	B	C
ATOM	12466	CB	MET	B	184	47.739	-56.542	-81.481	1.00	12.38	B	C
ATOM	12469	CG	MET	B	184	47.161	-56.685	-82.833	1.00	15.65	B	C
ATOM	12472	SD	MET	B	184	48.408	-57.002	-84.091	1.00	20.88	B	S
ATOM	12473	CE	MET	B	184	49.372	-55.487	-83.928	1.00	24.15	B	C
ATOM	12477	C	MET	B	184	45.938	-54.997	-80.487	1.00	26.16	B	C
ATOM	12478	O	MET	B	184	44.707	-54.989	-80.598	1.00	27.39	B	O
ATOM	12480	N	CYS	B	185	46.656	-53.873	-80.426	1.00	31.68	B	N
ATOM	12481	CA	CYS	B	185	46.046	-52.532	-80.504	1.00	24.79	B	C
ATOM	12483	CB	CYS	B	185	45.985	-51.881	-79.118	1.00	33.38	B	C
ATOM	12486	SG	CYS	B	185	44.751	-52.627	-78.038	1.00	31.13	B	S
ATOM	12488	C	CYS	B	185	46.819	-51.642	-81.452	1.00	25.25	B	C
ATOM	12489	O	CYS	B	185	48.001	-51.875	-81.700	1.00	23.30	B	O
ATOM	12491	N	ALA	B	186	46.140	-50.635	-81.996	1.00	25.26	B	N
ATOM	12492	CA	ALA	B	186	46.785	-49.577	-82.764	1.00	25.79	B	C
ATOM	12494	CB	ALA	B	186	46.569	-49.770	-84.229	1.00	19.31	B	C
ATOM	12498	C	ALA	B	186	46.226	-48.238	-82.308	1.00	27.30	B	C
ATOM	12499	O	ALA	B	186	45.150	-48.173	-81.724	1.00	23.06	B	O
ATOM	12501	N	GLU	B	187	46.962	-47.164	-82.564	1.00	32.54	B	N
ATOM	12502	CA	GLU	B	187	46.491	-45.822	-82.177	1.00	34.16	B	C
ATOM	12504	CB	GLU	B	187	47.606	-44.785	-82.353	1.00	39.81	B	C
ATOM	12507	CG	GLU	B	187	48.503	-44.657	-81.108	1.00	41.73	B	C
ATOM	12510	CD	GLU	B	187	49.840	-43.993	-81.396	1.00	41.27	B	C
ATOM	12511	OE1	GLU	B	187	49.857	-42.937	-82.072	1.00	48.18	B	O
ATOM	12512	OE2	GLU	B	187	50.870	-44.534	-80.950	1.00	35.43	B	O

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ATOM  12513  C   GLU B 187      45.226 -45.420 -82.936  1.00 31.85      B    C
ATOM  12514  O   GLU B 187      45.046 -45.808 -84.087  1.00 23.94      B    O
ATOM  12516  N   SER B 188      44.339 -44.672 -82.269  1.00 29.13      B    N
ATOM  12517  CA  SER B 188      43.047 -44.290 -82.854  1.00 29.24      B    C
ATOM  12519  CB  SER B 188      41.938 -44.853 -81.992  1.00 29.49      B    C
ATOM  12522  OG  SER B 188      42.022 -44.288 -80.710  1.00 23.72      B    O
ATOM  12524  C   SER B 188      42.797 -42.779 -83.035  1.00 30.41      B    C
ATOM  12525  O   SER B 188      41.722 -42.398 -83.487  1.00 35.94      B    O
ATOM  12527  N   ASN B 189      43.756 -41.923 -82.688  1.00 33.96      B    N
ATOM  12528  CA  ASN B 189      43.598 -40.471 -82.861  1.00 36.25      B    C
ATOM  12530  CB  ASN B 189      44.382 -39.732 -81.769  1.00 41.76      B    C
ATOM  12533  CG  ASN B 189      43.822 -38.329 -81.464  1.00 42.76      B    C
ATOM  12534  OD1 ASN B 189      42.711 -37.959 -81.874  1.00 44.05      B    O
ATOM  12535  ND2 ASN B 189      44.596 -37.554 -80.717  1.00 48.51      B    N
ATOM  12538  C   ASN B 189      44.081 -40.005 -84.235  1.00 37.18      B    C
ATOM  12539  O   ASN B 189      45.198 -40.317 -84.630  1.00 28.62      B    O
ATOM  12541  N   ARG B 190      43.258 -39.251 -84.960  1.00 43.34      B    N
ATOM  12542  CA  ARG B 190      43.601 -38.801 -86.331  1.00 47.86      B    C
ATOM  12544  CB  ARG B 190      45.051 -38.265 -86.452  1.00 56.87      B    C
ATOM  12547  CG  ARG B 190      45.493 -37.165 -85.490  1.00 64.92      B    C
ATOM  12550  CD  ARG B 190      44.799 -35.827 -85.777  1.00 68.56      B    C
ATOM  12553  NE  ARG B 190      43.820 -35.469 -84.748  1.00 69.84      B    N
ATOM  12555  CZ  ARG B 190      42.927 -34.484 -84.854  1.00 70.25      B    C
ATOM  12556  NH1 ARG B 190      42.855 -33.730 -85.952  1.00 71.33      B    N
ATOM  12559  NH2 ARG B 190      42.098 -34.248 -83.843  1.00 71.75      B    N
ATOM  12562  C   ARG B 190      43.479 -39.907 -87.383  1.00 49.60      B    C
ATOM  12563  O   ARG B 190      43.286 -39.615 -88.562  1.00 52.36      B    O
ATOM  12565  N   ARG B 191      43.577 -41.160 -86.943  1.00 46.89      B    N
ATOM  12566  CA  ARG B 191      43.977 -42.284 -87.778  1.00 41.72      B    C
ATOM  12568  CB  ARG B 191      45.508 -42.376 -87.720  1.00 46.85      B    C
ATOM  12571  CG  ARG B 191      46.241 -42.410 -89.043  1.00 50.50      B    C
ATOM  12574  CD  ARG B 191      46.045 -41.137 -89.868  1.00 55.03      B    C
ATOM  12577  NE  ARG B 191      46.781 -39.965 -89.370  1.00 58.53      B    N
ATOM  12579  CZ  ARG B 191      47.947 -39.512 -89.852  1.00 60.20      B    C
ATOM  12580  NH1 ARG B 191      48.566 -40.131 -90.859  1.00 58.75      B    N
ATOM  12583  NH2 ARG B 191      48.505 -38.422 -89.318  1.00 58.28      B    N
ATOM  12586  C   ARG B 191      43.340 -43.554 -87.170  1.00 38.78      B    C
ATOM  12587  O   ARG B 191      43.591 -43.866 -86.003  1.00 38.01      B    O
ATOM  12589  N   ASP B 192      42.513 -44.281 -87.919  1.00 31.46      B    N
ATOM  12590  CA  ASP B 192      41.752 -45.393 -87.306  1.00 32.51      B    C
ATOM  12592  CB  ASP B 192      40.675 -44.828 -86.348  1.00 21.27      B    C
ATOM  12595  CG  ASP B 192      40.324 -45.757 -85.173  1.00 25.16      B    C
ATOM  12596  OD1 ASP B 192      40.851 -46.876 -85.048  1.00 23.93      B    O
ATOM  12597  OD2 ASP B 192      39.480 -45.347 -84.338  1.00 22.08      B    O
ATOM  12598  C   ASP B 192      41.075 -46.278 -88.343  1.00 29.77      B    C
ATOM  12599  O   ASP B 192      41.008 -45.935 -89.514  1.00 28.89      B    O
ATOM  12601  N   SER B 193      40.598 -47.429 -87.878  1.00 31.41      B    N
ATOM  12602  CA  SER B 193      39.627 -48.230 -88.608  1.00 30.60      B    C
ATOM  12604  CB  SER B 193      39.980 -49.731 -88.546  1.00 24.61      B    C
ATOM  12607  OG  SER B 193      40.219 -50.205 -87.232  1.00 23.64      B    O
ATOM  12609  C   SER B 193      38.225 -47.957 -88.054  1.00 28.28      B    C
ATOM  12610  O   SER B 193      38.060 -47.636 -86.889  1.00 26.62      B    O
ATOM  12612  N   CYS B 194      37.211 -48.059 -88.897  1.00 33.44      B    N
ATOM  12613  CA  CYS B 194      35.860 -47.676 -88.491  1.00 34.54      B    C
ATOM  12615  CB  CYS B 194      35.483 -46.333 -89.128  1.00 42.51      B    C
ATOM  12618  SG  CYS B 194      36.648 -44.948 -88.878  1.00 43.06      B    S
ATOM  12620  C   CYS B 194      34.835 -48.731 -88.889  1.00 34.89      B    C
ATOM  12621  O   CYS B 194      35.167 -49.707 -89.584  1.00 31.54      B    O
ATOM  12623  N   LYS B 195      33.590 -48.527 -88.450  1.00 35.30      B    N
ATOM  12624  CA  LYS B 195      32.478 -49.382 -88.852  1.00 36.48      B    C
ATOM  12626  CB  LYS B 195      31.143 -48.702 -88.548  1.00 43.84      B    C
ATOM  12629  CG  LYS B 195      29.908 -49.586 -88.764  1.00 45.58      B    C
ATOM  12632  CD  LYS B 195      28.614 -48.822 -88.415  1.00 48.20      B    C
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ATOM	12635	CE	LYS	B	195	27.345	-49.649	-88.697	1.00	49.81	B	C
ATOM	12638	NZ	LYS	B	195	26.137	-48.785	-88.920	1.00	50.73	B	N
ATOM	12642	C	LYS	B	195	32.601	-49.707	-90.341	1.00	36.37	B	C
ATOM	12643	O	LYS	B	195	32.814	-48.813	-91.167	1.00	38.14	B	O
ATOM	12645	N	GLY	B	196	32.527	-50.996	-90.669	1.00	34.77	B	N
ATOM	12646	CA	GLY	B	196	32.722	-51.474	-92.044	1.00	31.07	B	C
ATOM	12649	C	GLY	B	196	34.132	-51.928	-92.374	1.00	28.95	B	C
ATOM	12650	O	GLY	B	196	34.339	-52.607	-93.387	1.00	28.36	B	O
ATOM	12652	N	ASP	B	197	35.112	-51.563	-91.541	1.00	28.85	B	N
ATOM	12653	CA	ASP	B	197	36.484	-52.030	-91.727	1.00	30.11	B	C
ATOM	12655	CB	ASP	B	197	37.505	-50.986	-91.263	1.00	32.11	B	C
ATOM	12658	CG	ASP	B	197	37.480	-49.716	-92.106	1.00	32.64	B	C
ATOM	12659	OD1	ASP	B	197	37.596	-49.815	-93.347	1.00	25.98	B	O
ATOM	12660	OD2	ASP	B	197	37.354	-48.620	-91.514	1.00	28.14	B	O
ATOM	12661	C	ASP	B	197	36.720	-53.343	-90.986	1.00	27.89	B	C
ATOM	12662	O	ASP	B	197	37.725	-54.005	-91.230	1.00	23.25	B	O
ATOM	12664	N	SER	B	198	35.801	-53.705	-90.086	1.00	27.74	B	N
ATOM	12665	CA	SER	B	198	35.899	-54.941	-89.303	1.00	28.33	B	C
ATOM	12667	CB	SER	B	198	34.637	-55.164	-88.473	1.00	32.77	B	C
ATOM	12670	OG	SER	B	198	34.074	-53.940	-88.067	1.00	35.65	B	O
ATOM	12672	C	SER	B	198	36.066	-56.136	-90.217	1.00	34.26	B	C
ATOM	12673	O	SER	B	198	35.490	-56.189	-91.301	1.00	36.53	B	O
ATOM	12675	N	GLY	B	199	36.860	-57.097	-89.773	1.00	30.10	B	N
ATOM	12676	CA	GLY	B	199	37.126	-58.276	-90.551	1.00	25.02	B	C
ATOM	12679	C	GLY	B	199	38.278	-58.042	-91.501	1.00	26.51	B	C
ATOM	12680	O	GLY	B	199	38.868	-58.993	-92.011	1.00	25.55	B	O
ATOM	12682	N	GLY	B	200	38.609	-56.779	-91.744	1.00	21.40	B	N
ATOM	12683	CA	GLY	B	200	39.683	-56.459	-92.668	1.00	19.67	B	C
ATOM	12686	C	GLY	B	200	41.069	-56.686	-92.088	1.00	18.61	B	C
ATOM	12687	O	GLY	B	200	41.238	-56.963	-90.905	1.00	24.41	B	O
ATOM	12689	N	PRO	B	201	42.085	-56.557	-92.924	1.00	19.41	B	N
ATOM	12690	CA	PRO	B	201	43.452	-56.891	-92.550	1.00	20.21	B	C
ATOM	12692	CB	PRO	B	201	44.087	-57.196	-93.905	1.00	14.63	B	C
ATOM	12695	CG	PRO	B	201	43.389	-56.287	-94.840	1.00	16.23	B	C
ATOM	12698	CD	PRO	B	201	41.986	-56.123	-94.328	1.00	18.49	B	C
ATOM	12701	C	PRO	B	201	44.281	-55.802	-91.865	1.00	19.96	B	C
ATOM	12702	O	PRO	B	201	44.224	-54.626	-92.261	1.00	25.78	B	O
ATOM	12703	N	LEU	B	202	45.067	-56.209	-90.866	1.00	21.43	B	N
ATOM	12704	CA	LEU	B	202	46.146	-55.384	-90.322	1.00	21.51	B	C
ATOM	12706	CB	LEU	B	202	46.092	-55.315	-88.799	1.00	22.40	B	C
ATOM	12709	CG	LEU	B	202	47.095	-54.366	-88.132	1.00	26.16	B	C
ATOM	12711	CD1	LEU	B	202	46.977	-52.967	-88.727	1.00	30.54	B	C
ATOM	12715	CD2	LEU	B	202	46.884	-54.299	-86.618	1.00	22.05	B	C
ATOM	12719	C	LEU	B	202	47.428	-56.025	-90.780	1.00	19.80	B	C
ATOM	12720	O	LEU	B	202	47.732	-57.166	-90.424	1.00	23.87	B	O
ATOM	12722	N	VAL	B	203	48.176	-55.304	-91.597	1.00	21.60	B	N
ATOM	12723	CA	VAL	B	203	49.307	-55.889	-92.299	1.00	23.05	B	C
ATOM	12725	CB	VAL	B	203	49.119	-55.799	-93.817	1.00	21.19	B	C
ATOM	12727	CG1	VAL	B	203	50.339	-56.388	-94.554	1.00	19.96	B	C
ATOM	12731	CG2	VAL	B	203	47.849	-56.540	-94.229	1.00	18.47	B	C
ATOM	12735	C	VAL	B	203	50.577	-55.182	-91.869	1.00	27.66	B	C
ATOM	12736	O	VAL	B	203	50.609	-53.958	-91.755	1.00	30.26	B	O
ATOM	12738	N	CYS	B	204	51.618	-55.961	-91.613	1.00	33.39	B	N
ATOM	12739	CA	CYS	B	204	52.807	-55.431	-90.984	1.00	32.24	B	C
ATOM	12741	CB	CYS	B	204	52.648	-55.525	-89.467	1.00	37.62	B	C
ATOM	12744	SG	CYS	B	204	53.062	-53.960	-88.775	1.00	48.12	B	S
ATOM	12746	C	CYS	B	204	54.071	-56.124	-91.457	1.00	34.61	B	C
ATOM	12747	O	CYS	B	204	54.273	-57.308	-91.209	1.00	40.52	B	O
ATOM	12749	N	GLY	B	205	54.911	-55.378	-92.169	1.00	33.44	B	N
ATOM	12750	CA	GLY	B	205	56.124	-55.926	-92.762	1.00	31.85	B	C
ATOM	12753	C	GLY	B	205	55.893	-56.808	-93.989	1.00	30.55	B	C
ATOM	12754	O	GLY	B	205	56.761	-57.600	-94.349	1.00	31.65	B	O
ATOM	12756	N	GLY	B	206	54.727	-56.664	-94.619	1.00	29.64	B	N

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ATOM  12757  CA  GLY B 206      54.300 -57.523 -95.719  1.00 28.20      B    C
ATOM  12760  C   GLY B 206      53.526 -58.774 -95.314  1.00 27.32      B    C
ATOM  12761  O   GLY B 206      53.221 -59.617 -96.171  1.00 29.21      B    O
ATOM  12763  N   VAL B 207      53.195 -58.886 -94.027  1.00 21.74      B    N
ATOM  12764  CA  VAL B 207      52.625 -60.095 -93.452  1.00 23.06      B    C
ATOM  12766  CB  VAL B 207      53.608 -60.717 -92.416  1.00 28.00      B    C
ATOM  12768  CG1 VAL B 207      52.990 -61.924 -91.712  1.00 27.18      B    C
ATOM  12772  CG2 VAL B 207      54.913 -61.099 -93.073  1.00 26.98      B    C
ATOM  12776  C   VAL B 207      51.339 -59.742 -92.729  1.00 24.52      B    C
ATOM  12777  O   VAL B 207      51.279 -58.723 -92.050  1.00 27.17      B    O
ATOM  12779  N   LEU B 208      50.307 -60.574 -92.855  1.00 21.49      B    N
ATOM  12780  CA  LEU B 208      49.075 -60.344 -92.110  1.00 19.75      B    C
ATOM  12782  CB  LEU B 208      47.915 -61.183 -92.660  1.00 19.46      B    C
ATOM  12785  CG  LEU B 208      46.549 -60.993 -91.984  1.00 21.09      B    C
ATOM  12787  CD1 LEU B 208      45.990 -59.594 -92.231  1.00 20.90      B    C
ATOM  12791  CD2 LEU B 208      45.578 -62.058 -92.451  1.00 24.00      B    C
ATOM  12795  C   LEU B 208      49.306 -60.672 -90.639  1.00 16.80      B    C
ATOM  12796  O   LEU B 208      49.732 -61.779 -90.311  1.00 17.28      B    O
ATOM  12798  N   GLU B 209      49.007 -59.716 -89.759  1.00 19.57      B    N
ATOM  12799  CA  GLU B 209      49.160 -59.901 -88.307  1.00 18.30      B    C
ATOM  12801  CB  GLU B 209      50.145 -58.858 -87.737  1.00 20.45      B    C
ATOM  12804  CG  GLU B 209      51.604 -59.002 -88.212  1.00 22.24      B    C
ATOM  12807  CD  GLU B 209      52.406 -60.092 -87.487  1.00 22.68      B    C
ATOM  12808  OE1 GLU B 209      51.894 -60.705 -86.527  1.00 20.36      B    O
ATOM  12809  OE2 GLU B 209      53.570 -60.330 -87.882  1.00 23.81      B    O
ATOM  12810  C   GLU B 209      47.840 -59.808 -87.544  1.00 19.66      B    C
ATOM  12811  O   GLU B 209      47.707 -60.371 -86.467  1.00 21.43      B    O
ATOM  12813  N   GLY B 210      46.875 -59.076 -88.080  1.00 20.19      B    N
ATOM  12814  CA  GLY B 210      45.633 -58.844 -87.367  1.00 22.73      B    C
ATOM  12817  C   GLY B 210      44.441 -58.773 -88.285  1.00 24.35      B    C
ATOM  12818  O   GLY B 210      44.579 -58.555 -89.492  1.00 29.49      B    O
ATOM  12820  N   VAL B 211      43.280 -59.001 -87.690  1.00 23.47      B    N
ATOM  12821  CA  VAL B 211      41.994 -58.839 -88.334  1.00 27.41      B    C
ATOM  12823  CB  VAL B 211      41.218 -60.196 -88.437  1.00 26.91      B    C
ATOM  12825  CG1 VAL B 211      39.808 -59.985 -88.945  1.00 22.67      B    C
ATOM  12829  CG2 VAL B 211      41.947 -61.137 -89.339  1.00 24.74      B    C
ATOM  12833  C   VAL B 211      41.218 -57.847 -87.489  1.00 26.97      B    C
ATOM  12834  O   VAL B 211      41.057 -58.037 -86.274  1.00 29.50      B    O
ATOM  12836  N   VAL B 212      40.768 -56.772 -88.126  1.00 25.07      B    N
ATOM  12837  CA  VAL B 212      40.040 -55.722 -87.429  1.00 30.10      B    C
ATOM  12839  CB  VAL B 212      39.562 -54.624 -88.410  1.00 26.29      B    C
ATOM  12841  CG1 VAL B 212      38.905 -53.504 -87.667  1.00 22.55      B    C
ATOM  12845  CG2 VAL B 212      40.721 -54.100 -89.261  1.00 23.72      B    C
ATOM  12849  C   VAL B 212      38.838 -56.354 -86.732  1.00 32.68      B    C
ATOM  12850  O   VAL B 212      38.007 -56.977 -87.392  1.00 32.55      B    O
ATOM  12852  N   THR B 213      38.751 -56.205 -85.410  1.00 38.68      B    N
ATOM  12853  CA  THR B 213      37.755 -56.931 -84.617  1.00 43.21      B    C
ATOM  12855  CB  THR B 213      38.284 -57.420 -83.232  1.00 44.47      B    C
ATOM  12857  OG1 THR B 213      37.737 -56.618 -82.178  1.00 51.49      B    O
ATOM  12859  CG2 THR B 213      39.776 -57.391 -83.161  1.00 45.20      B    C
ATOM  12863  C   THR B 213      36.547 -56.066 -84.348  1.00 48.06      B    C
ATOM  12864  O   THR B 213      36.689 -54.904 -83.949  1.00 48.06      B    O
ATOM  12866  N   SER B 214      35.370 -56.680 -84.514  1.00 52.98      B    N
ATOM  12867  CA  SER B 214      34.056 -56.028 -84.388  1.00 53.87      B    C
ATOM  12869  CB  SER B 214      32.943 -57.038 -84.683  1.00 54.46      B    C
ATOM  12872  OG  SER B 214      33.121 -57.650 -85.952  1.00 56.90      B    O
ATOM  12874  C   SER B 214      33.773 -55.386 -83.024  1.00 56.74      B    C
ATOM  12875  O   SER B 214      34.412 -55.709 -82.012  1.00 55.19      B    O
ATOM  12877  N   GLY B 215      32.795 -54.479 -83.020  1.00 57.46      B    N
ATOM  12878  CA  GLY B 215      32.375 -53.799 -81.801  1.00 58.22      B    C
ATOM  12881  C   GLY B 215      31.651 -52.491 -82.057  1.00 59.41      B    C
ATOM  12882  O   GLY B 215      31.572 -52.017 -83.196  1.00 58.04      B    O
ATOM  12884  N   SER B 216      31.139 -51.908 -80.973  1.00 60.54      B    N
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ATOM	12885	CA	SER	B	216	30.436	-50.626	-81.010	1.00	58.52	B	C
ATOM	12887	CB	SER	B	216	29.458	-50.531	-79.829	1.00	62.23	B	C
ATOM	12890	OG	SER	B	216	28.595	-51.655	-79.770	1.00	63.51	B	O
ATOM	12892	C	SER	B	216	31.401	-49.440	-80.941	1.00	58.82	B	C
ATOM	12893	O	SER	B	216	30.979	-48.307	-80.669	1.00	59.52	B	O
ATOM	12895	N	ARG	B	217	32.687	-49.687	-81.190	1.00	52.13	B	N
ATOM	12896	CA	ARG	B	217	33.693	-48.661	-80.985	1.00	49.02	B	C
ATOM	12898	CB	ARG	B	217	35.099	-49.260	-81.009	1.00	47.01	B	C
ATOM	12901	CG	ARG	B	217	36.190	-48.329	-80.506	1.00	44.75	B	C
ATOM	12904	CD	ARG	B	217	37.541	-49.000	-80.614	1.00	43.24	B	C
ATOM	12907	NE	ARG	B	217	37.833	-49.308	-82.006	1.00	40.55	B	N
ATOM	12909	CZ	ARG	B	217	38.405	-48.474	-82.866	1.00	40.85	B	C
ATOM	12910	NH1	ARG	B	217	38.802	-47.263	-82.488	1.00	41.60	B	N
ATOM	12913	NH2	ARG	B	217	38.596	-48.863	-84.111	1.00	41.87	B	N
ATOM	12916	C	ARG	B	217	33.542	-47.574	-82.044	1.00	46.79	B	C
ATOM	12917	O	ARG	B	217	33.588	-47.845	-83.253	1.00	43.16	B	O
ATOM	12919	N	VAL	B	218	33.333	-46.349	-81.565	1.00	45.08	B	N
ATOM	12920	CA	VAL	B	218	33.277	-45.168	-82.420	1.00	44.05	B	C
ATOM	12922	CB	VAL	B	218	32.370	-44.007	-81.831	1.00	42.47	B	C
ATOM	12924	CG1	VAL	B	218	31.669	-44.430	-80.534	1.00	45.34	B	C
ATOM	12928	CG2	VAL	B	218	33.145	-42.684	-81.665	1.00	37.20	B	C
ATOM	12932	C	VAL	B	218	34.723	-44.760	-82.688	1.00	42.28	B	C
ATOM	12933	O	VAL	B	218	35.502	-44.535	-81.763	1.00	47.05	B	O
ATOM	12935	N	CYS	B	219	35.078	-44.718	-83.964	1.00	42.66	B	N
ATOM	12936	CA	CYS	B	219	36.449	-44.539	-84.365	1.00	40.61	B	C
ATOM	12938	CB	CYS	B	219	36.652	-45.026	-85.811	1.00	45.01	B	C
ATOM	12941	SG	CYS	B	219	35.958	-44.035	-87.177	1.00	44.56	B	S
ATOM	12943	C	CYS	B	219	36.896	-43.095	-84.184	1.00	38.26	B	C
ATOM	12944	O	CYS	B	219	36.081	-42.216	-83.920	1.00	35.49	B	O
ATOM	12946	N	GLY	B	220	38.207	-42.875	-84.290	1.00	38.66	B	N
ATOM	12947	CA	GLY	B	220	38.796	-41.545	-84.193	1.00	36.27	B	C
ATOM	12950	C	GLY	B	220	39.009	-40.990	-82.800	1.00	34.67	B	C
ATOM	12951	O	GLY	B	220	39.574	-39.908	-82.666	1.00	31.81	B	O
ATOM	12953	N	ASN	B	221	38.561	-41.722	-81.775	1.00	34.53	B	N
ATOM	12954	CA	ASN	B	221	38.732	-41.330	-80.361	1.00	31.34	B	C
ATOM	12956	CB	ASN	B	221	37.532	-41.804	-79.526	1.00	30.32	B	C
ATOM	12959	CG	ASN	B	221	37.630	-41.368	-78.079	1.00	33.10	B	C
ATOM	12960	OD1	ASN	B	221	38.596	-40.687	-77.695	1.00	29.33	B	O
ATOM	12961	ND2	ASN	B	221	36.632	-41.747	-77.260	1.00	30.55	B	N
ATOM	12964	C	ASN	B	221	40.008	-41.892	-79.708	1.00	25.77	B	C
ATOM	12965	O	ASN	B	221	40.168	-43.115	-79.556	1.00	31.37	B	O
ATOM	12967	N	ARG	B	222	40.877	-40.998	-79.260	1.00	21.52	B	N
ATOM	12968	CA	ARG	B	222	42.143	-41.397	-78.662	1.00	31.80	B	C
ATOM	12970	CB	ARG	B	222	42.990	-40.174	-78.280	1.00	39.15	B	C
ATOM	12973	CG	ARG	B	222	42.325	-39.248	-77.270	1.00	42.38	B	C
ATOM	12976	CD	ARG	B	222	43.326	-38.407	-76.524	1.00	43.71	B	C
ATOM	12979	NE	ARG	B	222	42.674	-37.524	-75.548	1.00	46.61	B	N
ATOM	12981	CZ	ARG	B	222	42.638	-37.716	-74.222	1.00	48.44	B	C
ATOM	12982	NH1	ARG	B	222	43.201	-38.782	-73.650	1.00	48.01	B	N
ATOM	12985	NH2	ARG	B	222	42.026	-36.820	-73.455	1.00	48.27	B	N
ATOM	12988	C	ARG	B	222	41.975	-42.294	-77.441	1.00	29.03	B	C
ATOM	12989	O	ARG	B	222	42.868	-43.078	-77.147	1.00	26.64	B	O
ATOM	12991	N	LYS	B	223	40.839	-42.176	-76.742	1.00	19.67	B	N
ATOM	12992	CA	LYS	B	223	40.588	-42.968	-75.549	1.00	23.73	B	C
ATOM	12994	CB	LYS	B	223	39.543	-42.280	-74.663	1.00	26.03	B	C
ATOM	12997	CG	LYS	B	223	40.011	-40.935	-74.111	1.00	24.43	B	C
ATOM	13000	CD	LYS	B	223	38.967	-40.338	-73.182	1.00	26.56	B	C
ATOM	13003	CE	LYS	B	223	39.451	-39.070	-72.541	1.00	26.53	B	C
ATOM	13006	NZ	LYS	B	223	38.410	-38.586	-71.534	1.00	26.62	B	N
ATOM	13010	C	LYS	B	223	40.138	-44.383	-75.830	1.00	23.91	B	C
ATOM	13011	O	LYS	B	223	39.960	-45.137	-74.897	1.00	25.38	B	O
ATOM	13013	N	LYS	B	224	39.928	-44.739	-77.100	1.00	25.57	B	N
ATOM	13014	CA	LYS	B	224	39.579	-46.107	-77.475	1.00	23.84	B	C

ATOM	13016	CB	LYS	B	224	38.086	-46.197	-77.726	1.00	27.62	B	C
ATOM	13019	CG	LYS	B	224	37.227	-45.953	-76.487	1.00	22.32	B	C
ATOM	13022	CD	LYS	B	224	37.413	-47.064	-75.495	1.00	28.01	B	C
ATOM	13025	CE	LYS	B	224	36.370	-47.038	-74.389	1.00	30.00	B	C
ATOM	13028	NZ	LYS	B	224	36.718	-45.985	-73.460	1.00	30.16	B	N
ATOM	13032	C	LYS	B	224	40.333	-46.526	-78.728	1.00	26.59	B	C
ATOM	13033	O	LYS	B	224	39.846	-46.292	-79.821	1.00	26.94	B	O
ATOM	13035	N	PRO	B	225	41.534	-47.125	-78.568	1.00	21.64	B	N
ATOM	13036	CA	PRO	B	225	42.341	-47.586	-79.692	1.00	24.08	B	C
ATOM	13038	CB	PRO	B	225	43.583	-48.179	-79.008	1.00	24.21	B	C
ATOM	13041	CG	PRO	B	225	43.609	-47.510	-77.623	1.00	21.28	B	C
ATOM	13044	CD	PRO	B	225	42.198	-47.388	-77.279	1.00	19.22	B	C
ATOM	13047	C	PRO	B	225	41.652	-48.654	-80.537	1.00	24.95	B	C
ATOM	13048	O	PRO	B	225	40.725	-49.311	-80.064	1.00	19.94	B	O
ATOM	13049	N	GLY	B	226	42.114	-48.815	-81.779	1.00	25.87	B	N
ATOM	13050	CA	GLY	B	226	41.706	-49.936	-82.601	1.00	23.30	B	C
ATOM	13053	C	GLY	B	226	42.083	-51.256	-81.954	1.00	24.37	B	C
ATOM	13054	O	GLY	B	226	43.182	-51.391	-81.399	1.00	20.66	B	O
ATOM	13056	N	ILE	B	227	41.149	-52.209	-81.989	1.00	26.50	B	N
ATOM	13057	CA	ILE	B	227	41.370	-53.579	-81.511	1.00	26.12	B	C
ATOM	13059	CB	ILE	B	227	40.251	-54.075	-80.599	1.00	23.20	B	C
ATOM	13061	CG1	ILE	B	227	40.032	-53.100	-79.451	1.00	27.37	B	C
ATOM	13064	CD1	ILE	B	227	38.962	-53.533	-78.473	1.00	25.99	B	C
ATOM	13068	CG2	ILE	B	227	40.620	-55.455	-80.016	1.00	24.03	B	C
ATOM	13072	C	ILE	B	227	41.476	-54.525	-82.705	1.00	22.93	B	C
ATOM	13073	O	ILE	B	227	40.673	-54.453	-83.600	1.00	24.13	B	O
ATOM	13075	N	TYR	B	228	42.495	-55.383	-82.702	1.00	24.67	B	N
ATOM	13076	CA	TYR	B	228	42.776	-56.303	-83.800	1.00	27.23	B	C
ATOM	13078	CB	TYR	B	228	43.970	-55.808	-84.632	1.00	30.05	B	C
ATOM	13081	CG	TYR	B	228	43.768	-54.405	-85.142	1.00	31.24	B	C
ATOM	13082	CD1	TYR	B	228	43.292	-54.167	-86.431	1.00	34.27	B	C
ATOM	13084	CE1	TYR	B	228	43.077	-52.867	-86.893	1.00	31.75	B	C
ATOM	13086	CZ	TYR	B	228	43.329	-51.788	-86.052	1.00	32.54	B	C
ATOM	13087	OH	TYR	B	228	43.123	-50.480	-86.484	1.00	34.49	B	O
ATOM	13089	CE2	TYR	B	228	43.792	-52.007	-84.770	1.00	32.60	B	C
ATOM	13091	CD2	TYR	B	228	44.017	-53.309	-84.326	1.00	32.70	B	C
ATOM	13093	C	TYR	B	228	43.036	-57.679	-83.186	1.00	29.09	B	C
ATOM	13094	O	TYR	B	228	43.648	-57.774	-82.126	1.00	32.03	B	O
ATOM	13096	N	THR	B	229	42.518	-58.732	-83.820	1.00	33.05	B	N
ATOM	13097	CA	THR	B	229	42.749	-60.102	-83.359	1.00	28.74	B	C
ATOM	13099	CB	THR	B	229	41.557	-61.033	-83.664	1.00	27.50	B	C
ATOM	13101	OG1	THR	B	229	40.393	-60.526	-82.999	1.00	35.85	B	O
ATOM	13103	CG2	THR	B	229	41.840	-62.435	-83.160	1.00	27.56	B	C
ATOM	13107	C	THR	B	229	43.984	-60.599	-84.045	1.00	25.39	B	C
ATOM	13108	O	THR	B	229	44.106	-60.457	-85.259	1.00	27.69	B	O
ATOM	13110	N	ARG	B	230	44.900	-61.188	-83.273	1.00	25.80	B	N
ATOM	13111	CA	ARG	B	230	46.200	-61.611	-83.801	1.00	22.04	B	C
ATOM	13113	CB	ARG	B	230	47.243	-61.674	-82.687	1.00	16.56	B	C
ATOM	13116	CG	ARG	B	230	47.309	-60.448	-81.785	1.00	21.78	B	C
ATOM	13119	CD	ARG	B	230	48.451	-60.508	-80.760	1.00	20.47	B	C
ATOM	13122	NE	ARG	B	230	49.634	-61.154	-81.339	1.00	20.11	B	N
ATOM	13124	CZ	ARG	B	230	50.078	-62.374	-81.025	1.00	19.36	B	C
ATOM	13125	NH1	ARG	B	230	49.464	-63.094	-80.088	1.00	15.22	B	N
ATOM	13128	NH2	ARG	B	230	51.166	-62.864	-81.634	1.00	17.45	B	N
ATOM	13131	C	ARG	B	230	46.100	-62.971	-84.496	1.00	23.77	B	C
ATOM	13132	O	ARG	B	230	45.770	-63.954	-83.861	1.00	23.45	B	O
ATOM	13134	N	VAL	B	231	46.396	-63.020	-85.799	1.00	24.64	B	N
ATOM	13135	CA	VAL	B	231	46.173	-64.227	-86.590	1.00	24.06	B	C
ATOM	13137	CB	VAL	B	231	46.328	-63.989	-88.137	1.00	19.98	B	C
ATOM	13139	CG1	VAL	B	231	45.390	-62.868	-88.619	1.00	15.87	B	C
ATOM	13143	CG2	VAL	B	231	47.761	-63.676	-88.517	1.00	20.74	B	C
ATOM	13147	C	VAL	B	231	47.100	-65.345	-86.106	1.00	31.59	B	C
ATOM	13148	O	VAL	B	231	46.669	-66.492	-85.989	1.00	30.56	B	O

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ATOM  13150  N    ALA B 232      48.348 -64.988 -85.778  1.00 34.03      B    N
ATOM  13151  CA   ALA B 232      49.348 -65.922 -85.239  1.00 29.56      B    C
ATOM  13153  CB   ALA B 232      50.632 -65.180 -84.896  1.00 28.02      B    C
ATOM  13157  C    ALA B 232      48.862 -66.711 -84.025  1.00 27.13      B    C
ATOM  13158  O    ALA B 232      49.232 -67.863 -83.848  1.00 30.33      B    O
ATOM  13160  N    SER B 233      48.003 -66.104 -83.224  1.00 29.52      B    N
ATOM  13161  CA   SER B 233      47.456 -66.758 -82.041  1.00 32.05      B    C
ATOM  13163  CB   SER B 233      46.819 -65.705 -81.138  1.00 32.47      B    C
ATOM  13166  OG  ASER B 233      46.469 -66.253 -79.886  0.70 33.28      B    O
ATOM  13167  OG  BSER B 233      46.476 -66.253 -79.881  0.30 32.87      B    O
ATOM  13170  C    SER B 233      46.418 -67.841 -82.379  1.00 36.21      B    C
ATOM  13171  O    SER B 233      46.042 -68.639 -81.511  1.00 32.89      B    O
ATOM  13173  N    TYR B 234      45.946 -67.840 -83.628  1.00 36.81      B    N
ATOM  13174  CA   TYR B 234      44.969 -68.809 -84.119  1.00 33.43      B    C
ATOM  13176  CB   TYR B 234      43.687 -68.069 -84.538  1.00 27.07      B    C
ATOM  13179  CG   TYR B 234      43.034 -67.410 -83.355  1.00 27.36      B    C
ATOM  13180  CD1  TYR B 234      42.121 -68.102 -82.570  1.00 24.29      B    C
ATOM  13182  CE1  TYR B 234      41.547 -67.516 -81.470  1.00 27.04      B    C
ATOM  13184  CZ   TYR B 234      41.885 -66.214 -81.131  1.00 27.17      B    C
ATOM  13185  OH   TYR B 234      41.313 -65.636 -80.024  1.00 24.92      B    O
ATOM  13187  CE2  TYR B 234      42.802 -65.513 -81.889  1.00 23.22      B    C
ATOM  13189  CD2  TYR B 234      43.363 -66.105 -82.990  1.00 24.96      B    C
ATOM  13191  C    TYR B 234      45.537 -69.629 -85.275  1.00 32.65      B    C
ATOM  13192  O    TYR B 234      44.787 -70.129 -86.101  1.00 32.40      B    O
ATOM  13194  N    ALA B 235      46.859 -69.788 -85.313  1.00 33.23      B    N
ATOM  13195  CA   ALA B 235      47.530 -70.362 -86.468  1.00 36.14      B    C
ATOM  13197  CB   ALA B 235      49.038 -70.188 -86.358  1.00 35.92      B    C
ATOM  13201  C    ALA B 235      47.180 -71.829 -86.685  1.00 40.42      B    C
ATOM  13202  O    ALA B 235      47.099 -72.268 -87.827  1.00 37.42      B    O
ATOM  13204  N    ALA B 236      46.969 -72.574 -85.596  1.00 44.20      B    N
ATOM  13205  CA   ALA B 236      46.585 -73.992 -85.682  1.00 44.92      B    C
ATOM  13207  CB   ALA B 236      46.840 -74.698 -84.354  1.00 45.62      B    C
ATOM  13211  C    ALA B 236      45.118 -74.160 -86.111  1.00 46.95      B    C
ATOM  13212  O    ALA B 236      44.770 -75.138 -86.793  1.00 44.28      B    O
ATOM  13214  N    TRP B 237      44.275 -73.206 -85.711  1.00 45.41      B    N
ATOM  13215  CA   TRP B 237      42.873 -73.171 -86.131  1.00 44.74      B    C
ATOM  13217  CB   TRP B 237      42.097 -72.176 -85.284  1.00 46.44      B    C
ATOM  13220  CG   TRP B 237      40.679 -72.060 -85.689  1.00 47.73      B    C
ATOM  13221  CD1  TRP B 237      39.682 -72.956 -85.439  1.00 48.34      B    C
ATOM  13223  NE1  TRP B 237      38.496 -72.503 -85.968  1.00 48.60      B    N
ATOM  13225  CE2  TRP B 237      38.712 -71.296 -86.581  1.00 48.23      B    C
ATOM  13226  CD2  TRP B 237      40.079 -70.983 -86.424  1.00 49.07      B    C
ATOM  13227  CE3  TRP B 237      40.564 -69.781 -86.961  1.00 49.18      B    C
ATOM  13229  CZ3  TRP B 237      39.675 -68.940 -87.628  1.00 47.94      B    C
ATOM  13231  CH2  TRP B 237      38.320 -69.280 -87.765  1.00 47.55      B    C
ATOM  13233  CZ2  TRP B 237      37.820 -70.449 -87.253  1.00 48.82      B    C
ATOM  13235  C    TRP B 237      42.717 -72.809 -87.611  1.00 43.89      B    C
ATOM  13236  O    TRP B 237      41.906 -73.412 -88.318  1.00 43.80      B    O
ATOM  13238  N    ILE B 238      43.483 -71.818 -88.066  1.00 41.60      B    N
ATOM  13239  CA   ILE B 238      43.484 -71.413 -89.472  1.00 41.42      B    C
ATOM  13241  CB   ILE B 238      44.378 -70.159 -89.731  1.00 40.10      B    C
ATOM  13243  CG1  ILE B 238      43.760 -68.917 -89.084  1.00 37.96      B    C
ATOM  13246  CD1  ILE B 238      44.693 -67.720 -89.048  1.00 37.39      B    C
ATOM  13250  CG2  ILE B 238      44.584 -69.923 -91.243  1.00 38.65      B    C
ATOM  13254  C    ILE B 238      43.947 -72.562 -90.366  1.00 41.67      B    C
ATOM  13255  O    ILE B 238      43.383 -72.769 -91.440  1.00 43.03      B    O
ATOM  13257  N    ASP B 239      44.967 -73.299 -89.922  1.00 40.13      B    N
ATOM  13258  CA   ASP B 239      45.498 -74.433 -90.684  1.00 38.88      B    C
ATOM  13260  CB   ASP B 239      46.751 -75.012 -89.999  1.00 41.07      B    C
ATOM  13263  CG   ASP B 239      47.972 -74.107 -90.106  1.00 39.85      B    C
ATOM  13264  OD1  ASP B 239      48.036 -73.261 -91.020  1.00 40.45      B    O
ATOM  13265  OD2  ASP B 239      48.881 -74.257 -89.263  1.00 34.60      B    O
ATOM  13266  C    ASP B 239      44.478 -75.568 -90.860  1.00 35.34      B    C
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ATOM  13267  O   ASP B 239      44.451 -76.224 -91.919  1.00 29.37      B    O
ATOM  13269  N   SER B 240      43.676 -75.804 -89.814  1.00 31.43      B    N
ATOM  13270  CA  SER B 240      42.705 -76.898 -89.789  1.00 35.28      B    C
ATOM  13272  CB  SER B 240      42.243 -77.205 -88.362  1.00 32.54      B    C
ATOM  13275  OG ASER B 240      41.543 -76.119 -87.793  0.60 34.01      B    O
ATOM  13276  OG BSER B 240      41.545 -76.114 -87.795  0.40 33.91      B    O
ATOM  13279  C   SER B 240      41.502 -76.639 -90.690  1.00 39.25      B    C
ATOM  13280  O   SER B 240      40.983 -77.568 -91.311  1.00 41.26      B    O
ATOM  13282  N   VAL B 241      41.066 -75.383 -90.761  1.00 42.50      B    N
ATOM  13283  CA  VAL B 241      39.999 -74.996 -91.678  1.00 39.20      B    C
ATOM  13285  CB  VAL B 241      39.357 -73.676 -91.240  1.00 38.67      B    C
ATOM  13287  CG1 VAL B 241      38.297 -73.229 -92.236  1.00 41.01      B    C
ATOM  13291  CG2 VAL B 241      38.739 -73.840 -89.850  1.00 37.15      B    C
ATOM  13295  C   VAL B 241      40.512 -74.973 -93.138  1.00 40.16      B    C
ATOM  13296  O   VAL B 241      39.831 -75.471 -94.030  1.00 42.73      B    O
ATOM  13298  N   LEU B 242      41.725 -74.459 -93.369  1.00 39.93      B    N
ATOM  13299  CA  LEU B 242      42.328 -74.414 -94.729  1.00 40.02      B    C
ATOM  13301  CB  LEU B 242      43.447 -73.358 -94.810  1.00 37.96      B    C
ATOM  13304  CG  LEU B 242      43.039 -71.901 -95.059  1.00 35.95      B    C
ATOM  13306  CD1 LEU B 242      42.081 -71.428 -94.012  1.00 33.01      B    C
ATOM  13310  CD2 LEU B 242      44.268 -71.016 -95.095  1.00 37.74      B    C
ATOM  13314  C   LEU B 242      42.891 -75.745 -95.246  1.00 43.69      B    C
ATOM  13315  O   LEU B 242      43.248 -75.850 -96.432  1.00 41.13      B    O
ATOM  13317  N   ALA B 243      42.987 -76.746 -94.371  1.00 44.89      B    N
ATOM  13318  CA  ALA B 243      43.600 -78.025 -94.725  1.00 44.55      B    C
ATOM  13320  CB  ALA B 243      43.643 -78.939 -93.509  1.00 44.61      B    C
ATOM  13324  C   ALA B 243      42.863 -78.708 -95.879  1.00 45.79      B    C
ATOM  13325  O   ALA B 243      43.480 -79.312 -96.763  1.00 48.06      B    O
ATOM  13327  OXT ALA B 243      41.634 -78.667 -95.950  1.00 43.21      B    O
ATOM  13328  N   ASP D   1      48.973 -32.215 -66.529  1.00 19.57      D    N
ATOM  13329  CA  ASP D   1      48.225 -32.692 -65.331  1.00 24.41      D    C
ATOM  13331  CB  ASP D   1      49.025 -32.404 -64.042  1.00 26.97      D    C
ATOM  13334  CG  ASP D   1      49.111 -30.913 -63.702  1.00 32.13      D    C
ATOM  13335  OD1 ASP D   1      49.242 -30.078 -64.640  1.00 28.05      D    O
ATOM  13336  OD2 ASP D   1      49.041 -30.579 -62.487  1.00 31.06      D    O
ATOM  13337  C   ASP D   1      46.853 -32.036 -65.278  1.00 21.56      D    C
ATOM  13338  O   ASP D   1      46.668 -30.908 -65.781  1.00 25.79      D    O
ATOM  13342  N   ILE D   2      45.894 -32.724 -64.666  1.00 22.91      D    N
ATOM  13343  CA  ILE D   2      44.509 -32.222 -64.563  1.00 21.69      D    C
ATOM  13345  CB  ILE D   2      43.496 -33.203 -65.207  1.00 19.40      D    C
ATOM  13347  CG1 ILE D   2      43.829 -33.417 -66.693  1.00 25.16      D    C
ATOM  13350  CD1 ILE D   2      42.831 -34.241 -67.486  1.00 25.49      D    C
ATOM  13354  CG2 ILE D   2      42.041 -32.716 -65.022  1.00 19.22      D    C
ATOM  13358  C   ILE D   2      44.166 -32.014 -63.090  1.00 26.88      D    C
ATOM  13359  O   ILE D   2      44.398 -32.898 -62.261  1.00 30.79      D    O
ATOM  13361  N   GLN D   3      43.620 -30.841 -62.771  1.00 25.83      D    N
ATOM  13362  CA  GLN D   3      43.249 -30.493 -61.404  1.00 24.89      D    C
ATOM  13364  CB  GLN D   3      43.170 -28.973 -61.229  1.00 31.96      D    C
ATOM  13367  CG  GLN D   3      42.984 -28.463 -59.797  1.00 29.94      D    C
ATOM  13370  CD  GLN D   3      42.672 -26.982 -59.746  1.00 35.38      D    C
ATOM  13371  OE1 GLN D   3      42.206 -26.393 -60.723  1.00 47.20      D    O
ATOM  13372  NE2 GLN D   3      42.916 -26.367 -58.599  1.00 39.60      D    N
ATOM  13375  C   GLN D   3      41.897 -31.096 -61.070  1.00 24.25      D    C
ATOM  13376  O   GLN D   3      40.986 -31.154 -61.901  1.00 20.21      D    O
ATOM  13378  N   VAL D   4      41.762 -31.543 -59.829  1.00 20.69      D    N
ATOM  13379  CA  VAL D   4      40.531 -32.103 -59.389  1.00 20.45      D    C
ATOM  13381  CB  VAL D   4      40.607 -33.631 -59.293  1.00 26.93      D    C
ATOM  13383  CG1 VAL D   4      39.261 -34.207 -58.858  1.00 31.60      D    C
ATOM  13387  CG2 VAL D   4      41.038 -34.213 -60.647  1.00 25.84      D    C
ATOM  13391  C   VAL D   4      40.255 -31.487 -58.045  1.00 23.12      D    C
ATOM  13392  O   VAL D   4      41.082 -31.560 -57.122  1.00 22.41      D    O
ATOM  13394  N   THR D   5      39.088 -30.867 -57.941  1.00 24.54      D    N
ATOM  13395  CA  THR D   5      38.617 -30.330 -56.681  1.00 20.09      D    C
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ATOM  13397  CB  THR D   5      38.138 -28.873 -56.853  1.00 22.80      D    C
ATOM  13399  OG1 THR D   5      39.254 -28.080 -57.176  1.00 22.15      D    O
ATOM  13401  CG2 THR D   5      37.526 -28.338 -55.555  1.00 21.63      D    C
ATOM  13405  C   THR D   5      37.454 -31.145 -56.192  1.00 18.91      D    C
ATOM  13406  O   THR D   5      36.415 -31.199 -56.850  1.00 22.90      D    O
ATOM  13408  N   GLN D   6      37.614 -31.742 -55.014  1.00 28.74      D    N
ATOM  13409  CA  GLN D   6      36.606 -32.573 -54.418  1.00 23.73      D    C
ATOM  13411  CB  GLN D   6      37.190 -33.910 -53.965  1.00 24.43      D    C
ATOM  13414  CG  GLN D   6      36.124 -34.842 -53.363  1.00 27.14      D    C
ATOM  13417  CD  GLN D   6      36.607 -36.243 -53.121  1.00 29.14      D    C
ATOM  13418  OE1 GLN D   6      37.618 -36.678 -53.685  1.00 29.57      D    O
ATOM  13419  NE2 GLN D   6      35.892 -36.963 -52.272  1.00 26.51      D    N
ATOM  13422  C   GLN D   6      36.017 -31.886 -53.207  1.00 25.91      D    C
ATOM  13423  O   GLN D   6      36.756 -31.321 -52.389  1.00 21.21      D    O
ATOM  13425  N   SER D   7      34.691 -31.979 -53.069  1.00 25.02      D    N
ATOM  13426  CA  SER D   7      34.006 -31.337 -51.944  1.00 23.41      D    C
ATOM  13428  CB  SER D   7      33.661 -29.874 -52.279  1.00 26.36      D    C
ATOM  13431  OG  SER D   7      33.278 -29.733 -53.615  1.00 27.44      D    O
ATOM  13433  C   SER D   7      32.760 -32.089 -51.496  1.00 20.11      D    C
ATOM  13434  O   SER D   7      32.172 -32.827 -52.270  1.00 17.38      D    O
ATOM  13436  N   PRO D   8      32.362 -31.936 -50.213  1.00 20.95      D    N
ATOM  13437  CA  PRO D   8      33.012 -31.202 -49.150  1.00 20.86      D    C
ATOM  13439  CB  PRO D   8      31.915 -31.094 -48.088  1.00 22.69      D    C
ATOM  13442  CG  PRO D   8      31.151 -32.325 -48.232  1.00 20.93      D    C
ATOM  13445  CD  PRO D   8      31.143 -32.611 -49.731  1.00 18.09      D    C
ATOM  13448  C   PRO D   8      34.199 -31.997 -48.598  1.00 23.11      D    C
ATOM  13449  O   PRO D   8      34.405 -33.155 -48.991  1.00 28.31      D    O
ATOM  13450  N   SER D   9      34.950 -31.386 -47.683  1.00 23.18      D    N
ATOM  13451  CA  SER D   9      36.032 -32.063 -46.978  1.00 25.81      D    C
ATOM  13453  CB  SER D   9      36.928 -31.059 -46.272  1.00 29.03      D    C
ATOM  13456  OG  SER D   9      37.318 -30.064 -47.196  1.00 38.54      D    O
ATOM  13458  C   SER D   9      35.487 -33.051 -45.982  1.00 24.05      D    C
ATOM  13459  O   SER D   9      36.058 -34.107 -45.785  1.00 18.27      D    O
ATOM  13461  N   SER D  10      34.367 -32.711 -45.355  1.00 24.78      D    N
ATOM  13462  CA  SER D  10      33.684 -33.657 -44.500  1.00 22.43      D    C
ATOM  13464  CB  SER D  10      34.355 -33.723 -43.112  1.00 24.16      D    C
ATOM  13467  OG  SER D  10      34.357 -32.461 -42.487  1.00 30.49      D    O
ATOM  13469  C   SER D  10      32.187 -33.330 -44.425  1.00 22.54      D    C
ATOM  13470  O   SER D  10      31.733 -32.216 -44.731  1.00 20.86      D    O
ATOM  13472  N   LEU D  11      31.417 -34.348 -44.109  1.00 22.69      D    N
ATOM  13473  CA  LEU D  11      29.981 -34.203 -43.931  1.00 22.25      D    C
ATOM  13475  CB  LEU D  11      29.197 -34.378 -45.240  1.00 22.13      D    C
ATOM  13478  CG  LEU D  11      29.091 -35.745 -45.905  1.00 20.33      D    C
ATOM  13480  CD1 LEU D  11      27.960 -36.598 -45.314  1.00 18.37      D    C
ATOM  13484  CD2 LEU D  11      28.928 -35.596 -47.436  1.00 23.97      D    C
ATOM  13488  C   LEU D  11      29.530 -35.214 -42.922  1.00 24.57      D    C
ATOM  13489  O   LEU D  11      30.217 -36.222 -42.667  1.00 25.25      D    O
ATOM  13491  N   SER D  12      28.373 -34.911 -42.351  1.00 26.67      D    N
ATOM  13492  CA  SER D  12      27.732 -35.727 -41.361  1.00 26.87      D    C
ATOM  13494  CB  SER D  12      27.901 -35.083 -39.991  1.00 30.17      D    C
ATOM  13497  OG  SER D  12      27.493 -35.975 -38.995  1.00 30.87      D    O
ATOM  13499  C   SER D  12      26.245 -35.813 -41.692  1.00 26.02      D    C
ATOM  13500  O   SER D  12      25.575 -34.796 -41.839  1.00 25.36      D    O
ATOM  13502  N   ALA D  13      25.727 -37.030 -41.783  1.00 24.10      D    N
ATOM  13503  CA  ALA D  13      24.323 -37.238 -42.116  1.00 26.90      D    C
ATOM  13505  CB  ALA D  13      24.176 -37.461 -43.588  1.00 28.31      D    C
ATOM  13509  C   ALA D  13      23.808 -38.430 -41.346  1.00 28.05      D    C
ATOM  13510  O   ALA D  13      24.592 -39.235 -40.880  1.00 26.76      D    O
ATOM  13512  N   SER D  14      22.490 -38.546 -41.217  1.00 30.67      D    N
ATOM  13513  CA  SER D  14      21.874 -39.675 -40.529  1.00 25.25      D    C
ATOM  13515  CB  SER D  14      20.503 -39.275 -40.003  1.00 26.90      D    C
ATOM  13518  OG  SER D  14      20.585 -38.111 -39.208  1.00 33.41      D    O
ATOM  13520  C   SER D  14      21.726 -40.916 -41.424  1.00 26.66      D    C
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ATOM  13521  O   SER D  14      21.773 -40.833 -42.663  1.00 23.39      D    O
ATOM  13523  N   VAL D  15      21.518 -42.061 -40.776  1.00 20.93      D    N
ATOM  13524  CA  VAL D  15      21.249 -43.328 -41.457  1.00 26.09      D    C
ATOM  13526  CB  VAL D  15      21.135 -44.512 -40.430  1.00 25.46      D    C
ATOM  13528  CG1 VAL D  15      20.622 -45.811 -41.082  1.00 22.95      D    C
ATOM  13532  CG2 VAL D  15      22.485 -44.765 -39.768  1.00 24.08      D    C
ATOM  13536  C   VAL D  15      19.972 -43.199 -42.291  1.00 28.08      D    C
ATOM  13537  O   VAL D  15      18.915 -42.804 -41.780  1.00 29.11      D    O
ATOM  13539  N   GLY D  16      20.087 -43.529 -43.575  1.00 27.77      D    N
ATOM  13540  CA  GLY D  16      19.010 -43.361 -44.532  1.00 26.28      D    C
ATOM  13543  C   GLY D  16      19.047 -42.075 -45.344  1.00 26.03      D    C
ATOM  13544  O   GLY D  16      18.415 -42.004 -46.388  1.00 24.84      D    O
ATOM  13546  N   ASP D  17      19.778 -41.054 -44.895  1.00 27.51      D    N
ATOM  13547  CA  ASP D  17      19.919 -39.818 -45.685  1.00 26.21      D    C
ATOM  13549  CB  ASP D  17      20.653 -38.715 -44.903  1.00 25.90      D    C
ATOM  13552  CG  ASP D  17      19.813 -38.096 -43.823  1.00 27.62      D    C
ATOM  13553  OD1 ASP D  17      18.591 -38.364 -43.764  1.00 39.37      D    O
ATOM  13554  OD2 ASP D  17      20.381 -37.334 -43.016  1.00 29.26      D    O
ATOM  13555  C   ASP D  17      20.666 -40.040 -47.011  1.00 26.68      D    C
ATOM  13556  O   ASP D  17      21.462 -40.975 -47.147  1.00 30.93      D    O
ATOM  13558  N   ARG D  18      20.385 -39.163 -47.970  1.00 27.18      D    N
ATOM  13559  CA  ARG D  18      21.147 -39.054 -49.195  1.00 26.36      D    C
ATOM  13561  CB  ARG D  18      20.319 -38.510 -50.340  1.00 27.00      D    C
ATOM  13564  CG  ARG D  18      21.175 -38.357 -51.619  1.00 30.93      D    C
ATOM  13567  CD  ARG D  18      20.426 -37.813 -52.760  1.00 34.70      D    C
ATOM  13570  NE  ARG D  18      19.295 -38.674 -53.084  1.00 44.15      D    N
ATOM  13572  CZ  ARG D  18      18.244 -38.290 -53.801  1.00 43.90      D    C
ATOM  13573  NH1 ARG D  18      18.181 -37.055 -54.301  1.00 43.67      D    N
ATOM  13576  NH2 ARG D  18      17.255 -39.152 -54.021  1.00 39.28      D    N
ATOM  13579  C   ARG D  18      22.348 -38.143 -48.974  1.00 25.60      D    C
ATOM  13580  O   ARG D  18      22.212 -36.959 -48.602  1.00 27.50      D    O
ATOM  13582  N   VAL D  19      23.516 -38.729 -49.216  1.00 23.65      D    N
ATOM  13583  CA  VAL D  19      24.813 -38.084 -49.111  1.00 24.05      D    C
ATOM  13585  CB  VAL D  19      25.843 -39.040 -48.431  1.00 21.27      D    C
ATOM  13587  CG1 VAL D  19      27.280 -38.567 -48.644  1.00 23.14      D    C
ATOM  13591  CG2 VAL D  19      25.529 -39.218 -46.928  1.00 18.30      D    C
ATOM  13595  C   VAL D  19      25.241 -37.818 -50.552  1.00 21.67      D    C
ATOM  13596  O   VAL D  19      25.174 -38.708 -51.372  1.00 20.46      D    O
ATOM  13598  N   THR D  20      25.629 -36.588 -50.864  1.00 27.05      D    N
ATOM  13599  CA  THR D  20      26.116 -36.252 -52.209  1.00 23.42      D    C
ATOM  13601  CB  THR D  20      25.155 -35.312 -52.981  1.00 25.07      D    C
ATOM  13603  OG1 THR D  20      24.894 -34.150 -52.213  1.00 38.55      D    O
ATOM  13605  CG2 THR D  20      23.850 -35.985 -53.301  1.00 27.26      D    C
ATOM  13609  C   THR D  20      27.517 -35.636 -52.114  1.00 24.90      D    C
ATOM  13610  O   THR D  20      27.796 -34.811 -51.223  1.00 22.86      D    O
ATOM  13612  N   ILE D  21      28.404 -36.081 -53.005  1.00 25.69      D    N
ATOM  13613  CA  ILE D  21      29.831 -35.688 -53.013  1.00 26.57      D    C
ATOM  13615  CB  ILE D  21      30.730 -36.853 -52.486  1.00 31.11      D    C
ATOM  13617  CG1 ILE D  21      30.437 -37.123 -51.009  1.00 30.64      D    C
ATOM  13620  CD1 ILE D  21      31.123 -38.390 -50.436  1.00 29.62      D    C
ATOM  13624  CG2 ILE D  21      32.210 -36.548 -52.678  1.00 26.71      D    C
ATOM  13628  C   ILE D  21      30.225 -35.312 -54.445  1.00 22.51      D    C
ATOM  13629  O   ILE D  21      29.790 -35.998 -55.385  1.00 22.54      D    O
ATOM  13631  N   THR D  22      31.004 -34.231 -54.646  1.00 26.62      D    N
ATOM  13632  CA  THR D  22      31.348 -33.813 -56.040  1.00 28.09      D    C
ATOM  13634  CB  THR D  22      30.640 -32.432 -56.461  1.00 33.03      D    C
ATOM  13636  OG1 THR D  22      31.335 -31.306 -55.944  1.00 38.54      D    O
ATOM  13638  CG2 THR D  22      29.227 -32.351 -55.955  1.00 29.38      D    C
ATOM  13642  C   THR D  22      32.866 -33.767 -56.345  1.00 26.88      D    C
ATOM  13643  O   THR D  22      33.679 -33.619 -55.456  1.00 23.25      D    O
ATOM  13645  N   CYS D  23      33.222 -33.920 -57.619  1.00 27.11      D    N
ATOM  13646  CA  CYS D  23      34.543 -33.626 -58.100  1.00 29.52      D    C
ATOM  13648  CB  CYS D  23      35.399 -34.892 -58.354  1.00 32.01      D    C
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獼猴fD_Fab.txt

ATOM	13651	SG	CYS	D	23	36.043	-35.430	-56.782	1.00	51.73	D	S
ATOM	13653	C	CYS	D	23	34.389	-32.812	-59.340	1.00	24.57	D	C
ATOM	13654	O	CYS	D	23	33.763	-33.270	-60.293	1.00	25.41	D	O
ATOM	13656	N	ILE	D	24	34.950	-31.604	-59.325	1.00	27.70	D	N
ATOM	13657	CA	ILE	D	24	35.008	-30.779	-60.520	1.00	28.71	D	C
ATOM	13659	CB	ILE	D	24	34.573	-29.322	-60.256	1.00	28.50	D	C
ATOM	13661	CG1	ILE	D	24	33.064	-29.176	-59.963	1.00	32.83	D	C
ATOM	13664	CD1	ILE	D	24	32.521	-30.007	-58.894	1.00	38.35	D	C
ATOM	13668	CG2	ILE	D	24	34.819	-28.482	-61.518	1.00	28.22	D	C
ATOM	13672	C	ILE	D	24	36.450	-30.828	-61.057	1.00	32.49	D	C
ATOM	13673	O	ILE	D	24	37.393	-30.727	-60.285	1.00	32.44	D	O
ATOM	13675	N	THR	D	25	36.610	-30.982	-62.373	1.00	30.24	D	N
ATOM	13676	CA	THR	D	25	37.925	-31.082	-62.982	1.00	29.16	D	C
ATOM	13678	CB	THR	D	25	38.032	-32.313	-63.901	1.00	29.13	D	C
ATOM	13680	OG1	THR	D	25	37.091	-32.209	-64.980	1.00	26.63	D	O
ATOM	13682	CG2	THR	D	25	37.789	-33.588	-63.111	1.00	24.56	D	C
ATOM	13686	C	THR	D	25	38.308	-29.820	-63.762	1.00	29.07	D	C
ATOM	13687	O	THR	D	25	37.431	-29.079	-64.202	1.00	30.03	D	O
ATOM	13689	N	SER	D	26	39.616	-29.585	-63.938	1.00	32.08	D	N
ATOM	13690	CA	SER	D	26	40.068	-28.330	-64.567	1.00	36.35	D	C
ATOM	13692	CB	SER	D	26	41.580	-28.012	-64.335	1.00	40.56	D	C
ATOM	13695	OG	SER	D	26	42.504	-29.051	-64.675	1.00	38.34	D	O
ATOM	13697	C	SER	D	26	39.687	-28.294	-66.037	1.00	39.18	D	C
ATOM	13698	O	SER	D	26	39.505	-27.218	-66.613	1.00	46.60	D	O
ATOM	13700	N	THR	D	27	39.522	-29.476	-66.617	1.00	36.43	D	N
ATOM	13701	CA	THR	D	27	39.239	-29.620	-68.032	1.00	34.46	D	C
ATOM	13703	CB	THR	D	27	40.579	-29.829	-68.841	1.00	36.28	D	C
ATOM	13705	OG1	THR	D	27	40.326	-29.660	-70.243	1.00	45.08	D	O
ATOM	13707	CG2	THR	D	27	41.188	-31.179	-68.606	1.00	35.39	D	C
ATOM	13711	C	THR	D	27	38.223	-30.753	-68.282	1.00	28.55	D	C
ATOM	13712	O	THR	D	27	37.869	-31.508	-67.375	1.00	31.91	D	O
ATOM	13714	N	ASP	D	28	37.749	-30.850	-69.517	1.00	28.66	D	N
ATOM	13715	CA	ASP	D	28	36.725	-31.818	-69.869	1.00	28.99	D	C
ATOM	13717	CB	ASP	D	28	36.017	-31.430	-71.182	1.00	20.71	D	C
ATOM	13720	CG	ASP	D	28	34.689	-32.223	-71.410	1.00	27.85	D	C
ATOM	13721	OD1	ASP	D	28	33.584	-31.650	-71.254	1.00	29.94	D	O
ATOM	13722	OD2	ASP	D	28	34.740	-33.427	-71.719	1.00	27.91	D	O
ATOM	13723	C	ASP	D	28	37.343	-33.209	-69.973	1.00	27.05	D	C
ATOM	13724	O	ASP	D	28	38.277	-33.408	-70.735	1.00	31.78	D	O
ATOM	13726	N	ILE	D	29	36.785	-34.170	-69.239	1.00	24.21	D	N
ATOM	13727	CA	ILE	D	29	37.358	-35.514	-69.183	1.00	23.76	D	C
ATOM	13729	CB	ILE	D	29	37.950	-35.824	-67.763	1.00	18.28	D	C
ATOM	13731	CG1	ILE	D	29	36.882	-35.862	-66.682	1.00	22.62	D	C
ATOM	13734	CD1	ILE	D	29	37.255	-36.886	-65.550	1.00	22.33	D	C
ATOM	13738	CG2	ILE	D	29	39.036	-34.837	-67.429	1.00	13.90	D	C
ATOM	13742	C	ILE	D	29	36.425	-36.635	-69.614	1.00	27.66	D	C
ATOM	13743	O	ILE	D	29	36.694	-37.809	-69.335	1.00	31.60	D	O
ATOM	13745	N	ASP	D	30	35.325	-36.264	-70.272	1.00	28.90	D	N
ATOM	13746	CA	ASP	D	30	34.296	-37.195	-70.710	1.00	24.76	D	C
ATOM	13748	CB	ASP	D	30	34.872	-38.119	-71.786	1.00	24.79	D	C
ATOM	13751	CG	ASP	D	30	35.525	-37.347	-72.894	1.00	21.67	D	C
ATOM	13752	OD1	ASP	D	30	34.797	-36.665	-73.623	1.00	23.19	D	O
ATOM	13753	OD2	ASP	D	30	36.767	-37.391	-73.049	1.00	33.85	D	O
ATOM	13754	C	ASP	D	30	33.701	-37.902	-69.504	1.00	27.74	D	C
ATOM	13755	O	ASP	D	30	33.231	-37.235	-68.587	1.00	25.51	D	O
ATOM	13757	N	ASP	D	31	33.702	-39.231	-69.474	1.00	25.33	D	N
ATOM	13758	CA	ASP	D	31	33.083	-39.952	-68.342	1.00	30.45	D	C
ATOM	13760	CB	ASP	D	31	32.075	-40.977	-68.879	1.00	34.21	D	C
ATOM	13763	CG	ASP	D	31	32.697	-41.927	-69.879	1.00	39.14	D	C
ATOM	13764	OD1	ASP	D	31	33.859	-41.677	-70.285	1.00	39.74	D	O
ATOM	13765	OD2	ASP	D	31	32.050	-42.918	-70.266	1.00	47.57	D	O
ATOM	13766	C	ASP	D	31	34.133	-40.639	-67.439	1.00	29.18	D	C
ATOM	13767	O	ASP	D	31	33.796	-41.460	-66.586	1.00	29.06	D	O

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ATOM  13769  N   ASP D  32      35.399 -40.248 -67.602  1.00 27.83      D    N
ATOM  13770  CA  ASP D  32      36.530 -40.943 -67.012  1.00 26.56      D    C
ATOM  13772  CB  ASP D  32      37.769 -40.717 -67.871  1.00 24.54      D    C
ATOM  13775  CG  ASP D  32      37.671 -41.412 -69.206  1.00 26.39      D    C
ATOM  13776  OD1 ASP D  32      37.534 -42.644 -69.203  1.00 29.06      D    O
ATOM  13777  OD2 ASP D  32      37.731 -40.747 -70.249  1.00 29.32      D    O
ATOM  13778  C   ASP D  32      36.785 -40.541 -65.558  1.00 21.42      D    C
ATOM  13779  O   ASP D  32      37.847 -40.061 -65.200  1.00 13.97      D    O
ATOM  13781  N   MET D  33      35.780 -40.766 -64.723  1.00 27.01      D    N
ATOM  13782  CA  MET D  33      35.858 -40.471 -63.310  1.00 24.32      D    C
ATOM  13784  CB  MET D  33      34.774 -39.476 -62.915  1.00 25.82      D    C
ATOM  13787  CG  MET D  33      34.789 -39.026 -61.441  1.00 19.73      D    C
ATOM  13790  SD  MET D  33      36.361 -38.333 -60.880  1.00 28.62      D    S
ATOM  13791  CE  MET D  33      36.511 -36.793 -61.766  1.00 26.84      D    C
ATOM  13795  C   MET D  33      35.637 -41.762 -62.547  1.00 28.66      D    C
ATOM  13796  O   MET D  33      34.733 -42.538 -62.860  1.00 36.36      D    O
ATOM  13798  N   ASN D  34      36.426 -41.938 -61.500  1.00 28.11      D    N
ATOM  13799  CA  ASN D  34      36.346 -43.093 -60.639  1.00 21.47      D    C
ATOM  13801  CB  ASN D  34      37.655 -43.876 -60.702  1.00 21.22      D    C
ATOM  13804  CG  ASN D  34      38.053 -44.231 -62.136  1.00 19.56      D    C
ATOM  13805  OD1 ASN D  34      37.768 -45.311 -62.612  1.00 21.13      D    O
ATOM  13806  ND2 ASN D  34      38.667 -43.291 -62.824  1.00 15.44      D    N
ATOM  13809  C   ASN D  34      36.084 -42.643 -59.208  1.00 18.56      D    C
ATOM  13810  O   ASN D  34      36.369 -41.523 -58.837  1.00 25.59      D    O
ATOM  13812  N   TRP D  35      35.564 -43.541 -58.399  1.00 20.95      D    N
ATOM  13813  CA  TRP D  35      35.350 -43.236 -56.985  1.00 18.24      D    C
ATOM  13815  CB  TRP D  35      33.878 -42.956 -56.716  1.00 22.65      D    C
ATOM  13818  CG  TRP D  35      33.393 -41.721 -57.362  1.00 23.75      D    C
ATOM  13819  CD1 TRP D  35      32.830 -41.621 -58.579  1.00 23.33      D    C
ATOM  13821  NE1 TRP D  35      32.487 -40.334 -58.833  1.00 23.97      D    N
ATOM  13823  CE2 TRP D  35      32.822 -39.558 -57.761  1.00 24.90      D    C
ATOM  13824  CD2 TRP D  35      33.401 -40.404 -56.810  1.00 23.96      D    C
ATOM  13825  CE3 TRP D  35      33.828 -39.863 -55.595  1.00 27.35      D    C
ATOM  13827  CZ3 TRP D  35      33.678 -38.500 -55.390  1.00 25.24      D    C
ATOM  13829  CH2 TRP D  35      33.118 -37.677 -56.376  1.00 24.10      D    C
ATOM  13831  CZ2 TRP D  35      32.678 -38.181 -57.559  1.00 21.08      D    C
ATOM  13833  C   TRP D  35      35.771 -44.393 -56.164  1.00 17.08      D    C
ATOM  13834  O   TRP D  35      35.351 -45.532 -56.442  1.00 19.35      D    O
ATOM  13836  N   TYR D  36      36.589 -44.096 -55.153  1.00 21.50      D    N
ATOM  13837  CA  TYR D  36      37.095 -45.067 -54.199  1.00 22.21      D    C
ATOM  13839  CB  TYR D  36      38.628 -44.988 -54.098  1.00 26.01      D    C
ATOM  13842  CG  TYR D  36      39.397 -45.388 -55.322  1.00 24.74      D    C
ATOM  13843  CD1 TYR D  36      40.007 -46.640 -55.395  1.00 25.44      D    C
ATOM  13845  CE1 TYR D  36      40.726 -47.025 -56.498  1.00 24.30      D    C
ATOM  13847  CZ  TYR D  36      40.866 -46.176 -57.569  1.00 24.66      D    C
ATOM  13848  OH  TYR D  36      41.607 -46.627 -58.641  1.00 26.35      D    O
ATOM  13850  CE2 TYR D  36      40.287 -44.916 -57.544  1.00 24.23      D    C
ATOM  13852  CD2 TYR D  36      39.545 -44.520 -56.408  1.00 26.43      D    C
ATOM  13854  C   TYR D  36      36.554 -44.794 -52.802  1.00 22.90      D    C
ATOM  13855  O   TYR D  36      36.283 -43.652 -52.434  1.00 22.53      D    O
ATOM  13857  N   GLN D  37      36.434 -45.868 -52.029  1.00 23.80      D    N
ATOM  13858  CA  GLN D  37      36.139 -45.816 -50.600  1.00 24.57      D    C
ATOM  13860  CB  GLN D  37      34.910 -46.693 -50.318  1.00 25.51      D    C
ATOM  13863  CG  GLN D  37      34.398 -46.722 -48.883  1.00 26.28      D    C
ATOM  13866  CD  GLN D  37      33.468 -47.905 -48.651  1.00 24.39      D    C
ATOM  13867  OE1 GLN D  37      33.829 -49.048 -48.928  1.00 24.49      D    O
ATOM  13868  NE2 GLN D  37      32.250 -47.629 -48.191  1.00 25.14      D    N
ATOM  13871  C   GLN D  37      37.362 -46.338 -49.845  1.00 26.54      D    C
ATOM  13872  O   GLN D  37      38.028 -47.293 -50.290  1.00 26.31      D    O
ATOM  13874  N   GLN D  38      37.691 -45.695 -48.731  1.00 24.41      D    N
ATOM  13875  CA  GLN D  38      38.710 -46.208 -47.832  1.00 27.86      D    C
ATOM  13877  CB  GLN D  38      40.043 -45.479 -48.021  1.00 29.31      D    C
ATOM  13880  CG  GLN D  38      41.189 -46.099 -47.216  1.00 26.56      D    C
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ATOM  13883  CD  GLN D  38      42.511 -45.403 -47.455  1.00 28.84      D    C
ATOM  13884  OE1 GLN D  38      43.557 -46.038 -47.583  1.00 27.15      D    O
ATOM  13885  NE2 GLN D  38      42.465 -44.097 -47.524  1.00 24.65      D    N
ATOM  13888  C   GLN D  38      38.298 -46.091 -46.373  1.00 28.26      D    C
ATOM  13889  O   GLN D  38      38.010 -45.007 -45.887  1.00 29.09      D    O
ATOM  13891  N   LYS D  39      38.289 -47.224 -45.686  1.00 31.58      D    N
ATOM  13892  CA  LYS D  39      38.109 -47.257 -44.245  1.00 37.31      D    C
ATOM  13894  CB  LYS D  39      37.285 -48.476 -43.866  1.00 40.00      D    C
ATOM  13897  CG  LYS D  39      35.930 -48.488 -44.573  1.00 40.40      D    C
ATOM  13900  CD  LYS D  39      35.001 -49.492 -43.955  1.00 41.69      D    C
ATOM  13903  CE  LYS D  39      33.662 -49.530 -44.655  1.00 43.81      D    C
ATOM  13906  NZ  LYS D  39      32.720 -50.444 -43.930  1.00 45.82      D    N
ATOM  13910  C   LYS D  39      39.479 -47.223 -43.564  1.00 39.96      D    C
ATOM  13911  O   LYS D  39      40.495 -47.569 -44.189  1.00 35.82      D    O
ATOM  13913  N   PRO D  40      39.522 -46.787 -42.289  1.00 42.77      D    N
ATOM  13914  CA  PRO D  40      40.769 -46.355 -41.638  1.00 44.48      D    C
ATOM  13916  CB  PRO D  40      40.305 -45.976 -40.223  1.00 47.51      D    C
ATOM  13919  CG  PRO D  40      38.860 -45.650 -40.399  1.00 45.42      D    C
ATOM  13922  CD  PRO D  40      38.387 -46.671 -41.359  1.00 45.74      D    C
ATOM  13925  C   PRO D  40      41.902 -47.381 -41.587  1.00 44.02      D    C
ATOM  13926  O   PRO D  40      43.073 -47.002 -41.605  1.00 49.61      D    O
ATOM  13927  N   GLY D  41      41.575 -48.661 -41.535  1.00 38.33      D    N
ATOM  13928  CA  GLY D  41      42.627 -49.669 -41.486  1.00 43.53      D    C
ATOM  13931  C   GLY D  41      42.995 -50.259 -42.832  1.00 40.36      D    C
ATOM  13932  O   GLY D  41      43.975 -50.986 -42.940  1.00 43.33      D    O
ATOM  13934  N   LYS D  42      42.230 -49.914 -43.858  1.00 38.03      D    N
ATOM  13935  CA  LYS D  42      42.079 -50.757 -45.027  1.00 37.97      D    C
ATOM  13937  CB  LYS D  42      40.588 -51.092 -45.194  1.00 44.93      D    C
ATOM  13940  CG  LYS D  42      39.902 -51.622 -43.907  1.00 46.57      D    C
ATOM  13943  CD  LYS D  42      38.492 -52.194 -44.185  1.00 48.07      D    C
ATOM  13946  CE  LYS D  42      37.761 -52.618 -42.870  1.00 51.72      D    C
ATOM  13949  NZ  LYS D  42      36.239 -52.680 -42.963  1.00 49.90      D    N
ATOM  13953  C   LYS D  42      42.620 -50.123 -46.305  1.00 30.72      D    C
ATOM  13954  O   LYS D  42      42.899 -48.937 -46.350  1.00 31.81      D    O
ATOM  13956  N   VAL D  43      42.746 -50.945 -47.340  1.00 31.34      D    N
ATOM  13957  CA  VAL D  43      43.212 -50.524 -48.644  1.00 31.02      D    C
ATOM  13959  CB  VAL D  43      43.834 -51.721 -49.427  1.00 31.82      D    C
ATOM  13961  CG1 VAL D  43      44.248 -51.339 -50.827  1.00 34.86      D    C
ATOM  13965  CG2 VAL D  43      45.040 -52.228 -48.705  1.00 34.60      D    C
ATOM  13969  C   VAL D  43      42.048 -49.851 -49.384  1.00 29.76      D    C
ATOM  13970  O   VAL D  43      40.872 -50.098 -49.076  1.00 30.34      D    O
ATOM  13972  N   PRO D  44      42.360 -48.895 -50.274  1.00 30.43      D    N
ATOM  13973  CA  PRO D  44      41.251 -48.331 -51.029  1.00 28.97      D    C
ATOM  13975  CB  PRO D  44      41.911 -47.224 -51.859  1.00 27.75      D    C
ATOM  13978  CG  PRO D  44      43.126 -46.884 -51.110  1.00 31.17      D    C
ATOM  13981  CD  PRO D  44      43.617 -48.184 -50.558  1.00 28.40      D    C
ATOM  13984  C   PRO D  44      40.547 -49.371 -51.892  1.00 22.98      D    C
ATOM  13985  O   PRO D  44      41.193 -50.285 -52.436  1.00 27.14      D    O
ATOM  13986  N   LYS D  45      39.225 -49.223 -51.964  1.00 28.18      D    N
ATOM  13987  CA  LYS D  45      38.309 -50.041 -52.767  1.00 31.51      D    C
ATOM  13989  CB  LYS D  45      37.226 -50.628 -51.855  1.00 34.90      D    C
ATOM  13992  CG  LYS D  45      36.322 -51.678 -52.463  1.00 37.11      D    C
ATOM  13995  CD  LYS D  45      35.368 -52.206 -51.370  1.00 40.72      D    C
ATOM  13998  CE  LYS D  45      34.075 -52.858 -51.910  1.00 43.90      D    C
ATOM  14001  NZ  LYS D  45      32.936 -52.807 -50.887  1.00 45.13      D    N
ATOM  14005  C   LYS D  45      37.654 -49.155 -53.830  1.00 27.81      D    C
ATOM  14006  O   LYS D  45      37.020 -48.158 -53.495  1.00 25.67      D    O
ATOM  14008  N   LEU D  46      37.823 -49.518 -55.106  1.00 21.45      D    N
ATOM  14009  CA  LEU D  46      37.117 -48.861 -56.200  1.00 24.98      D    C
ATOM  14011  CB  LEU D  46      37.763 -49.178 -57.545  1.00 16.53      D    C
ATOM  14014  CG  LEU D  46      37.211 -48.458 -58.767  1.00 21.09      D    C
ATOM  14016  CD1 LEU D  46      37.386 -47.011 -58.612  1.00 23.73      D    C
ATOM  14020  CD2 LEU D  46      37.947 -48.879 -59.986  1.00 18.78      D    C
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ATOM  14024  C    LEU D  46      35.646 -49.306 -56.201  1.00 27.40      D    C
ATOM  14025  O    LEU D  46      35.335 -50.508 -56.293  1.00 24.52      D    O
ATOM  14027  N    LEU D  47      34.754 -48.320 -56.082  1.00 24.57      D    N
ATOM  14028  CA   LEU D  47      33.320 -48.555 -56.054  1.00 26.84      D    C
ATOM  14030  CB   LEU D  47      32.681 -47.637 -55.027  1.00 24.47      D    C
ATOM  14033  CG   LEU D  47      32.997 -47.834 -53.547  1.00 24.27      D    C
ATOM  14035  CD1  LEU D  47      31.893 -47.247 -52.725  1.00 22.16      D    C
ATOM  14039  CD2  LEU D  47      33.164 -49.286 -53.187  1.00 21.79      D    C
ATOM  14043  C    LEU D  47      32.660 -48.306 -57.411  1.00 28.13      D    C
ATOM  14044  O    LEU D  47      31.813 -49.087 -57.867  1.00 30.53      D    O
ATOM  14046  N    ILE D  48      33.026 -47.185 -58.014  1.00 27.03      D    N
ATOM  14047  CA   ILE D  48      32.441 -46.699 -59.258  1.00 25.86      D    C
ATOM  14049  CB   ILE D  48      31.666 -45.385 -59.071  1.00 23.02      D    C
ATOM  14051  CG1  ILE D  48      30.579 -45.480 -57.982  1.00 26.89      D    C
ATOM  14054  CD1  ILE D  48      29.472 -46.399 -58.247  1.00 23.66      D    C
ATOM  14058  CG2  ILE D  48      31.099 -44.886 -60.408  1.00 24.89      D    C
ATOM  14062  C    ILE D  48      33.611 -46.370 -60.167  1.00 22.34      D    C
ATOM  14063  O    ILE D  48      34.566 -45.739 -59.730  1.00 31.22      D    O
ATOM  14065  N    SER D  49      33.534 -46.793 -61.419  1.00 22.90      D    N
ATOM  14066  CA   SER D  49      34.565 -46.470 -62.422  1.00 24.91      D    C
ATOM  14068  CB   SER D  49      35.225 -47.759 -62.898  1.00 23.68      D    C
ATOM  14071  OG   SER D  49      34.286 -48.614 -63.519  1.00 29.51      D    O
ATOM  14073  C    SER D  49      33.980 -45.690 -63.605  1.00 27.66      D    C
ATOM  14074  O    SER D  49      32.820 -45.292 -63.578  1.00 22.43      D    O
ATOM  14076  N    GLY D  50      34.785 -45.467 -64.645  1.00 27.77      D    N
ATOM  14077  CA   GLY D  50      34.400 -44.606 -65.753  1.00 24.55      D    C
ATOM  14080  C    GLY D  50      33.040 -44.954 -66.303  1.00 30.19      D    C
ATOM  14081  O    GLY D  50      32.669 -46.124 -66.328  1.00 38.06      D    O
ATOM  14083  N    GLY D  51      32.291 -43.941 -66.728  1.00 28.78      D    N
ATOM  14084  CA   GLY D  51      30.933 -44.131 -67.270  1.00 28.38      D    C
ATOM  14087  C    GLY D  51      29.881 -44.310 -66.188  1.00 27.91      D    C
ATOM  14088  O    GLY D  51      28.766 -44.781 -66.455  1.00 26.87      D    O
ATOM  14090  N    ASN D  52      30.251 -43.935 -64.967  1.00 30.53      D    N
ATOM  14091  CA   ASN D  52      29.437 -44.166 -63.782  1.00 29.12      D    C
ATOM  14093  CB   ASN D  52      28.248 -43.214 -63.829  1.00 34.31      D    C
ATOM  14096  CG   ASN D  52      28.694 -41.765 -63.733  1.00 36.82      D    C
ATOM  14097  OD1  ASN D  52      29.440 -41.427 -62.824  1.00 40.42      D    O
ATOM  14098  ND2  ASN D  52      28.273 -40.913 -64.686  1.00 33.25      D    N
ATOM  14101  C    ASN D  52      29.051 -45.645 -63.585  1.00 30.61      D    C
ATOM  14102  O    ASN D  52      27.912 -45.974 -63.238  1.00 33.36      D    O
ATOM  14104  N    THR D  53      30.043 -46.522 -63.784  1.00 22.05      D    N
ATOM  14105  CA   THR D  53      29.863 -47.979 -63.793  1.00 20.62      D    C
ATOM  14107  CB   THR D  53      30.896 -48.631 -64.758  1.00 22.22      D    C
ATOM  14109  OG1  THR D  53      30.714 -48.078 -66.057  1.00 26.58      D    O
ATOM  14111  CG2  THR D  53      30.791 -50.175 -64.830  1.00 19.41      D    C
ATOM  14115  C    THR D  53      30.067 -48.515 -62.371  1.00 24.84      D    C
ATOM  14116  O    THR D  53      31.184 -48.513 -61.856  1.00 25.16      D    O
ATOM  14118  N    LEU D  54      28.977 -48.948 -61.739  1.00 27.31      D    N
ATOM  14119  CA   LEU D  54      29.027 -49.594 -60.428  1.00 29.35      D    C
ATOM  14121  CB   LEU D  54      27.598 -49.808 -59.907  1.00 28.32      D    C
ATOM  14124  CG   LEU D  54      27.398 -50.299 -58.474  1.00 25.72      D    C
ATOM  14126  CD1  LEU D  54      27.834 -49.269 -57.444  1.00 24.93      D    C
ATOM  14130  CD2  LEU D  54      25.952 -50.637 -58.284  1.00 29.74      D    C
ATOM  14134  C    LEU D  54      29.771 -50.927 -60.530  1.00 29.32      D    C
ATOM  14135  O    LEU D  54      29.413 -51.776 -61.340  1.00 28.60      D    O
ATOM  14137  N    ARG D  55      30.829 -51.104 -59.740  1.00 31.51      D    N
ATOM  14138  CA   ARG D  55      31.553 -52.375 -59.738  1.00 33.30      D    C
ATOM  14140  CB   ARG D  55      32.850 -52.277 -58.928  1.00 40.35      D    C
ATOM  14143  CG   ARG D  55      33.912 -51.333 -59.501  1.00 44.95      D    C
ATOM  14146  CD   ARG D  55      34.178 -51.515 -61.024  1.00 46.02      D    C
ATOM  14149  NE   ARG D  55      35.576 -51.228 -61.345  1.00 48.65      D    N
ATOM  14151  CZ   ARG D  55      36.140 -51.346 -62.548  1.00 49.14      D    C
ATOM  14152  NH1  ARG D  55      35.425 -51.741 -63.593  1.00 54.73      D    N
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ATOM  14155  NH2 ARG D  55      37.427 -51.061 -62.709  1.00 46.65           D    N
ATOM  14158  C   ARG D  55      30.715 -53.522 -59.174  1.00 32.58           D    C
ATOM  14159  O   ARG D  55      29.976 -53.326 -58.215  1.00 34.68           D    O
ATOM  14161  N   PRO D  56      30.843 -54.736 -59.759  1.00 36.36           D    N
ATOM  14162  CA  PRO D  56      30.186 -55.933 -59.233  1.00 35.21           D    C
ATOM  14164  CB  PRO D  56      30.855 -57.065 -60.016  1.00 38.48           D    C
ATOM  14167  CG  PRO D  56      31.165 -56.452 -61.319  1.00 39.04           D    C
ATOM  14170  CD  PRO D  56      31.581 -55.040 -60.999  1.00 37.26           D    C
ATOM  14173  C   PRO D  56      30.393 -56.128 -57.732  1.00 35.33           D    C
ATOM  14174  O   PRO D  56      31.528 -56.135 -57.265  1.00 36.15           D    O
ATOM  14175  N   GLY D  57      29.299 -56.266 -56.993  1.00 26.46           D    N
ATOM  14176  CA  GLY D  57      29.378 -56.521 -55.566  1.00 31.17           D    C
ATOM  14179  C   GLY D  57      29.219 -55.302 -54.683  1.00 29.16           D    C
ATOM  14180  O   GLY D  57      29.114 -55.441 -53.466  1.00 34.16           D    O
ATOM  14182  N   VAL D  58      29.219 -54.111 -55.291  1.00 34.24           D    N
ATOM  14183  CA  VAL D  58      29.083 -52.851 -54.562  1.00 29.71           D    C
ATOM  14185  CB  VAL D  58      29.877 -51.698 -55.235  1.00 28.16           D    C
ATOM  14187  CG1 VAL D  58      29.707 -50.394 -54.454  1.00 19.29           D    C
ATOM  14191  CG2 VAL D  58      31.369 -52.075 -55.322  1.00 25.50           D    C
ATOM  14195  C   VAL D  58      27.588 -52.560 -54.463  1.00 31.44           D    C
ATOM  14196  O   VAL D  58      26.861 -52.688 -55.459  1.00 29.45           D    O
ATOM  14198  N   PRO D  59      27.098 -52.260 -53.245  1.00 29.19           D    N
ATOM  14199  CA  PRO D  59      25.680 -52.036 -53.071  1.00 28.16           D    C
ATOM  14201  CB  PRO D  59      25.588 -51.629 -51.606  1.00 27.76           D    C
ATOM  14204  CG  PRO D  59      26.683 -52.323 -50.998  1.00 28.56           D    C
ATOM  14207  CD  PRO D  59      27.792 -52.181 -51.954  1.00 29.87           D    C
ATOM  14210  C   PRO D  59      25.098 -50.969 -53.992  1.00 26.31           D    C
ATOM  14211  O   PRO D  59      25.759 -49.984 -54.310  1.00 29.09           D    O
ATOM  14212  N   SER D  60      23.859 -51.177 -54.416  1.00 29.56           D    N
ATOM  14213  CA  SER D  60      23.217 -50.340 -55.423  1.00 29.02           D    C
ATOM  14215  CB  SER D  60      21.908 -51.004 -55.897  1.00 38.41           D    C
ATOM  14218  OG  SER D  60      21.134 -51.460 -54.786  1.00 42.50           D    O
ATOM  14220  C   SER D  60      22.935 -48.919 -54.952  1.00 30.03           D    C
ATOM  14221  O   SER D  60      22.784 -48.024 -55.783  1.00 24.17           D    O
ATOM  14223  N   ARG D  61      22.871 -48.698 -53.632  1.00 26.60           D    N
ATOM  14224  CA  ARG D  61      22.708 -47.343 -53.100  1.00 26.75           D    C
ATOM  14226  CB  ARG D  61      22.591 -47.364 -51.581  1.00 28.78           D    C
ATOM  14229  CG  ARG D  61      23.774 -47.952 -50.885  1.00 31.92           D    C
ATOM  14232  CD  ARG D  61      23.630 -47.815 -49.400  1.00 32.72           D    C
ATOM  14235  NE  ARG D  61      24.797 -48.355 -48.726  1.00 36.88           D    N
ATOM  14237  CZ  ARG D  61      24.948 -49.627 -48.372  1.00 38.14           D    C
ATOM  14238  NH1 ARG D  61      24.016 -50.533 -48.648  1.00 44.10           D    N
ATOM  14241  NH2 ARG D  61      26.056 -50.001 -47.754  1.00 34.40           D    N
ATOM  14244  C   ARG D  61      23.842 -46.400 -53.516  1.00 23.75           D    C
ATOM  14245  O   ARG D  61      23.699 -45.185 -53.459  1.00 24.94           D    O
ATOM  14247  N   PHE D  62      24.971 -46.967 -53.927  1.00 30.31           D    N
ATOM  14248  CA  PHE D  62      26.062 -46.197 -54.486  1.00 26.78           D    C
ATOM  14250  CB  PHE D  62      27.391 -46.933 -54.285  1.00 28.56           D    C
ATOM  14253  CG  PHE D  62      27.852 -46.959 -52.861  1.00 27.28           D    C
ATOM  14254  CD1 PHE D  62      28.552 -45.890 -52.339  1.00 27.71           D    C
ATOM  14256  CE1 PHE D  62      28.970 -45.906 -51.027  1.00 29.22           D    C
ATOM  14258  CZ  PHE D  62      28.710 -47.001 -50.237  1.00 28.43           D    C
ATOM  14260  CE2 PHE D  62      28.025 -48.076 -50.747  1.00 26.39           D    C
ATOM  14262  CD2 PHE D  62      27.598 -48.053 -52.051  1.00 25.00           D    C
ATOM  14264  C   PHE D  62      25.825 -45.959 -55.975  1.00 30.49           D    C
ATOM  14265  O   PHE D  62      25.576 -46.893 -56.733  1.00 35.90           D    O
ATOM  14267  N   SER D  63      25.912 -44.706 -56.400  1.00 32.22           D    N
ATOM  14268  CA  SER D  63      25.820 -44.401 -57.814  1.00 26.18           D    C
ATOM  14270  CB  SER D  63      24.358 -44.259 -58.243  1.00 28.90           D    C
ATOM  14273  OG  SER D  63      23.772 -43.095 -57.709  1.00 28.18           D    O
ATOM  14275  C   SER D  63      26.570 -43.148 -58.113  1.00 27.36           D    C
ATOM  14276  O   SER D  63      26.681 -42.262 -57.265  1.00 24.28           D    O
ATOM  14278  N   GLY D  64      27.107 -43.085 -59.328  1.00 24.83           D    N
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ATOM  14279  CA  GLY D  64      27.759 -41.900 -59.831  1.00 25.07      D    C
ATOM  14282  C   GLY D  64      26.955 -41.245 -60.937  1.00 27.82      D    C
ATOM  14283  O   GLY D  64      26.152 -41.899 -61.604  1.00 29.25      D    O
ATOM  14285  N   SER D  65      27.197 -39.954 -61.156  1.00 28.23      D    N
ATOM  14286  CA  SER D  65      26.547 -39.210 -62.229  1.00 31.92      D    C
ATOM  14288  CB  SER D  65      25.229 -38.606 -61.751  1.00 34.45      D    C
ATOM  14291  OG  SER D  65      25.445 -37.740 -60.650  1.00 38.75      D    O
ATOM  14293  C   SER D  65      27.413 -38.074 -62.731  1.00 28.36      D    C
ATOM  14294  O   SER D  65      28.176 -37.502 -61.988  1.00 22.28      D    O
ATOM  14296  N   GLY D  66      27.250 -37.732 -64.000  1.00 28.51      D    N
ATOM  14297  CA  GLY D  66      27.882 -36.556 -64.539  1.00 28.37      D    C
ATOM  14300  C   GLY D  66      28.931 -36.939 -65.529  1.00 26.52      D    C
ATOM  14301  O   GLY D  66      29.410 -38.063 -65.539  1.00 35.55      D    O
ATOM  14303  N   SER D  67      29.241 -36.001 -66.408  1.00 21.98      D    N
ATOM  14304  CA  SER D  67      30.272 -36.209 -67.395  1.00 29.87      D    C
ATOM  14306  CB  SER D  67      29.744 -37.081 -68.546  1.00 28.03      D    C
ATOM  14309  OG  SER D  67      29.027 -36.318 -69.495  1.00 33.55      D    O
ATOM  14311  C   SER D  67      30.759 -34.827 -67.842  1.00 25.47      D    C
ATOM  14312  O   SER D  67      30.026 -33.858 -67.765  1.00 37.07      D    O
ATOM  14314  N   GLY D  68      32.008 -34.734 -68.253  1.00 30.12      D    N
ATOM  14315  CA  GLY D  68      32.576 -33.477 -68.703  1.00 30.71      D    C
ATOM  14318  C   GLY D  68      33.501 -33.029 -67.621  1.00 24.62      D    C
ATOM  14319  O   GLY D  68      34.577 -33.566 -67.497  1.00 27.36      D    O
ATOM  14321  N   THR D  69      33.060 -32.068 -66.813  1.00 29.97      D    N
ATOM  14322  CA  THR D  69      33.871 -31.529 -65.716  1.00 26.63      D    C
ATOM  14324  CB  THR D  69      34.061 -30.007 -65.837  1.00 29.25      D    C
ATOM  14326  OG1 THR D  69      32.792 -29.361 -65.695  1.00 22.95      D    O
ATOM  14328  CG2 THR D  69      34.760 -29.591 -67.182  1.00 20.12      D    C
ATOM  14332  C   THR D  69      33.263 -31.771 -64.336  1.00 26.86      D    C
ATOM  14333  O   THR D  69      33.988 -31.723 -63.359  1.00 25.38      D    O
ATOM  14335  N   ASP D  70      31.950 -32.023 -64.271  1.00 26.49      D    N
ATOM  14336  CA  ASP D  70      31.173 -32.035 -63.022  1.00 26.27      D    C
ATOM  14338  CB  ASP D  70      29.943 -31.115 -63.135  1.00 29.07      D    C
ATOM  14341  CG  ASP D  70      30.293 -29.614 -63.281  1.00 31.26      D    C
ATOM  14342  OD1 ASP D  70      31.473 -29.209 -63.373  1.00 26.00      D    O
ATOM  14343  OD2 ASP D  70      29.333 -28.820 -63.301  1.00 32.48      D    O
ATOM  14344  C   ASP D  70      30.689 -33.450 -62.652  1.00 24.36      D    C
ATOM  14345  O   ASP D  70      29.790 -34.005 -63.286  1.00 23.67      D    O
ATOM  14347  N   PHE D  71      31.261 -34.021 -61.600  1.00 24.90      D    N
ATOM  14348  CA  PHE D  71      31.010 -35.425 -61.247  1.00 22.55      D    C
ATOM  14350  CB  PHE D  71      32.288 -36.241 -61.431  1.00 19.80      D    C
ATOM  14353  CG  PHE D  71      32.799 -36.218 -62.876  1.00 19.54      D    C
ATOM  14354  CD1 PHE D  71      32.379 -37.172 -63.790  1.00 18.61      D    C
ATOM  14356  CE1 PHE D  71      32.821 -37.148 -65.113  1.00 25.10      D    C
ATOM  14358  CZ  PHE D  71      33.718 -36.157 -65.529  1.00 20.59      D    C
ATOM  14360  CE2 PHE D  71      34.130 -35.208 -64.647  1.00 19.12      D    C
ATOM  14362  CD2 PHE D  71      33.688 -35.253 -63.291  1.00 16.91      D    C
ATOM  14364  C   PHE D  71      30.440 -35.520 -59.827  1.00 21.61      D    C
ATOM  14365  O   PHE D  71      30.752 -34.705 -58.980  1.00 28.30      D    O
ATOM  14367  N   THR D  72      29.540 -36.470 -59.613  1.00 25.78      D    N
ATOM  14368  CA  THR D  72      28.868 -36.621 -58.336  1.00 25.62      D    C
ATOM  14370  CB  THR D  72      27.432 -36.006 -58.385  1.00 23.90      D    C
ATOM  14372  OG1 THR D  72      27.495 -34.662 -58.875  1.00 25.14      D    O
ATOM  14374  CG2 THR D  72      26.783 -35.968 -57.045  1.00 24.08      D    C
ATOM  14378  C   THR D  72      28.805 -38.106 -58.009  1.00 25.39      D    C
ATOM  14379  O   THR D  72      28.464 -38.923 -58.844  1.00 27.12      D    O
ATOM  14381  N   LEU D  73      29.144 -38.423 -56.773  1.00 26.32      D    N
ATOM  14382  CA  LEU D  73      28.881 -39.699 -56.180  1.00 23.73      D    C
ATOM  14384  CB  LEU D  73      30.111 -40.174 -55.428  1.00 22.91      D    C
ATOM  14387  CG  LEU D  73      29.978 -41.318 -54.447  1.00 24.18      D    C
ATOM  14389  CD1 LEU D  73      29.655 -42.561 -55.160  1.00 19.36      D    C
ATOM  14393  CD2 LEU D  73      31.275 -41.487 -53.661  1.00 19.61      D    C
ATOM  14397  C   LEU D  73      27.760 -39.475 -55.181  1.00 24.08      D    C
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ATOM	14398	O	LEU	D	73	27.847	-38.587	-54.343	1.00	28.07	D	O
ATOM	14400	N	THR	D	74	26.741	-40.324	-55.255	1.00	22.40	D	N
ATOM	14401	CA	THR	D	74	25.577	-40.246	-54.387	1.00	28.50	D	C
ATOM	14403	CB	THR	D	74	24.351	-39.945	-55.231	1.00	27.25	D	C
ATOM	14405	OG1	THR	D	74	24.503	-38.624	-55.765	1.00	24.36	D	O
ATOM	14407	CG2	THR	D	74	23.064	-40.034	-54.413	1.00	22.43	D	C
ATOM	14411	C	THR	D	74	25.433	-41.561	-53.643	1.00	25.66	D	C
ATOM	14412	O	THR	D	74	25.540	-42.606	-54.241	1.00	32.11	D	O
ATOM	14414	N	ILE	D	75	25.291	-41.499	-52.326	1.00	22.22	D	N
ATOM	14415	CA	ILE	D	75	24.803	-42.646	-51.549	1.00	27.18	D	C
ATOM	14417	CB	ILE	D	75	25.612	-42.883	-50.224	1.00	23.69	D	C
ATOM	14419	CG1	ILE	D	75	27.135	-42.724	-50.454	1.00	21.60	D	C
ATOM	14422	CD1	ILE	D	75	27.970	-42.768	-49.214	1.00	24.13	D	C
ATOM	14426	CG2	ILE	D	75	25.317	-44.269	-49.661	1.00	19.91	D	C
ATOM	14430	C	ILE	D	75	23.331	-42.375	-51.208	1.00	29.24	D	C
ATOM	14431	O	ILE	D	75	23.048	-41.487	-50.424	1.00	31.02	D	O
ATOM	14433	N	SER	D	76	22.409	-43.172	-51.752	1.00	33.66	D	N
ATOM	14434	CA	SER	D	76	20.962	-42.875	-51.659	1.00	32.65	D	C
ATOM	14436	CB	SER	D	76	20.178	-43.680	-52.693	1.00	35.78	D	C
ATOM	14439	OG	SER	D	76	20.217	-45.077	-52.399	1.00	41.64	D	O
ATOM	14441	C	SER	D	76	20.354	-43.109	-50.281	1.00	33.79	D	C
ATOM	14442	O	SER	D	76	19.371	-42.450	-49.900	1.00	35.88	D	O
ATOM	14444	N	SER	D	77	20.923	-44.053	-49.544	1.00	33.75	D	N
ATOM	14445	CA	SER	D	77	20.465	-44.364	-48.201	1.00	31.69	D	C
ATOM	14447	CB	SER	D	77	19.432	-45.497	-48.225	1.00	32.75	D	C
ATOM	14450	OG	SER	D	77	19.199	-45.983	-46.927	1.00	39.45	D	O
ATOM	14452	C	SER	D	77	21.678	-44.758	-47.388	1.00	31.73	D	C
ATOM	14453	O	SER	D	77	22.107	-45.905	-47.423	1.00	35.95	D	O
ATOM	14455	N	LEU	D	78	22.217	-43.789	-46.653	1.00	28.56	D	N
ATOM	14456	CA	LEU	D	78	23.472	-43.944	-45.967	1.00	29.79	D	C
ATOM	14458	CB	LEU	D	78	23.908	-42.607	-45.365	1.00	29.88	D	C
ATOM	14461	CG	LEU	D	78	25.254	-42.579	-44.639	1.00	28.42	D	C
ATOM	14463	CD1	LEU	D	78	26.351	-42.861	-45.640	1.00	23.97	D	C
ATOM	14467	CD2	LEU	D	78	25.479	-41.253	-43.933	1.00	27.13	D	C
ATOM	14471	C	LEU	D	78	23.324	-44.990	-44.872	1.00	29.47	D	C
ATOM	14472	O	LEU	D	78	22.466	-44.858	-44.009	1.00	26.89	D	O
ATOM	14474	N	GLN	D	79	24.144	-46.040	-44.943	1.00	29.19	D	N
ATOM	14475	CA	GLN	D	79	24.121	-47.110	-43.956	1.00	30.05	D	C
ATOM	14477	CB	GLN	D	79	24.123	-48.497	-44.622	1.00	28.19	D	C
ATOM	14480	CG	GLN	D	79	22.892	-48.854	-45.462	1.00	29.10	D	C
ATOM	14483	CD	GLN	D	79	21.585	-48.584	-44.758	1.00	29.94	D	C
ATOM	14484	OE1	GLN	D	79	21.339	-49.097	-43.679	1.00	29.19	D	O
ATOM	14485	NE2	GLN	D	79	20.739	-47.765	-45.368	1.00	34.70	D	N
ATOM	14488	C	GLN	D	79	25.341	-46.944	-43.056	1.00	30.15	D	C
ATOM	14489	O	GLN	D	79	26.330	-46.336	-43.457	1.00	26.76	D	O
ATOM	14491	N	PRO	D	80	25.275	-47.478	-41.830	1.00	30.40	D	N
ATOM	14492	CA	PRO	D	80	26.376	-47.363	-40.863	1.00	31.68	D	C
ATOM	14494	CB	PRO	D	80	25.945	-48.308	-39.749	1.00	31.64	D	C
ATOM	14497	CG	PRO	D	80	24.493	-48.325	-39.827	1.00	32.58	D	C
ATOM	14500	CD	PRO	D	80	24.140	-48.216	-41.261	1.00	31.88	D	C
ATOM	14503	C	PRO	D	80	27.756	-47.764	-41.399	1.00	28.99	D	C
ATOM	14504	O	PRO	D	80	28.746	-47.109	-41.092	1.00	28.58	D	O
ATOM	14505	N	GLU	D	81	27.797	-48.819	-42.205	1.00	28.68	D	N
ATOM	14506	CA	GLU	D	81	29.045	-49.340	-42.775	1.00	30.29	D	C
ATOM	14508	CB	GLU	D	81	28.845	-50.761	-43.307	1.00	28.25	D	C
ATOM	14511	CG	GLU	D	81	27.828	-50.918	-44.423	1.00	34.74	D	C
ATOM	14514	CD	GLU	D	81	26.494	-51.513	-43.965	1.00	43.46	D	C
ATOM	14515	OE1	GLU	D	81	25.899	-51.057	-42.940	1.00	40.82	D	O
ATOM	14516	OE2	GLU	D	81	26.041	-52.451	-44.654	1.00	47.54	D	O
ATOM	14517	C	GLU	D	81	29.611	-48.473	-43.895	1.00	30.45	D	C
ATOM	14518	O	GLU	D	81	30.666	-48.784	-44.443	1.00	32.05	D	O
ATOM	14520	N	ASP	D	82	28.886	-47.417	-44.257	1.00	31.69	D	N
ATOM	14521	CA	ASP	D	82	29.332	-46.470	-45.272	1.00	28.01	D	C

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ATOM	14523	CB	ASP	D	82	28.118	-45.842	-45.958	1.00	32.15	D C
ATOM	14526	CG	ASP	D	82	27.327	-46.851	-46.738	1.00	30.80	D C
ATOM	14527	OD1	ASP	D	82	27.942	-47.847	-47.173	1.00	35.80	D O
ATOM	14528	OD2	ASP	D	82	26.111	-46.664	-46.904	1.00	27.92	D O
ATOM	14529	C	ASP	D	82	30.265	-45.381	-44.743	1.00	26.99	D C
ATOM	14530	O	ASP	D	82	30.785	-44.600	-45.545	1.00	23.23	D O
ATOM	14532	N	VAL	D	83	30.487	-45.319	-43.422	1.00	25.48	D N
ATOM	14533	CA	VAL	D	83	31.464	-44.376	-42.878	1.00	27.11	D C
ATOM	14535	CB	VAL	D	83	31.436	-44.223	-41.302	1.00	31.38	D C
ATOM	14537	CG1	VAL	D	83	30.059	-43.713	-40.827	1.00	32.69	D C
ATOM	14541	CG2	VAL	D	83	31.825	-45.494	-40.585	1.00	29.63	D C
ATOM	14545	C	VAL	D	83	32.864	-44.748	-43.403	1.00	28.07	D C
ATOM	14546	O	VAL	D	83	33.378	-45.855	-43.185	1.00	26.35	D O
ATOM	14548	N	ALA	D	84	33.446	-43.807	-44.133	1.00	23.32	D N
ATOM	14549	CA	ALA	D	84	34.720	-43.993	-44.802	1.00	25.07	D C
ATOM	14551	CB	ALA	D	84	34.545	-44.943	-45.992	1.00	26.25	D C
ATOM	14555	C	ALA	D	84	35.157	-42.620	-45.278	1.00	26.17	D C
ATOM	14556	O	ALA	D	84	34.410	-41.639	-45.107	1.00	21.62	D O
ATOM	14558	N	THR	D	85	36.360	-42.528	-45.843	1.00	24.62	D N
ATOM	14559	CA	THR	D	85	36.709	-41.384	-46.665	1.00	21.77	D C
ATOM	14561	CB	THR	D	85	38.121	-40.820	-46.367	1.00	20.79	D C
ATOM	14563	OG1	THR	D	85	38.107	-40.247	-45.066	1.00	27.09	D O
ATOM	14565	CG2	THR	D	85	38.504	-39.693	-47.343	1.00	21.26	D C
ATOM	14569	C	THR	D	85	36.547	-41.856	-48.092	1.00	27.22	D C
ATOM	14570	O	THR	D	85	36.887	-42.997	-48.414	1.00	17.46	D O
ATOM	14572	N	TYR	D	86	35.962	-40.985	-48.916	1.00	28.12	D N
ATOM	14573	CA	TYR	D	86	35.712	-41.235	-50.313	1.00	22.80	D C
ATOM	14575	CB	TYR	D	86	34.207	-40.997	-50.614	1.00	22.25	D C
ATOM	14578	CG	TYR	D	86	33.298	-42.037	-49.948	1.00	20.76	D C
ATOM	14579	CD1	TYR	D	86	32.927	-43.191	-50.612	1.00	23.74	D C
ATOM	14581	CE1	TYR	D	86	32.155	-44.176	-49.986	1.00	19.70	D C
ATOM	14583	CZ	TYR	D	86	31.753	-43.999	-48.677	1.00	22.91	D C
ATOM	14584	OH	TYR	D	86	30.989	-44.963	-48.036	1.00	19.15	D O
ATOM	14586	CE2	TYR	D	86	32.128	-42.865	-48.002	1.00	21.28	D C
ATOM	14588	CD2	TYR	D	86	32.894	-41.897	-48.627	1.00	17.54	D C
ATOM	14590	C	TYR	D	86	36.669	-40.351	-51.142	1.00	25.73	D C
ATOM	14591	O	TYR	D	86	36.858	-39.173	-50.817	1.00	25.01	D O
ATOM	14593	N	TYR	D	87	37.302	-40.944	-52.165	1.00	22.30	D N
ATOM	14594	CA	TYR	D	87	38.235	-40.245	-53.074	1.00	21.15	D C
ATOM	14596	CB	TYR	D	87	39.681	-40.789	-52.972	1.00	22.58	D C
ATOM	14599	CG	TYR	D	87	40.291	-40.635	-51.617	1.00	17.27	D C
ATOM	14600	CD1	TYR	D	87	40.969	-39.470	-51.271	1.00	20.42	D C
ATOM	14602	CE1	TYR	D	87	41.483	-39.293	-50.009	1.00	15.93	D C
ATOM	14604	CZ	TYR	D	87	41.348	-40.303	-49.089	1.00	18.29	D C
ATOM	14605	OH	TYR	D	87	41.854	-40.141	-47.838	1.00	21.68	D O
ATOM	14607	CE2	TYR	D	87	40.666	-41.466	-49.394	1.00	14.46	D C
ATOM	14609	CD2	TYR	D	87	40.146	-41.630	-50.652	1.00	17.04	D C
ATOM	14611	C	TYR	D	87	37.809	-40.434	-54.510	1.00	20.23	D C
ATOM	14612	O	TYR	D	87	37.623	-41.555	-54.954	1.00	21.73	D O
ATOM	14614	N	CYS	D	88	37.675	-39.335	-55.247	1.00	20.76	D N
ATOM	14615	CA	CYS	D	88	37.525	-39.422	-56.682	1.00	23.97	D C
ATOM	14617	CB	CYS	D	88	36.786	-38.217	-57.250	1.00	31.52	D C
ATOM	14620	SG	CYS	D	88	37.593	-36.643	-57.101	1.00	34.61	D S
ATOM	14622	C	CYS	D	88	38.882	-39.604	-57.348	1.00	23.12	D C
ATOM	14623	O	CYS	D	88	39.927	-39.331	-56.754	1.00	22.11	D O
ATOM	14625	N	LEU	D	89	38.851	-40.131	-58.567	1.00	23.55	D N
ATOM	14626	CA	LEU	D	89	40.046	-40.273	-59.350	1.00	23.64	D C
ATOM	14628	CB	LEU	D	89	40.697	-41.642	-59.151	1.00	21.20	D C
ATOM	14631	CG	LEU	D	89	41.865	-41.890	-60.131	1.00	23.42	D C
ATOM	14633	CD1	LEU	D	89	43.189	-41.499	-59.535	1.00	16.08	D C
ATOM	14637	CD2	LEU	D	89	41.886	-43.325	-60.534	1.00	21.64	D C
ATOM	14641	C	LEU	D	89	39.741	-40.044	-60.824	1.00	22.50	D C
ATOM	14642	O	LEU	D	89	39.035	-40.795	-61.473	1.00	24.42	D O

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ATOM	14644	N	GLN	D	90	40.383	-39.024	-61.332	1.00	21.44	D	N
ATOM	14645	CA	GLN	D	90	40.335	-38.627	-62.714	1.00	25.59	D	C
ATOM	14647	CB	GLN	D	90	40.830	-37.174	-62.689	1.00	26.82	D	C
ATOM	14650	CG	GLN	D	90	41.095	-36.496	-63.935	1.00	29.48	D	C
ATOM	14653	CD	GLN	D	90	42.328	-36.969	-64.655	1.00	19.89	D	C
ATOM	14654	OE1	GLN	D	90	43.474	-36.844	-64.208	1.00	26.78	D	O
ATOM	14655	NE2	GLN	D	90	42.092	-37.456	-65.823	1.00	24.69	D	N
ATOM	14658	C	GLN	D	90	41.255	-39.564	-63.511	1.00	24.41	D	C
ATOM	14659	O	GLN	D	90	42.419	-39.669	-63.176	1.00	24.58	D	O
ATOM	14661	N	SER	D	91	40.746	-40.218	-64.563	1.00	25.09	D	N
ATOM	14662	CA	SER	D	91	41.561	-41.085	-65.433	1.00	23.75	D	C
ATOM	14664	CB	SER	D	91	41.324	-42.564	-65.110	1.00	28.68	D	C
ATOM	14667	OG	SER	D	91	39.952	-42.888	-65.101	1.00	27.41	D	O
ATOM	14669	C	SER	D	91	41.404	-40.835	-66.948	1.00	22.49	D	C
ATOM	14670	O	SER	D	91	41.363	-41.746	-67.769	1.00	23.99	D	O
ATOM	14672	N	ASP	D	92	41.353	-39.570	-67.293	1.00	23.36	D	N
ATOM	14673	CA	ASP	D	92	41.367	-39.088	-68.670	1.00	22.56	D	C
ATOM	14675	CB	ASP	D	92	41.155	-37.570	-68.634	1.00	25.39	D	C
ATOM	14678	CG	ASP	D	92	41.245	-36.942	-69.976	1.00	26.61	D	C
ATOM	14679	OD1	ASP	D	92	40.226	-36.906	-70.683	1.00	27.79	D	O
ATOM	14680	OD2	ASP	D	92	42.336	-36.460	-70.300	1.00	28.44	D	O
ATOM	14681	C	ASP	D	92	42.666	-39.402	-69.406	1.00	24.59	D	C
ATOM	14682	O	ASP	D	92	42.645	-39.776	-70.589	1.00	20.40	D	O
ATOM	14684	N	SER	D	93	43.783	-39.256	-68.694	1.00	22.26	D	N
ATOM	14685	CA	SER	D	93	45.122	-39.366	-69.279	1.00	23.17	D	C
ATOM	14687	CB	SER	D	93	45.437	-38.103	-70.076	1.00	24.63	D	C
ATOM	14690	OG	SER	D	93	45.139	-36.940	-69.309	1.00	17.68	D	O
ATOM	14692	C	SER	D	93	46.145	-39.553	-68.173	1.00	22.37	D	C
ATOM	14693	O	SER	D	93	45.819	-39.409	-67.010	1.00	18.71	D	O
ATOM	14695	N	LEU	D	94	47.385	-39.889	-68.530	1.00	25.40	D	N
ATOM	14696	CA	LEU	D	94	48.458	-39.933	-67.541	1.00	25.92	D	C
ATOM	14698	CB	LEU	D	94	49.565	-40.908	-67.945	1.00	22.65	D	C
ATOM	14701	CG	LEU	D	94	49.144	-42.378	-67.965	1.00	27.95	D	C
ATOM	14703	CD1	LEU	D	94	50.213	-43.176	-68.669	1.00	24.33	D	C
ATOM	14707	CD2	LEU	D	94	48.849	-42.925	-66.544	1.00	25.24	D	C
ATOM	14711	C	LEU	D	94	49.033	-38.535	-67.440	1.00	24.84	D	C
ATOM	14712	O	LEU	D	94	49.247	-37.898	-68.469	1.00	30.22	D	O
ATOM	14714	N	PRO	D	95	49.311	-38.054	-66.207	1.00	17.81	D	N
ATOM	14715	CA	PRO	D	95	49.148	-38.694	-64.908	1.00	17.93	D	C
ATOM	14717	CB	PRO	D	95	50.081	-37.877	-64.021	1.00	18.50	D	C
ATOM	14720	CG	PRO	D	95	50.003	-36.559	-64.560	1.00	18.07	D	C
ATOM	14723	CD	PRO	D	95	49.848	-36.700	-66.048	1.00	18.43	D	C
ATOM	14726	C	PRO	D	95	47.717	-38.576	-64.393	1.00	17.72	D	C
ATOM	14727	O	PRO	D	95	47.064	-37.578	-64.666	1.00	16.78	D	O
ATOM	14728	N	TYR	D	96	47.228	-39.594	-63.693	1.00	23.06	D	N
ATOM	14729	CA	TYR	D	96	45.895	-39.541	-63.081	1.00	14.78	D	C
ATOM	14731	CB	TYR	D	96	45.442	-40.921	-62.612	1.00	16.14	D	C
ATOM	14734	CG	TYR	D	96	45.245	-42.001	-63.661	1.00	17.13	D	C
ATOM	14735	CD1	TYR	D	96	45.156	-41.691	-65.020	1.00	17.38	D	C
ATOM	14737	CE1	TYR	D	96	44.941	-42.645	-65.937	1.00	15.77	D	C
ATOM	14739	CZ	TYR	D	96	44.790	-43.951	-65.541	1.00	17.77	D	C
ATOM	14740	OH	TYR	D	96	44.553	-44.887	-66.492	1.00	17.87	D	O
ATOM	14742	CE2	TYR	D	96	44.841	-44.308	-64.200	1.00	15.05	D	C
ATOM	14744	CD2	TYR	D	96	45.090	-43.329	-63.278	1.00	15.05	D	C
ATOM	14746	C	TYR	D	96	45.960	-38.617	-61.871	1.00	21.05	D	C
ATOM	14747	O	TYR	D	96	47.041	-38.251	-61.435	1.00	16.87	D	O
ATOM	14749	N	THR	D	97	44.794	-38.255	-61.315	1.00	22.41	D	N
ATOM	14750	CA	THR	D	97	44.727	-37.339	-60.182	1.00	19.27	D	C
ATOM	14752	CB	THR	D	97	44.372	-35.849	-60.564	1.00	23.55	D	C
ATOM	14754	OG1	THR	D	97	45.007	-35.462	-61.789	1.00	19.90	D	O
ATOM	14756	CG2	THR	D	97	44.749	-34.866	-59.416	1.00	18.47	D	C
ATOM	14760	C	THR	D	97	43.612	-37.800	-59.262	1.00	20.18	D	C
ATOM	14761	O	THR	D	97	42.496	-37.968	-59.714	1.00	18.25	D	O

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ATOM  14763  N   PHE D  98      43.941 -37.946 -57.978  1.00 17.72      D    N
ATOM  14764  CA  PHE D  98      42.975 -38.130 -56.931  1.00 19.02      D    C
ATOM  14766  CB  PHE D  98      43.628 -38.810 -55.733  1.00 16.64      D    C
ATOM  14769  CG  PHE D  98      43.751 -40.308 -55.830  1.00 16.93      D    C
ATOM  14770  CD1 PHE D  98      42.640 -41.125 -55.674  1.00 16.30      D    C
ATOM  14772  CE1 PHE D  98      42.732 -42.493 -55.713  1.00 15.69      D    C
ATOM  14774  CZ  PHE D  98      43.973 -43.088 -55.887  1.00 16.00      D    C
ATOM  14776  CE2 PHE D  98      45.112 -42.288 -55.993  1.00 16.64      D    C
ATOM  14778  CD2 PHE D  98      44.996 -40.899 -55.969  1.00 15.33      D    C
ATOM  14780  C   PHE D  98      42.504 -36.759 -56.450  1.00 23.22      D    C
ATOM  14781  O   PHE D  98      43.284 -35.823 -56.404  1.00 24.78      D    O
ATOM  14783  N   GLY D  99      41.241 -36.646 -56.062  1.00 25.63      D    N
ATOM  14784  CA  GLY D  99      40.803 -35.504 -55.284  1.00 22.02      D    C
ATOM  14787  C   GLY D  99      41.242 -35.574 -53.819  1.00 19.87      D    C
ATOM  14788  O   GLY D  99      41.809 -36.564 -53.371  1.00 24.13      D    O
ATOM  14790  N   GLN D 100      40.930 -34.521 -53.067  1.00 17.76      D    N
ATOM  14791  CA  GLN D 100      41.467 -34.303 -51.729  1.00 20.61      D    C
ATOM  14793  CB  GLN D 100      41.405 -32.826 -51.364  1.00 20.81      D    C
ATOM  14796  CG  GLN D 100      42.122 -31.883 -52.348  1.00 25.98      D    C
ATOM  14799  CD  GLN D 100      41.378 -31.633 -53.674  1.00 26.07      D    C
ATOM  14800  OE1 GLN D 100      40.359 -32.252 -53.982  1.00 32.19      D    O
ATOM  14801  NE2 GLN D 100      41.892 -30.707 -54.448  1.00 31.10      D    N
ATOM  14804  C   GLN D 100      40.751 -35.143 -50.679  1.00 16.02      D    C
ATOM  14805  O   GLN D 100      41.194 -35.251 -49.539  1.00 21.53      D    O
ATOM  14807  N   GLY D 101      39.640 -35.743 -51.073  1.00 23.63      D    N
ATOM  14808  CA  GLY D 101      38.920 -36.670 -50.215  1.00 24.16      D    C
ATOM  14811  C   GLY D 101      37.772 -35.988 -49.498  1.00 19.70      D    C
ATOM  14812  O   GLY D 101      37.788 -34.777 -49.312  1.00 23.12      D    O
ATOM  14814  N   THR D 102      36.789 -36.803 -49.110  1.00 23.12      D    N
ATOM  14815  CA  THR D 102      35.608 -36.385 -48.339  1.00 19.43      D    C
ATOM  14817  CB  THR D 102      34.339 -36.243 -49.202  1.00 20.17      D    C
ATOM  14819  OG1 THR D 102      34.567 -35.342 -50.290  1.00 22.19      D    O
ATOM  14821  CG2 THR D 102      33.177 -35.711 -48.365  1.00 16.57      D    C
ATOM  14825  C   THR D 102      35.319 -37.430 -47.262  1.00 20.19      D    C
ATOM  14826  O   THR D 102      35.013 -38.592 -47.551  1.00 18.78      D    O
ATOM  14828  N   LYS D 103      35.445 -37.028 -46.012  1.00 19.52      D    N
ATOM  14829  CA  LYS D 103      35.133 -37.910 -44.908  1.00 21.81      D    C
ATOM  14831  CB  LYS D 103      35.896 -37.453 -43.664  1.00 22.97      D    C
ATOM  14834  CG  LYS D 103      35.842 -38.453 -42.523  1.00 24.14      D    C
ATOM  14837  CD  LYS D 103      35.941 -37.747 -41.171  1.00 29.39      D    C
ATOM  14840  CE  LYS D 103      37.302 -37.845 -40.569  1.00 36.08      D    C
ATOM  14843  NZ  LYS D 103      37.363 -39.041 -39.724  1.00 37.15      D    N
ATOM  14847  C   LYS D 103      33.634 -37.882 -44.624  1.00 22.14      D    C
ATOM  14848  O   LYS D 103      33.098 -36.848 -44.257  1.00 21.42      D    O
ATOM  14850  N   VAL D 104      32.974 -39.027 -44.792  1.00 26.54      D    N
ATOM  14851  CA  VAL D 104      31.551 -39.170 -44.521  1.00 23.50      D    C
ATOM  14853  CB  VAL D 104      30.876 -40.053 -45.569  1.00 22.74      D    C
ATOM  14855  CG1 VAL D 104      29.409 -40.285 -45.188  1.00 24.14      D    C
ATOM  14859  CG2 VAL D 104      31.004 -39.421 -46.967  1.00 18.29      D    C
ATOM  14863  C   VAL D 104      31.331 -39.766 -43.130  1.00 29.41      D    C
ATOM  14864  O   VAL D 104      31.807 -40.861 -42.856  1.00 28.82      D    O
ATOM  14866  N   GLU D 105      30.595 -39.045 -42.276  1.00 28.13      D    N
ATOM  14867  CA  GLU D 105      30.346 -39.448 -40.893  1.00 28.64      D    C
ATOM  14869  CB  GLU D 105      30.939 -38.421 -39.928  1.00 31.57      D    C
ATOM  14872  CG  GLU D 105      32.398 -38.055 -40.236  1.00 35.47      D    C
ATOM  14875  CD  GLU D 105      33.176 -37.619 -39.002  1.00 37.71      D    C
ATOM  14876  OE1 GLU D 105      33.318 -36.392 -38.799  1.00 41.28      D    O
ATOM  14877  OE2 GLU D 105      33.634 -38.506 -38.235  1.00 37.76      D    O
ATOM  14878  C   GLU D 105      28.849 -39.604 -40.621  1.00 25.14      D    C
ATOM  14879  O   GLU D 105      28.021 -39.041 -41.310  1.00 21.64      D    O
ATOM  14881  N   ILE D 106      28.490 -40.398 -39.626  1.00 32.36      D    N
ATOM  14882  CA  ILE D 106      27.072 -40.610 -39.333  1.00 29.59      D    C
ATOM  14884  CB  ILE D 106      26.686 -42.098 -39.205  1.00 27.88      D    C
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ATOM	14886	CG1	ILE	D	106	26.529	-42.705	-40.585	1.00	24.47	D	C
ATOM	14889	CD1	ILE	D	106	25.983	-44.058	-40.566	1.00	24.61	D	C
ATOM	14893	CG2	ILE	D	106	25.366	-42.267	-38.449	1.00	28.17	D	C
ATOM	14897	C	ILE	D	106	26.697	-39.879	-38.087	1.00	31.86	D	C
ATOM	14898	O	ILE	D	106	27.394	-39.958	-37.078	1.00	35.56	D	O
ATOM	14900	N	LYS	D	107	25.588	-39.154	-38.177	1.00	35.20	D	N
ATOM	14901	CA	LYS	D	107	24.985	-38.536	-37.017	1.00	34.44	D	C
ATOM	14903	CB	LYS	D	107	24.512	-37.111	-37.325	1.00	37.48	D	C
ATOM	14906	CG	LYS	D	107	23.017	-36.868	-37.381	1.00	43.55	D	C
ATOM	14909	CD	LYS	D	107	22.540	-36.073	-36.181	1.00	46.00	D	C
ATOM	14912	CE	LYS	D	107	22.850	-34.594	-36.358	1.00	47.73	D	C
ATOM	14915	NZ	LYS	D	107	22.653	-33.837	-35.091	1.00	47.52	D	N
ATOM	14919	C	LYS	D	107	23.879	-39.471	-36.542	1.00	33.34	D	C
ATOM	14920	O	LYS	D	107	23.188	-40.118	-37.328	1.00	35.03	D	O
ATOM	14922	N	ARG	D	108	23.732	-39.527	-35.233	1.00	33.03	D	N
ATOM	14923	CA	ARG	D	108	23.187	-40.680	-34.569	1.00	31.01	D	C
ATOM	14925	CB	ARG	D	108	24.305	-41.714	-34.538	1.00	32.10	D	C
ATOM	14928	CG	ARG	D	108	24.050	-42.977	-33.803	1.00	37.21	D	C
ATOM	14931	CD	ARG	D	108	24.979	-43.109	-32.625	1.00	39.14	D	C
ATOM	14934	NE	ARG	D	108	24.977	-44.485	-32.170	1.00	43.01	D	N
ATOM	14936	CZ	ARG	D	108	24.055	-45.038	-31.387	1.00	41.52	D	C
ATOM	14937	NH1	ARG	D	108	23.043	-44.335	-30.905	1.00	42.43	D	N
ATOM	14940	NH2	ARG	D	108	24.174	-46.318	-31.067	1.00	45.02	D	N
ATOM	14943	C	ARG	D	108	22.758	-40.199	-33.187	1.00	29.58	D	C
ATOM	14944	O	ARG	D	108	23.211	-39.147	-32.737	1.00	30.07	D	O
ATOM	14946	N	THR	D	109	21.856	-40.926	-32.538	1.00	31.51	D	N
ATOM	14947	CA	THR	D	109	21.395	-40.566	-31.189	1.00	31.58	D	C
ATOM	14949	CB	THR	D	109	20.217	-41.476	-30.704	1.00	31.60	D	C
ATOM	14951	OG1	THR	D	109	20.539	-42.856	-30.914	1.00	33.30	D	O
ATOM	14953	CG2	THR	D	109	18.946	-41.169	-31.459	1.00	25.01	D	C
ATOM	14957	C	THR	D	109	22.533	-40.637	-30.180	1.00	31.79	D	C
ATOM	14958	O	THR	D	109	23.572	-41.235	-30.445	1.00	35.81	D	O
ATOM	14960	N	VAL	D	110	22.327	-40.029	-29.018	1.00	31.94	D	N
ATOM	14961	CA	VAL	D	110	23.354	-39.981	-27.985	1.00	33.09	D	C
ATOM	14963	CB	VAL	D	110	23.073	-38.850	-26.964	1.00	33.06	D	C
ATOM	14965	CG1	VAL	D	110	23.279	-37.504	-27.623	1.00	35.90	D	C
ATOM	14969	CG2	VAL	D	110	23.982	-38.958	-25.784	1.00	32.84	D	C
ATOM	14973	C	VAL	D	110	23.501	-41.323	-27.258	1.00	35.00	D	C
ATOM	14974	O	VAL	D	110	22.512	-41.960	-26.892	1.00	35.42	D	O
ATOM	14976	N	ALA	D	111	24.748	-41.749	-27.076	1.00	33.63	D	N
ATOM	14977	CA	ALA	D	111	25.062	-42.979	-26.373	1.00	30.52	D	C
ATOM	14979	CB	ALA	D	111	25.590	-44.016	-27.330	1.00	28.06	D	C
ATOM	14983	C	ALA	D	111	26.096	-42.674	-25.301	1.00	32.32	D	C
ATOM	14984	O	ALA	D	111	27.192	-42.189	-25.605	1.00	34.60	D	O
ATOM	14986	N	ALA	D	112	25.739	-42.937	-24.046	1.00	29.23	D	N
ATOM	14987	CA	ALA	D	112	26.682	-42.814	-22.940	1.00	29.88	D	C
ATOM	14989	CB	ALA	D	112	25.966	-42.934	-21.606	1.00	25.30	D	C
ATOM	14993	C	ALA	D	112	27.714	-43.921	-23.084	1.00	29.74	D	C
ATOM	14994	O	ALA	D	112	27.378	-45.018	-23.538	1.00	32.65	D	O
ATOM	14996	N	PRO	D	113	28.982	-43.634	-22.748	1.00	27.72	D	N
ATOM	14997	CA	PRO	D	113	29.965	-44.707	-22.751	1.00	27.32	D	C
ATOM	14999	CB	PRO	D	113	31.295	-43.963	-22.645	1.00	26.69	D	C
ATOM	15002	CG	PRO	D	113	30.964	-42.689	-21.969	1.00	26.88	D	C
ATOM	15005	CD	PRO	D	113	29.578	-42.336	-22.393	1.00	26.25	D	C
ATOM	15008	C	PRO	D	113	29.788	-45.625	-21.557	1.00	29.97	D	C
ATOM	15009	O	PRO	D	113	29.350	-45.177	-20.500	1.00	30.27	D	O
ATOM	15010	N	SER	D	114	30.104	-46.905	-21.746	1.00	31.38	D	N
ATOM	15011	CA	SER	D	114	30.398	-47.809	-20.637	1.00	28.44	D	C
ATOM	15013	CB	SER	D	114	30.195	-49.271	-21.047	1.00	31.00	D	C
ATOM	15016	OG	SER	D	114	29.261	-49.396	-22.110	1.00	37.75	D	O
ATOM	15018	C	SER	D	114	31.865	-47.563	-20.277	1.00	28.88	D	C
ATOM	15019	O	SER	D	114	32.692	-47.392	-21.168	1.00	29.06	D	O
ATOM	15021	N	VAL	D	115	32.193	-47.528	-18.985	1.00	30.10	D	N

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ATOM  15022  CA  VAL D 115      33.564 -47.210 -18.565  1.00 29.12      D    C
ATOM  15024  CB  VAL D 115      33.630 -45.911 -17.744  1.00 26.46      D    C
ATOM  15026  CG1 VAL D 115      35.053 -45.662 -17.241  1.00 21.50      D    C
ATOM  15030  CG2 VAL D 115      33.147 -44.738 -18.586  1.00 21.91      D    C
ATOM  15034  C   VAL D 115      34.182 -48.351 -17.767  1.00 29.14      D    C
ATOM  15035  O   VAL D 115      33.528 -48.933 -16.917  1.00 25.04      D    O
ATOM  15037  N   PHE D 116      35.441 -48.660 -18.086  1.00 31.23      D    N
ATOM  15038  CA  PHE D 116      36.198 -49.741 -17.466  1.00 29.75      D    C
ATOM  15040  CB  PHE D 116      36.376 -50.917 -18.439  1.00 33.06      D    C
ATOM  15043  CG  PHE D 116      35.086 -51.458 -19.011  1.00 34.46      D    C
ATOM  15044  CD1 PHE D 116      34.391 -52.475 -18.366  1.00 35.78      D    C
ATOM  15046  CE1 PHE D 116      33.213 -52.983 -18.905  1.00 33.55      D    C
ATOM  15048  CZ  PHE D 116      32.730 -52.485 -20.093  1.00 33.99      D    C
ATOM  15050  CE2 PHE D 116      33.413 -51.481 -20.750  1.00 33.27      D    C
ATOM  15052  CD2 PHE D 116      34.589 -50.976 -20.214  1.00 32.96      D    C
ATOM  15054  C   PHE D 116      37.584 -49.231 -17.100  1.00 27.39      D    C
ATOM  15055  O   PHE D 116      38.196 -48.490 -17.865  1.00 24.57      D    O
ATOM  15057  N   ILE D 117      38.091 -49.657 -15.945  1.00 30.76      D    N
ATOM  15058  CA  ILE D 117      39.436 -49.291 -15.511  1.00 28.81      D    C
ATOM  15060  CB  ILE D 117      39.388 -48.460 -14.191  1.00 30.10      D    C
ATOM  15062  CG1 ILE D 117      40.780 -47.918 -13.834  1.00 28.19      D    C
ATOM  15065  CD1 ILE D 117      40.759 -46.847 -12.775  1.00 26.00      D    C
ATOM  15069  CG2 ILE D 117      38.784 -49.277 -13.057  1.00 25.02      D    C
ATOM  15073  C   ILE D 117      40.282 -50.564 -15.378  1.00 29.40      D    C
ATOM  15074  O   ILE D 117      39.769 -51.614 -14.988  1.00 27.02      D    O
ATOM  15076  N   PHE D 118      41.563 -50.464 -15.745  1.00 31.05      D    N
ATOM  15077  CA  PHE D 118      42.510 -51.581 -15.691  1.00 29.55      D    C
ATOM  15079  CB  PHE D 118      42.968 -51.996 -17.089  1.00 30.50      D    C
ATOM  15082  CG  PHE D 118      41.879 -52.537 -17.950  1.00 30.95      D    C
ATOM  15083  CD1 PHE D 118      41.530 -53.875 -17.879  1.00 29.74      D    C
ATOM  15085  CE1 PHE D 118      40.530 -54.384 -18.674  1.00 30.56      D    C
ATOM  15087  CZ  PHE D 118      39.861 -53.558 -19.546  1.00 30.88      D    C
ATOM  15089  CE2 PHE D 118      40.197 -52.211 -19.624  1.00 30.79      D    C
ATOM  15091  CD2 PHE D 118      41.206 -51.711 -18.835  1.00 30.33      D    C
ATOM  15093  C   PHE D 118      43.756 -51.178 -14.937  1.00 29.55      D    C
ATOM  15094  O   PHE D 118      44.518 -50.350 -15.426  1.00 31.14      D    O
ATOM  15096  N   PRO D 119      43.999 -51.786 -13.765  1.00 28.66      D    N
ATOM  15097  CA  PRO D 119      45.267 -51.525 -13.095  1.00 29.35      D    C
ATOM  15099  CB  PRO D 119      45.169 -52.344 -11.804  1.00 29.92      D    C
ATOM  15102  CG  PRO D 119      43.726 -52.651 -11.632  1.00 31.03      D    C
ATOM  15105  CD  PRO D 119      43.140 -52.701 -12.997  1.00 29.98      D    C
ATOM  15108  C   PRO D 119      46.440 -52.007 -13.930  1.00 27.14      D    C
ATOM  15109  O   PRO D 119      46.240 -52.749 -14.883  1.00 25.56      D    O
ATOM  15110  N   PRO D 120      47.667 -51.622 -13.554  1.00 29.13      D    N
ATOM  15111  CA  PRO D 120      48.806 -52.126 -14.300  1.00 30.79      D    C
ATOM  15113  CB  PRO D 120      50.003 -51.384 -13.691  1.00 27.20      D    C
ATOM  15116  CG  PRO D 120      49.442 -50.309 -12.896  1.00 29.10      D    C
ATOM  15119  CD  PRO D 120      48.090 -50.759 -12.448  1.00 29.73      D    C
ATOM  15122  C   PRO D 120      48.976 -53.621 -14.118  1.00 33.17      D    C
ATOM  15123  O   PRO D 120      48.596 -54.180 -13.080  1.00 33.53      D    O
ATOM  15124  N   SER D 121      49.540 -54.252 -15.139  1.00 34.61      D    N
ATOM  15125  CA  SER D 121      49.883 -55.661 -15.093  1.00 36.58      D    C
ATOM  15127  CB  SER D 121      50.432 -56.085 -16.450  1.00 34.74      D    C
ATOM  15130  OG  SER D 121      50.750 -57.452 -16.452  1.00 38.70      D    O
ATOM  15132  C   SER D 121      50.931 -55.924 -14.010  1.00 38.64      D    C
ATOM  15133  O   SER D 121      51.852 -55.122 -13.821  1.00 37.91      D    O
ATOM  15135  N   ASP D 122      50.802 -57.046 -13.305  1.00 39.96      D    N
ATOM  15136  CA  ASP D 122      51.814 -57.423 -12.327  1.00 40.89      D    C
ATOM  15138  CB  ASP D 122      51.420 -58.700 -11.564  1.00 46.16      D    C
ATOM  15141  CG  ASP D 122      50.536 -58.421 -10.338  1.00 48.41      D    C
ATOM  15142  OD1 ASP D 122      50.770 -57.421  -9.621  1.00 46.39      D    O
ATOM  15143  OD2 ASP D 122      49.613 -59.225 -10.084  1.00 50.90      D    O
ATOM  15144  C   ASP D 122      53.143 -57.604 -13.057  1.00 39.97      D    C
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ATOM	15145	O	ASP	D	122	54.201	-57.233	-12.549	1.00	39.70	D	O
ATOM	15147	N	GLU	D	123	53.075	-58.150	-14.265	1.00	40.92	D	N
ATOM	15148	CA	GLU	D	123	54.254	-58.304	-15.106	1.00	41.52	D	C
ATOM	15150	CB	GLU	D	123	53.874	-58.981	-16.414	1.00	41.20	D	C
ATOM	15153	CG	GLU	D	123	55.073	-59.428	-17.223	1.00	43.54	D	C
ATOM	15156	CD	GLU	D	123	54.680	-60.002	-18.564	1.00	48.16	D	C
ATOM	15157	OE1	GLU	D	123	53.464	-60.049	-18.866	1.00	51.94	D	O
ATOM	15158	OE2	GLU	D	123	55.593	-60.400	-19.319	1.00	52.58	D	O
ATOM	15159	C	GLU	D	123	54.933	-56.973	-15.418	1.00	41.78	D	C
ATOM	15160	O	GLU	D	123	56.163	-56.902	-15.475	1.00	41.61	D	O
ATOM	15162	N	GLN	D	124	54.126	-55.931	-15.639	1.00	41.22	D	N
ATOM	15163	CA	GLN	D	124	54.637	-54.613	-16.020	1.00	39.06	D	C
ATOM	15165	CB	GLN	D	124	53.523	-53.710	-16.564	1.00	36.82	D	C
ATOM	15168	CG	GLN	D	124	54.082	-52.438	-17.204	1.00	37.60	D	C
ATOM	15171	CD	GLN	D	124	53.044	-51.384	-17.552	1.00	33.82	D	C
ATOM	15172	OE1	GLN	D	124	51.851	-51.530	-17.276	1.00	29.25	D	O
ATOM	15173	NE2	GLN	D	124	53.507	-50.304	-18.169	1.00	33.21	D	N
ATOM	15176	C	GLN	D	124	55.350	-53.912	-14.865	1.00	39.73	D	C
ATOM	15177	O	GLN	D	124	56.408	-53.311	-15.072	1.00	38.43	D	O
ATOM	15179	N	LEU	D	125	54.764	-53.965	-13.666	1.00	41.44	D	N
ATOM	15180	CA	LEU	D	125	55.404	-53.410	-12.463	1.00	42.32	D	C
ATOM	15182	CB	LEU	D	125	54.605	-53.747	-11.198	1.00	37.58	D	C
ATOM	15185	CG	LEU	D	125	53.410	-52.905	-10.742	1.00	33.02	D	C
ATOM	15187	CD1	LEU	D	125	53.620	-51.428	-11.052	1.00	31.93	D	C
ATOM	15191	CD2	LEU	D	125	52.118	-53.421	-11.324	1.00	31.83	D	C
ATOM	15195	C	LEU	D	125	56.826	-53.957	-12.317	1.00	44.07	D	C
ATOM	15196	O	LEU	D	125	57.767	-53.210	-12.043	1.00	44.84	D	O
ATOM	15198	N	LYS	D	126	56.954	-55.267	-12.508	1.00	46.83	D	N
ATOM	15199	CA	LYS	D	126	58.245	-55.968	-12.542	1.00	50.83	D	C
ATOM	15201	CB	LYS	D	126	58.040	-57.354	-13.177	1.00	54.90	D	C
ATOM	15204	CG	LYS	D	126	58.628	-58.538	-12.421	1.00	56.24	D	C
ATOM	15207	CD	LYS	D	126	57.774	-59.791	-12.673	1.00	56.17	D	C
ATOM	15210	CE	LYS	D	126	58.559	-61.079	-12.507	1.00	57.56	D	C
ATOM	15213	NZ	LYS	D	126	59.624	-61.239	-13.537	1.00	59.31	D	N
ATOM	15217	C	LYS	D	126	59.326	-55.195	-13.322	1.00	52.15	D	C
ATOM	15218	O	LYS	D	126	60.465	-55.081	-12.859	1.00	53.19	D	O
ATOM	15220	N	SER	D	127	58.959	-54.672	-14.497	1.00	50.79	D	N
ATOM	15221	CA	SER	D	127	59.883	-53.908	-15.353	1.00	48.68	D	C
ATOM	15223	CB	SER	D	127	59.476	-54.031	-16.832	1.00	50.68	D	C
ATOM	15226	OG	SER	D	127	58.198	-53.463	-17.091	1.00	49.93	D	O
ATOM	15228	C	SER	D	127	60.026	-52.422	-14.954	1.00	47.27	D	C
ATOM	15229	O	SER	D	127	60.800	-51.690	-15.574	1.00	46.30	D	O
ATOM	15231	N	GLY	D	128	59.278	-51.983	-13.939	1.00	45.20	D	N
ATOM	15232	CA	GLY	D	128	59.483	-50.670	-13.316	1.00	44.46	D	C
ATOM	15235	C	GLY	D	128	58.550	-49.533	-13.719	1.00	44.32	D	C
ATOM	15236	O	GLY	D	128	58.847	-48.372	-13.425	1.00	44.67	D	O
ATOM	15238	N	THR	D	129	57.425	-49.852	-14.366	1.00	42.57	D	N
ATOM	15239	CA	THR	D	129	56.453	-48.836	-14.823	1.00	40.41	D	C
ATOM	15241	CB	THR	D	129	56.625	-48.522	-16.331	1.00	41.75	D	C
ATOM	15243	OG1	THR	D	129	58.008	-48.301	-16.622	1.00	44.53	D	O
ATOM	15245	CG2	THR	D	129	55.819	-47.282	-16.734	1.00	41.17	D	C
ATOM	15249	C	THR	D	129	55.003	-49.281	-14.592	1.00	37.87	D	C
ATOM	15250	O	THR	D	129	54.674	-50.458	-14.738	1.00	35.71	D	O
ATOM	15252	N	ALA	D	130	54.143	-48.325	-14.242	1.00	36.71	D	N
ATOM	15253	CA	ALA	D	130	52.703	-48.565	-14.087	1.00	34.74	D	C
ATOM	15255	CB	ALA	D	130	52.246	-48.110	-12.707	1.00	33.49	D	C
ATOM	15259	C	ALA	D	130	51.903	-47.837	-15.179	1.00	34.70	D	C
ATOM	15260	O	ALA	D	130	51.999	-46.615	-15.321	1.00	34.83	D	O
ATOM	15262	N	SER	D	131	51.131	-48.593	-15.960	1.00	31.77	D	N
ATOM	15263	CA	SER	D	131	50.190	-48.020	-16.902	1.00	28.49	D	C
ATOM	15265	CB	SER	D	131	50.479	-48.516	-18.310	1.00	28.78	D	C
ATOM	15268	OG	SER	D	131	51.859	-48.361	-18.587	1.00	30.26	D	O
ATOM	15270	C	SER	D	131	48.776	-48.379	-16.470	1.00	27.13	D	C

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ATOM  15271  O   SER D 131      48.406 -49.548 -16.424  1.00 25.44      D    O
ATOM  15273  N   VAL D 132      47.998 -47.357 -16.125  1.00 26.88      D    N
ATOM  15274  CA  VAL D 132      46.616 -47.537 -15.708  1.00 26.00      D    C
ATOM  15276  CB  VAL D 132      46.255 -46.646 -14.490  1.00 20.58      D    C
ATOM  15278  CG1 VAL D 132      44.985 -47.142 -13.822  1.00 17.41      D    C
ATOM  15282  CG2 VAL D 132      47.415 -46.583 -13.502  1.00 16.64      D    C
ATOM  15286  C   VAL D 132      45.775 -47.146 -16.908  1.00 25.48      D    C
ATOM  15287  O   VAL D 132      45.922 -46.040 -17.428  1.00 30.57      D    O
ATOM  15289  N   VAL D 133      44.910 -48.051 -17.361  1.00 25.94      D    N
ATOM  15290  CA  VAL D 133      44.162 -47.846 -18.598  1.00 27.27      D    C
ATOM  15292  CB  VAL D 133      44.412 -49.016 -19.599  1.00 26.21      D    C
ATOM  15294  CG1 VAL D 133      43.535 -48.899 -20.842  1.00 22.42      D    C
ATOM  15298  CG2 VAL D 133      45.880 -49.055 -20.010  1.00 24.94      D    C
ATOM  15302  C   VAL D 133      42.666 -47.632 -18.305  1.00 28.46      D    C
ATOM  15303  O   VAL D 133      42.048 -48.378 -17.543  1.00 27.42      D    O
ATOM  15305  N   CYS D 134      42.101 -46.585 -18.899  1.00 31.94      D    N
ATOM  15306  CA  CYS D 134      40.676 -46.307 -18.789  1.00 31.66      D    C
ATOM  15308  CB  CYS D 134      40.451 -44.938 -18.130  1.00 34.11      D    C
ATOM  15311  SG  CYS D 134      38.731 -44.420 -17.972  1.00 36.06      D    S
ATOM  15313  C   CYS D 134      40.039 -46.406 -20.183  1.00 33.22      D    C
ATOM  15314  O   CYS D 134      40.525 -45.818 -21.151  1.00 33.36      D    O
ATOM  15316  N   LEU D 135      38.955 -47.169 -20.274  1.00 32.61      D    N
ATOM  15317  CA  LEU D 135      38.301 -47.450 -21.545  1.00 32.21      D    C
ATOM  15319  CB  LEU D 135      38.270 -48.962 -21.774  1.00 31.24      D    C
ATOM  15322  CG  LEU D 135      37.463 -49.519 -22.948  1.00 32.70      D    C
ATOM  15324  CD1 LEU D 135      37.919 -48.937 -24.296  1.00 27.46      D    C
ATOM  15328  CD2 LEU D 135      37.584 -51.039 -22.928  1.00 33.39      D    C
ATOM  15332  C   LEU D 135      36.880 -46.889 -21.566  1.00 31.76      D    C
ATOM  15333  O   LEU D 135      36.059 -47.242 -20.721  1.00 31.70      D    O
ATOM  15335  N   LEU D 136      36.603 -46.006 -22.530  1.00 33.85      D    N
ATOM  15336  CA  LEU D 136      35.239 -45.548 -22.807  1.00 30.59      D    C
ATOM  15338  CB  LEU D 136      35.210 -44.041 -23.084  1.00 30.02      D    C
ATOM  15341  CG  LEU D 136      35.494 -43.100 -21.902  1.00 29.87      D    C
ATOM  15343  CD1 LEU D 136      36.729 -43.532 -21.139  1.00 27.59      D    C
ATOM  15347  CD2 LEU D 136      35.647 -41.652 -22.366  1.00 28.29      D    C
ATOM  15351  C   LEU D 136      34.750 -46.324 -24.017  1.00 31.44      D    C
ATOM  15352  O   LEU D 136      35.324 -46.204 -25.096  1.00 37.86      D    O
ATOM  15354  N   ASN D 137      33.699 -47.120 -23.850  1.00 32.20      D    N
ATOM  15355  CA  ASN D 137      33.246 -48.027 -24.916  1.00 32.34      D    C
ATOM  15357  CB  ASN D 137      33.100 -49.459 -24.366  1.00 35.12      D    C
ATOM  15360  CG  ASN D 137      33.546 -50.529 -25.360  1.00 38.43      D    C
ATOM  15361  OD1 ASN D 137      34.679 -50.514 -25.842  1.00 42.18      D    O
ATOM  15362  ND2 ASN D 137      32.662 -51.477 -25.649  1.00 39.41      D    N
ATOM  15365  C   ASN D 137      31.931 -47.573 -25.570  1.00 30.34      D    C
ATOM  15366  O   ASN D 137      30.942 -47.316 -24.881  1.00 27.97      D    O
ATOM  15368  N   ASN D 138      31.943 -47.464 -26.902  1.00 29.02      D    N
ATOM  15369  CA  ASN D 138      30.728 -47.294 -27.692  1.00 28.20      D    C
ATOM  15371  CB  ASN D 138      29.896 -48.585 -27.677  1.00 30.41      D    C
ATOM  15374  CG  ASN D 138      30.694 -49.824 -28.079  1.00 36.99      D    C
ATOM  15375  OD1 ASN D 138      31.434 -49.840 -29.073  1.00 38.74      D    O
ATOM  15376  ND2 ASN D 138      30.512 -50.892 -27.311  1.00 44.52      D    N
ATOM  15379  C   ASN D 138      29.836 -46.094 -27.287  1.00 27.01      D    C
ATOM  15380  O   ASN D 138      28.670 -46.266 -26.898  1.00 28.24      D    O
ATOM  15382  N   PHE D 139      30.382 -44.886 -27.410  1.00 24.88      D    N
ATOM  15383  CA  PHE D 139      29.644 -43.653 -27.093  1.00 28.00      D    C
ATOM  15385  CB  PHE D 139      30.340 -42.878 -25.955  1.00 29.11      D    C
ATOM  15388  CG  PHE D 139      31.760 -42.450 -26.263  1.00 28.78      D    C
ATOM  15389  CD1 PHE D 139      32.022 -41.192 -26.793  1.00 28.17      D    C
ATOM  15391  CE1 PHE D 139      33.321 -40.790 -27.075  1.00 26.79      D    C
ATOM  15393  CZ  PHE D 139      34.373 -41.642 -26.819  1.00 27.16      D    C
ATOM  15395  CE2 PHE D 139      34.130 -42.891 -26.288  1.00 26.75      D    C
ATOM  15397  CD2 PHE D 139      32.830 -43.288 -26.002  1.00 27.54      D    C
ATOM  15399  C   PHE D 139      29.386 -42.747 -28.306  1.00 29.03      D    C
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ATOM  15400  O   PHE D 139      30.031 -42.876 -29.364  1.00 31.03      D    O
ATOM  15402  N   TYR D 140      28.394 -41.870 -28.160  1.00 29.92      D    N
ATOM  15403  CA  TYR D 140      28.122 -40.821 -29.147  1.00 31.12      D    C
ATOM  15405  CB  TYR D 140      27.152 -41.299 -30.242  1.00 29.92      D    C
ATOM  15408  CG  TYR D 140      27.111 -40.328 -31.391  1.00 30.80      D    C
ATOM  15409  CD1 TYR D 140      28.010 -40.438 -32.448  1.00 24.94      D    C
ATOM  15411  CE1 TYR D 140      28.007 -39.526 -33.482  1.00 31.63      D    C
ATOM  15413  CZ  TYR D 140      27.103 -38.473 -33.450  1.00 31.49      D    C
ATOM  15414  OH  TYR D 140      27.085 -37.546 -34.454  1.00 28.96      D    O
ATOM  15416  CE2 TYR D 140      26.219 -38.336 -32.400  1.00 27.23      D    C
ATOM  15418  CD2 TYR D 140      26.225 -39.255 -31.381  1.00 28.73      D    C
ATOM  15420  C   TYR D 140      27.560 -39.574 -28.455  1.00 34.37      D    C
ATOM  15421  O   TYR D 140      26.641 -39.692 -27.637  1.00 34.18      D    O
ATOM  15423  N   PRO D 141      28.074 -38.373 -28.799  1.00 34.24      D    N
ATOM  15424  CA  PRO D 141      29.070 -38.051 -29.827  1.00 33.63      D    C
ATOM  15426  CB  PRO D 141      28.758 -36.588 -30.171  1.00 32.65      D    C
ATOM  15429  CG  PRO D 141      28.106 -36.030 -28.974  1.00 32.13      D    C
ATOM  15432  CD  PRO D 141      27.588 -37.157 -28.119  1.00 33.61      D    C
ATOM  15435  C   PRO D 141      30.547 -38.224 -29.434  1.00 35.56      D    C
ATOM  15436  O   PRO D 141      30.871 -38.600 -28.318  1.00 31.71      D    O
ATOM  15437  N   ARG D 142      31.418 -37.941 -30.394  1.00 39.14      D    N
ATOM  15438  CA  ARG D 142      32.867 -38.072 -30.264  1.00 37.08      D    C
ATOM  15440  CB  ARG D 142      33.489 -37.472 -31.523  1.00 41.30      D    C
ATOM  15443  CG  ARG D 142      34.967 -37.275 -31.509  1.00 46.19      D    C
ATOM  15446  CD  ARG D 142      35.703 -38.569 -31.413  1.00 52.29      D    C
ATOM  15449  NE  ARG D 142      37.138 -38.330 -31.526  1.00 57.43      D    N
ATOM  15451  CZ  ARG D 142      37.780 -38.094 -32.670  1.00 60.40      D    C
ATOM  15452  NH1 ARG D 142      37.120 -38.073 -33.831  1.00 60.11      D    N
ATOM  15455  NH2 ARG D 142      39.097 -37.885 -32.653  1.00 59.46      D    N
ATOM  15458  C   ARG D 142      33.454 -37.406 -29.015  1.00 37.18      D    C
ATOM  15459  O   ARG D 142      34.409 -37.904 -28.426  1.00 37.44      D    O
ATOM  15461  N   GLU D 143      32.871 -36.280 -28.624  1.00 36.04      D    N
ATOM  15462  CA  GLU D 143      33.399 -35.438 -27.558  1.00 36.98      D    C
ATOM  15464  CB  GLU D 143      32.740 -34.050 -27.607  1.00 39.85      D    C
ATOM  15467  CG  GLU D 143      33.201 -33.158 -28.776  1.00 41.92      D    C
ATOM  15470  CD  GLU D 143      32.669 -33.598 -30.136  1.00 43.37      D    C
ATOM  15471  OE1 GLU D 143      31.490 -34.005 -30.210  1.00 45.37      D    O
ATOM  15472  OE2 GLU D 143      33.434 -33.532 -31.131  1.00 42.99      D    O
ATOM  15473  C   GLU D 143      33.204 -36.051 -26.160  1.00 37.43      D    C
ATOM  15474  O   GLU D 143      32.079 -36.331 -25.742  1.00 37.88      D    O
ATOM  15476  N   ALA D 144      34.313 -36.234 -25.447  1.00 34.18      D    N
ATOM  15477  CA  ALA D 144      34.304 -36.815 -24.112  1.00 37.33      D    C
ATOM  15479  CB  ALA D 144      34.262 -38.339 -24.194  1.00 37.08      D    C
ATOM  15483  C   ALA D 144      35.547 -36.362 -23.365  1.00 36.80      D    C
ATOM  15484  O   ALA D 144      36.591 -36.127 -23.978  1.00 37.64      D    O
ATOM  15486  N   LYS D 145      35.430 -36.241 -22.048  1.00 37.39      D    N
ATOM  15487  CA  LYS D 145      36.562 -35.843 -21.211  1.00 39.09      D    C
ATOM  15489  CB  LYS D 145      36.279 -34.533 -20.481  1.00 39.83      D    C
ATOM  15492  CG  LYS D 145      37.552 -33.781 -20.115  1.00 42.52      D    C
ATOM  15495  CD  LYS D 145      37.283 -32.588 -19.203  1.00 43.56      D    C
ATOM  15498  CE  LYS D 145      37.149 -32.999 -17.750  1.00 45.83      D    C
ATOM  15501  NZ  LYS D 145      36.957 -31.803 -16.880  1.00 43.85      D    N
ATOM  15505  C   LYS D 145      36.894 -36.933 -20.205  1.00 35.48      D    C
ATOM  15506  O   LYS D 145      35.994 -37.489 -19.582  1.00 31.31      D    O
ATOM  15508  N   VAL D 146      38.188 -37.237 -20.089  1.00 35.08      D    N
ATOM  15509  CA  VAL D 146      38.703 -38.226 -19.145  1.00 36.58      D    C
ATOM  15511  CB  VAL D 146      39.436 -39.383 -19.862  1.00 35.47      D    C
ATOM  15513  CG1 VAL D 146      39.919 -40.415 -18.854  1.00 34.12      D    C
ATOM  15517  CG2 VAL D 146      38.531 -40.038 -20.892  1.00 36.56      D    C
ATOM  15521  C   VAL D 146      39.679 -37.520 -18.201  1.00 36.13      D    C
ATOM  15522  O   VAL D 146      40.666 -36.929 -18.642  1.00 35.35      D    O
ATOM  15524  N   GLN D 147      39.390 -37.584 -16.905  1.00 40.14      D    N
ATOM  15525  CA  GLN D 147      40.224 -36.961 -15.872  1.00 38.74      D    C
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ATOM  15527  CB  GLN D 147      39.396 -35.920 -15.100  1.00 43.79       D    C
ATOM  15530  CG  GLN D 147      40.103 -35.254 -13.909  1.00 45.49       D    C
ATOM  15533  CD  GLN D 147      41.346 -34.466 -14.307  1.00 50.28       D    C
ATOM  15534  OE1 GLN D 147      42.412 -34.607 -13.693  1.00 50.78       D    O
ATOM  15535  NE2 GLN D 147      41.214 -33.628 -15.336  1.00 52.62       D    N
ATOM  15538  C   GLN D 147      40.767 -38.038 -14.930  1.00 36.50       D    C
ATOM  15539  O   GLN D 147      39.995 -38.772 -14.308  1.00 34.45       D    O
ATOM  15541  N   TRP D 148      42.092 -38.130 -14.827  1.00 34.03       D    N
ATOM  15542  CA  TRP D 148      42.722 -39.067 -13.898  1.00 34.45       D    C
ATOM  15544  CB  TRP D 148      44.066 -39.544 -14.446  1.00 30.66       D    C
ATOM  15547  CG  TRP D 148      43.918 -40.598 -15.490  1.00 29.58       D    C
ATOM  15548  CD1 TRP D 148      44.074 -40.449 -16.834  1.00 29.30       D    C
ATOM  15550  NE1 TRP D 148      43.845 -41.643 -17.467  1.00 29.69       D    N
ATOM  15552  CE2 TRP D 148      43.531 -42.591 -16.530  1.00 29.30       D    C
ATOM  15553  CD2 TRP D 148      43.562 -41.967 -15.274  1.00 29.25       D    C
ATOM  15554  CE3 TRP D 148      43.280 -42.729 -14.135  1.00 28.96       D    C
ATOM  15556  CZ3 TRP D 148      42.971 -44.066 -14.287  1.00 28.54       D    C
ATOM  15558  CH2 TRP D 148      42.954 -44.660 -15.547  1.00 29.27       D    C
ATOM  15560  CZ2 TRP D 148      43.232 -43.942 -16.681  1.00 29.79       D    C
ATOM  15562  C   TRP D 148      42.915 -38.451 -12.510  1.00 35.26       D    C
ATOM  15563  O   TRP D 148      43.365 -37.316 -12.386  1.00 35.44       D    O
ATOM  15565  N   LYS D 149      42.548 -39.208 -11.479  1.00 35.54       D    N
ATOM  15566  CA  LYS D 149      42.760 -38.815 -10.095  1.00 38.11       D    C
ATOM  15568  CB  LYS D 149      41.427 -38.644  -9.368  1.00 40.72       D    C
ATOM  15571  CG  LYS D 149      40.555 -37.472  -9.795  1.00 41.09       D    C
ATOM  15574  CD  LYS D 149      39.265 -37.475  -8.952  1.00 41.77       D    C
ATOM  15577  CE  LYS D 149      38.562 -36.118  -8.888  1.00 42.78       D    C
ATOM  15580  NZ  LYS D 149      37.509 -35.986  -9.914  1.00 42.94       D    N
ATOM  15584  C   LYS D 149      43.547 -39.917  -9.382  1.00 38.03       D    C
ATOM  15585  O   LYS D 149      43.187 -41.086  -9.474  1.00 36.30       D    O
ATOM  15587  N   VAL D 150      44.609 -39.538  -8.674  1.00 37.91       D    N
ATOM  15588  CA  VAL D 150      45.321 -40.452  -7.781  1.00 36.63       D    C
ATOM  15590  CB  VAL D 150      46.800 -40.590  -8.184  1.00 34.89       D    C
ATOM  15592  CG1 VAL D 150      47.487 -41.659  -7.351  1.00 33.82       D    C
ATOM  15596  CG2 VAL D 150      46.911 -40.922  -9.659  1.00 31.87       D    C
ATOM  15600  C   VAL D 150      45.195 -39.926  -6.345  1.00 37.19       D    C
ATOM  15601  O   VAL D 150      45.719 -38.856  -6.020  1.00 37.56       D    O
ATOM  15603  N   ASP D 151      44.493 -40.676  -5.496  1.00 35.96       D    N
ATOM  15604  CA  ASP D 151      44.184 -40.243  -4.124  1.00 37.33       D    C
ATOM  15606  CB  ASP D 151      45.455 -40.143  -3.245  1.00 37.08       D    C
ATOM  15609  CG  ASP D 151      45.949 -41.499  -2.724  1.00 34.84       D    C
ATOM  15610  OD1 ASP D 151      45.172 -42.482  -2.698  1.00 32.13       D    O
ATOM  15611  OD2 ASP D 151      47.129 -41.560  -2.311  1.00 32.66       D    O
ATOM  15612  C   ASP D 151      43.440 -38.903  -4.172  1.00 37.55       D    C
ATOM  15613  O   ASP D 151      43.746 -37.970  -3.428  1.00 37.91       D    O
ATOM  15615  N   ASN D 152      42.470 -38.828  -5.077  1.00 37.12       D    N
ATOM  15616  CA  ASN D 152      41.647 -37.631  -5.312  1.00 38.08       D    C
ATOM  15618  CB  ASN D 152      40.775 -37.325  -4.088  1.00 40.69       D    C
ATOM  15621  CG  ASN D 152      39.363 -36.897  -4.477  1.00 45.14       D    C
ATOM  15622  OD1 ASN D 152      38.914 -35.800  -4.129  1.00 45.59       D    O
ATOM  15623  ND2 ASN D 152      38.665 -37.757  -5.221  1.00 47.05       D    N
ATOM  15626  C   ASN D 152      42.373 -36.355  -5.795  1.00 36.43       D    C
ATOM  15627  O   ASN D 152      41.743 -35.305  -5.926  1.00 36.65       D    O
ATOM  15629  N   ALA D 153      43.673 -36.446  -6.078  1.00 33.09       D    N
ATOM  15630  CA  ALA D 153      44.406 -35.337  -6.679  1.00 33.65       D    C
ATOM  15632  CB  ALA D 153      45.860 -35.362  -6.262  1.00 31.73       D    C
ATOM  15636  C   ALA D 153      44.289 -35.448  -8.198  1.00 33.55       D    C
ATOM  15637  O   ALA D 153      44.605 -36.488  -8.777  1.00 30.56       D    O
ATOM  15639  N   LEU D 154      43.833 -34.369  -8.830  1.00 34.49       D    N
ATOM  15640  CA  LEU D 154      43.655 -34.325 -10.276  1.00 35.99       D    C
ATOM  15642  CB  LEU D 154      42.848 -33.077 -10.664  1.00 40.15       D    C
ATOM  15645  CG  LEU D 154      41.387 -33.066 -10.193  1.00 43.14       D    C
ATOM  15647  CD1 LEU D 154      40.756 -31.690 -10.337  1.00 42.70       D    C
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ATOM  15651  CD2 LEU D 154      40.578 -34.084 -10.975  1.00 45.09        D    C
ATOM  15655  C   LEU D 154      45.001 -34.357 -11.019  1.00 35.56        D    C
ATOM  15656  O   LEU D 154      45.910 -33.588 -10.710  1.00 35.73        D    O
ATOM  15658  N   GLN D 155      45.114 -35.251 -11.999  1.00 33.47        D    N
ATOM  15659  CA  GLN D 155      46.352 -35.438 -12.744  1.00 33.18        D    C
ATOM  15661  CB  GLN D 155      46.543 -36.920 -13.088  1.00 32.91        D    C
ATOM  15664  CG  GLN D 155      46.513 -37.874 -11.909  1.00 32.02        D    C
ATOM  15667  CD  GLN D 155      47.631 -37.627 -10.930  1.00 29.51        D    C
ATOM  15668  OE1 GLN D 155      47.389 -37.326  -9.760  1.00 25.58        D    O
ATOM  15669  NE2 GLN D 155      48.865 -37.743 -11.400  1.00 26.71        D    N
ATOM  15672  C   GLN D 155      46.346 -34.651 -14.046  1.00 33.11        D    C
ATOM  15673  O   GLN D 155      45.292 -34.403 -14.634  1.00 33.54        D    O
ATOM  15675  N   SER D 156      47.536 -34.260 -14.490  1.00 33.03        D    N
ATOM  15676  CA  SER D 156      47.744 -33.837 -15.870  1.00 37.14        D    C
ATOM  15678  CB  SER D 156      47.312 -32.387 -16.107  1.00 42.00        D    C
ATOM  15681  OG  SER D 156      48.295 -31.473 -15.641  1.00 44.81        D    O
ATOM  15683  C   SER D 156      49.212 -33.999 -16.221  1.00 37.76        D    C
ATOM  15684  O   SER D 156      50.075 -34.027 -15.335  1.00 29.55        D    O
ATOM  15686  N   GLY D 157      49.478 -34.112 -17.522  1.00 37.09        D    N
ATOM  15687  CA  GLY D 157      50.830 -34.292 -18.036  1.00 37.74        D    C
ATOM  15690  C   GLY D 157      51.270 -35.741 -18.145  1.00 39.38        D    C
ATOM  15691  O   GLY D 157      52.274 -36.025 -18.792  1.00 43.20        D    O
ATOM  15693  N   ASN D 158      50.521 -36.659 -17.532  1.00 38.65        D    N
ATOM  15694  CA  ASN D 158      50.937 -38.063 -17.442  1.00 36.08        D    C
ATOM  15696  CB  ASN D 158      51.246 -38.442 -15.977  1.00 35.48        D    C
ATOM  15699  CG  ASN D 158      50.128 -38.074 -15.010  1.00 33.80        D    C
ATOM  15700  OD1 ASN D 158      48.986 -37.842 -15.399  1.00 35.68        D    O
ATOM  15701  ND2 ASN D 158      50.467 -38.020 -13.734  1.00 33.93        D    N
ATOM  15704  C   ASN D 158      49.954 -39.056 -18.072  1.00 34.29        D    C
ATOM  15705  O   ASN D 158      50.002 -40.245 -17.777  1.00 33.25        D    O
ATOM  15707  N   SER D 159      49.080 -38.565 -18.949  1.00 34.43        D    N
ATOM  15708  CA  SER D 159      48.137 -39.424 -19.664  1.00 32.18        D    C
ATOM  15710  CB  SER D 159      46.729 -39.364 -19.043  1.00 30.03        D    C
ATOM  15713  OG  SER D 159      46.224 -38.042 -18.969  1.00 28.71        D    O
ATOM  15715  C   SER D 159      48.088 -39.079 -21.147  1.00 32.21        D    C
ATOM  15716  O   SER D 159      48.432 -37.963 -21.544  1.00 30.66        D    O
ATOM  15718  N   GLN D 160      47.691 -40.065 -21.954  1.00 32.47        D    N
ATOM  15719  CA  GLN D 160      47.448 -39.883 -23.386  1.00 30.75        D    C
ATOM  15721  CB  GLN D 160      48.608 -40.438 -24.202  1.00 30.58        D    C
ATOM  15724  CG  GLN D 160      49.943 -39.843 -23.843  1.00 31.86        D    C
ATOM  15727  CD  GLN D 160      51.003 -40.138 -24.881  1.00 31.77        D    C
ATOM  15728  OE1 GLN D 160      51.282 -39.310 -25.754  1.00 32.06        D    O
ATOM  15729  NE2 GLN D 160      51.597 -41.321 -24.797  1.00 30.39        D    N
ATOM  15732  C   GLN D 160      46.175 -40.599 -23.803  1.00 31.17        D    C
ATOM  15733  O   GLN D 160      45.767 -41.566 -23.163  1.00 33.67        D    O
ATOM  15735  N   GLU D 161      45.569 -40.123 -24.889  1.00 31.98        D    N
ATOM  15736  CA  GLU D 161      44.319 -40.673 -25.406  1.00 31.46        D    C
ATOM  15738  CB  GLU D 161      43.222 -39.619 -25.396  1.00 33.09        D    C
ATOM  15741  CG  GLU D 161      42.811 -39.200 -24.023  1.00 35.15        D    C
ATOM  15744  CD  GLU D 161      41.595 -38.298 -24.026  1.00 36.71        D    C
ATOM  15745  OE1 GLU D 161      41.254 -37.730 -25.097  1.00 38.31        D    O
ATOM  15746  OE2 GLU D 161      40.985 -38.155 -22.945  1.00 41.05        D    O
ATOM  15747  C   GLU D 161      44.450 -41.179 -26.827  1.00 27.44        D    C
ATOM  15748  O   GLU D 161      45.317 -40.748 -27.588  1.00 25.73        D    O
ATOM  15750  N   SER D 162      43.562 -42.102 -27.164  1.00 27.69        D    N
ATOM  15751  CA  SER D 162      43.418 -42.603 -28.512  1.00 28.23        D    C
ATOM  15753  CB  SER D 162      44.196 -43.893 -28.658  1.00 30.31        D    C
ATOM  15756  OG  SER D 162      44.415 -44.198 -30.010  1.00 30.35        D    O
ATOM  15758  C   SER D 162      41.945 -42.869 -28.707  1.00 28.46        D    C
ATOM  15759  O   SER D 162      41.287 -43.382 -27.804  1.00 27.71        D    O
ATOM  15761  N   VAL D 163      41.406 -42.489 -29.858  1.00 30.04        D    N
ATOM  15762  CA  VAL D 163      39.987 -42.682 -30.116  1.00 27.10        D    C
ATOM  15764  CB  VAL D 163      39.246 -41.346 -30.259  1.00 27.85        D    C
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ATOM  15766  CG1 VAL D 163      37.750 -41.591 -30.378  1.00 28.84       D    C
ATOM  15770  CG2 VAL D 163      39.537 -40.438 -29.062  1.00 28.04       D    C
ATOM  15774  C   VAL D 163      39.850 -43.491 -31.385  1.00 27.06       D    C
ATOM  15775  O   VAL D 163      40.619 -43.279 -32.324  1.00 25.24       D    O
ATOM  15777  N   THR D 164      38.903 -44.432 -31.405  1.00 27.15       D    N
ATOM  15778  CA  THR D 164      38.660 -45.235 -32.603  1.00 28.10       D    C
ATOM  15780  CB  THR D 164      37.803 -46.520 -32.350  1.00 29.51       D    C
ATOM  15782  OG1 THR D 164      36.661 -46.219 -31.535  1.00 34.64       D    O
ATOM  15784  CG2 THR D 164      38.629 -47.628 -31.685  1.00 27.01       D    C
ATOM  15788  C   THR D 164      37.946 -44.371 -33.615  1.00 32.43       D    C
ATOM  15789  O   THR D 164      37.360 -43.342 -33.268  1.00 36.29       D    O
ATOM  15791  N   GLU D 165      37.987 -44.781 -34.877  1.00 30.38       D    N
ATOM  15792  CA  GLU D 165      37.078 -44.202 -35.834  1.00 31.13       D    C
ATOM  15794  CB  GLU D 165      37.494 -44.494 -37.274  1.00 36.06       D    C
ATOM  15797  CG  GLU D 165      38.190 -43.307 -37.948  1.00 44.65       D    C
ATOM  15800  CD  GLU D 165      37.282 -42.063 -38.102  1.00 52.43       D    C
ATOM  15801  OE1 GLU D 165      36.029 -42.203 -38.273  1.00 49.18       D    O
ATOM  15802  OE2 GLU D 165      37.845 -40.938 -38.046  1.00 52.85       D    O
ATOM  15803  C   GLU D 165      35.677 -44.718 -35.541  1.00 28.03       D    C
ATOM  15804  O   GLU D 165      35.496 -45.702 -34.837  1.00 25.73       D    O
ATOM  15806  N   GLN D 166      34.692 -44.036 -36.099  1.00 30.47       D    N
ATOM  15807  CA  GLN D 166      33.297 -44.414 -35.934  1.00 30.73       D    C
ATOM  15809  CB  GLN D 166      32.415 -43.488 -36.776  1.00 29.32       D    C
ATOM  15812  CG  GLN D 166      30.991 -43.421 -36.326  1.00 30.43       D    C
ATOM  15815  CD  GLN D 166      30.241 -42.266 -36.920  1.00 30.89       D    C
ATOM  15816  OE1 GLN D 166      30.576 -41.766 -38.014  1.00 34.28       D    O
ATOM  15817  NE2 GLN D 166      29.202 -41.839 -36.222  1.00 26.71       D    N
ATOM  15820  C   GLN D 166      33.068 -45.883 -36.321  1.00 28.74       D    C
ATOM  15821  O   GLN D 166      33.509 -46.338 -37.374  1.00 25.41       D    O
ATOM  15823  N   ASP D 167      32.374 -46.614 -35.455  1.00 30.23       D    N
ATOM  15824  CA  ASP D 167      32.185 -48.045 -35.637  1.00 28.99       D    C
ATOM  15826  CB  ASP D 167      31.597 -48.686 -34.379  1.00 32.03       D    C
ATOM  15829  CG  ASP D 167      31.454 -50.187 -34.510  1.00 32.07       D    C
ATOM  15830  OD1 ASP D 167      32.474 -50.908 -34.441  1.00 37.59       D    O
ATOM  15831  OD2 ASP D 167      30.313 -50.644 -34.696  1.00 32.20       D    O
ATOM  15832  C   ASP D 167      31.268 -48.303 -36.803  1.00 28.01       D    C
ATOM  15833  O   ASP D 167      30.302 -47.574 -36.983  1.00 30.14       D    O
ATOM  15835  N   SER D 168      31.568 -49.354 -37.575  1.00 28.72       D    N
ATOM  15836  CA  SER D 168      30.867 -49.650 -38.828  1.00 29.80       D    C
ATOM  15838  CB  SER D 168      31.730 -50.541 -39.733  1.00 31.87       D    C
ATOM  15841  OG  SER D 168      31.876 -51.855 -39.185  1.00 29.49       D    O
ATOM  15843  C   SER D 168      29.503 -50.309 -38.628  1.00 29.96       D    C
ATOM  15844  O   SER D 168      28.778 -50.516 -39.599  1.00 30.34       D    O
ATOM  15846  N   LYS D 169      29.158 -50.648 -37.384  1.00 33.12       D    N
ATOM  15847  CA  LYS D 169      27.887 -51.301 -37.093  1.00 34.76       D    C
ATOM  15849  CB  LYS D 169      28.115 -52.623 -36.356  1.00 39.32       D    C
ATOM  15852  CG  LYS D 169      28.835 -53.652 -37.223  1.00 41.84       D    C
ATOM  15855  CD  LYS D 169      28.988 -55.021 -36.555  1.00 43.16       D    C
ATOM  15858  CE  LYS D 169      29.279 -56.106 -37.592  1.00 45.57       D    C
ATOM  15861  NZ  LYS D 169      30.065 -55.586 -38.763  1.00 46.95       D    N
ATOM  15865  C   LYS D 169      26.937 -50.408 -36.318  1.00 33.26       D    C
ATOM  15866  O   LYS D 169      25.777 -50.289 -36.703  1.00 32.76       D    O
ATOM  15868  N   ASP D 170      27.419 -49.777 -35.247  1.00 33.20       D    N
ATOM  15869  CA  ASP D 170      26.569 -48.912 -34.424  1.00 36.00       D    C
ATOM  15871  CB  ASP D 170      26.465 -49.449 -32.979  1.00 40.28       D    C
ATOM  15874  CG  ASP D 170      27.785 -49.410 -32.221  1.00 42.24       D    C
ATOM  15875  OD1 ASP D 170      28.727 -48.737 -32.678  1.00 42.34       D    O
ATOM  15876  OD2 ASP D 170      27.871 -50.058 -31.152  1.00 45.54       D    O
ATOM  15877  C   ASP D 170      26.948 -47.423 -34.443  1.00 33.34       D    C
ATOM  15878  O   ASP D 170      26.369 -46.630 -33.703  1.00 33.74       D    O
ATOM  15880  N   SER D 171      27.899 -47.046 -35.292  1.00 33.62       D    N
ATOM  15881  CA  SER D 171      28.255 -45.632 -35.487  1.00 33.82       D    C
ATOM  15883  CB  SER D 171      27.078 -44.863 -36.103  1.00 25.73       D    C
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ATOM  15886  OG  SER D 171      26.557 -45.586 -37.194  1.00 27.43      D    O
ATOM  15888  C   SER D 171      28.732 -44.928 -34.207  1.00 32.41      D    C
ATOM  15889  O   SER D 171      28.561 -43.715 -34.070  1.00 31.95      D    O
ATOM  15891  N   THR D 172      29.348 -45.685 -33.296  1.00 32.89      D    N
ATOM  15892  CA  THR D 172      29.850 -45.124 -32.034  1.00 29.07      D    C
ATOM  15894  CB  THR D 172      29.399 -45.950 -30.806  1.00 29.96      D    C
ATOM  15896  OG1 THR D 172      29.889 -47.290 -30.917  1.00 30.75      D    O
ATOM  15898  CG2 THR D 172      27.865 -45.962 -30.675  1.00 25.69      D    C
ATOM  15902  C   THR D 172      31.375 -44.995 -32.029  1.00 24.97      D    C
ATOM  15903  O   THR D 172      32.068 -45.469 -32.927  1.00 26.50      D    O
ATOM  15905  N   TYR D 173      31.879 -44.324 -31.004  1.00 28.98      D    N
ATOM  15906  CA  TYR D 173      33.300 -44.157 -30.797  1.00 25.87      D    C
ATOM  15908  CB  TYR D 173      33.625 -42.669 -30.676  1.00 28.62      D    C
ATOM  15911  CG  TYR D 173      33.320 -41.861 -31.913  1.00 27.20      D    C
ATOM  15912  CD1 TYR D 173      34.216 -41.820 -32.968  1.00 27.80      D    C
ATOM  15914  CE1 TYR D 173      33.959 -41.072 -34.101  1.00 26.92      D    C
ATOM  15916  CZ  TYR D 173      32.770 -40.360 -34.207  1.00 29.72      D    C
ATOM  15917  OH  TYR D 173      32.514 -39.636 -35.353  1.00 28.75      D    O
ATOM  15919  CE2 TYR D 173      31.856 -40.380 -33.174  1.00 29.12      D    C
ATOM  15921  CD2 TYR D 173      32.137 -41.131 -32.027  1.00 29.23      D    C
ATOM  15923  C   TYR D 173      33.731 -44.881 -29.531  1.00 27.51      D    C
ATOM  15924  O   TYR D 173      32.929 -45.109 -28.621  1.00 29.23      D    O
ATOM  15926  N   SER D 174      35.005 -45.246 -29.467  1.00 26.48      D    N
ATOM  15927  CA  SER D 174      35.584 -45.769 -28.237  1.00 24.31      D    C
ATOM  15929  CB  SER D 174      35.764 -47.287 -28.317  1.00 24.07      D    C
ATOM  15932  OG  SER D 174      34.504 -47.933 -28.300  1.00 28.45      D    O
ATOM  15934  C   SER D 174      36.906 -45.068 -27.952  1.00 19.92      D    C
ATOM  15935  O   SER D 174      37.594 -44.642 -28.865  1.00 18.96      D    O
ATOM  15937  N   LEU D 175      37.252 -44.949 -26.675  1.00 24.70      D    N
ATOM  15938  CA  LEU D 175      38.438 -44.211 -26.285  1.00 25.47      D    C
ATOM  15940  CB  LEU D 175      38.041 -42.815 -25.816  1.00 25.20      D    C
ATOM  15943  CG  LEU D 175      39.119 -41.825 -25.364  1.00 22.37      D    C
ATOM  15945  CD1 LEU D 175      38.727 -40.446 -25.867  1.00 25.49      D    C
ATOM  15949  CD2 LEU D 175      39.301 -41.833 -23.846  1.00 23.33      D    C
ATOM  15953  C   LEU D 175      39.204 -44.929 -25.195  1.00 26.86      D    C
ATOM  15954  O   LEU D 175      38.613 -45.432 -24.237  1.00 25.28      D    O
ATOM  15956  N   SER D 176      40.525 -44.974 -25.362  1.00 27.38      D    N
ATOM  15957  CA  SER D 176      41.428 -45.410 -24.316  1.00 29.19      D    C
ATOM  15959  CB  SER D 176      42.442 -46.410 -24.859  1.00 33.77      D    C
ATOM  15962  OG  SER D 176      43.403 -45.767 -25.680  1.00 37.34      D    O
ATOM  15964  C   SER D 176      42.167 -44.203 -23.754  1.00 30.52      D    C
ATOM  15965  O   SER D 176      42.667 -43.377 -24.514  1.00 30.01      D    O
ATOM  15967  N   SER D 177      42.219 -44.111 -22.424  1.00 31.83      D    N
ATOM  15968  CA  SER D 177      43.109 -43.184 -21.725  1.00 30.27      D    C
ATOM  15970  CB  SER D 177      42.320 -42.275 -20.778  1.00 30.61      D    C
ATOM  15973  OG  SER D 177      43.035 -41.079 -20.519  1.00 32.91      D    O
ATOM  15975  C   SER D 177      44.118 -44.009 -20.930  1.00 30.59      D    C
ATOM  15976  O   SER D 177      43.726 -44.911 -20.206  1.00 29.89      D    O
ATOM  15978  N   THR D 178      45.405 -43.693 -21.070  1.00 28.97      D    N
ATOM  15979  CA  THR D 178      46.458 -44.406 -20.377  1.00 28.38      D    C
ATOM  15981  CB  THR D 178      47.406 -45.101 -21.387  1.00 29.09      D    C
ATOM  15983  OG1 THR D 178      46.634 -45.953 -22.242  1.00 31.29      D    O
ATOM  15985  CG2 THR D 178      48.480 -45.940 -20.669  1.00 28.86      D    C
ATOM  15989  C   THR D 178      47.245 -43.469 -19.451  1.00 28.06      D    C
ATOM  15990  O   THR D 178      47.981 -42.607 -19.923  1.00 27.36      D    O
ATOM  15992  N   LEU D 179      47.072 -43.649 -18.136  1.00 26.29      D    N
ATOM  15993  CA  LEU D 179      47.867 -42.945 -17.113  1.00 26.08      D    C
ATOM  15995  CB  LEU D 179      47.086 -42.861 -15.791  1.00 25.21      D    C
ATOM  15998  CG  LEU D 179      47.722 -42.138 -14.599  1.00 26.26      D    C
ATOM  16000  CD1 LEU D 179      47.712 -40.632 -14.814  1.00 28.61      D    C
ATOM  16004  CD2 LEU D 179      47.002 -42.500 -13.311  1.00 25.59      D    C
ATOM  16008  C   LEU D 179      49.169 -43.702 -16.897  1.00 27.09      D    C
ATOM  16009  O   LEU D 179      49.139 -44.900 -16.613  1.00 27.94      D    O
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ATOM  16011  N   THR D 180      50.309 -43.021 -17.045  1.00 30.50       D    N
ATOM  16012  CA  THR D 180      51.626 -43.654 -16.854  1.00 30.60       D    C
ATOM  16014  CB  THR D 180      52.514 -43.543 -18.121  1.00 32.67       D    C
ATOM  16016  OG1 THR D 180      51.854 -44.176 -19.228  1.00 33.88       D    O
ATOM  16018  CG2 THR D 180      53.866 -44.228 -17.902  1.00 30.78       D    C
ATOM  16022  C   THR D 180      52.371 -43.102 -15.622  1.00 31.85       D    C
ATOM  16023  O   THR D 180      52.488 -41.880 -15.427  1.00 29.00       D    O
ATOM  16025  N   LEU D 181      52.858 -44.027 -14.794  1.00 32.12       D    N
ATOM  16026  CA  LEU D 181      53.596 -43.712 -13.569  1.00 33.43       D    C
ATOM  16028  CB  LEU D 181      52.731 -44.015 -12.339  1.00 31.62       D    C
ATOM  16031  CG  LEU D 181      51.864 -42.899 -11.756  1.00 29.87       D    C
ATOM  16033  CD1 LEU D 181      50.536 -42.775 -12.449  1.00 25.58       D    C
ATOM  16037  CD2 LEU D 181      51.648 -43.164 -10.271  1.00 32.46       D    C
ATOM  16041  C   LEU D 181      54.880 -44.534 -13.476  1.00 34.17       D    C
ATOM  16042  O   LEU D 181      55.022 -45.561 -14.135  1.00 33.85       D    O
ATOM  16044  N   SER D 182      55.818 -44.084 -12.648  1.00 38.37       D    N
ATOM  16045  CA  SER D 182      56.928 -44.941 -12.240  1.00 39.27       D    C
ATOM  16047  CB  SER D 182      58.045 -44.123 -11.593  1.00 40.02       D    C
ATOM  16050  OG  SER D 182      57.671 -43.690 -10.296  1.00 42.36       D    O
ATOM  16052  C   SER D 182      56.377 -45.953 -11.243  1.00 39.75       D    C
ATOM  16053  O   SER D 182      55.328 -45.726 -10.639  1.00 37.90       D    O
ATOM  16055  N   LYS D 183      57.078 -47.070 -11.074  1.00 43.74       D    N
ATOM  16056  CA  LYS D 183      56.732 -48.040 -10.035  1.00 44.36       D    C
ATOM  16058  CB  LYS D 183      57.684 -49.240 -10.069  1.00 44.77       D    C
ATOM  16061  CG  LYS D 183      57.254 -50.413  -9.191  1.00 44.98       D    C
ATOM  16064  CD  LYS D 183      58.378 -51.442  -9.035  1.00 45.67       D    C
ATOM  16067  CE  LYS D 183      57.968 -52.587  -8.120  1.00 45.92       D    C
ATOM  16070  NZ  LYS D 183      57.676 -52.116  -6.729  1.00 45.82       D    N
ATOM  16074  C   LYS D 183      56.796 -47.355  -8.669  1.00 46.88       D    C
ATOM  16075  O   LYS D 183      55.909 -47.539  -7.829  1.00 47.63       D    O
ATOM  16077  N   ALA D 184      57.848 -46.564  -8.462  1.00 46.70       D    N
ATOM  16078  CA  ALA D 184      58.023 -45.801  -7.226  1.00 45.20       D    C
ATOM  16080  CB  ALA D 184      59.250 -44.890  -7.332  1.00 46.92       D    C
ATOM  16084  C   ALA D 184      56.786 -44.973  -6.884  1.00 44.41       D    C
ATOM  16085  O   ALA D 184      56.285 -45.034  -5.762  1.00 41.87       D    O
ATOM  16087  N   ASP D 185      56.289 -44.212  -7.855  1.00 43.99       D    N
ATOM  16088  CA  ASP D 185      55.181 -43.293  -7.606  1.00 42.27       D    C
ATOM  16090  CB  ASP D 185      55.165 -42.173  -8.653  1.00 44.69       D    C
ATOM  16093  CG  ASP D 185      54.563 -40.883  -8.116  1.00 49.02       D    C
ATOM  16094  OD1 ASP D 185      53.582 -40.385  -8.714  1.00 50.64       D    O
ATOM  16095  OD2 ASP D 185      55.065 -40.369  -7.086  1.00 50.57       D    O
ATOM  16096  C   ASP D 185      53.824 -44.011  -7.547  1.00 40.11       D    C
ATOM  16097  O   ASP D 185      52.938 -43.587  -6.807  1.00 38.69       D    O
ATOM  16099  N   TYR D 186      53.670 -45.094  -8.313  1.00 37.25       D    N
ATOM  16100  CA  TYR D 186      52.436 -45.893  -8.300  1.00 36.60       D    C
ATOM  16102  CB  TYR D 186      52.461 -46.973  -9.397  1.00 34.06       D    C
ATOM  16105  CG  TYR D 186      51.267 -47.919  -9.363  1.00 33.86       D    C
ATOM  16106  CD1 TYR D 186      49.988 -47.473  -9.678  1.00 33.27       D    C
ATOM  16108  CE1 TYR D 186      48.887 -48.333  -9.645  1.00 32.91       D    C
ATOM  16110  CZ  TYR D 186      49.067 -49.656  -9.289  1.00 34.12       D    C
ATOM  16111  OH  TYR D 186      47.989 -50.506  -9.240  1.00 34.03       D    O
ATOM  16113  CE2 TYR D 186      50.329 -50.128  -8.976  1.00 32.80       D    C
ATOM  16115  CD2 TYR D 186      51.421 -49.261  -9.017  1.00 33.55       D    C
ATOM  16117  C   TYR D 186      52.168 -46.536  -6.930  1.00 35.62       D    C
ATOM  16118  O   TYR D 186      51.053 -46.460  -6.417  1.00 32.60       D    O
ATOM  16120  N   GLU D 187      53.197 -47.145  -6.339  1.00 37.51       D    N
ATOM  16121  CA  GLU D 187      53.074 -47.832  -5.033  1.00 40.24       D    C
ATOM  16123  CB  GLU D 187      54.318 -48.695  -4.753  1.00 44.53       D    C
ATOM  16126  CG  GLU D 187      54.672 -49.730  -5.834  1.00 48.07       D    C
ATOM  16129  CD  GLU D 187      53.838 -50.999  -5.764  1.00 50.87       D    C
ATOM  16130  OE1 GLU D 187      52.691 -50.949  -5.262  1.00 51.16       D    O
ATOM  16131  OE2 GLU D 187      54.332 -52.051  -6.229  1.00 52.56       D    O
ATOM  16132  C   GLU D 187      52.868 -46.861  -3.852  1.00 39.07       D    C
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ATOM	16133	O	GLU	D	187	52.556	-47.277	-2.738	1.00	37.05	D	O
ATOM	16135	N	LYS	D	188	53.055	-45.574	-4.120	1.00	40.18	D	N
ATOM	16136	CA	LYS	D	188	52.930	-44.494	-3.142	1.00	39.27	D	C
ATOM	16138	CB	LYS	D	188	53.542	-43.233	-3.775	1.00	41.65	D	C
ATOM	16141	CG	LYS	D	188	54.252	-42.270	-2.865	1.00	43.39	D	C
ATOM	16144	CD	LYS	D	188	54.604	-40.995	-3.642	1.00	43.40	D	C
ATOM	16147	CE	LYS	D	188	55.868	-40.335	-3.109	1.00	44.77	D	C
ATOM	16150	NZ	LYS	D	188	57.085	-41.089	-3.532	1.00	46.07	D	N
ATOM	16154	C	LYS	D	188	51.463	-44.213	-2.746	1.00	38.41	D	C
ATOM	16155	O	LYS	D	188	51.188	-43.743	-1.630	1.00	34.22	D	O
ATOM	16157	N	HIS	D	189	50.531	-44.494	-3.667	1.00	37.82	D	N
ATOM	16158	CA	HIS	D	189	49.127	-44.058	-3.547	1.00	36.28	D	C
ATOM	16160	CB	HIS	D	189	48.822	-43.007	-4.629	1.00	35.79	D	C
ATOM	16163	CG	HIS	D	189	49.745	-41.821	-4.602	1.00	36.10	D	C
ATOM	16164	ND1	HIS	D	189	49.762	-40.909	-3.564	1.00	36.34	D	N
ATOM	16166	CE1	HIS	D	189	50.674	-39.982	-3.809	1.00	36.94	D	C
ATOM	16168	NE2	HIS	D	189	51.243	-40.255	-4.972	1.00	35.63	D	N
ATOM	16170	CD2	HIS	D	189	50.679	-41.397	-5.489	1.00	33.77	D	C
ATOM	16172	C	HIS	D	189	48.132	-45.234	-3.621	1.00	34.10	D	C
ATOM	16173	O	HIS	D	189	48.481	-46.325	-4.069	1.00	31.99	D	O
ATOM	16175	N	LYS	D	190	46.894	-45.004	-3.181	1.00	34.90	D	N
ATOM	16176	CA	LYS	D	190	45.894	-46.077	-3.047	1.00	36.79	D	C
ATOM	16178	CB	LYS	D	190	45.215	-45.991	-1.671	1.00	38.91	D	C
ATOM	16181	CG	LYS	D	190	44.106	-47.030	-1.425	1.00	38.77	D	C
ATOM	16184	CD	LYS	D	190	43.619	-46.998	0.031	1.00	40.74	D	C
ATOM	16187	CE	LYS	D	190	42.582	-48.087	0.333	1.00	41.42	D	C
ATOM	16190	NZ	LYS	D	190	42.602	-48.512	1.771	1.00	39.05	D	N
ATOM	16194	C	LYS	D	190	44.823	-46.056	-4.137	1.00	38.54	D	C
ATOM	16195	O	LYS	D	190	44.696	-47.007	-4.913	1.00	39.33	D	O
ATOM	16197	N	VAL	D	191	44.053	-44.968	-4.170	1.00	37.39	D	N
ATOM	16198	CA	VAL	D	191	42.872	-44.854	-5.023	1.00	34.04	D	C
ATOM	16200	CB	VAL	D	191	41.814	-43.901	-4.407	1.00	33.29	D	C
ATOM	16202	CG1	VAL	D	191	40.522	-43.924	-5.228	1.00	30.42	D	C
ATOM	16206	CG2	VAL	D	191	41.551	-44.249	-2.922	1.00	30.00	D	C
ATOM	16210	C	VAL	D	191	43.258	-44.315	-6.395	1.00	34.11	D	C
ATOM	16211	O	VAL	D	191	43.824	-43.223	-6.502	1.00	33.76	D	O
ATOM	16213	N	TYR	D	192	42.951	-45.096	-7.431	1.00	32.52	D	N
ATOM	16214	CA	TYR	D	192	43.135	-44.689	-8.820	1.00	30.69	D	C
ATOM	16216	CB	TYR	D	192	44.060	-45.676	-9.536	1.00	28.33	D	C
ATOM	16219	CG	TYR	D	192	45.498	-45.483	-9.122	1.00	27.51	D	C
ATOM	16220	CD1	TYR	D	192	46.376	-44.740	-9.904	1.00	27.16	D	C
ATOM	16222	CE1	TYR	D	192	47.686	-44.544	-9.517	1.00	27.83	D	C
ATOM	16224	CZ	TYR	D	192	48.130	-45.078	-8.318	1.00	26.98	D	C
ATOM	16225	OH	TYR	D	192	49.424	-44.885	-7.919	1.00	26.79	D	O
ATOM	16227	CE2	TYR	D	192	47.279	-45.805	-7.522	1.00	28.45	D	C
ATOM	16229	CD2	TYR	D	192	45.964	-45.998	-7.927	1.00	29.20	D	C
ATOM	16231	C	TYR	D	192	41.776	-44.615	-9.490	1.00	27.53	D	C
ATOM	16232	O	TYR	D	192	41.050	-45.599	-9.518	1.00	24.27	D	O
ATOM	16234	N	ALA	D	193	41.432	-43.438	-10.013	1.00	30.95	D	N
ATOM	16235	CA	ALA	D	193	40.110	-43.192	-10.587	1.00	32.32	D	C
ATOM	16237	CB	ALA	D	193	39.261	-42.390	-9.598	1.00	29.12	D	C
ATOM	16241	C	ALA	D	193	40.204	-42.450	-11.915	1.00	31.75	D	C
ATOM	16242	O	ALA	D	193	40.863	-41.418	-12.001	1.00	29.95	D	O
ATOM	16244	N	CYS	D	194	39.559	-42.972	-12.955	1.00	38.65	D	N
ATOM	16245	CA	CYS	D	194	39.306	-42.167	-14.150	1.00	38.12	D	C
ATOM	16247	CB	CYS	D	194	39.603	-42.925	-15.456	1.00	41.97	D	C
ATOM	16250	SG	CYS	D	194	38.380	-44.133	-15.993	1.00	45.44	D	S
ATOM	16252	C	CYS	D	194	37.864	-41.667	-14.069	1.00	38.55	D	C
ATOM	16253	O	CYS	D	194	36.938	-42.445	-13.825	1.00	35.85	D	O
ATOM	16255	N	GLU	D	195	37.699	-40.354	-14.225	1.00	41.02	D	N
ATOM	16256	CA	GLU	D	195	36.393	-39.700	-14.172	1.00	40.19	D	C
ATOM	16258	CB	GLU	D	195	36.441	-38.461	-13.267	1.00	41.74	D	C
ATOM	16261	CG	GLU	D	195	35.075	-37.797	-13.038	1.00	43.78	D	C

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ATOM  16264  CD  GLU D 195      35.168 -36.370 -12.504  1.00 44.86      D    C
ATOM  16265  OE1 GLU D 195      35.699 -35.487 -13.220  1.00 45.69      D    O
ATOM  16266  OE2 GLU D 195      34.677 -36.130 -11.379  1.00 45.42      D    O
ATOM  16267  C   GLU D 195      36.008 -39.296 -15.589  1.00 36.20      D    C
ATOM  16268  O   GLU D 195      36.749 -38.578 -16.256  1.00 33.18      D    O
ATOM  16270  N   VAL D 196      34.840 -39.746 -16.036  1.00 36.84      D    N
ATOM  16271  CA  VAL D 196      34.418 -39.564 -17.421  1.00 37.63      D    C
ATOM  16273  CB  VAL D 196      34.080 -40.921 -18.076  1.00 36.55      D    C
ATOM  16275  CG1 VAL D 196      33.663 -40.725 -19.529  1.00 36.34      D    C
ATOM  16279  CG2 VAL D 196      35.279 -41.875 -17.980  1.00 35.41      D    C
ATOM  16283  C   VAL D 196      33.220 -38.612 -17.530  1.00 36.83      D    C
ATOM  16284  O   VAL D 196      32.188 -38.821 -16.883  1.00 33.70      D    O
ATOM  16286  N   THR D 197      33.378 -37.565 -18.344  1.00 38.36      D    N
ATOM  16287  CA  THR D 197      32.293 -36.626 -18.666  1.00 37.73      D    C
ATOM  16289  CB  THR D 197      32.710 -35.166 -18.387  1.00 38.84      D    C
ATOM  16291  OG1 THR D 197      33.022 -35.015 -16.999  1.00 38.26      D    O
ATOM  16293  CG2 THR D 197      31.590 -34.193 -18.761  1.00 39.70      D    C
ATOM  16297  C   THR D 197      31.900 -36.750 -20.139  1.00 37.89      D    C
ATOM  16298  O   THR D 197      32.755 -36.762 -21.022  1.00 33.38      D    O
ATOM  16300  N   HIS D 198      30.598 -36.834 -20.394  1.00 39.44      D    N
ATOM  16301  CA  HIS D 198      30.074 -36.974 -21.748  1.00 38.43      D    C
ATOM  16303  CB  HIS D 198      30.194 -38.443 -22.199  1.00 37.37      D    C
ATOM  16306  CG  HIS D 198      29.631 -38.721 -23.564  1.00 35.05      D    C
ATOM  16307  ND1 HIS D 198      30.320 -38.455 -24.729  1.00 32.61      D    N
ATOM  16309  CE1 HIS D 198      29.580 -38.807 -25.763  1.00 31.14      D    C
ATOM  16311  NE2 HIS D 198      28.439 -39.297 -25.314  1.00 33.29      D    N
ATOM  16313  CD2 HIS D 198      28.452 -39.264 -23.941  1.00 33.34      D    C
ATOM  16315  C   HIS D 198      28.623 -36.474 -21.793  1.00 41.74      D    C
ATOM  16316  O   HIS D 198      27.922 -36.476 -20.769  1.00 38.95      D    O
ATOM  16318  N   GLN D 199      28.191 -36.030 -22.974  1.00 43.67      D    N
ATOM  16319  CA  GLN D 199      26.853 -35.463 -23.160  1.00 43.93      D    C
ATOM  16321  CB  GLN D 199      26.648 -35.061 -24.627  1.00 46.28      D    C
ATOM  16324  CG  GLN D 199      25.225 -34.605 -24.954  1.00 48.17      D    C
ATOM  16327  CD  GLN D 199      25.081 -34.033 -26.347  1.00 50.85      D    C
ATOM  16328  OE1 GLN D 199      26.046 -33.967 -27.115  1.00 54.41      D    O
ATOM  16329  NE2 GLN D 199      23.860 -33.620 -26.687  1.00 54.51      D    N
ATOM  16332  C   GLN D 199      25.738 -36.413 -22.714  1.00 43.84      D    C
ATOM  16333  O   GLN D 199      24.764 -35.983 -22.106  1.00 48.58      D    O
ATOM  16335  N   GLY D 200      25.888 -37.699 -23.021  1.00 42.80      D    N
ATOM  16336  CA  GLY D 200      24.913 -38.732 -22.645  1.00 41.96      D    C
ATOM  16339  C   GLY D 200      24.961 -39.217 -21.205  1.00 40.62      D    C
ATOM  16340  O   GLY D 200      24.310 -40.206 -20.865  1.00 38.70      D    O
ATOM  16342  N   LEU D 201      25.741 -38.532 -20.368  1.00 42.21      D    N
ATOM  16343  CA  LEU D 201      25.808 -38.803 -18.937  1.00 41.75      D    C
ATOM  16345  CB  LEU D 201      27.255 -39.068 -18.508  1.00 35.33      D    C
ATOM  16348  CG  LEU D 201      27.876 -40.399 -18.933  1.00 30.90      D    C
ATOM  16350  CD1 LEU D 201      29.348 -40.445 -18.555  1.00 24.45      D    C
ATOM  16354  CD2 LEU D 201      27.123 -41.586 -18.339  1.00 31.71      D    C
ATOM  16358  C   LEU D 201      25.263 -37.590 -18.182  1.00 46.14      D    C
ATOM  16359  O   LEU D 201      25.722 -36.464 -18.403  1.00 46.98      D    O
ATOM  16361  N   SER D 202      24.288 -37.827 -17.297  1.00 48.27      D    N
ATOM  16362  CA  SER D 202      23.693 -36.763 -16.476  1.00 49.04      D    C
ATOM  16364  CB  SER D 202      22.461 -37.278 -15.713  1.00 51.12      D    C
ATOM  16367  OG  SER D 202      22.714 -38.523 -15.078  1.00 51.09      D    O
ATOM  16369  C   SER D 202      24.735 -36.175 -15.513  1.00 50.73      D    C
ATOM  16370  O   SER D 202      24.909 -34.957 -15.440  1.00 51.01      D    O
ATOM  16372  N   SER D 203      25.428 -37.046 -14.787  1.00 49.62      D    N
ATOM  16373  CA  SER D 203      26.593 -36.641 -14.004  1.00 49.43      D    C
ATOM  16375  CB  SER D 203      26.290 -36.699 -12.502  1.00 50.66      D    C
ATOM  16378  OG  SER D 203      25.822 -37.982 -12.112  1.00 51.17      D    O
ATOM  16380  C   SER D 203      27.784 -37.540 -14.359  1.00 49.42      D    C
ATOM  16381  O   SER D 203      27.587 -38.680 -14.791  1.00 51.11      D    O
ATOM  16383  N   PRO D 204      29.023 -37.028 -14.194  1.00 47.80      D    N
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ATOM  16384  CA  PRO D 204      30.223 -37.823 -14.468  1.00 46.13        D    C
ATOM  16386  CB  PRO D 204      31.363 -36.904 -14.017  1.00 45.04        D    C
ATOM  16389  CG  PRO D 204      30.817 -35.547 -14.147  1.00 45.68        D    C
ATOM  16392  CD  PRO D 204      29.373 -35.659 -13.775  1.00 46.28        D    C
ATOM  16395  C   PRO D 204      30.292 -39.151 -13.713  1.00 46.65        D    C
ATOM  16396  O   PRO D 204      29.969 -39.208 -12.523  1.00 47.98        D    O
ATOM  16397  N   VAL D 205      30.712 -40.201 -14.418  1.00 45.61        D    N
ATOM  16398  CA  VAL D 205      30.868 -41.535 -13.847  1.00 42.96        D    C
ATOM  16400  CB  VAL D 205      30.379 -42.635 -14.826  1.00 45.57        D    C
ATOM  16402  CG1 VAL D 205      30.367 -44.003 -14.145  1.00 47.04        D    C
ATOM  16406  CG2 VAL D 205      28.994 -42.300 -15.370  1.00 47.22        D    C
ATOM  16410  C   VAL D 205      32.345 -41.767 -13.543  1.00 42.43        D    C
ATOM  16411  O   VAL D 205      33.198 -41.585 -14.414  1.00 40.17        D    O
ATOM  16413  N   THR D 206      32.639 -42.146 -12.298  1.00 41.03        D    N
ATOM  16414  CA  THR D 206      33.983 -42.532 -11.895  1.00 38.54        D    C
ATOM  16416  CB  THR D 206      34.381 -41.909 -10.533  1.00 39.58        D    C
ATOM  16418  OG1 THR D 206      34.270 -40.483 -10.607  1.00 41.40        D    O
ATOM  16420  CG2 THR D 206      35.811 -42.271 -10.161  1.00 38.33        D    C
ATOM  16424  C   THR D 206      34.041 -44.051 -11.794  1.00 35.16        D    C
ATOM  16425  O   THR D 206      33.097 -44.693 -11.324  1.00 31.19        D    O
ATOM  16427  N   LYS D 207      35.141 -44.612 -12.282  1.00 33.94        D    N
ATOM  16428  CA  LYS D 207      35.494 -45.999 -12.045  1.00 34.16        D    C
ATOM  16430  CB  LYS D 207      35.602 -46.792 -13.351  1.00 37.15        D    C
ATOM  16433  CG  LYS D 207      34.285 -46.987 -14.096  1.00 37.18        D    C
ATOM  16436  CD  LYS D 207      33.360 -47.969 -13.373  1.00 38.88        D    C
ATOM  16439  CE  LYS D 207      32.006 -48.076 -14.070  1.00 39.50        D    C
ATOM  16442  NZ  LYS D 207      30.967 -48.701 -13.215  1.00 39.35        D    N
ATOM  16446  C   LYS D 207      36.833 -45.945 -11.342  1.00 32.99        D    C
ATOM  16447  O   LYS D 207      37.758 -45.289 -11.819  1.00 28.90        D    O
ATOM  16449  N   SER D 208      36.927 -46.596 -10.188  1.00 32.63        D    N
ATOM  16450  CA  SER D 208      38.166 -46.589  -9.423  1.00 34.88        D    C
ATOM  16452  CB  SER D 208      38.057 -45.619  -8.238  1.00 35.83        D    C
ATOM  16455  OG  SER D 208      36.774 -45.672  -7.627  1.00 37.02        D    O
ATOM  16457  C   SER D 208      38.556 -47.982  -8.946  1.00 35.88        D    C
ATOM  16458  O   SER D 208      37.736 -48.899  -8.930  1.00 37.55        D    O
ATOM  16460  N   PHE D 209      39.832 -48.134  -8.597  1.00 35.66        D    N
ATOM  16461  CA  PHE D 209      40.308 -49.315  -7.895  1.00 34.47        D    C
ATOM  16463  CB  PHE D 209      40.938 -50.320  -8.859  1.00 30.65        D    C
ATOM  16466  CG  PHE D 209      42.191 -49.831  -9.519  1.00 29.51        D    C
ATOM  16467  CD1 PHE D 209      43.409 -49.875  -8.857  1.00 29.10        D    C
ATOM  16469  CE1 PHE D 209      44.572 -49.430  -9.470  1.00 30.20        D    C
ATOM  16471  CZ  PHE D 209      44.525 -48.953 -10.761  1.00 29.49        D    C
ATOM  16473  CE2 PHE D 209      43.319 -48.917 -11.435  1.00 29.96        D    C
ATOM  16475  CD2 PHE D 209      42.160 -49.356 -10.818  1.00 29.38        D    C
ATOM  16477  C   PHE D 209      41.306 -48.916  -6.810  1.00 37.09        D    C
ATOM  16478  O   PHE D 209      42.036 -47.934  -6.962  1.00 39.98        D    O
ATOM  16480  N   ASN D 210      41.318 -49.681  -5.720  1.00 37.21        D    N
ATOM  16481  CA  ASN D 210      42.311 -49.521  -4.651  1.00 34.25        D    C
ATOM  16483  CB  ASN D 210      41.704 -49.888  -3.304  1.00 33.38        D    C
ATOM  16486  CG  ASN D 210      40.571 -48.978  -2.904  1.00 33.17        D    C
ATOM  16487  OD1 ASN D 210      40.398 -47.896  -3.457  1.00 33.54        D    O
ATOM  16488  ND2 ASN D 210      39.793 -49.411  -1.920  1.00 34.26        D    N
ATOM  16491  C   ASN D 210      43.508 -50.420  -4.934  1.00 30.44        D    C
ATOM  16492  O   ASN D 210      43.351 -51.630  -5.103  1.00 28.02        D    O
ATOM  16494  N   ARG D 211      44.699 -49.835  -4.990  1.00 30.03        D    N
ATOM  16495  CA  ARG D 211      45.892 -50.582  -5.377  1.00 35.18        D    C
ATOM  16497  CB  ARG D 211      47.103 -49.657  -5.393  1.00 33.25        D    C
ATOM  16500  CG  ARG D 211      48.376 -50.345  -5.845  1.00 31.85        D    C
ATOM  16503  CD  ARG D 211      49.564 -49.417  -5.759  1.00 31.50        D    C
ATOM  16506  NE  ARG D 211      49.639 -48.772  -4.458  1.00 30.34        D    N
ATOM  16508  CZ  ARG D 211      49.947 -49.402  -3.325  1.00 30.43        D    C
ATOM  16509  NH1 ARG D 211      50.247 -50.696  -3.320  1.00 29.16        D    N
ATOM  16512  NH2 ARG D 211      49.972 -48.722  -2.189  1.00 28.99        D    N
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ATOM  16515  C   ARG D 211      46.176 -51.777  -4.456  1.00 41.18      D    C
ATOM  16516  O   ARG D 211      46.447 -51.600  -3.264  1.00 43.62      D    O
ATOM  16518  N   GLY D 212      46.124 -52.985  -5.019  1.00 45.70      D    N
ATOM  16519  CA  GLY D 212      46.390 -54.215  -4.263  1.00 45.88      D    C
ATOM  16522  C   GLY D 212      45.244 -54.612  -3.347  1.00 48.12      D    C
ATOM  16523  O   GLY D 212      45.450 -54.831  -2.150  1.00 48.60      D    O
ATOM  16525  N   GLU D 213      44.038 -54.699  -3.915  1.00 49.33      D    N
ATOM  16526  CA  GLU D 213      42.822 -55.053  -3.169  1.00 49.58      D    C
ATOM  16528  CB  GLU D 213      42.228 -53.815  -2.483  1.00 51.00      D    C
ATOM  16531  CG  GLU D 213      43.007 -53.338  -1.243  1.00 52.20      D    C
ATOM  16534  CD  GLU D 213      42.317 -52.210  -0.485  1.00 50.89      D    C
ATOM  16535  OE1 GLU D 213      41.126 -51.939  -0.755  1.00 52.48      D    O
ATOM  16536  OE2 GLU D 213      42.974 -51.588   0.379  1.00 46.68      D    O
ATOM  16537  C   GLU D 213      41.757 -55.688  -4.069  1.00 48.61      D    C
ATOM  16538  O   GLU D 213      42.032 -56.091  -5.201  1.00 45.50      D    O
ATOM  16540  N   GLU E   1      43.361 -66.395 -59.205  1.00 45.81      E    N
ATOM  16541  CA  GLU E   1      43.110 -65.205 -58.342  1.00 42.61      E    C
ATOM  16543  CB  GLU E   1      43.050 -65.629 -56.876  1.00 47.52      E    C
ATOM  16546  CG  GLU E   1      42.731 -64.499 -55.890  1.00 50.47      E    C
ATOM  16549  CD  GLU E   1      43.429 -64.670 -54.529  1.00 54.38      E    C
ATOM  16550  OE1 GLU E   1      43.597 -65.826 -54.060  1.00 59.16      E    O
ATOM  16551  OE2 GLU E   1      43.814 -63.638 -53.928  1.00 58.37      E    O
ATOM  16552  C   GLU E   1      44.240 -64.207 -58.525  1.00 36.60      E    C
ATOM  16553  O   GLU E   1      45.401 -64.573 -58.404  1.00 36.70      E    O
ATOM  16557  N   VAL E   2      43.903 -62.953 -58.817  1.00 34.34      E    N
ATOM  16558  CA  VAL E   2      44.896 -61.878 -58.869  1.00 31.82      E    C
ATOM  16560  CB  VAL E   2      44.314 -60.623 -59.526  1.00 28.68      E    C
ATOM  16562  CG1 VAL E   2      45.290 -59.438 -59.404  1.00 24.69      E    C
ATOM  16566  CG2 VAL E   2      43.993 -60.927 -60.973  1.00 26.92      E    C
ATOM  16570  C   VAL E   2      45.441 -61.538 -57.471  1.00 31.24      E    C
ATOM  16571  O   VAL E   2      44.677 -61.246 -56.539  1.00 26.34      E    O
ATOM  16573  N   GLN E   3      46.763 -61.607 -57.328  1.00 29.40      E    N
ATOM  16574  CA  GLN E   3      47.428 -61.205 -56.110  1.00 32.39      E    C
ATOM  16576  CB  GLN E   3      48.029 -62.417 -55.402  1.00 37.61      E    C
ATOM  16579  CG  GLN E   3      47.121 -63.080 -54.390  1.00 40.10      E    C
ATOM  16582  CD  GLN E   3      47.828 -64.214 -53.667  1.00 44.10      E    C
ATOM  16583  OE1 GLN E   3      47.745 -65.376 -54.080  1.00 45.91      E    O
ATOM  16584  NE2 GLN E   3      48.565 -63.875 -52.602  1.00 48.83      E    N
ATOM  16587  C   GLN E   3      48.533 -60.205 -56.391  1.00 30.41      E    C
ATOM  16588  O   GLN E   3      49.308 -60.369 -57.342  1.00 26.65      E    O
ATOM  16590  N   LEU E   4      48.576 -59.171 -55.551  1.00 30.61      E    N
ATOM  16591  CA  LEU E   4      49.668 -58.196 -55.491  1.00 28.61      E    C
ATOM  16593  CB  LEU E   4      49.167 -56.791 -55.848  1.00 28.10      E    C
ATOM  16596  CG  LEU E   4      48.654 -56.615 -57.281  1.00 29.88      E    C
ATOM  16598  CD1 LEU E   4      48.294 -55.192 -57.529  1.00 28.48      E    C
ATOM  16602  CD2 LEU E   4      49.682 -57.115 -58.307  1.00 27.51      E    C
ATOM  16606  C   LEU E   4      50.214 -58.199 -54.070  1.00 26.28      E    C
ATOM  16607  O   LEU E   4      49.516 -57.775 -53.155  1.00 26.99      E    O
ATOM  16609  N   VAL E   5      51.442 -58.696 -53.884  1.00 24.82      E    N
ATOM  16610  CA  VAL E   5      52.037 -58.824 -52.549  1.00 25.39      E    C
ATOM  16612  CB  VAL E   5      52.422 -60.302 -52.212  1.00 28.03      E    C
ATOM  16614  CG1 VAL E   5      52.860 -60.443 -50.734  1.00 23.12      E    C
ATOM  16618  CG2 VAL E   5      51.253 -61.242 -52.530  1.00 24.65      E    C
ATOM  16622  C   VAL E   5      53.248 -57.901 -52.415  1.00 26.85      E    C
ATOM  16623  O   VAL E   5      54.261 -58.078 -53.085  1.00 29.63      E    O
ATOM  16625  N   GLN E   6      53.120 -56.899 -51.555  1.00 28.37      E    N
ATOM  16626  CA  GLN E   6      54.185 -55.925 -51.348  1.00 26.85      E    C
ATOM  16628  CB  GLN E   6      53.602 -54.535 -51.083  1.00 27.34      E    C
ATOM  16631  CG  GLN E   6      53.048 -53.905 -52.318  1.00 23.89      E    C
ATOM  16634  CD  GLN E   6      52.471 -52.539 -52.082  1.00 20.30      E    C
ATOM  16635  OE1 GLN E   6      51.270 -52.373 -52.092  1.00 23.44      E    O
ATOM  16636  NE2 GLN E   6      53.320 -51.558 -51.863  1.00 21.80      E    N
ATOM  16639  C   GLN E   6      55.129 -56.302 -50.227  1.00 30.71      E    C
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ATOM  16640  O   GLN E   6      54.768 -57.050 -49.299  1.00 24.90           E      O
ATOM  16642  N   SER E   7      56.345 -55.762 -50.327  1.00 29.21           E      N
ATOM  16643  CA  SER E   7      57.391 -56.046 -49.371  1.00 28.15           E      C
ATOM  16645  CB  SER E   7      58.763 -55.600 -49.892  1.00 26.60           E      C
ATOM  16648  OG  SER E   7      58.776 -54.229 -50.234  1.00 27.79           E      O
ATOM  16650  C   SER E   7      57.064 -55.383 -48.050  1.00 27.88           E      C
ATOM  16651  O   SER E   7      56.200 -54.518 -47.972  1.00 29.50           E      O
ATOM  16653  N   GLY E   8      57.759 -55.818 -47.007  1.00 30.06           E      N
ATOM  16654  CA  GLY E   8      57.426 -55.456 -45.642  1.00 26.95           E      C
ATOM  16657  C   GLY E   8      57.803 -54.039 -45.282  1.00 28.72           E      C
ATOM  16658  O   GLY E   8      58.440 -53.334 -46.074  1.00 30.52           E      O
ATOM  16660  N   PRO E   9      57.397 -53.602 -44.079  1.00 29.77           E      N
ATOM  16661  CA  PRO E   9      57.683 -52.241 -43.647  1.00 31.34           E      C
ATOM  16663  CB  PRO E   9      56.949 -52.118 -42.306  1.00 30.32           E      C
ATOM  16666  CG  PRO E   9      56.641 -53.492 -41.874  1.00 27.28           E      C
ATOM  16669  CD  PRO E   9      56.623 -54.362 -43.083  1.00 30.08           E      C
ATOM  16672  C   PRO E   9      59.176 -52.007 -43.483  1.00 32.24           E      C
ATOM  16673  O   PRO E   9      59.917 -52.941 -43.202  1.00 34.90           E      O
ATOM  16674  N   GLU E  10      59.593 -50.761 -43.683  1.00 33.21           E      N
ATOM  16675  CA  GLU E  10      60.999 -50.379 -43.694  1.00 32.14           E      C
ATOM  16677  CB  GLU E  10      61.408 -49.916 -45.101  1.00 33.21           E      C
ATOM  16680  CG  GLU E  10      61.240 -50.975 -46.214  1.00 35.14           E      C
ATOM  16683  CD  GLU E  10      62.501 -51.777 -46.501  1.00 34.56           E      C
ATOM  16684  OE1 GLU E  10      63.442 -51.751 -45.690  1.00 32.42           E      O
ATOM  16685  OE2 GLU E  10      62.555 -52.434 -47.561  1.00 38.18           E      O
ATOM  16686  C   GLU E  10      61.214 -49.242 -42.716  1.00 31.38           E      C
ATOM  16687  O   GLU E  10      60.318 -48.446 -42.475  1.00 35.40           E      O
ATOM  16689  N   LEU E  11      62.400 -49.195 -42.124  1.00 31.96           E      N
ATOM  16690  CA  LEU E  11      62.843 -48.035 -41.372  1.00 31.09           E      C
ATOM  16692  CB  LEU E  11      62.948 -48.352 -39.871  1.00 29.38           E      C
ATOM  16695  CG  LEU E  11      63.606 -47.303 -38.960  1.00 29.82           E      C
ATOM  16697  CD1 LEU E  11      62.813 -45.987 -38.918  1.00 26.14           E      C
ATOM  16701  CD2 LEU E  11      63.792 -47.878 -37.570  1.00 30.98           E      C
ATOM  16705  C   LEU E  11      64.196 -47.655 -41.970  1.00 30.59           E      C
ATOM  16706  O   LEU E  11      65.097 -48.491 -42.071  1.00 30.89           E      O
ATOM  16708  N   LYS E  12      64.322 -46.407 -42.393  1.00 26.41           E      N
ATOM  16709  CA  LYS E  12      65.533 -45.944 -43.042  1.00 29.62           E      C
ATOM  16711  CB  LYS E  12      65.310 -45.803 -44.552  1.00 29.74           E      C
ATOM  16714  CG  LYS E  12      65.085 -47.121 -45.280  1.00 28.86           E      C
ATOM  16717  CD  LYS E  12      66.384 -47.945 -45.438  1.00 31.34           E      C
ATOM  16720  CE  LYS E  12      66.074 -49.311 -46.021  1.00 32.85           E      C
ATOM  16723  NZ  LYS E  12      67.276 -50.055 -46.456  1.00 33.76           E      N
ATOM  16727  C   LYS E  12      65.913 -44.611 -42.441  1.00 32.39           E      C
ATOM  16728  O   LYS E  12      65.053 -43.881 -41.958  1.00 35.52           E      O
ATOM  16730  N   LYS E  13      67.202 -44.300 -42.461  1.00 35.01           E      N
ATOM  16731  CA  LYS E  13      67.692 -43.053 -41.901  1.00 35.82           E      C
ATOM  16733  CB  LYS E  13      69.144 -43.208 -41.441  1.00 40.75           E      C
ATOM  16736  CG  LYS E  13      69.351 -44.308 -40.396  1.00 43.06           E      C
ATOM  16739  CD  LYS E  13      70.832 -44.533 -40.092  1.00 42.05           E      C
ATOM  16742  CE  LYS E  13      71.041 -45.559 -38.980  1.00 44.10           E      C
ATOM  16745  NZ  LYS E  13      70.406 -45.124 -37.702  1.00 46.88           E      N
ATOM  16749  C   LYS E  13      67.584 -41.982 -42.961  1.00 33.75           E      C
ATOM  16750  O   LYS E  13      67.642 -42.293 -44.152  1.00 34.61           E      O
ATOM  16752  N   PRO E  14      67.409 -40.716 -42.544  1.00 33.41           E      N
ATOM  16753  CA  PRO E  14      67.418 -39.622 -43.516  1.00 33.70           E      C
ATOM  16755  CB  PRO E  14      67.437 -38.369 -42.635  1.00 33.84           E      C
ATOM  16758  CG  PRO E  14      66.805 -38.791 -41.355  1.00 32.05           E      C
ATOM  16761  CD  PRO E  14      67.160 -40.239 -41.171  1.00 32.78           E      C
ATOM  16764  C   PRO E  14      68.655 -39.680 -44.416  1.00 31.92           E      C
ATOM  16765  O   PRO E  14      69.729 -40.006 -43.939  1.00 32.74           E      O
ATOM  16766  N   GLY E  15      68.497 -39.400 -45.705  1.00 30.81           E      N
ATOM  16767  CA  GLY E  15      69.617 -39.467 -46.649  1.00 30.33           E      C
ATOM  16770  C   GLY E  15      69.744 -40.783 -47.397  1.00 27.88           E      C
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ATOM  16771  O   GLY E  15      70.218 -40.809 -48.531  1.00 30.77      E    O
ATOM  16773  N   ALA E  16      69.304 -41.871 -46.771  1.00 27.56      E    N
ATOM  16774  CA  ALA E  16      69.387 -43.202 -47.360  1.00 27.98      E    C
ATOM  16776  CB  ALA E  16      69.060 -44.249 -46.305  1.00 29.11      E    C
ATOM  16780  C   ALA E  16      68.476 -43.383 -48.575  1.00 28.26      E    C
ATOM  16781  O   ALA E  16      67.811 -42.452 -49.012  1.00 28.42      E    O
ATOM  16783  N   SER E  17      68.481 -44.594 -49.125  1.00 30.36      E    N
ATOM  16784  CA  SER E  17      67.579 -44.994 -50.205  1.00 27.43      E    C
ATOM  16786  CB  SER E  17      68.360 -45.233 -51.498  1.00 28.83      E    C
ATOM  16789  OG  SER E  17      68.799 -44.003 -52.047  1.00 30.20      E    O
ATOM  16791  C   SER E  17      66.838 -46.268 -49.806  1.00 25.64      E    C
ATOM  16792  O   SER E  17      67.313 -47.031 -48.984  1.00 23.68      E    O
ATOM  16794  N   VAL E  18      65.665 -46.478 -50.391  1.00 25.18      E    N
ATOM  16795  CA  VAL E  18      64.846 -47.661 -50.124  1.00 23.49      E    C
ATOM  16797  CB  VAL E  18      63.730 -47.357 -49.077  1.00 21.83      E    C
ATOM  16799  CG1 VAL E  18      62.725 -46.369 -49.643  1.00 16.12      E    C
ATOM  16803  CG2 VAL E  18      63.057 -48.640 -48.601  1.00 20.09      E    C
ATOM  16807  C   VAL E  18      64.214 -48.110 -51.435  1.00 22.97      E    C
ATOM  16808  O   VAL E  18      63.906 -47.289 -52.301  1.00 22.32      E    O
ATOM  16810  N   LYS E  19      64.038 -49.415 -51.578  1.00 24.24      E    N
ATOM  16811  CA  LYS E  19      63.450 -49.988 -52.775  1.00 25.40      E    C
ATOM  16813  CB  LYS E  19      64.520 -50.659 -53.603  1.00 29.70      E    C
ATOM  16816  CG  LYS E  19      64.102 -51.121 -54.969  1.00 27.47      E    C
ATOM  16819  CD  LYS E  19      65.254 -51.967 -55.514  1.00 26.94      E    C
ATOM  16822  CE  LYS E  19      64.950 -52.543 -56.859  1.00 27.65      E    C
ATOM  16825  NZ  LYS E  19      65.914 -53.646 -57.171  1.00 22.24      E    N
ATOM  16829  C   LYS E  19      62.399 -50.990 -52.353  1.00 24.50      E    C
ATOM  16830  O   LYS E  19      62.720 -52.019 -51.767  1.00 25.94      E    O
ATOM  16832  N   VAL E  20      61.145 -50.660 -52.661  1.00 23.41      E    N
ATOM  16833  CA  VAL E  20      59.961 -51.418 -52.261  1.00 24.90      E    C
ATOM  16835  CB  VAL E  20      58.852 -50.428 -51.790  1.00 28.28      E    C
ATOM  16837  CG1 VAL E  20      57.481 -51.103 -51.680  1.00 31.52      E    C
ATOM  16841  CG2 VAL E  20      59.269 -49.800 -50.456  1.00 32.24      E    C
ATOM  16845  C   VAL E  20      59.486 -52.236 -53.456  1.00 23.66      E    C
ATOM  16846  O   VAL E  20      59.491 -51.739 -54.576  1.00 24.78      E    O
ATOM  16848  N   SER E  21      59.101 -53.492 -53.223  1.00 25.05      E    N
ATOM  16849  CA  SER E  21      58.644 -54.372 -54.290  1.00 25.66      E    C
ATOM  16851  CB  SER E  21      59.462 -55.671 -54.307  1.00 32.53      E    C
ATOM  16854  OG  SER E  21      59.257 -56.459 -53.154  1.00 35.58      E    O
ATOM  16856  C   SER E  21      57.124 -54.655 -54.260  1.00 26.81      E    C
ATOM  16857  O   SER E  21      56.462 -54.510 -53.227  1.00 18.48      E    O
ATOM  16859  N   CYS E  22      56.606 -55.034 -55.431  1.00 27.56      E    N
ATOM  16860  CA  CYS E  22      55.209 -55.408 -55.657  1.00 27.74      E    C
ATOM  16862  CB  CYS E  22      54.442 -54.237 -56.304  1.00 30.59      E    C
ATOM  16865  SG  CYS E  22      52.649 -54.540 -56.585  1.00 30.39      E    S
ATOM  16867  C   CYS E  22      55.165 -56.638 -56.575  1.00 29.21      E    C
ATOM  16868  O   CYS E  22      55.279 -56.521 -57.800  1.00 27.90      E    O
ATOM  16870  N   LYS E  23      55.013 -57.814 -55.977  1.00 27.07      E    N
ATOM  16871  CA  LYS E  23      54.981 -59.080 -56.721  1.00 28.97      E    C
ATOM  16873  CB  LYS E  23      55.634 -60.196 -55.872  1.00 31.05      E    C
ATOM  16876  CG  LYS E  23      55.382 -61.660 -56.282  1.00 34.03      E    C
ATOM  16879  CD  LYS E  23      56.198 -62.100 -57.489  1.00 37.11      E    C
ATOM  16882  CE  LYS E  23      56.492 -63.610 -57.475  1.00 38.58      E    C
ATOM  16885  NZ  LYS E  23      57.847 -63.904 -56.934  1.00 41.40      E    N
ATOM  16889  C   LYS E  23      53.542 -59.412 -57.175  1.00 30.45      E    C
ATOM  16890  O   LYS E  23      52.633 -59.573 -56.355  1.00 34.33      E    O
ATOM  16892  N   ALA E  24      53.359 -59.470 -58.496  1.00 27.62      E    N
ATOM  16893  CA  ALA E  24      52.092 -59.808 -59.141  1.00 25.35      E    C
ATOM  16895  CB  ALA E  24      51.952 -59.030 -60.454  1.00 20.29      E    C
ATOM  16899  C   ALA E  24      52.011 -61.311 -59.420  1.00 22.63      E    C
ATOM  16900  O   ALA E  24      53.023 -61.963 -59.662  1.00 24.06      E    O
ATOM  16902  N   SER E  25      50.804 -61.852 -59.368  1.00 23.69      E    N
ATOM  16903  CA  SER E  25      50.538 -63.231 -59.752  1.00 27.84      E    C
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ATOM  16905  CB  SER E  25      50.999 -64.241 -58.677  1.00 27.33           E      C
ATOM  16908  OG  SER E  25      50.230 -64.142 -57.491  1.00 30.87           E      O
ATOM  16910  C   SER E  25      49.049 -63.385 -60.032  1.00 31.19           E      C
ATOM  16911  O   SER E  25      48.227 -62.533 -59.633  1.00 26.98           E      O
ATOM  16913  N   GLY E  26      48.719 -64.468 -60.730  1.00 28.91           E      N
ATOM  16914  CA  GLY E  26      47.350 -64.736 -61.146  1.00 28.96           E      C
ATOM  16917  C   GLY E  26      46.894 -63.971 -62.376  1.00 31.23           E      C
ATOM  16918  O   GLY E  26      45.688 -63.893 -62.643  1.00 30.95           E      O
ATOM  16920  N   TYR E  27      47.839 -63.384 -63.111  1.00 29.16           E      N
ATOM  16921  CA  TYR E  27      47.529 -62.719 -64.376  1.00 28.01           E      C
ATOM  16923  CB  TYR E  27      46.774 -61.393 -64.142  1.00 28.84           E      C
ATOM  16926  CG  TYR E  27      47.628 -60.260 -63.598  1.00 29.20           E      C
ATOM  16927  CD1 TYR E  27      48.219 -59.339 -64.463  1.00 30.72           E      C
ATOM  16929  CE1 TYR E  27      48.998 -58.290 -63.985  1.00 28.44           E      C
ATOM  16931  CZ  TYR E  27      49.193 -58.151 -62.635  1.00 26.00           E      C
ATOM  16932  OH  TYR E  27      49.977 -57.122 -62.177  1.00 27.67           E      O
ATOM  16934  CE2 TYR E  27      48.605 -59.044 -61.740  1.00 29.54           E      C
ATOM  16936  CD2 TYR E  27      47.826 -60.090 -62.226  1.00 27.82           E      C
ATOM  16938  C   TYR E  27      48.812 -62.481 -65.175  1.00 27.01           E      C
ATOM  16939  O   TYR E  27      49.908 -62.523 -64.614  1.00 25.37           E      O
ATOM  16941  N   THR E  28      48.673 -62.224 -66.475  1.00 25.48           E      N
ATOM  16942  CA  THR E  28      49.827 -61.926 -67.330  1.00 25.80           E      C
ATOM  16944  CB  THR E  28      49.484 -62.069 -68.826  1.00 27.75           E      C
ATOM  16946  OG1 THR E  28      48.834 -63.323 -69.047  1.00 32.12           E      O
ATOM  16948  CG2 THR E  28      50.755 -62.006 -69.699  1.00 23.45           E      C
ATOM  16952  C   THR E  28      50.339 -60.512 -67.019  1.00 22.81           E      C
ATOM  16953  O   THR E  28      49.627 -59.524 -67.176  1.00 21.44           E      O
ATOM  16955  N   PHE E  29      51.587 -60.442 -66.580  1.00 23.28           E      N
ATOM  16956  CA  PHE E  29      52.161 -59.244 -65.980  1.00 26.12           E      C
ATOM  16958  CB  PHE E  29      53.540 -59.585 -65.402  1.00 23.11           E      C
ATOM  16961  CG  PHE E  29      54.187 -58.462 -64.643  1.00 22.05           E      C
ATOM  16962  CD1 PHE E  29      53.619 -57.989 -63.457  1.00 18.67           E      C
ATOM  16964  CE1 PHE E  29      54.230 -56.959 -62.745  1.00 20.45           E      C
ATOM  16966  CZ  PHE E  29      55.431 -56.412 -63.199  1.00 21.30           E      C
ATOM  16968  CE2 PHE E  29      56.018 -56.882 -64.363  1.00 20.28           E      C
ATOM  16970  CD2 PHE E  29      55.397 -57.913 -65.083  1.00 24.32           E      C
ATOM  16972  C   PHE E  29      52.241 -58.078 -66.968  1.00 25.34           E      C
ATOM  16973  O   PHE E  29      51.826 -56.974 -66.653  1.00 26.22           E      O
ATOM  16975  N   THR E  30      52.729 -58.341 -68.174  1.00 22.25           E      N
ATOM  16976  CA  THR E  30      52.874 -57.297 -69.179  1.00 21.54           E      C
ATOM  16978  CB  THR E  30      53.894 -57.706 -70.242  1.00 19.16           E      C
ATOM  16980  OG1 THR E  30      53.457 -58.903 -70.896  1.00 27.04           E      O
ATOM  16982  CG2 THR E  30      55.243 -57.933 -69.600  1.00 14.18           E      C
ATOM  16986  C   THR E  30      51.560 -56.859 -69.851  1.00 25.42           E      C
ATOM  16987  O   THR E  30      51.580 -55.995 -70.722  1.00 28.86           E      O
ATOM  16989  N   ASN E  31      50.433 -57.440 -69.436  1.00 26.85           E      N
ATOM  16990  CA  ASN E  31      49.097 -57.071 -69.946  1.00 25.25           E      C
ATOM  16992  CB  ASN E  31      48.063 -58.189 -69.691  1.00 24.62           E      C
ATOM  16995  CG  ASN E  31      48.048 -59.262 -70.770  1.00 19.10           E      C
ATOM  16996  OD1 ASN E  31      49.030 -59.483 -71.498  1.00 25.22           E      O
ATOM  16997  ND2 ASN E  31      46.931 -59.971 -70.847  1.00 21.48           E      N
ATOM  17000  C   ASN E  31      48.551 -55.808 -69.322  1.00 23.41           E      C
ATOM  17001  O   ASN E  31      47.741 -55.120 -69.934  1.00 26.09           E      O
ATOM  17003  N   TYR E  32      48.981 -55.533 -68.094  1.00 22.97           E      N
ATOM  17004  CA  TYR E  32      48.507 -54.415 -67.300  1.00 22.74           E      C
ATOM  17006  CB  TYR E  32      47.616 -54.895 -66.149  1.00 21.77           E      C
ATOM  17009  CG  TYR E  32      46.390 -55.733 -66.497  1.00 21.56           E      C
ATOM  17010  CD1 TYR E  32      45.114 -55.170 -66.465  1.00 22.22           E      C
ATOM  17012  CE1 TYR E  32      43.999 -55.913 -66.755  1.00 20.44           E      C
ATOM  17014  CZ  TYR E  32      44.115 -57.256 -67.050  1.00 22.11           E      C
ATOM  17015  OH  TYR E  32      42.959 -57.962 -67.318  1.00 27.65           E      O
ATOM  17017  CE2 TYR E  32      45.361 -57.859 -67.083  1.00 18.79           E      C
ATOM  17019  CD2 TYR E  32      46.495 -57.096 -66.799  1.00 20.23           E      C
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ATOM  17021  C   TYR E  32      49.698 -53.680 -66.685  1.00 22.46      E    C
ATOM  17022  O   TYR E  32      50.644 -54.306 -66.212  1.00 25.60      E    O
ATOM  17024  N   GLY E  33      49.637 -52.354 -66.669  1.00 22.53      E    N
ATOM  17025  CA  GLY E  33      50.670 -51.553 -66.038  1.00 24.09      E    C
ATOM  17028  C   GLY E  33      50.424 -51.446 -64.552  1.00 21.45      E    C
ATOM  17029  O   GLY E  33      49.420 -51.946 -64.047  1.00 21.24      E    O
ATOM  17031  N   MET E  34      51.350 -50.809 -63.841  1.00 22.33      E    N
ATOM  17032  CA  MET E  34      51.218 -50.642 -62.390  1.00 24.25      E    C
ATOM  17034  CB  MET E  34      52.331 -51.385 -61.674  1.00 21.45      E    C
ATOM  17037  CG  MET E  34      52.103 -51.671 -60.200  1.00 23.10      E    C
ATOM  17040  SD  MET E  34      50.995 -53.059 -59.916  1.00 28.20      E    S
ATOM  17041  CE  MET E  34      51.880 -54.403 -60.693  1.00 22.31      E    C
ATOM  17045  C   MET E  34      51.286 -49.167 -62.030  1.00 23.22      E    C
ATOM  17046  O   MET E  34      52.174 -48.448 -62.501  1.00 23.65      E    O
ATOM  17048  N   ASN E  35      50.350 -48.735 -61.192  1.00 19.83      E    N
ATOM  17049  CA  ASN E  35      50.388 -47.411 -60.593  1.00 21.90      E    C
ATOM  17051  CB  ASN E  35      48.994 -46.811 -60.390  1.00 23.06      E    C
ATOM  17054  CG  ASN E  35      48.145 -46.795 -61.634  1.00 26.53      E    C
ATOM  17055  OD1 ASN E  35      48.634 -46.656 -62.761  1.00 23.14      E    O
ATOM  17056  ND2 ASN E  35      46.833 -46.890 -61.422  1.00 22.83      E    N
ATOM  17059  C   ASN E  35      50.987 -47.512 -59.200  1.00 23.59      E    C
ATOM  17060  O   ASN E  35      50.859 -48.526 -58.516  1.00 23.35      E    O
ATOM  17062  N   TRP E  36      51.588 -46.418 -58.767  1.00 23.35      E    N
ATOM  17063  CA  TRP E  36      52.098 -46.296 -57.431  1.00 21.65      E    C
ATOM  17065  CB  TRP E  36      53.602 -46.036 -57.507  1.00 21.09      E    C
ATOM  17068  CG  TRP E  36      54.338 -47.296 -57.797  1.00 23.40      E    C
ATOM  17069  CD1 TRP E  36      54.787 -47.734 -59.013  1.00 21.20      E    C
ATOM  17071  NE1 TRP E  36      55.402 -48.944 -58.866  1.00 21.95      E    N
ATOM  17073  CE2 TRP E  36      55.351 -49.317 -57.548  1.00 20.18      E    C
ATOM  17074  CD2 TRP E  36      54.682 -48.308 -56.851  1.00 20.25      E    C
ATOM  17075  CE3 TRP E  36      54.492 -48.451 -55.473  1.00 22.82      E    C
ATOM  17077  CZ3 TRP E  36      54.985 -49.587 -54.851  1.00 21.22      E    C
ATOM  17079  CH2 TRP E  36      55.631 -50.573 -55.573  1.00 21.59      E    C
ATOM  17081  CZ2 TRP E  36      55.830 -50.462 -56.920  1.00 23.19      E    C
ATOM  17083  C   TRP E  36      51.383 -45.155 -56.770  1.00 13.93      E    C
ATOM  17084  O   TRP E  36      51.215 -44.129 -57.372  1.00 13.75      E    O
ATOM  17086  N   VAL E  37      50.993 -45.331 -55.517  1.00 24.14      E    N
ATOM  17087  CA  VAL E  37      50.160 -44.379 -54.813  1.00 19.31      E    C
ATOM  17089  CB  VAL E  37      48.688 -44.905 -54.736  1.00 21.14      E    C
ATOM  17091  CG1 VAL E  37      47.787 -43.976 -53.930  1.00 15.34      E    C
ATOM  17095  CG2 VAL E  37      48.110 -45.143 -56.136  1.00 19.69      E    C
ATOM  17099  C   VAL E  37      50.714 -44.223 -53.399  1.00 23.73      E    C
ATOM  17100  O   VAL E  37      51.084 -45.213 -52.787  1.00 24.89      E    O
ATOM  17102  N   ARG E  38      50.798 -42.996 -52.874  1.00 23.48      E    N
ATOM  17103  CA  ARG E  38      51.124 -42.854 -51.455  1.00 25.97      E    C
ATOM  17105  CB  ARG E  38      52.496 -42.213 -51.211  1.00 30.87      E    C
ATOM  17108  CG  ARG E  38      52.584 -40.738 -51.334  1.00 30.30      E    C
ATOM  17111  CD  ARG E  38      53.907 -40.251 -50.710  1.00 31.62      E    C
ATOM  17114  NE  ARG E  38      53.693 -39.077 -49.871  1.00 35.50      E    N
ATOM  17116  CZ  ARG E  38      54.664 -38.386 -49.289  1.00 41.20      E    C
ATOM  17117  NH1 ARG E  38      55.942 -38.739 -49.443  1.00 45.93      E    N
ATOM  17120  NH2 ARG E  38      54.352 -37.336 -48.542  1.00 42.14      E    N
ATOM  17123  C   ARG E  38      50.043 -42.214 -50.601  1.00 20.05      E    C
ATOM  17124  O   ARG E  38      49.165 -41.511 -51.088  1.00 18.25      E    O
ATOM  17126  N   GLN E  39      50.097 -42.553 -49.325  1.00 22.48      E    N
ATOM  17127  CA  GLN E  39      49.288 -41.936 -48.318  1.00 25.55      E    C
ATOM  17129  CB  GLN E  39      48.101 -42.832 -47.993  1.00 27.38      E    C
ATOM  17132  CG  GLN E  39      47.147 -42.288 -46.958  1.00 25.90      E    C
ATOM  17135  CD  GLN E  39      45.818 -42.992 -47.008  1.00 23.35      E    C
ATOM  17136  OE1 GLN E  39      44.769 -42.363 -47.161  1.00 19.77      E    O
ATOM  17137  NE2 GLN E  39      45.855 -44.307 -46.943  1.00 23.35      E    N
ATOM  17140  C   GLN E  39      50.171 -41.725 -47.111  1.00 26.42      E    C
ATOM  17141  O   GLN E  39      50.491 -42.671 -46.392  1.00 27.02      E    O
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ATOM  17143  N   ALA E  40      50.588 -40.473 -46.926  1.00 28.23           E    N
ATOM  17144  CA  ALA E  40      51.276 -40.040 -45.721  1.00 27.90           E    C
ATOM  17146  CB  ALA E  40      51.707 -38.576 -45.842  1.00 26.11           E    C
ATOM  17150  C   ALA E  40      50.324 -40.220 -44.546  1.00 30.93           E    C
ATOM  17151  O   ALA E  40      49.105 -40.170 -44.723  1.00 29.79           E    O
ATOM  17153  N   PRO E  41      50.861 -40.425 -43.334  1.00 33.06           E    N
ATOM  17154  CA  PRO E  41      49.964 -40.724 -42.208  1.00 34.14           E    C
ATOM  17156  CB  PRO E  41      50.923 -40.834 -41.019  1.00 35.11           E    C
ATOM  17159  CG  PRO E  41      52.213 -41.228 -41.637  1.00 35.80           E    C
ATOM  17162  CD  PRO E  41      52.267 -40.432 -42.911  1.00 33.95           E    C
ATOM  17165  C   PRO E  41      48.897 -39.670 -41.945  1.00 33.57           E    C
ATOM  17166  O   PRO E  41      49.199 -38.477 -41.861  1.00 38.62           E    O
ATOM  17167  N   GLY E  42      47.651 -40.122 -41.834  1.00 32.79           E    N
ATOM  17168  CA  GLY E  42      46.521 -39.237 -41.625  1.00 32.77           E    C
ATOM  17171  C   GLY E  42      46.112 -38.361 -42.808  1.00 33.41           E    C
ATOM  17172  O   GLY E  42      45.282 -37.469 -42.651  1.00 31.00           E    O
ATOM  17174  N   GLN E  43      46.662 -38.620 -43.992  1.00 36.03           E    N
ATOM  17175  CA  GLN E  43      46.466 -37.728 -45.142  1.00 30.29           E    C
ATOM  17177  CB  GLN E  43      47.809 -37.172 -45.624  1.00 30.92           E    C
ATOM  17180  CG  GLN E  43      48.561 -36.362 -44.593  1.00 37.04           E    C
ATOM  17183  CD  GLN E  43      47.795 -35.120 -44.160  1.00 43.95           E    C
ATOM  17184  OE1 GLN E  43      47.280 -34.363 -44.995  1.00 47.10           E    O
ATOM  17185  NE2 GLN E  43      47.712 -34.905 -42.850  1.00 47.30           E    N
ATOM  17188  C   GLN E  43      45.760 -38.465 -46.258  1.00 27.09           E    C
ATOM  17189  O   GLN E  43      45.394 -39.634 -46.114  1.00 28.47           E    O
ATOM  17191  N   GLY E  44      45.559 -37.779 -47.376  1.00 24.18           E    N
ATOM  17192  CA  GLY E  44      44.814 -38.334 -48.475  1.00 23.65           E    C
ATOM  17195  C   GLY E  44      45.683 -39.156 -49.388  1.00 18.02           E    C
ATOM  17196  O   GLY E  44      46.886 -39.215 -49.216  1.00 25.49           E    O
ATOM  17198  N   LEU E  45      45.062 -39.796 -50.366  1.00 25.41           E    N
ATOM  17199  CA  LEU E  45      45.793 -40.592 -51.359  1.00 21.76           E    C
ATOM  17201  CB  LEU E  45      44.837 -41.524 -52.089  1.00 23.56           E    C
ATOM  17204  CG  LEU E  45      44.041 -42.528 -51.286  1.00 21.92           E    C
ATOM  17206  CD1 LEU E  45      43.184 -43.335 -52.254  1.00 20.25           E    C
ATOM  17210  CD2 LEU E  45      44.978 -43.437 -50.460  1.00 22.71           E    C
ATOM  17214  C   LEU E  45      46.444 -39.677 -52.401  1.00 23.48           E    C
ATOM  17215  O   LEU E  45      45.815 -38.703 -52.847  1.00 24.51           E    O
ATOM  17217  N   GLU E  46      47.677 -40.004 -52.811  1.00 24.62           E    N
ATOM  17218  CA  GLU E  46      48.343 -39.283 -53.888  1.00 21.46           E    C
ATOM  17220  CB  GLU E  46      49.529 -38.471 -53.371  1.00 26.40           E    C
ATOM  17223  CG  GLU E  46      49.315 -37.731 -52.087  1.00 27.56           E    C
ATOM  17226  CD  GLU E  46      50.616 -37.256 -51.506  1.00 26.92           E    C
ATOM  17227  OE1 GLU E  46      51.028 -37.779 -50.439  1.00 26.86           E    O
ATOM  17228  OE2 GLU E  46      51.234 -36.382 -52.139  1.00 33.13           E    O
ATOM  17229  C   GLU E  46      48.845 -40.237 -54.959  1.00 22.53           E    C
ATOM  17230  O   GLU E  46      49.574 -41.196 -54.677  1.00 25.39           E    O
ATOM  17232  N   TRP E  47      48.464 -39.948 -56.196  1.00 20.56           E    N
ATOM  17233  CA  TRP E  47      48.877 -40.727 -57.332  1.00 22.88           E    C
ATOM  17235  CB  TRP E  47      47.914 -40.492 -58.482  1.00 19.92           E    C
ATOM  17238  CG  TRP E  47      47.919 -41.560 -59.509  1.00 22.88           E    C
ATOM  17239  CD1 TRP E  47      47.227 -42.725 -59.473  1.00 23.12           E    C
ATOM  17241  NE1 TRP E  47      47.464 -43.443 -60.603  1.00 21.42           E    N
ATOM  17243  CE2 TRP E  47      48.344 -42.753 -61.395  1.00 20.09           E    C
ATOM  17244  CD2 TRP E  47      48.656 -41.565 -60.732  1.00 19.46           E    C
ATOM  17245  CE3 TRP E  47      49.540 -40.660 -61.338  1.00 24.78           E    C
ATOM  17247  CZ3 TRP E  47      50.070 -40.984 -62.563  1.00 21.36           E    C
ATOM  17249  CH2 TRP E  47      49.727 -42.180 -63.204  1.00 20.75           E    C
ATOM  17251  CZ2 TRP E  47      48.875 -43.077 -62.639  1.00 17.71           E    C
ATOM  17253  C   TRP E  47      50.296 -40.295 -57.714  1.00 25.90           E    C
ATOM  17254  O   TRP E  47      50.532 -39.118 -58.021  1.00 23.94           E    O
ATOM  17256  N   MET E  48      51.226 -41.253 -57.673  1.00 28.23           E    N
ATOM  17257  CA  MET E  48      52.654 -40.988 -57.889  1.00 24.20           E    C
ATOM  17259  CB  MET E  48      53.497 -41.927 -57.066  1.00 18.65           E    C
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ATOM  17262  CG  MET E  48      53.302 -41.774 -55.601  1.00 18.43           E    C
ATOM  17265  SD  MET E  48      54.150 -43.057 -54.704  1.00 19.60           E    S
ATOM  17266  CE  MET E  48      55.843 -42.529 -54.858  1.00 21.52           E    C
ATOM  17270  C   MET E  48      53.067 -41.137 -59.321  1.00 22.49           E    C
ATOM  17271  O   MET E  48      53.886 -40.366 -59.811  1.00 28.41           E    O
ATOM  17273  N   GLY E  49      52.496 -42.125 -59.999  1.00 18.39           E    N
ATOM  17274  CA  GLY E  49      52.833 -42.369 -61.379  1.00 16.32           E    C
ATOM  17277  C   GLY E  49      52.551 -43.769 -61.873  1.00 16.96           E    C
ATOM  17278  O   GLY E  49      52.011 -44.596 -61.169  1.00 16.68           E    O
ATOM  17280  N   TRP E  50      52.940 -44.023 -63.109  1.00 20.14           E    N
ATOM  17281  CA  TRP E  50      52.658 -45.275 -63.770  1.00 16.94           E    C
ATOM  17283  CB  TRP E  50      51.606 -45.005 -64.838  1.00 22.28           E    C
ATOM  17286  CG  TRP E  50      51.749 -45.628 -66.186  1.00 19.14           E    C
ATOM  17287  CD1 TRP E  50      52.587 -45.230 -67.204  1.00 23.36           E    C
ATOM  17289  NE1 TRP E  50      52.409 -46.029 -68.314  1.00 21.05           E    N
ATOM  17291  CE2 TRP E  50      51.422 -46.941 -68.030  1.00 25.78           E    C
ATOM  17292  CD2 TRP E  50      50.997 -46.716 -66.689  1.00 18.07           E    C
ATOM  17293  CE3 TRP E  50      50.012 -47.538 -66.147  1.00 21.64           E    C
ATOM  17295  CZ3 TRP E  50      49.477 -48.522 -66.927  1.00 22.09           E    C
ATOM  17297  CH2 TRP E  50      49.919 -48.734 -68.254  1.00 21.99           E    C
ATOM  17299  CZ2 TRP E  50      50.896 -47.966 -68.814  1.00 20.34           E    C
ATOM  17301  C   TRP E  50      53.942 -45.808 -64.349  1.00 24.10           E    C
ATOM  17302  O   TRP E  50      54.761 -45.036 -64.838  1.00 26.64           E    O
ATOM  17304  N   ILE E  51      54.130 -47.124 -64.257  1.00 20.65           E    N
ATOM  17305  CA  ILE E  51      55.096 -47.804 -65.084  1.00 22.17           E    C
ATOM  17307  CB  ILE E  51      56.169 -48.589 -64.275  1.00 20.11           E    C
ATOM  17309  CG1 ILE E  51      57.199 -49.209 -65.239  1.00 22.02           E    C
ATOM  17312  CD1 ILE E  51      58.602 -49.424 -64.664  1.00 18.26           E    C
ATOM  17316  CG2 ILE E  51      55.512 -49.601 -63.313  1.00 13.25           E    C
ATOM  17320  C   ILE E  51      54.344 -48.731 -66.041  1.00 25.20           E    C
ATOM  17321  O   ILE E  51      53.393 -49.443 -65.646  1.00 22.52           E    O
ATOM  17323  N   ASN E  52      54.756 -48.672 -67.308  1.00 16.52           E    N
ATOM  17324  CA  ASN E  52      54.278 -49.583 -68.328  1.00 16.49           E    C
ATOM  17326  CB  ASN E  52      54.443 -48.924 -69.703  1.00 14.19           E    C
ATOM  17329  CG  ASN E  52      53.823 -49.740 -70.834  1.00 18.18           E    C
ATOM  17330  OD1 ASN E  52      53.946 -50.973 -70.887  1.00 21.43           E    O
ATOM  17331  ND2 ASN E  52      53.171 -49.052 -71.752  1.00 20.18           E    N
ATOM  17334  C   ASN E  52      55.094 -50.872 -68.196  1.00 18.87           E    C
ATOM  17335  O   ASN E  52      56.325 -50.875 -68.407  1.00 19.61           E    O
ATOM  17337  N   THR E  53      54.424 -51.951 -67.786  1.00 16.17           E    N
ATOM  17338  CA  THR E  53      55.067 -53.239 -67.545  1.00 20.06           E    C
ATOM  17340  CB  THR E  53      54.142 -54.175 -66.736  1.00 16.62           E    C
ATOM  17342  OG1 THR E  53      52.935 -54.333 -67.465  1.00 18.91           E    O
ATOM  17344  CG2 THR E  53      53.810 -53.612 -65.298  1.00 10.24           E    C
ATOM  17348  C   THR E  53      55.463 -53.975 -68.854  1.00 20.76           E    C
ATOM  17349  O   THR E  53      56.186 -54.977 -68.799  1.00 24.69           E    O
ATOM  17351  N   TYR E  54      54.982 -53.487 -70.002  1.00 17.95           E    N
ATOM  17352  CA  TYR E  54      55.283 -54.067 -71.311  1.00 19.27           E    C
ATOM  17354  CB  TYR E  54      54.082 -53.979 -72.287  1.00 17.85           E    C
ATOM  17357  CG  TYR E  54      54.267 -54.864 -73.507  1.00 17.18           E    C
ATOM  17358  CD1 TYR E  54      53.686 -56.123 -73.575  1.00 19.27           E    C
ATOM  17360  CE1 TYR E  54      53.868 -56.940 -74.684  1.00 21.16           E    C
ATOM  17362  CZ  TYR E  54      54.667 -56.517 -75.738  1.00 20.33           E    C
ATOM  17363  OH  TYR E  54      54.852 -57.331 -76.821  1.00 18.54           E    O
ATOM  17365  CE2 TYR E  54      55.266 -55.278 -75.695  1.00 19.97           E    C
ATOM  17367  CD2 TYR E  54      55.051 -54.452 -74.578  1.00 11.76           E    C
ATOM  17369  C   TYR E  54      56.504 -53.404 -71.938  1.00 21.93           E    C
ATOM  17370  O   TYR E  54      57.401 -54.091 -72.408  1.00 26.66           E    O
ATOM  17372  N   THR E  55      56.527 -52.074 -71.966  1.00 25.48           E    N
ATOM  17373  CA  THR E  55      57.607 -51.323 -72.632  1.00 23.25           E    C
ATOM  17375  CB  THR E  55      57.024 -50.145 -73.403  1.00 23.75           E    C
ATOM  17377  OG1 THR E  55      56.303 -49.294 -72.501  1.00 28.13           E    O
ATOM  17379  CG2 THR E  55      56.071 -50.657 -74.500  1.00 18.72           E    C
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ATOM  17383  C   THR E  55      58.677 -50.798 -71.665  1.00 26.93           E    C
ATOM  17384  O   THR E  55      59.835 -50.565 -72.061  1.00 24.82           E    O
ATOM  17386  N   GLY E  56      58.297 -50.641 -70.398  1.00 19.62           E    N
ATOM  17387  CA  GLY E  56      59.195 -50.128 -69.366  1.00 23.63           E    C
ATOM  17390  C   GLY E  56      59.091 -48.621 -69.128  1.00 29.02           E    C
ATOM  17391  O   GLY E  56      59.684 -48.108 -68.172  1.00 32.83           E    O
ATOM  17393  N   GLU E  57      58.339 -47.910 -69.972  1.00 32.68           E    N
ATOM  17394  CA  GLU E  57      58.235 -46.452 -69.855  1.00 32.74           E    C
ATOM  17396  CB  GLU E  57      57.833 -45.761 -71.182  1.00 33.15           E    C
ATOM  17399  CG  GLU E  57      56.506 -46.146 -71.813  1.00 41.40           E    C
ATOM  17402  CD  GLU E  57      56.528 -46.181 -73.375  1.00 44.50           E    C
ATOM  17403  OE1 GLU E  57      57.399 -45.541 -74.011  1.00 48.94           E    O
ATOM  17404  OE2 GLU E  57      55.652 -46.862 -73.965  1.00 46.71           E    O
ATOM  17405  C   GLU E  57      57.363 -46.013 -68.676  1.00 30.95           E    C
ATOM  17406  O   GLU E  57      56.423 -46.712 -68.251  1.00 29.34           E    O
ATOM  17408  N   THR E  58      57.697 -44.836 -68.159  1.00 28.93           E    N
ATOM  17409  CA  THR E  58      57.161 -44.355 -66.897  1.00 27.41           E    C
ATOM  17411  CB  THR E  58      58.257 -44.334 -65.809  1.00 24.06           E    C
ATOM  17413  OG1 THR E  58      59.429 -43.650 -66.290  1.00 27.56           E    O
ATOM  17415  CG2 THR E  58      58.640 -45.716 -65.421  1.00 12.88           E    C
ATOM  17419  C   THR E  58      56.607 -42.958 -67.032  1.00 30.29           E    C
ATOM  17420  O   THR E  58      57.128 -42.162 -67.811  1.00 30.14           E    O
ATOM  17422  N   THR E  59      55.531 -42.681 -66.284  1.00 30.56           E    N
ATOM  17423  CA  THR E  59      54.985 -41.337 -66.117  1.00 28.91           E    C
ATOM  17425  CB  THR E  59      53.571 -41.198 -66.729  1.00 28.95           E    C
ATOM  17427  OG1 THR E  59      53.604 -41.562 -68.107  1.00 30.42           E    O
ATOM  17429  CG2 THR E  59      53.054 -39.786 -66.616  1.00 29.89           E    C
ATOM  17433  C   THR E  59      54.897 -41.058 -64.619  1.00 31.92           E    C
ATOM  17434  O   THR E  59      54.336 -41.853 -63.862  1.00 30.64           E    O
ATOM  17436  N   TYR E  60      55.453 -39.927 -64.204  1.00 29.29           E    N
ATOM  17437  CA  TYR E  60      55.396 -39.488 -62.823  1.00 25.84           E    C
ATOM  17439  CB  TYR E  60      56.794 -39.131 -62.353  1.00 25.55           E    C
ATOM  17442  CG  TYR E  60      57.758 -40.281 -62.458  1.00 21.89           E    C
ATOM  17443  CD1 TYR E  60      57.861 -41.201 -61.435  1.00 24.18           E    C
ATOM  17445  CE1 TYR E  60      58.732 -42.241 -61.501  1.00 24.72           E    C
ATOM  17447  CZ  TYR E  60      59.503 -42.413 -62.630  1.00 23.01           E    C
ATOM  17448  OH  TYR E  60      60.369 -43.476 -62.664  1.00 23.68           E    O
ATOM  17450  CE2 TYR E  60      59.426 -41.517 -63.672  1.00 21.19           E    C
ATOM  17452  CD2 TYR E  60      58.560 -40.448 -63.576  1.00 23.95           E    C
ATOM  17454  C   TYR E  60      54.510 -38.265 -62.694  1.00 26.44           E    C
ATOM  17455  O   TYR E  60      54.466 -37.423 -63.596  1.00 26.63           E    O
ATOM  17457  N   ALA E  61      53.790 -38.182 -61.577  1.00 25.75           E    N
ATOM  17458  CA  ALA E  61      53.054 -36.984 -61.233  1.00 26.98           E    C
ATOM  17460  CB  ALA E  61      52.126 -37.236 -60.038  1.00 24.01           E    C
ATOM  17464  C   ALA E  61      54.099 -35.929 -60.906  1.00 24.46           E    C
ATOM  17465  O   ALA E  61      55.210 -36.269 -60.548  1.00 20.53           E    O
ATOM  17467  N   ASP E  62      53.758 -34.653 -61.055  1.00 28.06           E    N
ATOM  17468  CA  ASP E  62      54.733 -33.570 -60.829  1.00 27.68           E    C
ATOM  17470  CB  ASP E  62      54.089 -32.186 -61.112  1.00 33.85           E    C
ATOM  17473  CG  ASP E  62      53.989 -31.878 -62.623  1.00 39.86           E    C
ATOM  17474  OD1 ASP E  62      54.999 -32.047 -63.348  1.00 49.52           E    O
ATOM  17475  OD2 ASP E  62      52.913 -31.469 -63.101  1.00 41.29           E    O
ATOM  17476  C   ASP E  62      55.416 -33.609 -59.452  1.00 27.74           E    C
ATOM  17477  O   ASP E  62      56.626 -33.346 -59.337  1.00 25.00           E    O
ATOM  17479  N   ASP E  63      54.669 -33.961 -58.410  1.00 24.36           E    N
ATOM  17480  CA  ASP E  63      55.237 -34.014 -57.049  1.00 25.69           E    C
ATOM  17482  CB  ASP E  63      54.116 -34.126 -56.012  1.00 35.83           E    C
ATOM  17485  CG  ASP E  63      53.297 -32.839 -55.869  1.00 37.82           E    C
ATOM  17486  OD1 ASP E  63      53.769 -31.733 -56.253  1.00 33.55           E    O
ATOM  17487  OD2 ASP E  63      52.174 -32.958 -55.340  1.00 39.96           E    O
ATOM  17488  C   ASP E  63      56.234 -35.164 -56.796  1.00 30.06           E    C
ATOM  17489  O   ASP E  63      56.893 -35.206 -55.735  1.00 23.42           E    O
ATOM  17491  N   PHE E  64      56.343 -36.096 -57.748  1.00 23.74           E    N
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ATOM  17492  CA  PHE E  64      57.198 -37.264 -57.580  1.00 26.32           E    C
ATOM  17494  CB  PHE E  64      56.328 -38.502 -57.490  1.00 20.36           E    C
ATOM  17497  CG  PHE E  64      55.487 -38.507 -56.282  1.00 19.04           E    C
ATOM  17498  CD1 PHE E  64      56.003 -38.962 -55.084  1.00 20.13           E    C
ATOM  17500  CE1 PHE E  64      55.254 -38.921 -53.950  1.00 22.53           E    C
ATOM  17502  CZ  PHE E  64      53.966 -38.396 -53.989  1.00 18.73           E    C
ATOM  17504  CE2 PHE E  64      53.450 -37.911 -55.163  1.00 17.94           E    C
ATOM  17506  CD2 PHE E  64      54.200 -37.955 -56.306  1.00 20.70           E    C
ATOM  17508  C   PHE E  64      58.237 -37.402 -58.668  1.00 24.60           E    C
ATOM  17509  O   PHE E  64      58.766 -38.483 -58.891  1.00 33.90           E    O
ATOM  17511  N   LYS E  65      58.533 -36.300 -59.341  1.00 29.38           E    N
ATOM  17512  CA  LYS E  65      59.609 -36.284 -60.316  1.00 33.29           E    C
ATOM  17514  CB  LYS E  65      59.334 -35.234 -61.394  1.00 35.87           E    C
ATOM  17517  CG  LYS E  65      58.084 -35.521 -62.226  1.00 36.19           E    C
ATOM  17520  CD  LYS E  65      57.727 -34.347 -63.127  1.00 36.57           E    C
ATOM  17523  CE  LYS E  65      57.011 -34.800 -64.387  1.00 35.68           E    C
ATOM  17526  NZ  LYS E  65      56.228 -33.677 -64.975  1.00 40.68           E    N
ATOM  17530  C   LYS E  65      60.899 -35.977 -59.569  1.00 31.57           E    C
ATOM  17531  O   LYS E  65      60.982 -34.979 -58.851  1.00 32.77           E    O
ATOM  17533  N   GLY E  66      61.884 -36.857 -59.698  1.00 36.07           E    N
ATOM  17534  CA  GLY E  66      63.224 -36.585 -59.170  1.00 32.70           E    C
ATOM  17537  C   GLY E  66      63.802 -37.665 -58.289  1.00 29.23           E    C
ATOM  17538  O   GLY E  66      64.744 -38.347 -58.684  1.00 33.74           E    O
ATOM  17540  N   ARG E  67      63.275 -37.806 -57.082  1.00 20.61           E    N
ATOM  17541  CA  ARG E  67      63.791 -38.805 -56.155  1.00 25.40           E    C
ATOM  17543  CB  ARG E  67      63.706 -38.311 -54.713  1.00 23.13           E    C
ATOM  17546  CG  ARG E  67      64.315 -36.956 -54.508  1.00 26.67           E    C
ATOM  17549  CD  ARG E  67      64.396 -36.571 -53.041  1.00 26.08           E    C
ATOM  17552  NE  ARG E  67      63.073 -36.340 -52.463  1.00 25.32           E    N
ATOM  17554  CZ  ARG E  67      62.444 -37.152 -51.621  1.00 22.19           E    C
ATOM  17555  NH1 ARG E  67      62.993 -38.285 -51.226  1.00 23.36           E    N
ATOM  17558  NH2 ARG E  67      61.242 -36.820 -51.181  1.00 25.96           E    N
ATOM  17561  C   ARG E  67      63.109 -40.175 -56.264  1.00 25.60           E    C
ATOM  17562  O   ARG E  67      63.494 -41.100 -55.540  1.00 24.89           E    O
ATOM  17564  N   PHE E  68      62.132 -40.309 -57.170  1.00 27.13           E    N
ATOM  17565  CA  PHE E  68      61.286 -41.518 -57.273  1.00 23.54           E    C
ATOM  17567  CB  PHE E  68      59.804 -41.163 -57.062  1.00 22.48           E    C
ATOM  17570  CG  PHE E  68      59.522 -40.523 -55.744  1.00 23.93           E    C
ATOM  17571  CD1 PHE E  68      59.071 -41.272 -54.677  1.00 25.35           E    C
ATOM  17573  CE1 PHE E  68      58.829 -40.677 -53.459  1.00 18.46           E    C
ATOM  17575  CZ  PHE E  68      59.048 -39.333 -53.297  1.00 20.39           E    C
ATOM  17577  CE2 PHE E  68      59.479 -38.574 -54.346  1.00 22.00           E    C
ATOM  17579  CD2 PHE E  68      59.713 -39.162 -55.562  1.00 26.97           E    C
ATOM  17581  C   PHE E  68      61.444 -42.179 -58.625  1.00 23.80           E    C
ATOM  17582  O   PHE E  68      61.245 -41.519 -59.655  1.00 20.89           E    O
ATOM  17584  N   VAL E  69      61.799 -43.473 -58.619  1.00 26.79           E    N
ATOM  17585  CA  VAL E  69      62.053 -44.239 -59.845  1.00 21.38           E    C
ATOM  17587  CB  VAL E  69      63.554 -44.462 -60.064  1.00 23.11           E    C
ATOM  17589  CG1 VAL E  69      63.790 -45.183 -61.375  1.00 12.41           E    C
ATOM  17593  CG2 VAL E  69      64.277 -43.142 -60.048  1.00 22.42           E    C
ATOM  17597  C   VAL E  69      61.350 -45.592 -59.861  1.00 20.04           E    C
ATOM  17598  O   VAL E  69      61.484 -46.377 -58.928  1.00 18.12           E    O
ATOM  17600  N   PHE E  70      60.577 -45.851 -60.915  1.00 18.90           E    N
ATOM  17601  CA  PHE E  70      59.922 -47.146 -61.088  1.00 19.62           E    C
ATOM  17603  CB  PHE E  70      58.535 -47.034 -61.751  1.00 19.63           E    C
ATOM  17606  CG  PHE E  70      57.622 -45.995 -61.131  1.00 19.70           E    C
ATOM  17607  CD1 PHE E  70      57.538 -45.840 -59.756  1.00 20.68           E    C
ATOM  17609  CE1 PHE E  70      56.696 -44.865 -59.193  1.00 19.59           E    C
ATOM  17611  CZ  PHE E  70      55.932 -44.052 -60.005  1.00 21.53           E    C
ATOM  17613  CE2 PHE E  70      56.004 -44.209 -61.392  1.00 19.33           E    C
ATOM  17615  CD2 PHE E  70      56.847 -45.176 -61.937  1.00 18.38           E    C
ATOM  17617  C   PHE E  70      60.811 -48.023 -61.956  1.00 18.55           E    C
ATOM  17618  O   PHE E  70      61.389 -47.543 -62.938  1.00 23.45           E    O
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ATOM  17620  N   SER E  71      60.910 -49.299 -61.589  1.00 16.20           E    N
ATOM  17621  CA  SER E  71      61.559 -50.312 -62.426  1.00 20.12           E    C
ATOM  17623  CB  SER E  71      63.018 -50.509 -62.014  1.00 16.10           E    C
ATOM  17626  OG  SER E  71      63.108 -50.686 -60.621  1.00 24.00           E    O
ATOM  17628  C   SER E  71      60.784 -51.620 -62.333  1.00 22.37           E    C
ATOM  17629  O   SER E  71      59.823 -51.724 -61.551  1.00 22.67           E    O
ATOM  17631  N   LEU E  72      61.191 -52.590 -63.158  1.00 20.88           E    N
ATOM  17632  CA  LEU E  72      60.559 -53.904 -63.253  1.00 17.96           E    C
ATOM  17634  CB  LEU E  72      59.894 -54.064 -64.616  1.00 21.62           E    C
ATOM  17637  CG  LEU E  72      58.892 -52.997 -65.021  1.00 17.90           E    C
ATOM  17639  CD1 LEU E  72      58.557 -53.154 -66.481  1.00 13.13           E    C
ATOM  17643  CD2 LEU E  72      57.675 -53.082 -64.123  1.00 24.52           E    C
ATOM  17647  C   LEU E  72      61.569 -55.008 -63.154  1.00 21.97           E    C
ATOM  17648  O   LEU E  72      62.710 -54.819 -63.524  1.00 19.71           E    O
ATOM  17650  N   ASP E  73      61.146 -56.159 -62.645  1.00 26.26           E    N
ATOM  17651  CA  ASP E  73      61.794 -57.418 -62.985  1.00 27.11           E    C
ATOM  17653  CB  ASP E  73      62.525 -58.059 -61.813  1.00 28.49           E    C
ATOM  17656  CG  ASP E  73      63.470 -59.175 -62.267  1.00 24.66           E    C
ATOM  17657  OD1 ASP E  73      63.227 -59.744 -63.347  1.00 22.38           E    O
ATOM  17658  OD2 ASP E  73      64.453 -59.475 -61.564  1.00 25.32           E    O
ATOM  17659  C   ASP E  73      60.717 -58.344 -63.538  1.00 29.33           E    C
ATOM  17660  O   ASP E  73      60.014 -59.025 -62.805  1.00 29.91           E    O
ATOM  17662  N   THR E  74      60.618 -58.353 -64.856  1.00 30.27           E    N
ATOM  17663  CA  THR E  74      59.529 -59.005 -65.551  1.00 32.11           E    C
ATOM  17665  CB  THR E  74      59.524 -58.542 -67.030  1.00 30.75           E    C
ATOM  17667  OG1 THR E  74      58.245 -58.007 -67.347  1.00 35.93           E    O
ATOM  17669  CG2 THR E  74      59.881 -59.640 -67.974  1.00 30.98           E    C
ATOM  17673  C   THR E  74      59.582 -60.537 -65.391  1.00 32.79           E    C
ATOM  17674  O   THR E  74      58.545 -61.203 -65.369  1.00 35.69           E    O
ATOM  17676  N   SER E  75      60.791 -61.076 -65.245  1.00 36.20           E    N
ATOM  17677  CA  SER E  75      61.002 -62.506 -64.996  1.00 34.83           E    C
ATOM  17679  CB  SER E  75      62.491 -62.826 -65.091  1.00 35.55           E    C
ATOM  17682  OG  SER E  75      63.159 -62.364 -63.935  1.00 34.07           E    O
ATOM  17684  C   SER E  75      60.476 -62.997 -63.632  1.00 37.76           E    C
ATOM  17685  O   SER E  75      60.246 -64.194 -63.451  1.00 35.12           E    O
ATOM  17687  N   VAL E  76      60.321 -62.080 -62.673  1.00 35.85           E    N
ATOM  17688  CA  VAL E  76      59.753 -62.398 -61.359  1.00 31.84           E    C
ATOM  17690  CB  VAL E  76      60.757 -62.062 -60.242  1.00 32.64           E    C
ATOM  17692  CG1 VAL E  76      60.120 -62.161 -58.878  1.00 39.14           E    C
ATOM  17696  CG2 VAL E  76      61.946 -63.014 -60.323  1.00 35.23           E    C
ATOM  17700  C   VAL E  76      58.436 -61.635 -61.192  1.00 32.03           E    C
ATOM  17701  O   VAL E  76      57.901 -61.509 -60.088  1.00 30.94           E    O
ATOM  17703  N   SER E  77      57.912 -61.163 -62.322  1.00 28.84           E    N
ATOM  17704  CA  SER E  77      56.730 -60.330 -62.386  1.00 30.11           E    C
ATOM  17706  CB  SER E  77      55.490 -61.215 -62.526  1.00 31.53           E    C
ATOM  17709  OG  SER E  77      55.279 -61.944 -61.349  1.00 39.14           E    O
ATOM  17711  C   SER E  77      56.627 -59.376 -61.194  1.00 25.33           E    C
ATOM  17712  O   SER E  77      55.657 -59.396 -60.460  1.00 21.60           E    O
ATOM  17714  N   THR E  78      57.661 -58.556 -61.009  1.00 26.14           E    N
ATOM  17715  CA  THR E  78      57.737 -57.612 -59.886  1.00 25.05           E    C
ATOM  17717  CB  THR E  78      58.844 -58.038 -58.880  1.00 24.81           E    C
ATOM  17719  OG1 THR E  78      58.665 -59.407 -58.528  1.00 26.63           E    O
ATOM  17721  CG2 THR E  78      58.823 -57.209 -57.607  1.00 19.58           E    C
ATOM  17725  C   THR E  78      57.995 -56.188 -60.401  1.00 23.95           E    C
ATOM  17726  O   THR E  78      58.771 -55.992 -61.335  1.00 22.95           E    O
ATOM  17728  N   ALA E  79      57.294 -55.223 -59.807  1.00 22.50           E    N
ATOM  17729  CA  ALA E  79      57.521 -53.799 -60.009  1.00 21.03           E    C
ATOM  17731  CB  ALA E  79      56.196 -53.077 -60.292  1.00 15.40           E    C
ATOM  17735  C   ALA E  79      58.145 -53.254 -58.742  1.00 20.97           E    C
ATOM  17736  O   ALA E  79      57.826 -53.714 -57.642  1.00 20.71           E    O
ATOM  17738  N   TYR E  80      59.033 -52.277 -58.901  1.00 21.36           E    N
ATOM  17739  CA  TYR E  80      59.726 -51.646 -57.784  1.00 22.23           E    C
ATOM  17741  CB  TYR E  80      61.239 -51.957 -57.827  1.00 24.92           E    C
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ATOM  17744  CG  TYR E  80      61.554 -53.413 -57.885  1.00 21.60      E    C
ATOM  17745  CD1 TYR E  80      61.659 -54.162 -56.719  1.00 24.57      E    C
ATOM  17747  CE1 TYR E  80      61.966 -55.510 -56.756  1.00 25.85      E    C
ATOM  17749  CZ  TYR E  80      62.140 -56.139 -57.978  1.00 26.02      E    C
ATOM  17750  OH  TYR E  80      62.440 -57.482 -57.999  1.00 27.13      E    O
ATOM  17752  CE2 TYR E  80      62.035 -55.421 -59.162  1.00 23.64      E    C
ATOM  17754  CD2 TYR E  80      61.743 -54.059 -59.109  1.00 24.53      E    C
ATOM  17756  C   TYR E  80      59.581 -50.145 -57.773  1.00 21.55      E    C
ATOM  17757  O   TYR E  80      59.479 -49.492 -58.814  1.00 19.84      E    O
ATOM  17759  N   LEU E  81      59.596 -49.602 -56.564  1.00 24.83      E    N
ATOM  17760  CA  LEU E  81      59.677 -48.173 -56.368  1.00 23.80      E    C
ATOM  17762  CB  LEU E  81      58.448 -47.641 -55.624  1.00 23.00      E    C
ATOM  17765  CG  LEU E  81      58.463 -46.204 -55.077  1.00 20.80      E    C
ATOM  17767  CD1 LEU E  81      58.547 -45.101 -56.167  1.00  9.61      E    C
ATOM  17771  CD2 LEU E  81      57.244 -46.047 -54.207  1.00 16.24      E    C
ATOM  17775  C   LEU E  81      60.932 -47.942 -55.572  1.00 21.64      E    C
ATOM  17776  O   LEU E  81      61.082 -48.463 -54.485  1.00 23.91      E    O
ATOM  17778  N   GLN E  82      61.856 -47.195 -56.144  1.00 21.13      E    N
ATOM  17779  CA  GLN E  82      63.016 -46.754 -55.414  1.00 21.41      E    C
ATOM  17781  CB  GLN E  82      64.269 -46.995 -56.245  1.00 23.14      E    C
ATOM  17784  CG  GLN E  82      65.551 -46.727 -55.528  1.00 22.93      E    C
ATOM  17787  CD  GLN E  82      66.736 -47.246 -56.308  1.00 26.57      E    C
ATOM  17788  OE1 GLN E  82      67.004 -48.433 -56.304  1.00 23.58      E    O
ATOM  17789  NE2 GLN E  82      67.438 -46.354 -56.999  1.00 32.14      E    N
ATOM  17792  C   GLN E  82      62.851 -45.278 -55.072  1.00 16.59      E    C
ATOM  17793  O   GLN E  82      62.543 -44.466 -55.942  1.00 19.82      E    O
ATOM  17795  N   ILE E  83      63.016 -44.950 -53.792  1.00 20.99      E    N
ATOM  17796  CA  ILE E  83      63.075 -43.555 -53.330  1.00 21.79      E    C
ATOM  17798  CB  ILE E  83      62.039 -43.230 -52.227  1.00 21.02      E    C
ATOM  17800  CG1 ILE E  83      60.711 -43.937 -52.484  1.00 19.35      E    C
ATOM  17803  CD1 ILE E  83      59.667 -43.716 -51.366  1.00 21.19      E    C
ATOM  17807  CG2 ILE E  83      61.839 -41.713 -52.149  1.00 18.89      E    C
ATOM  17811  C   ILE E  83      64.450 -43.210 -52.764  1.00 23.74      E    C
ATOM  17812  O   ILE E  83      64.958 -43.894 -51.869  1.00 21.30      E    O
ATOM  17814  N   SER E  84      65.022 -42.116 -53.263  1.00 26.69      E    N
ATOM  17815  CA  SER E  84      66.364 -41.678 -52.890  1.00 25.06      E    C
ATOM  17817  CB  SER E  84      67.138 -41.311 -54.139  1.00 27.73      E    C
ATOM  17820  OG  SER E  84      67.281 -42.450 -54.946  1.00 32.86      E    O
ATOM  17822  C   SER E  84      66.333 -40.474 -51.981  1.00 25.62      E    C
ATOM  17823  O   SER E  84      65.310 -39.818 -51.868  1.00 27.47      E    O
ATOM  17825  N   SER E  85      67.467 -40.187 -51.340  1.00 28.80      E    N
ATOM  17826  CA  SER E  85      67.618 -39.008 -50.488  1.00 27.22      E    C
ATOM  17828  CB  SER E  85      67.804 -37.769 -51.353  1.00 30.22      E    C
ATOM  17831  OG  SER E  85      68.946 -37.920 -52.184  1.00 32.28      E    O
ATOM  17833  C   SER E  85      66.432 -38.827 -49.541  1.00 27.81      E    C
ATOM  17834  O   SER E  85      65.836 -37.750 -49.465  1.00 24.90      E    O
ATOM  17836  N   LEU E  86      66.120 -39.899 -48.814  1.00 26.51      E    N
ATOM  17837  CA  LEU E  86      64.944 -39.959 -47.951  1.00 29.18      E    C
ATOM  17839  CB  LEU E  86      64.875 -41.318 -47.246  1.00 29.09      E    C
ATOM  17842  CG  LEU E  86      64.462 -42.495 -48.138  1.00 25.28      E    C
ATOM  17844  CD1 LEU E  86      64.699 -43.803 -47.443  1.00 23.42      E    C
ATOM  17848  CD2 LEU E  86      63.003 -42.386 -48.532  1.00 20.35      E    C
ATOM  17852  C   LEU E  86      64.894 -38.827 -46.931  1.00 30.66      E    C
ATOM  17853  O   LEU E  86      65.899 -38.488 -46.313  1.00 31.70      E    O
ATOM  17855  N   LYS E  87      63.708 -38.224 -46.815  1.00 33.24      E    N
ATOM  17856  CA  LYS E  87      63.401 -37.172 -45.850  1.00 35.49      E    C
ATOM  17858  CB  LYS E  87      62.763 -35.957 -46.555  1.00 38.89      E    C
ATOM  17861  CG  LYS E  87      63.598 -35.378 -47.698  1.00 40.14      E    C
ATOM  17864  CD  LYS E  87      62.825 -34.392 -48.583  1.00 41.06      E    C
ATOM  17867  CE  LYS E  87      63.761 -33.806 -49.680  1.00 43.26      E    C
ATOM  17870  NZ  LYS E  87      63.074 -32.929 -50.697  1.00 41.97      E    N
ATOM  17874  C   LYS E  87      62.397 -37.775 -44.879  1.00 35.49      E    C
ATOM  17875  O   LYS E  87      61.723 -38.745 -45.217  1.00 35.37      E    O
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ATOM	17877	N	ALA	E	88	62.282	-37.188	-43.688	1.00	36.11	E	N
ATOM	17878	CA	ALA	E	88	61.264	-37.595	-42.701	1.00	33.64	E	C
ATOM	17880	CB	ALA	E	88	61.353	-36.718	-41.444	1.00	29.97	E	C
ATOM	17884	C	ALA	E	88	59.856	-37.543	-43.292	1.00	30.38	E	C
ATOM	17885	O	ALA	E	88	59.009	-38.356	-42.947	1.00	27.79	E	O
ATOM	17887	N	GLU	E	89	59.641	-36.586	-44.194	1.00	33.32	E	N
ATOM	17888	CA	GLU	E	89	58.355	-36.351	-44.858	1.00	33.72	E	C
ATOM	17890	CB	GLU	E	89	58.381	-35.018	-45.613	1.00	38.76	E	C
ATOM	17893	CG	GLU	E	89	58.381	-33.777	-44.716	1.00	41.68	E	C
ATOM	17896	CD	GLU	E	89	59.757	-33.396	-44.200	1.00	46.63	E	C
ATOM	17897	OE1	GLU	E	89	60.764	-33.792	-44.833	1.00	44.32	E	O
ATOM	17898	OE2	GLU	E	89	59.827	-32.693	-43.159	1.00	49.77	E	O
ATOM	17899	C	GLU	E	89	57.953	-37.442	-45.849	1.00	34.39	E	C
ATOM	17900	O	GLU	E	89	56.794	-37.489	-46.272	1.00	31.31	E	O
ATOM	17902	N	ASP	E	90	58.913	-38.285	-46.240	1.00	31.74	E	N
ATOM	17903	CA	ASP	E	90	58.628	-39.465	-47.057	1.00	27.31	E	C
ATOM	17905	CB	ASP	E	90	59.884	-39.973	-47.748	1.00	24.96	E	C
ATOM	17908	CG	ASP	E	90	60.421	-39.005	-48.744	1.00	22.36	E	C
ATOM	17909	OD1	ASP	E	90	59.625	-38.292	-49.370	1.00	26.32	E	O
ATOM	17910	OD2	ASP	E	90	61.650	-38.989	-48.934	1.00	26.57	E	O
ATOM	17911	C	ASP	E	90	58.027	-40.605	-46.256	1.00	22.79	E	C
ATOM	17912	O	ASP	E	90	57.652	-41.621	-46.837	1.00	25.51	E	O
ATOM	17914	N	THR	E	91	57.964	-40.461	-44.936	1.00	23.54	E	N
ATOM	17915	CA	THR	E	91	57.273	-41.432	-44.089	1.00	24.73	E	C
ATOM	17917	CB	THR	E	91	57.300	-41.025	-42.592	1.00	26.19	E	C
ATOM	17919	OG1	THR	E	91	58.657	-40.893	-42.150	1.00	23.99	E	O
ATOM	17921	CG2	THR	E	91	56.569	-42.051	-41.722	1.00	24.19	E	C
ATOM	17925	C	THR	E	91	55.829	-41.524	-44.557	1.00	26.14	E	C
ATOM	17926	O	THR	E	91	55.066	-40.546	-44.481	1.00	26.53	E	O
ATOM	17928	N	ALA	E	92	55.471	-42.697	-45.070	1.00	23.41	E	N
ATOM	17929	CA	ALA	E	92	54.172	-42.909	-45.676	1.00	20.23	E	C
ATOM	17931	CB	ALA	E	92	54.043	-42.051	-46.945	1.00	18.83	E	C
ATOM	17935	C	ALA	E	92	53.974	-44.379	-46.016	1.00	17.50	E	C
ATOM	17936	O	ALA	E	92	54.949	-45.135	-46.095	1.00	21.47	E	O
ATOM	17938	N	VAL	E	93	52.715	-44.767	-46.234	1.00	22.88	E	N
ATOM	17939	CA	VAL	E	93	52.374	-46.033	-46.892	1.00	21.18	E	C
ATOM	17941	CB	VAL	E	93	50.993	-46.569	-46.457	1.00	20.20	E	C
ATOM	17943	CG1	VAL	E	93	50.676	-47.864	-47.191	1.00	14.16	E	C
ATOM	17947	CG2	VAL	E	93	50.955	-46.805	-44.935	1.00	21.20	E	C
ATOM	17951	C	VAL	E	93	52.385	-45.860	-48.422	1.00	23.32	E	C
ATOM	17952	O	VAL	E	93	51.793	-44.929	-48.960	1.00	23.78	E	O
ATOM	17954	N	TYR	E	94	53.063	-46.771	-49.107	1.00	24.98	E	N
ATOM	17955	CA	TYR	E	94	53.184	-46.757	-50.569	1.00	21.09	E	C
ATOM	17957	CB	TYR	E	94	54.656	-46.789	-50.981	1.00	18.31	E	C
ATOM	17960	CG	TYR	E	94	55.393	-45.546	-50.563	1.00	16.32	E	C
ATOM	17961	CD1	TYR	E	94	55.510	-44.469	-51.432	1.00	19.59	E	C
ATOM	17963	CE1	TYR	E	94	56.152	-43.308	-51.061	1.00	17.02	E	C
ATOM	17965	CZ	TYR	E	94	56.703	-43.201	-49.819	1.00	17.08	E	C
ATOM	17966	OH	TYR	E	94	57.331	-42.027	-49.512	1.00	21.17	E	O
ATOM	17968	CE2	TYR	E	94	56.618	-44.248	-48.916	1.00	16.36	E	C
ATOM	17970	CD2	TYR	E	94	55.966	-45.432	-49.299	1.00	18.62	E	C
ATOM	17972	C	TYR	E	94	52.504	-47.994	-51.097	1.00	21.71	E	C
ATOM	17973	O	TYR	E	94	52.835	-49.104	-50.674	1.00	32.23	E	O
ATOM	17975	N	TYR	E	95	51.575	-47.802	-52.029	1.00	23.89	E	N
ATOM	17976	CA	TYR	E	95	50.782	-48.886	-52.602	1.00	23.75	E	C
ATOM	17978	CB	TYR	E	95	49.301	-48.540	-52.553	1.00	24.60	E	C
ATOM	17981	CG	TYR	E	95	48.684	-48.400	-51.195	1.00	25.48	E	C
ATOM	17982	CD1	TYR	E	95	48.298	-49.528	-50.476	1.00	22.52	E	C
ATOM	17984	CE1	TYR	E	95	47.677	-49.409	-49.238	1.00	25.46	E	C
ATOM	17986	CZ	TYR	E	95	47.434	-48.158	-48.715	1.00	25.51	E	C
ATOM	17987	OH	TYR	E	95	46.840	-48.079	-47.485	1.00	28.74	E	O
ATOM	17989	CE2	TYR	E	95	47.794	-46.997	-49.419	1.00	23.62	E	C
ATOM	17991	CD2	TYR	E	95	48.400	-47.126	-50.657	1.00	26.10	E	C

ATOM	17993	C	TYR	E	95	51.078	-49.042	-54.071	1.00	22.24	E	C
ATOM	17994	O	TYR	E	95	51.351	-48.074	-54.759	1.00	24.85	E	O
ATOM	17996	N	CYS	E	96	50.953	-50.260	-54.553	1.00	24.35	E	N
ATOM	17997	CA	CYS	E	96	50.874	-50.504	-55.974	1.00	28.02	E	C
ATOM	17999	CB	CYS	E	96	51.855	-51.607	-56.411	1.00	28.06	E	C
ATOM	18002	SG	CYS	E	96	51.699	-53.139	-55.512	1.00	32.92	E	S
ATOM	18004	C	CYS	E	96	49.426	-50.860	-56.286	1.00	23.39	E	C
ATOM	18005	O	CYS	E	96	48.676	-51.360	-55.434	1.00	22.74	E	O
ATOM	18007	N	GLU	E	97	49.032	-50.549	-57.507	1.00	21.55	E	N
ATOM	18008	CA	GLU	E	97	47.721	-50.839	-57.985	1.00	20.52	E	C
ATOM	18010	CB	GLU	E	97	46.837	-49.587	-57.876	1.00	26.41	E	C
ATOM	18013	CG	GLU	E	97	45.426	-49.752	-58.465	1.00	24.17	E	C
ATOM	18016	CD	GLU	E	97	44.740	-48.442	-58.791	1.00	25.51	E	C
ATOM	18017	OE1	GLU	E	97	45.445	-47.468	-59.116	1.00	27.02	E	O
ATOM	18018	OE2	GLU	E	97	43.488	-48.409	-58.745	1.00	23.30	E	O
ATOM	18019	C	GLU	E	97	47.840	-51.255	-59.436	1.00	23.91	E	C
ATOM	18020	O	GLU	E	97	48.330	-50.507	-60.263	1.00	22.36	E	O
ATOM	18022	N	ARG	E	98	47.366	-52.440	-59.765	1.00	26.29	E	N
ATOM	18023	CA	ARG	E	98	47.316	-52.814	-61.159	1.00	24.99	E	C
ATOM	18025	CB	ARG	E	98	46.925	-54.276	-61.286	1.00	26.18	E	C
ATOM	18028	CG	ARG	E	98	46.875	-54.759	-62.702	1.00	27.37	E	C
ATOM	18031	CD	ARG	E	98	46.392	-56.159	-62.757	1.00	24.02	E	C
ATOM	18034	NE	ARG	E	98	44.947	-56.254	-62.627	1.00	20.20	E	N
ATOM	18036	CZ	ARG	E	98	44.232	-57.291	-63.027	1.00	20.72	E	C
ATOM	18037	NH1	ARG	E	98	44.828	-58.334	-63.584	1.00	20.91	E	N
ATOM	18040	NH2	ARG	E	98	42.906	-57.278	-62.895	1.00	19.62	E	N
ATOM	18043	C	ARG	E	98	46.337	-51.882	-61.884	1.00	23.45	E	C
ATOM	18044	O	ARG	E	98	45.215	-51.678	-61.423	1.00	23.36	E	O
ATOM	18046	N	GLU	E	99	46.781	-51.294	-62.997	1.00	23.02	E	N
ATOM	18047	CA	GLU	E	99	45.910	-50.493	-63.893	1.00	27.53	E	C
ATOM	18049	CB	GLU	E	99	46.764	-49.405	-64.551	1.00	24.81	E	C
ATOM	18052	CG	GLU	E	99	46.009	-48.497	-65.500	1.00	19.47	E	C
ATOM	18055	CD	GLU	E	99	44.822	-47.843	-64.880	1.00	25.79	E	C
ATOM	18056	OE1	GLU	E	99	44.718	-47.780	-63.630	1.00	23.21	E	O
ATOM	18057	OE2	GLU	E	99	43.984	-47.361	-65.662	1.00	27.51	E	O
ATOM	18058	C	GLU	E	99	45.414	-51.465	-64.942	1.00	26.47	E	C
ATOM	18059	O	GLU	E	99	46.049	-51.609	-65.978	1.00	30.84	E	O
ATOM	18061	N	GLY	E	100	44.299	-52.152	-64.748	1.00	33.02	E	N
ATOM	18062	CA	GLY	E	100	42.912	-51.710	-64.957	1.00	27.89	E	C
ATOM	18065	C	GLY	E	100	42.283	-53.123	-64.875	1.00	28.71	E	C
ATOM	18066	O	GLY	E	100	42.874	-54.001	-64.248	1.00	29.43	E	O
ATOM	18068	N	GLY	E	101	41.128	-53.387	-65.487	1.00	33.38	E	N
ATOM	18069	CA	GLY	E	101	40.415	-54.653	-65.258	1.00	29.46	E	C
ATOM	18072	C	GLY	E	101	39.858	-54.667	-63.845	1.00	27.19	E	C
ATOM	18073	O	GLY	E	101	39.791	-53.633	-63.190	1.00	29.35	E	O
ATOM	18075	N	VAL	E	108	39.471	-55.833	-63.351	1.00	29.50	E	N
ATOM	18076	CA	VAL	E	108	38.991	-55.936	-61.968	1.00	26.08	E	C
ATOM	18078	CB	VAL	E	108	38.706	-57.397	-61.556	1.00	22.76	E	C
ATOM	18080	CG1	VAL	E	108	38.468	-57.500	-60.035	1.00	12.62	E	C
ATOM	18084	CG2	VAL	E	108	37.514	-57.924	-62.351	1.00	23.11	E	C
ATOM	18088	C	VAL	E	108	40.059	-55.323	-61.083	1.00	23.76	E	C
ATOM	18089	O	VAL	E	108	41.213	-55.740	-61.127	1.00	29.15	E	O
ATOM	18091	N	ASN	E	109	39.677	-54.325	-60.297	1.00	25.50	E	N
ATOM	18092	CA	ASN	E	109	40.641	-53.463	-59.613	1.00	26.20	E	C
ATOM	18094	CB	ASN	E	109	39.958	-52.186	-59.141	1.00	24.73	E	C
ATOM	18097	CG	ASN	E	109	40.947	-51.134	-58.688	1.00	24.12	E	C
ATOM	18098	OD1	ASN	E	109	41.635	-50.531	-59.495	1.00	29.11	E	O
ATOM	18099	ND2	ASN	E	109	40.992	-50.888	-57.398	1.00	20.31	E	N
ATOM	18102	C	ASN	E	109	41.350	-54.111	-58.421	1.00	28.69	E	C
ATOM	18103	O	ASN	E	109	40.724	-54.396	-57.405	1.00	22.78	E	O
ATOM	18105	N	ASN	E	110	42.672	-54.264	-58.556	1.00	26.87	E	N
ATOM	18106	CA	ASN	E	110	43.522	-54.890	-57.557	1.00	27.53	E	C
ATOM	18108	CB	ASN	E	110	44.113	-56.164	-58.140	1.00	27.19	E	C

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ATOM  18111  CG  ASN E 110      43.118 -57.300 -58.137  1.00 28.62           E      C
ATOM  18112  OD1 ASN E 110      42.999 -58.018 -57.146  1.00 33.65           E      O
ATOM  18113  ND2 ASN E 110      42.387 -57.460 -59.233  1.00 22.75           E      N
ATOM  18116  C   ASN E 110      44.643 -53.994 -57.014  1.00 28.89           E      C
ATOM  18117  O   ASN E 110      45.389 -53.381 -57.784  1.00 26.09           E      O
ATOM  18119  N   TRP E 111      44.731 -53.932 -55.678  1.00 25.29           E      N
ATOM  18120  CA  TRP E 111      45.787 -53.214 -54.975  1.00 25.75           E      C
ATOM  18122  CB  TRP E 111      45.196 -52.264 -53.961  1.00 21.23           E      C
ATOM  18125  CG  TRP E 111      44.494 -51.114 -54.532  1.00 21.11           E      C
ATOM  18126  CD1 TRP E 111      43.388 -51.141 -55.315  1.00 19.91           E      C
ATOM  18128  NE1 TRP E 111      43.010 -49.872 -55.632  1.00 22.06           E      N
ATOM  18130  CE2 TRP E 111      43.876 -48.988 -55.055  1.00 20.26           E      C
ATOM  18131  CD2 TRP E 111      44.822 -49.740 -54.345  1.00 18.19           E      C
ATOM  18132  CE3 TRP E 111      45.835 -49.072 -53.662  1.00 22.18           E      C
ATOM  18134  CZ3 TRP E 111      45.875 -47.694 -53.722  1.00 21.63           E      C
ATOM  18136  CH2 TRP E 111      44.901 -46.973 -54.417  1.00 22.86           E      C
ATOM  18138  CZ2 TRP E 111      43.901 -47.600 -55.097  1.00 19.37           E      C
ATOM  18140  C   TRP E 111      46.669 -54.192 -54.203  1.00 27.25           E      C
ATOM  18141  O   TRP E 111      46.196 -55.256 -53.786  1.00 27.81           E      O
ATOM  18143  N   GLY E 112      47.935 -53.815 -54.000  1.00 26.66           E      N
ATOM  18144  CA  GLY E 112      48.783 -54.448 -52.996  1.00 27.29           E      C
ATOM  18147  C   GLY E 112      48.365 -54.001 -51.601  1.00 25.61           E      C
ATOM  18148  O   GLY E 112      47.526 -53.121 -51.458  1.00 32.03           E      O
ATOM  18150  N   GLN E 113      48.950 -54.607 -50.573  1.00 31.54           E      N
ATOM  18151  CA  GLN E 113      48.557 -54.337 -49.180  1.00 26.71           E      C
ATOM  18153  CB  GLN E 113      48.842 -55.565 -48.285  1.00 29.26           E      C
ATOM  18156  CG  GLN E 113      50.296 -55.744 -47.734  1.00 31.08           E      C
ATOM  18159  CD  GLN E 113      51.279 -56.362 -48.732  1.00 31.05           E      C
ATOM  18160  OE1 GLN E 113      51.025 -56.398 -49.938  1.00 28.43           E      O
ATOM  18161  NE2 GLN E 113      52.417 -56.855 -48.222  1.00 29.99           E      N
ATOM  18164  C   GLN E 113      49.182 -53.066 -48.600  1.00 27.85           E      C
ATOM  18165  O   GLN E 113      48.803 -52.619 -47.510  1.00 28.73           E      O
ATOM  18167  N   GLY E 114      50.117 -52.468 -49.336  1.00 29.66           E      N
ATOM  18168  CA  GLY E 114      50.833 -51.287 -48.869  1.00 27.88           E      C
ATOM  18171  C   GLY E 114      52.127 -51.660 -48.170  1.00 26.39           E      C
ATOM  18172  O   GLY E 114      52.207 -52.684 -47.506  1.00 26.61           E      O
ATOM  18174  N   THR E 115      53.146 -50.831 -48.368  1.00 25.61           E      N
ATOM  18175  CA  THR E 115      54.359 -50.864 -47.578  1.00 24.35           E      C
ATOM  18177  CB  THR E 115      55.629 -50.996 -48.452  1.00 19.13           E      C
ATOM  18179  OG1 THR E 115      55.542 -52.158 -49.286  1.00 17.95           E      O
ATOM  18181  CG2 THR E 115      56.848 -51.089 -47.557  1.00 22.18           E      C
ATOM  18185  C   THR E 115      54.480 -49.555 -46.811  1.00 22.42           E      C
ATOM  18186  O   THR E 115      54.521 -48.496 -47.411  1.00 25.63           E      O
ATOM  18188  N   LEU E 116      54.571 -49.628 -45.485  1.00 25.47           E      N
ATOM  18189  CA  LEU E 116      54.910 -48.449 -44.701  1.00 23.68           E      C
ATOM  18191  CB  LEU E 116      54.309 -48.561 -43.307  1.00 25.55           E      C
ATOM  18194  CG  LEU E 116      54.512 -47.397 -42.329  1.00 26.87           E      C
ATOM  18196  CD1 LEU E 116      54.370 -46.052 -43.006  1.00 28.24           E      C
ATOM  18200  CD2 LEU E 116      53.515 -47.520 -41.201  1.00 29.87           E      C
ATOM  18204  C   LEU E 116      56.438 -48.270 -44.638  1.00 24.44           E      C
ATOM  18205  O   LEU E 116      57.146 -49.167 -44.204  1.00 20.30           E      O
ATOM  18207  N   VAL E 117      56.933 -47.123 -45.113  1.00 25.27           E      N
ATOM  18208  CA  VAL E 117      58.341 -46.739 -44.984  1.00 20.16           E      C
ATOM  18210  CB  VAL E 117      58.890 -46.197 -46.299  1.00 23.11           E      C
ATOM  18212  CG1 VAL E 117      60.348 -45.724 -46.140  1.00 19.22           E      C
ATOM  18216  CG2 VAL E 117      58.761 -47.248 -47.394  1.00 25.16           E      C
ATOM  18220  C   VAL E 117      58.396 -45.622 -43.946  1.00 20.45           E      C
ATOM  18221  O   VAL E 117      57.644 -44.677 -44.039  1.00 20.27           E      O
ATOM  18223  N   THR E 118      59.244 -45.768 -42.933  1.00 21.82           E      N
ATOM  18224  CA  THR E 118      59.450 -44.740 -41.907  1.00 21.54           E      C
ATOM  18226  CB  THR E 118      59.273 -45.336 -40.488  1.00 21.53           E      C
ATOM  18228  OG1 THR E 118      57.911 -45.748 -40.313  1.00 25.56           E      O
ATOM  18230  CG2 THR E 118      59.644 -44.330 -39.399  1.00 19.60           E      C
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ATOM  18234  C   THR E 118      60.865 -44.211 -42.085  1.00 21.66           E    C
ATOM  18235  O   THR E 118      61.800 -45.000 -42.178  1.00 22.62           E    O
ATOM  18237  N   VAL E 119      61.024 -42.894 -42.178  1.00 20.55           E    N
ATOM  18238  CA  VAL E 119      62.357 -42.302 -42.253  1.00 23.29           E    C
ATOM  18240  CB  VAL E 119      62.494 -41.312 -43.411  1.00 19.13           E    C
ATOM  18242  CG1 VAL E 119      63.930 -40.865 -43.510  1.00 17.35           E    C
ATOM  18246  CG2 VAL E 119      62.025 -41.956 -44.737  1.00 18.28           E    C
ATOM  18250  C   VAL E 119      62.713 -41.606 -40.931  1.00 27.58           E    C
ATOM  18251  O   VAL E 119      62.202 -40.531 -40.633  1.00 29.65           E    O
ATOM  18253  N   SER E 120      63.599 -42.233 -40.158  1.00 29.33           E    N
ATOM  18254  CA  SER E 120      63.987 -41.753 -38.830  1.00 33.19           E    C
ATOM  18256  CB  SER E 120      63.115 -42.410 -37.756  1.00 35.20           E    C
ATOM  18259  OG  SER E 120      63.167 -41.676 -36.541  1.00 36.92           E    O
ATOM  18261  C   SER E 120      65.442 -42.092 -38.543  1.00 32.72           E    C
ATOM  18262  O   SER E 120      65.990 -43.009 -39.141  1.00 30.45           E    O
ATOM  18264  N   SER E 121      66.060 -41.355 -37.623  1.00 37.17           E    N
ATOM  18265  CA  SER E 121      67.389 -41.723 -37.103  1.00 37.20           E    C
ATOM  18267  CB  SER E 121      68.151 -40.488 -36.608  1.00 37.78           E    C
ATOM  18270  OG  SER E 121      68.500 -39.621 -37.679  1.00 34.29           E    O
ATOM  18272  C   SER E 121      67.260 -42.750 -35.971  1.00 40.95           E    C
ATOM  18273  O   SER E 121      68.225 -43.446 -35.639  1.00 41.76           E    O
ATOM  18275  N   ALA E 122      66.061 -42.842 -35.391  1.00 40.67           E    N
ATOM  18276  CA  ALA E 122      65.785 -43.767 -34.291  1.00 38.63           E    C
ATOM  18278  CB  ALA E 122      64.397 -43.480 -33.694  1.00 35.96           E    C
ATOM  18282  C   ALA E 122      65.885 -45.223 -34.742  1.00 38.47           E    C
ATOM  18283  O   ALA E 122      65.773 -45.529 -35.935  1.00 38.78           E    O
ATOM  18285  N   SER E 123      66.097 -46.115 -33.777  1.00 39.35           E    N
ATOM  18286  CA  SER E 123      66.339 -47.528 -34.054  1.00 39.23           E    C
ATOM  18288  CB  SER E 123      67.551 -48.032 -33.260  1.00 43.17           E    C
ATOM  18291  OG  SER E 123      68.700 -47.227 -33.502  1.00 44.30           E    O
ATOM  18293  C   SER E 123      65.103 -48.345 -33.713  1.00 39.02           E    C
ATOM  18294  O   SER E 123      64.218 -47.876 -33.001  1.00 40.07           E    O
ATOM  18296  N   THR E 124      65.052 -49.567 -34.231  1.00 40.54           E    N
ATOM  18297  CA  THR E 124      63.891 -50.432 -34.082  1.00 39.95           E    C
ATOM  18299  CB  THR E 124      63.958 -51.621 -35.057  1.00 40.85           E    C
ATOM  18301  OG1 THR E 124      63.953 -51.134 -36.406  1.00 42.41           E    O
ATOM  18303  CG2 THR E 124      62.770 -52.552 -34.857  1.00 42.33           E    C
ATOM  18307  C   THR E 124      63.780 -50.963 -32.656  1.00 42.60           E    C
ATOM  18308  O   THR E 124      64.792 -51.239 -32.010  1.00 44.92           E    O
ATOM  18310  N   LYS E 125      62.548 -51.081 -32.169  1.00 40.05           E    N
ATOM  18311  CA  LYS E 125      62.281 -51.685 -30.872  1.00 38.98           E    C
ATOM  18313  CB  LYS E 125      62.200 -50.625 -29.773  1.00 39.76           E    C
ATOM  18316  CG  LYS E 125      62.200 -51.233 -28.373  1.00 41.99           E    C
ATOM  18319  CD  LYS E 125      61.798 -50.236 -27.295  1.00 42.24           E    C
ATOM  18322  CE  LYS E 125      61.602 -50.919 -25.932  1.00 42.89           E    C
ATOM  18325  NZ  LYS E 125      60.554 -52.004 -25.930  1.00 41.30           E    N
ATOM  18329  C   LYS E 125      60.982 -52.463 -30.915  1.00 35.23           E    C
ATOM  18330  O   LYS E 125      59.942 -51.917 -31.267  1.00 36.71           E    O
ATOM  18332  N   GLY E 126      61.041 -53.734 -30.549  1.00 35.30           E    N
ATOM  18333  CA  GLY E 126      59.846 -54.559 -30.451  1.00 35.86           E    C
ATOM  18336  C   GLY E 126      59.013 -54.184 -29.241  1.00 36.40           E    C
ATOM  18337  O   GLY E 126      59.536 -53.660 -28.252  1.00 37.85           E    O
ATOM  18339  N   PRO E 127      57.708 -54.463 -29.297  1.00 35.89           E    N
ATOM  18340  CA  PRO E 127      56.833 -54.111 -28.190  1.00 35.78           E    C
ATOM  18342  CB  PRO E 127      55.443 -54.197 -28.822  1.00 36.64           E    C
ATOM  18345  CG  PRO E 127      55.578 -55.259 -29.849  1.00 36.16           E    C
ATOM  18348  CD  PRO E 127      56.978 -55.136 -30.385  1.00 35.95           E    C
ATOM  18351  C   PRO E 127      56.921 -55.076 -27.009  1.00 36.88           E    C
ATOM  18352  O   PRO E 127      57.202 -56.264 -27.191  1.00 39.55           E    O
ATOM  18353  N   SER E 128      56.696 -54.557 -25.807  1.00 33.11           E    N
ATOM  18354  CA  SER E 128      56.311 -55.391 -24.679  1.00 32.71           E    C
ATOM  18356  CB  SER E 128      56.673 -54.730 -23.345  1.00 35.31           E    C
ATOM  18359  OG  SER E 128      58.071 -54.527 -23.222  1.00 34.75           E    O
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ATOM  18361  C   SER E 128      54.803 -55.538 -24.788  1.00 31.04           E    C
ATOM  18362  O   SER E 128      54.120 -54.594 -25.172  1.00 31.18           E    O
ATOM  18364  N   VAL E 129      54.273 -56.710 -24.467  1.00 29.61           E    N
ATOM  18365  CA  VAL E 129      52.823 -56.915 -24.505  1.00 30.55           E    C
ATOM  18367  CB  VAL E 129      52.429 -57.962 -25.557  1.00 28.60           E    C
ATOM  18369  CG1 VAL E 129      50.928 -57.942 -25.789  1.00 29.67           E    C
ATOM  18373  CG2 VAL E 129      53.177 -57.702 -26.868  1.00 29.87           E    C
ATOM  18377  C   VAL E 129      52.315 -57.326 -23.116  1.00 31.56           E    C
ATOM  18378  O   VAL E 129      52.738 -58.346 -22.572  1.00 35.46           E    O
ATOM  18380  N   PHE E 130      51.424 -56.518 -22.547  1.00 28.21           E    N
ATOM  18381  CA  PHE E 130      50.883 -56.761 -21.214  1.00 27.39           E    C
ATOM  18383  CB  PHE E 130      51.134 -55.557 -20.308  1.00 27.09           E    C
ATOM  18386  CG  PHE E 130      52.575 -55.133 -20.246  1.00 27.89           E    C
ATOM  18387  CD1 PHE E 130      53.548 -56.003 -19.779  1.00 27.27           E    C
ATOM  18389  CE1 PHE E 130      54.876 -55.618 -19.716  1.00 26.86           E    C
ATOM  18391  CZ  PHE E 130      55.248 -54.354 -20.118  1.00 26.67           E    C
ATOM  18393  CE2 PHE E 130      54.290 -53.472 -20.577  1.00 27.39           E    C
ATOM  18395  CD2 PHE E 130      52.958 -53.862 -20.637  1.00 27.47           E    C
ATOM  18397  C   PHE E 130      49.390 -57.018 -21.305  1.00 26.91           E    C
ATOM  18398  O   PHE E 130      48.736 -56.517 -22.212  1.00 29.62           E    O
ATOM  18400  N   PRO E 131      48.833 -57.781 -20.353  1.00 27.51           E    N
ATOM  18401  CA  PRO E 131      47.410 -58.058 -20.395  1.00 28.15           E    C
ATOM  18403  CB  PRO E 131      47.313 -59.408 -19.695  1.00 27.96           E    C
ATOM  18406  CG  PRO E 131      48.407 -59.372 -18.680  1.00 27.60           E    C
ATOM  18409  CD  PRO E 131      49.475 -58.444 -19.204  1.00 28.14           E    C
ATOM  18412  C   PRO E 131      46.590 -57.017 -19.646  1.00 30.60           E    C
ATOM  18413  O   PRO E 131      47.012 -56.532 -18.593  1.00 37.40           E    O
ATOM  18414  N   LEU E 132      45.426 -56.688 -20.196  1.00 28.76           E    N
ATOM  18415  CA  LEU E 132      44.453 -55.857 -19.514  1.00 28.34           E    C
ATOM  18417  CB  LEU E 132      43.860 -54.824 -20.477  1.00 27.41           E    C
ATOM  18420  CG  LEU E 132      44.899 -53.922 -21.143  1.00 26.15           E    C
ATOM  18422  CD1 LEU E 132      44.283 -53.076 -22.245  1.00 26.83           E    C
ATOM  18426  CD2 LEU E 132      45.553 -53.042 -20.103  1.00 29.76           E    C
ATOM  18430  C   LEU E 132      43.405 -56.819 -18.995  1.00 27.96           E    C
ATOM  18431  O   LEU E 132      42.488 -57.192 -19.721  1.00 31.86           E    O
ATOM  18433  N   ALA E 133      43.573 -57.243 -17.740  1.00 32.75           E    N
ATOM  18434  CA  ALA E 133      42.770 -58.314 -17.164  1.00 30.19           E    C
ATOM  18436  CB  ALA E 133      43.406 -58.801 -15.864  1.00 32.23           E    C
ATOM  18440  C   ALA E 133      41.328 -57.865 -16.917  1.00 30.06           E    C
ATOM  18441  O   ALA E 133      41.103 -56.747 -16.455  1.00 32.27           E    O
ATOM  18443  N   PRO E 134      40.344 -58.732 -17.226  1.00 30.05           E    N
ATOM  18444  CA  PRO E 134      38.950 -58.433 -16.880  1.00 34.10           E    C
ATOM  18446  CB  PRO E 134      38.169 -59.491 -17.650  1.00 31.15           E    C
ATOM  18449  CG  PRO E 134      39.106 -60.632 -17.774  1.00 30.14           E    C
ATOM  18452  CD  PRO E 134      40.476 -60.040 -17.893  1.00 28.56           E    C
ATOM  18455  C   PRO E 134      38.723 -58.576 -15.374  1.00 39.66           E    C
ATOM  18456  O   PRO E 134      39.459 -59.325 -14.728  1.00 44.60           E    O
ATOM  18457  N   SER E 135      37.730 -57.879 -14.814  1.00 43.36           E    N
ATOM  18458  CA  SER E 135      37.579 -57.821 -13.344  1.00 44.93           E    C
ATOM  18460  CB  SER E 135      38.511 -56.744 -12.774  1.00 47.21           E    C
ATOM  18463  OG  SER E 135      38.208 -55.468 -13.315  1.00 46.19           E    O
ATOM  18465  C   SER E 135      36.146 -57.587 -12.842  1.00 47.31           E    C
ATOM  18466  O   SER E 135      35.227 -57.366 -13.634  1.00 44.36           E    O
ATOM  18468  N   SER E 136      35.984 -57.641 -11.513  1.00 48.97           E    N
ATOM  18469  CA  SER E 136      34.674 -57.548 -10.846  1.00 47.51           E    C
ATOM  18471  CB  SER E 136      34.852 -57.581  -9.323  1.00 48.26           E    C
ATOM  18474  OG  SER E 136      35.563 -58.738  -8.916  1.00 46.55           E    O
ATOM  18476  C   SER E 136      33.883 -56.305 -11.233  1.00 47.90           E    C
ATOM  18477  O   SER E 136      32.987 -56.370 -12.077  1.00 49.31           E    O
ATOM  18479  N   GLY E 142      26.205 -60.189 -17.298  1.00 47.53           E    N
ATOM  18480  CA  GLY E 142      26.622 -58.914 -17.882  1.00 48.55           E    C
ATOM  18483  C   GLY E 142      27.757 -59.026 -18.896  1.00 50.08           E    C
ATOM  18484  O   GLY E 142      28.189 -60.131 -19.236  1.00 51.62           E    O
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ATOM  18486  N   THR E 143      28.235 -57.875 -19.378  1.00 48.52      E    N
ATOM  18487  CA  THR E 143      29.347 -57.809 -20.337  1.00 45.44      E    C
ATOM  18489  CB  THR E 143      29.082 -56.749 -21.413  1.00 46.39      E    C
ATOM  18491  OG1 THR E 143      27.891 -57.099 -22.124  1.00 48.21      E    O
ATOM  18493  CG2 THR E 143      30.242 -56.651 -22.399  1.00 45.23      E    C
ATOM  18497  C   THR E 143      30.665 -57.490 -19.633  1.00 44.27      E    C
ATOM  18498  O   THR E 143      30.701 -56.701 -18.684  1.00 43.94      E    O
ATOM  18500  N   ALA E 144      31.739 -58.122 -20.104  1.00 40.61      E    N
ATOM  18501  CA  ALA E 144      33.076 -57.922 -19.563  1.00 38.56      E    C
ATOM  18503  CB  ALA E 144      33.610 -59.219 -18.992  1.00 42.64      E    C
ATOM  18507  C   ALA E 144      34.010 -57.388 -20.648  1.00 37.69      E    C
ATOM  18508  O   ALA E 144      33.764 -57.573 -21.851  1.00 33.81      E    O
ATOM  18510  N   ALA E 145      35.068 -56.708 -20.206  1.00 36.38      E    N
ATOM  18511  CA  ALA E 145      36.053 -56.099 -21.095  1.00 33.12      E    C
ATOM  18513  CB  ALA E 145      35.943 -54.574 -21.054  1.00 34.74      E    C
ATOM  18517  C   ALA E 145      37.455 -56.532 -20.714  1.00 29.43      E    C
ATOM  18518  O   ALA E 145      37.796 -56.599 -19.532  1.00 29.62      E    O
ATOM  18520  N   LEU E 146      38.255 -56.844 -21.727  1.00 27.86      E    N
ATOM  18521  CA  LEU E 146      39.657 -57.206 -21.549  1.00 29.49      E    C
ATOM  18523  CB  LEU E 146      39.821 -58.719 -21.341  1.00 29.77      E    C
ATOM  18526  CG  LEU E 146      39.246 -59.633 -22.433  1.00 26.61      E    C
ATOM  18528  CD1 LEU E 146      40.267 -60.675 -22.847  1.00 26.32      E    C
ATOM  18532  CD2 LEU E 146      37.926 -60.280 -21.996  1.00 23.96      E    C
ATOM  18536  C   LEU E 146      40.450 -56.764 -22.770  1.00 31.49      E    C
ATOM  18537  O   LEU E 146      39.880 -56.336 -23.777  1.00 35.03      E    O
ATOM  18539  N   GLY E 147      41.766 -56.865 -22.675  1.00 32.33      E    N
ATOM  18540  CA  GLY E 147      42.617 -56.430 -23.756  1.00 29.40      E    C
ATOM  18543  C   GLY E 147      44.084 -56.714 -23.534  1.00 30.48      E    C
ATOM  18544  O   GLY E 147      44.463 -57.451 -22.617  1.00 27.50      E    O
ATOM  18546  N   CYS E 148      44.899 -56.115 -24.397  1.00 32.26      E    N
ATOM  18547  CA  CYS E 148      46.347 -56.199 -24.322  1.00 30.95      E    C
ATOM  18549  CB  CYS E 148      46.886 -57.160 -25.384  1.00 35.56      E    C
ATOM  18552  SG  CYS E 148      46.523 -58.919 -25.111  1.00 35.80      E    S
ATOM  18554  C   CYS E 148      46.910 -54.813 -24.571  1.00 28.43      E    C
ATOM  18555  O   CYS E 148      46.382 -54.074 -25.397  1.00 30.92      E    O
ATOM  18557  N   LEU E 149      47.976 -54.468 -23.855  1.00 27.83      E    N
ATOM  18558  CA  LEU E 149      48.656 -53.182 -24.015  1.00 26.51      E    C
ATOM  18560  CB  LEU E 149      48.942 -52.565 -22.639  1.00 24.18      E    C
ATOM  18563  CG  LEU E 149      49.843 -51.325 -22.563  1.00 25.00      E    C
ATOM  18565  CD1 LEU E 149      49.278 -50.182 -23.426  1.00 21.79      E    C
ATOM  18569  CD2 LEU E 149      50.042 -50.871 -21.125  1.00 19.16      E    C
ATOM  18573  C   LEU E 149      49.951 -53.425 -24.775  1.00 27.61      E    C
ATOM  18574  O   LEU E 149      50.853 -54.066 -24.257  1.00 28.51      E    O
ATOM  18576  N   VAL E 150      50.031 -52.944 -26.011  1.00 31.28      E    N
ATOM  18577  CA  VAL E 150      51.232 -53.126 -26.833  1.00 29.61      E    C
ATOM  18579  CB  VAL E 150      50.866 -53.370 -28.312  1.00 27.28      E    C
ATOM  18581  CG1 VAL E 150      52.108 -53.456 -29.188  1.00 24.24      E    C
ATOM  18585  CG2 VAL E 150      50.042 -54.664 -28.438  1.00 26.74      E    C
ATOM  18589  C   VAL E 150      52.087 -51.880 -26.626  1.00 30.58      E    C
ATOM  18590  O   VAL E 150      51.768 -50.812 -27.128  1.00 32.39      E    O
ATOM  18592  N   LYS E 151      53.162 -52.031 -25.860  1.00 32.82      E    N
ATOM  18593  CA  LYS E 151      53.856 -50.898 -25.249  1.00 32.40      E    C
ATOM  18595  CB  LYS E 151      53.885 -51.118 -23.734  1.00 35.97      E    C
ATOM  18598  CG  LYS E 151      54.494 -49.990 -22.896  1.00 36.11      E    C
ATOM  18601  CD  LYS E 151      53.509 -48.884 -22.584  1.00 36.41      E    C
ATOM  18604  CE  LYS E 151      53.936 -48.105 -21.348  1.00 36.60      E    C
ATOM  18607  NZ  LYS E 151      55.399 -47.866 -21.311  1.00 36.68      E    N
ATOM  18611  C   LYS E 151      55.280 -50.724 -25.782  1.00 30.30      E    C
ATOM  18612  O   LYS E 151      56.005 -51.694 -25.959  1.00 32.16      E    O
ATOM  18614  N   ASP E 152      55.664 -49.475 -26.033  1.00 31.04      E    N
ATOM  18615  CA  ASP E 152      57.053 -49.099 -26.325  1.00 32.69      E    C
ATOM  18617  CB  ASP E 152      57.945 -49.356 -25.104  1.00 36.61      E    C
ATOM  18620  CG  ASP E 152      57.620 -48.447 -23.931  1.00 37.42      E    C
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ATOM  18621  OD1 ASP E 152      57.283 -47.262 -24.152  1.00 37.77      E    O
ATOM  18622  OD2 ASP E 152      57.730 -48.924 -22.782  1.00 36.80      E    O
ATOM  18623  C   ASP E 152      57.655 -49.786 -27.551  1.00 32.28      E    C
ATOM  18624  O   ASP E 152      58.522 -50.652 -27.425  1.00 31.31      E    O
ATOM  18626  N   TYR E 153      57.201 -49.384 -28.736  1.00 33.88      E    N
ATOM  18627  CA  TYR E 153      57.767 -49.893 -29.990  1.00 30.40      E    C
ATOM  18629  CB  TYR E 153      56.849 -50.933 -30.619  1.00 26.56      E    C
ATOM  18632  CG  TYR E 153      55.517 -50.416 -31.113  1.00 28.23      E    C
ATOM  18633  CD1 TYR E 153      55.355 -49.984 -32.438  1.00 24.58      E    C
ATOM  18635  CE1 TYR E 153      54.134 -49.541 -32.897  1.00 25.36      E    C
ATOM  18637  CZ  TYR E 153      53.055 -49.515 -32.028  1.00 25.71      E    C
ATOM  18638  OH  TYR E 153      51.846 -49.076 -32.460  1.00 26.75      E    O
ATOM  18640  CE2 TYR E 153      53.193 -49.940 -30.713  1.00 25.56      E    C
ATOM  18642  CD2 TYR E 153      54.407 -50.392 -30.271  1.00 23.50      E    C
ATOM  18644  C   TYR E 153      58.072 -48.799 -31.002  1.00 28.97      E    C
ATOM  18645  O   TYR E 153      57.570 -47.683 -30.900  1.00 29.19      E    O
ATOM  18647  N   PHE E 154      58.922 -49.145 -31.963  1.00 31.25      E    N
ATOM  18648  CA  PHE E 154      59.287 -48.267 -33.059  1.00 31.43      E    C
ATOM  18650  CB  PHE E 154      60.357 -47.266 -32.633  1.00 34.03      E    C
ATOM  18653  CG  PHE E 154      60.538 -46.139 -33.608  1.00 34.05      E    C
ATOM  18654  CD1 PHE E 154      59.711 -45.021 -33.556  1.00 35.89      E    C
ATOM  18656  CE1 PHE E 154      59.865 -43.973 -34.464  1.00 35.55      E    C
ATOM  18658  CZ  PHE E 154      60.848 -44.043 -35.444  1.00 34.82      E    C
ATOM  18660  CE2 PHE E 154      61.675 -45.154 -35.514  1.00 34.11      E    C
ATOM  18662  CD2 PHE E 154      61.517 -46.200 -34.597  1.00 35.48      E    C
ATOM  18664  C   PHE E 154      59.828 -49.127 -34.194  1.00 32.38      E    C
ATOM  18665  O   PHE E 154      60.548 -50.083 -33.940  1.00 27.95      E    O
ATOM  18667  N   PRO E 155      59.450 -48.829 -35.448  1.00 30.79      E    N
ATOM  18668  CA  PRO E 155      58.497 -47.835 -35.890  1.00 32.00      E    C
ATOM  18670  CB  PRO E 155      59.002 -47.496 -37.294  1.00 31.04      E    C
ATOM  18673  CG  PRO E 155      59.542 -48.773 -37.803  1.00 28.39      E    C
ATOM  18676  CD  PRO E 155      60.013 -49.566 -36.591  1.00 30.49      E    C
ATOM  18679  C   PRO E 155      57.091 -48.434 -35.946  1.00 33.16      E    C
ATOM  18680  O   PRO E 155      56.851 -49.534 -35.440  1.00 31.05      E    O
ATOM  18681  N   GLU E 156      56.162 -47.714 -36.554  1.00 32.87      E    N
ATOM  18682  CA  GLU E 156      54.917 -48.330 -36.961  1.00 33.62      E    C
ATOM  18684  CB  GLU E 156      53.915 -47.262 -37.389  1.00 35.87      E    C
ATOM  18687  CG  GLU E 156      53.385 -46.403 -36.242  1.00 33.75      E    C
ATOM  18690  CD  GLU E 156      52.083 -46.934 -35.648  1.00 35.68      E    C
ATOM  18691  OE1 GLU E 156      51.972 -48.155 -35.399  1.00 33.85      E    O
ATOM  18692  OE2 GLU E 156      51.168 -46.115 -35.412  1.00 36.28      E    O
ATOM  18693  C   GLU E 156      55.225 -49.305 -38.110  1.00 35.08      E    C
ATOM  18694  O   GLU E 156      56.282 -49.208 -38.755  1.00 31.84      E    O
ATOM  18696  N   PRO E 157      54.318 -50.262 -38.369  1.00 34.40      E    N
ATOM  18697  CA  PRO E 157      53.081 -50.578 -37.677  1.00 34.61      E    C
ATOM  18699  CB  PRO E 157      52.146 -50.878 -38.840  1.00 35.02      E    C
ATOM  18702  CG  PRO E 157      53.058 -51.570 -39.844  1.00 35.97      E    C
ATOM  18705  CD  PRO E 157      54.476 -51.113 -39.563  1.00 34.44      E    C
ATOM  18708  C   PRO E 157      53.166 -51.831 -36.795  1.00 35.21      E    C
ATOM  18709  O   PRO E 157      54.147 -52.580 -36.854  1.00 31.58      E    O
ATOM  18710  N   VAL E 158      52.130 -52.038 -35.986  1.00 33.76      E    N
ATOM  18711  CA  VAL E 158      51.852 -53.341 -35.411  1.00 35.15      E    C
ATOM  18713  CB  VAL E 158      51.933 -53.362 -33.867  1.00 34.07      E    C
ATOM  18715  CG1 VAL E 158      53.327 -53.026 -33.410  1.00 30.82      E    C
ATOM  18719  CG2 VAL E 158      50.890 -52.443 -33.246  1.00 33.68      E    C
ATOM  18723  C   VAL E 158      50.463 -53.790 -35.824  1.00 35.73      E    C
ATOM  18724  O   VAL E 158      49.580 -52.968 -36.088  1.00 39.78      E    O
ATOM  18726  N   THR E 159      50.281 -55.102 -35.880  1.00 37.31      E    N
ATOM  18727  CA  THR E 159      48.973 -55.694 -36.094  1.00 39.31      E    C
ATOM  18729  CB  THR E 159      48.985 -56.643 -37.297  1.00 41.40      E    C
ATOM  18731  OG1 THR E 159      49.816 -57.773 -37.014  1.00 42.78      E    O
ATOM  18733  CG2 THR E 159      49.512 -55.923 -38.528  1.00 44.06      E    C
ATOM  18737  C   THR E 159      48.564 -56.441 -34.828  1.00 39.96      E    C
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ATOM  18738  O   THR E 159      49.409 -56.994 -34.122  1.00 39.87      E    O
ATOM  18740  N   VAL E 160      47.273 -56.411 -34.516  1.00 38.99      E    N
ATOM  18741  CA  VAL E 160      46.759 -57.155 -33.393  1.00 38.17      E    C
ATOM  18743  CB  VAL E 160      46.479 -56.256 -32.186  1.00 33.68      E    C
ATOM  18745  CG1 VAL E 160      45.829 -57.064 -31.071  1.00 29.21      E    C
ATOM  18749  CG2 VAL E 160      47.768 -55.614 -31.711  1.00 29.66      E    C
ATOM  18753  C   VAL E 160      45.489 -57.874 -33.804  1.00 39.99      E    C
ATOM  18754  O   VAL E 160      44.602 -57.273 -34.403  1.00 40.72      E    O
ATOM  18756  N   SER E 161      45.430 -59.170 -33.490  1.00 41.77      E    N
ATOM  18757  CA  SER E 161      44.238 -59.980 -33.716  1.00 40.45      E    C
ATOM  18759  CB  SER E 161      44.451 -60.952 -34.889  1.00 42.58      E    C
ATOM  18762  OG  SER E 161      45.245 -62.067 -34.511  1.00 44.51      E    O
ATOM  18764  C   SER E 161      43.907 -60.732 -32.431  1.00 37.42      E    C
ATOM  18765  O   SER E 161      44.692 -60.726 -31.490  1.00 36.94      E    O
ATOM  18767  N   TRP E 162      42.739 -61.361 -32.398  1.00 37.33      E    N
ATOM  18768  CA  TRP E 162      42.286 -62.087 -31.223  1.00 38.56      E    C
ATOM  18770  CB  TRP E 162      41.120 -61.347 -30.564  1.00 35.69      E    C
ATOM  18773  CG  TRP E 162      41.560 -60.151 -29.778  1.00 34.58      E    C
ATOM  18774  CD1 TRP E 162      41.674 -58.869 -30.228  1.00 34.95      E    C
ATOM  18776  NE1 TRP E 162      42.112 -58.047 -29.215  1.00 34.98      E    N
ATOM  18778  CE2 TRP E 162      42.296 -58.797 -28.086  1.00 35.16      E    C
ATOM  18779  CD2 TRP E 162      41.964 -60.131 -28.405  1.00 33.31      E    C
ATOM  18780  CE3 TRP E 162      42.066 -61.106 -27.410  1.00 33.47      E    C
ATOM  18782  CZ3 TRP E 162      42.496 -60.732 -26.157  1.00 34.55      E    C
ATOM  18784  CH2 TRP E 162      42.818 -59.400 -25.869  1.00 34.77      E    C
ATOM  18786  CZ2 TRP E 162      42.728 -58.419 -26.818  1.00 35.21      E    C
ATOM  18788  C   TRP E 162      41.877 -63.504 -31.609  1.00 39.26      E    C
ATOM  18789  O   TRP E 162      41.060 -63.686 -32.509  1.00 40.39      E    O
ATOM  18791  N   ASN E 163      42.450 -64.488 -30.913  1.00 41.68      E    N
ATOM  18792  CA  ASN E 163      42.261 -65.911 -31.219  1.00 39.55      E    C
ATOM  18794  CB  ASN E 163      40.859 -66.374 -30.800  1.00 36.73      E    C
ATOM  18797  CG  ASN E 163      40.600 -66.182 -29.309  1.00 33.82      E    C
ATOM  18798  OD1 ASN E 163      41.524 -65.970 -28.528  1.00 31.78      E    O
ATOM  18799  ND2 ASN E 163      39.335 -66.257 -28.915  1.00 32.40      E    N
ATOM  18802  C   ASN E 163      42.534 -66.200 -32.700  1.00 39.71      E    C
ATOM  18803  O   ASN E 163      41.662 -66.665 -33.434  1.00 37.18      E    O
ATOM  18805  N   SER E 164      43.761 -65.887 -33.118  1.00 41.23      E    N
ATOM  18806  CA  SER E 164      44.242 -66.078 -34.490  1.00 40.93      E    C
ATOM  18808  CB  SER E 164      44.702 -67.530 -34.692  1.00 39.75      E    C
ATOM  18811  OG  SER E 164      45.615 -67.927 -33.681  1.00 38.55      E    O
ATOM  18813  C   SER E 164      43.222 -65.698 -35.564  1.00 41.73      E    C
ATOM  18814  O   SER E 164      43.120 -66.372 -36.585  1.00 46.96      E    O
ATOM  18816  N   GLY E 165      42.470 -64.626 -35.330  1.00 42.46      E    N
ATOM  18817  CA  GLY E 165      41.473 -64.143 -36.290  1.00 40.94      E    C
ATOM  18820  C   GLY E 165      40.040 -64.595 -36.036  1.00 39.15      E    C
ATOM  18821  O   GLY E 165      39.118 -64.119 -36.699  1.00 33.06      E    O
ATOM  18823  N   ALA E 166      39.849 -65.504 -35.082  1.00 40.21      E    N
ATOM  18824  CA  ALA E 166      38.524 -66.048 -34.781  1.00 41.74      E    C
ATOM  18826  CB  ALA E 166      38.637 -67.263 -33.855  1.00 43.12      E    C
ATOM  18830  C   ALA E 166      37.617 -64.990 -34.163  1.00 43.83      E    C
ATOM  18831  O   ALA E 166      36.494 -64.794 -34.620  1.00 46.56      E    O
ATOM  18833  N   LEU E 167      38.114 -64.306 -33.134  1.00 43.98      E    N
ATOM  18834  CA  LEU E 167      37.348 -63.264 -32.439  1.00 42.38      E    C
ATOM  18836  CB  LEU E 167      37.821 -63.154 -30.985  1.00 40.80      E    C
ATOM  18839  CG  LEU E 167      37.052 -62.262 -30.010  1.00 39.56      E    C
ATOM  18841  CD1 LEU E 167      35.575 -62.612 -29.982  1.00 38.05      E    C
ATOM  18845  CD2 LEU E 167      37.655 -62.385 -28.620  1.00 37.96      E    C
ATOM  18849  C   LEU E 167      37.484 -61.915 -33.161  1.00 42.08      E    C
ATOM  18850  O   LEU E 167      38.579 -61.392 -33.322  1.00 43.31      E    O
ATOM  18852  N   THR E 168      36.370 -61.365 -33.625  1.00 41.17      E    N
ATOM  18853  CA  THR E 168      36.398 -60.067 -34.291  1.00 41.92      E    C
ATOM  18855  CB  THR E 168      36.339 -60.228 -35.823  1.00 44.57      E    C
ATOM  18857  OG1 THR E 168      35.184 -60.989 -36.185  1.00 48.75      E    O
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ATOM  18859  CG2 THR E 168      37.570 -60.952 -36.326  1.00 43.31      E    C
ATOM  18863  C   THR E 168      35.300 -59.126 -33.787  1.00 39.87      E    C
ATOM  18864  O   THR E 168      35.492 -57.908 -33.767  1.00 41.47      E    O
ATOM  18866  N   SER E 169      34.173 -59.692 -33.363  1.00 40.66      E    N
ATOM  18867  CA  SER E 169      33.077 -58.935 -32.754  1.00 41.25      E    C
ATOM  18869  CB  SER E 169      31.859 -59.849 -32.544  1.00 44.19      E    C
ATOM  18872  OG  SER E 169      30.863 -59.217 -31.746  1.00 45.75      E    O
ATOM  18874  C   SER E 169      33.458 -58.292 -31.413  1.00 41.52      E    C
ATOM  18875  O   SER E 169      33.912 -58.976 -30.487  1.00 43.81      E    O
ATOM  18877  N   GLY E 170      33.246 -56.980 -31.306  1.00 38.63      E    N
ATOM  18878  CA  GLY E 170      33.504 -56.245 -30.061  1.00 34.79      E    C
ATOM  18881  C   GLY E 170      34.944 -55.785 -29.898  1.00 32.86      E    C
ATOM  18882  O   GLY E 170      35.291 -55.180 -28.878  1.00 35.36      E    O
ATOM  18884  N   VAL E 171      35.781 -56.058 -30.900  1.00 29.09      E    N
ATOM  18885  CA  VAL E 171      37.205 -55.723 -30.839  1.00 31.14      E    C
ATOM  18887  CB  VAL E 171      38.048 -56.678 -31.723  1.00 30.94      E    C
ATOM  18889  CG1 VAL E 171      39.447 -56.119 -31.950  1.00 31.05      E    C
ATOM  18893  CG2 VAL E 171      38.127 -58.065 -31.088  1.00 23.30      E    C
ATOM  18897  C   VAL E 171      37.476 -54.273 -31.254  1.00 29.63      E    C
ATOM  18898  O   VAL E 171      37.095 -53.845 -32.336  1.00 32.72      E    O
ATOM  18900  N   HIS E 172      38.154 -53.530 -30.386  1.00 30.49      E    N
ATOM  18901  CA  HIS E 172      38.574 -52.171 -30.697  1.00 28.98      E    C
ATOM  18903  CB  HIS E 172      37.820 -51.152 -29.826  1.00 29.81      E    C
ATOM  18906  CG  HIS E 172      36.337 -51.132 -30.056  1.00 27.94      E    C
ATOM  18907  ND1 HIS E 172      35.774 -50.675 -31.227  1.00 26.24      E    N
ATOM  18909  CE1 HIS E 172      34.457 -50.773 -31.148  1.00 29.34      E    C
ATOM  18911  NE2 HIS E 172      34.142 -51.278 -29.969  1.00 22.78      E    N
ATOM  18913  CD2 HIS E 172      35.301 -51.503 -29.262  1.00 28.15      E    C
ATOM  18915  C   HIS E 172      40.075 -52.069 -30.484  1.00 27.28      E    C
ATOM  18916  O   HIS E 172      40.550 -52.072 -29.350  1.00 30.94      E    O
ATOM  18918  N   THR E 173      40.819 -52.047 -31.580  1.00 24.01      E    N
ATOM  18919  CA  THR E 173      42.260 -51.858 -31.537  1.00 28.19      E    C
ATOM  18921  CB  THR E 173      43.019 -52.671 -32.620  1.00 25.38      E    C
ATOM  18923  OG1 THR E 173      42.863 -54.076 -32.368  1.00 24.79      E    O
ATOM  18925  CG2 THR E 173      44.529 -52.329 -32.618  1.00 21.83      E    C
ATOM  18929  C   THR E 173      42.481 -50.386 -31.746  1.00 28.81      E    C
ATOM  18930  O   THR E 173      42.109 -49.843 -32.785  1.00 26.67      E    O
ATOM  18932  N   PHE E 174      43.070 -49.735 -30.746  1.00 30.91      E    N
ATOM  18933  CA  PHE E 174      43.223 -48.293 -30.791  1.00 30.94      E    C
ATOM  18935  CB  PHE E 174      43.320 -47.719 -29.386  1.00 26.21      E    C
ATOM  18938  CG  PHE E 174      42.031 -47.807 -28.649  1.00 27.92      E    C
ATOM  18939  CD1 PHE E 174      41.067 -46.842 -28.817  1.00 27.82      E    C
ATOM  18941  CE1 PHE E 174      39.860 -46.938 -28.175  1.00 27.43      E    C
ATOM  18943  CZ  PHE E 174      39.593 -48.002 -27.363  1.00 26.64      E    C
ATOM  18945  CE2 PHE E 174      40.537 -48.982 -27.200  1.00 28.38      E    C
ATOM  18947  CD2 PHE E 174      41.743 -48.894 -27.854  1.00 28.25      E    C
ATOM  18949  C   PHE E 174      44.397 -47.871 -31.648  1.00 31.48      E    C
ATOM  18950  O   PHE E 174      45.348 -48.637 -31.824  1.00 29.64      E    O
ATOM  18952  N   PRO E 175      44.305 -46.664 -32.232  1.00 33.05      E    N
ATOM  18953  CA  PRO E 175      45.422 -46.088 -32.960  1.00 33.41      E    C
ATOM  18955  CB  PRO E 175      44.865 -44.758 -33.479  1.00 33.29      E    C
ATOM  18958  CG  PRO E 175      43.404 -44.877 -33.397  1.00 33.19      E    C
ATOM  18961  CD  PRO E 175      43.112 -45.799 -32.279  1.00 32.95      E    C
ATOM  18964  C   PRO E 175      46.616 -45.835 -32.051  1.00 34.20      E    C
ATOM  18965  O   PRO E 175      46.442 -45.366 -30.929  1.00 29.88      E    O
ATOM  18966  N   ALA E 176      47.817 -46.138 -32.539  1.00 37.51      E    N
ATOM  18967  CA  ALA E 176      49.029 -45.943 -31.758  1.00 35.53      E    C
ATOM  18969  CB  ALA E 176      50.240 -46.461 -32.516  1.00 33.45      E    C
ATOM  18973  C   ALA E 176      49.195 -44.470 -31.417  1.00 38.39      E    C
ATOM  18974  O   ALA E 176      48.894 -43.609 -32.237  1.00 45.13      E    O
ATOM  18976  N   VAL E 177      49.625 -44.196 -30.188  1.00 39.30      E    N
ATOM  18977  CA  VAL E 177      50.039 -42.858 -29.773  1.00 38.84      E    C
ATOM  18979  CB  VAL E 177      49.408 -42.428 -28.419  1.00 40.28      E    C
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ATOM  18981  CG1 VAL E 177      47.890 -42.494 -28.491  1.00 40.32      E    C
ATOM  18985  CG2 VAL E 177      49.958 -43.276 -27.242  1.00 44.64      E    C
ATOM  18989  C   VAL E 177      51.556 -42.835 -29.651  1.00 36.47      E    C
ATOM  18990  O   VAL E 177      52.173 -43.847 -29.303  1.00 33.37      E    O
ATOM  18992  N   LEU E 178      52.146 -41.680 -29.955  1.00 37.78      E    N
ATOM  18993  CA  LEU E 178      53.579 -41.465 -29.802  1.00 38.62      E    C
ATOM  18995  CB  LEU E 178      54.118 -40.529 -30.879  1.00 37.67      E    C
ATOM  18998  CG  LEU E 178      55.623 -40.251 -30.871  1.00 38.72      E    C
ATOM  19000  CD1 LEU E 178      56.415 -41.538 -30.998  1.00 37.20      E    C
ATOM  19004  CD2 LEU E 178      55.968 -39.273 -32.003  1.00 40.29      E    C
ATOM  19008  C   LEU E 178      53.824 -40.872 -28.427  1.00 40.63      E    C
ATOM  19009  O   LEU E 178      53.267 -39.830 -28.071  1.00 41.50      E    O
ATOM  19011  N   GLN E 179      54.665 -41.549 -27.660  1.00 41.56      E    N
ATOM  19012  CA  GLN E 179      54.929 -41.180 -26.285  1.00 41.85      E    C
ATOM  19014  CB  GLN E 179      55.263 -42.432 -25.474  1.00 41.75      E    C
ATOM  19017  CG  GLN E 179      54.176 -43.496 -25.518  1.00 39.42      E    C
ATOM  19020  CD  GLN E 179      54.600 -44.787 -24.868  1.00 40.97      E    C
ATOM  19021  OE1 GLN E 179      55.514 -45.463 -25.338  1.00 40.18      E    O
ATOM  19022  NE2 GLN E 179      53.930 -45.142 -23.779  1.00 43.22      E    N
ATOM  19025  C   GLN E 179      56.077 -40.186 -26.230  1.00 43.47      E    C
ATOM  19026  O   GLN E 179      56.825 -40.028 -27.203  1.00 42.57      E    O
ATOM  19028  N   SER E 180      56.205 -39.522 -25.082  1.00 44.23      E    N
ATOM  19029  CA  SER E 180      57.298 -38.583 -24.828  1.00 43.65      E    C
ATOM  19031  CB  SER E 180      57.247 -38.108 -23.374  1.00 46.02      E    C
ATOM  19034  OG  SER E 180      57.536 -39.177 -22.479  1.00 47.23      E    O
ATOM  19036  C   SER E 180      58.660 -39.221 -25.116  1.00 45.02      E    C
ATOM  19037  O   SER E 180      59.596 -38.542 -25.545  1.00 47.95      E    O
ATOM  19039  N   SER E 181      58.755 -40.531 -24.883  1.00 42.92      E    N
ATOM  19040  CA  SER E 181      59.989 -41.285 -25.095  1.00 40.43      E    C
ATOM  19042  CB  SER E 181      59.874 -42.664 -24.434  1.00 39.42      E    C
ATOM  19045  OG  SER E 181      58.759 -43.388 -24.930  1.00 35.25      E    O
ATOM  19047  C   SER E 181      60.372 -41.462 -26.565  1.00 40.16      E    C
ATOM  19048  O   SER E 181      61.508 -41.841 -26.862  1.00 40.98      E    O
ATOM  19050  N   GLY E 182      59.433 -41.205 -27.475  1.00 38.39      E    N
ATOM  19051  CA  GLY E 182      59.661 -41.406 -28.908  1.00 37.70      E    C
ATOM  19054  C   GLY E 182      59.296 -42.804 -29.382  1.00 38.29      E    C
ATOM  19055  O   GLY E 182      59.603 -43.178 -30.515  1.00 38.75      E    O
ATOM  19057  N   LEU E 183      58.647 -43.574 -28.507  1.00 37.09      E    N
ATOM  19058  CA  LEU E 183      58.152 -44.907 -28.828  1.00 34.19      E    C
ATOM  19060  CB  LEU E 183      58.618 -45.923 -27.797  1.00 33.25      E    C
ATOM  19063  CG  LEU E 183      60.050 -46.441 -27.884  1.00 35.69      E    C
ATOM  19065  CD1 LEU E 183      61.073 -45.320 -27.918  1.00 39.92      E    C
ATOM  19069  CD2 LEU E 183      60.296 -47.326 -26.692  1.00 33.46      E    C
ATOM  19073  C   LEU E 183      56.637 -44.911 -28.842  1.00 33.58      E    C
ATOM  19074  O   LEU E 183      55.994 -44.156 -28.112  1.00 32.34      E    O
ATOM  19076  N   TYR E 184      56.065 -45.791 -29.651  1.00 31.66      E    N
ATOM  19077  CA  TYR E 184      54.617 -45.900 -29.736  1.00 32.97      E    C
ATOM  19079  CB  TYR E 184      54.196 -46.408 -31.117  1.00 36.59      E    C
ATOM  19082  CG  TYR E 184      54.494 -45.426 -32.212  1.00 37.52      E    C
ATOM  19083  CD1 TYR E 184      53.611 -44.388 -32.494  1.00 36.93      E    C
ATOM  19085  CE1 TYR E 184      53.885 -43.471 -33.489  1.00 37.48      E    C
ATOM  19087  CZ  TYR E 184      55.057 -43.588 -34.216  1.00 37.66      E    C
ATOM  19088  OH  TYR E 184      55.326 -42.684 -35.212  1.00 39.64      E    O
ATOM  19090  CE2 TYR E 184      55.949 -44.603 -33.955  1.00 36.51      E    C
ATOM  19092  CD2 TYR E 184      55.669 -45.514 -32.952  1.00 38.00      E    C
ATOM  19094  C   TYR E 184      54.067 -46.812 -28.657  1.00 31.41      E    C
ATOM  19095  O   TYR E 184      54.793 -47.596 -28.044  1.00 29.10      E    O
ATOM  19097  N   SER E 185      52.768 -46.691 -28.424  1.00 32.98      E    N
ATOM  19098  CA  SER E 185      52.059 -47.610 -27.549  1.00 31.99      E    C
ATOM  19100  CB  SER E 185      52.141 -47.134 -26.094  1.00 33.98      E    C
ATOM  19103  OG  SER E 185      51.361 -47.944 -25.226  1.00 34.21      E    O
ATOM  19105  C   SER E 185      50.624 -47.676 -28.023  1.00 29.77      E    C
ATOM  19106  O   SER E 185      50.081 -46.674 -28.462  1.00 29.91      E    O
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ATOM	19108	N	LEU	E	186	50.021	-48.858	-27.979	1.00	30.81	E	N
ATOM	19109	CA	LEU	E	186	48.592	-48.984	-28.270	1.00	29.55	E	C
ATOM	19111	CB	LEU	E	186	48.339	-49.200	-29.772	1.00	29.14	E	C
ATOM	19114	CG	LEU	E	186	48.576	-50.538	-30.469	1.00	27.70	E	C
ATOM	19116	CD1	LEU	E	186	47.589	-51.627	-30.041	1.00	27.64	E	C
ATOM	19120	CD2	LEU	E	186	48.476	-50.304	-31.957	1.00	23.42	E	C
ATOM	19124	C	LEU	E	186	47.918	-50.068	-27.454	1.00	29.18	E	C
ATOM	19125	O	LEU	E	186	48.567	-50.931	-26.884	1.00	29.53	E	O
ATOM	19127	N	SER	E	187	46.596	-49.992	-27.412	1.00	32.17	E	N
ATOM	19128	CA	SER	E	187	45.780	-50.958	-26.715	1.00	29.61	E	C
ATOM	19130	CB	SER	E	187	44.979	-50.263	-25.621	1.00	33.26	E	C
ATOM	19133	OG	SER	E	187	44.800	-51.125	-24.515	1.00	40.95	E	O
ATOM	19135	C	SER	E	187	44.832	-51.590	-27.710	1.00	28.97	E	C
ATOM	19136	O	SER	E	187	44.421	-50.962	-28.676	1.00	27.57	E	O
ATOM	19138	N	SER	E	188	44.505	-52.850	-27.479	1.00	32.42	E	N
ATOM	19139	CA	SER	E	188	43.460	-53.525	-28.224	1.00	27.47	E	C
ATOM	19141	CB	SER	E	188	44.028	-54.604	-29.141	1.00	27.77	E	C
ATOM	19144	OG	SER	E	188	42.996	-55.174	-29.932	1.00	27.63	E	O
ATOM	19146	C	SER	E	188	42.543	-54.135	-27.198	1.00	27.43	E	C
ATOM	19147	O	SER	E	188	42.976	-54.949	-26.384	1.00	31.91	E	O
ATOM	19149	N	VAL	E	189	41.288	-53.708	-27.210	1.00	27.76	E	N
ATOM	19150	CA	VAL	E	189	40.291	-54.226	-26.288	1.00	27.31	E	C
ATOM	19152	CB	VAL	E	189	39.566	-53.096	-25.513	1.00	25.78	E	C
ATOM	19154	CG1	VAL	E	189	40.550	-52.342	-24.593	1.00	24.18	E	C
ATOM	19158	CG2	VAL	E	189	38.871	-52.148	-26.462	1.00	20.58	E	C
ATOM	19162	C	VAL	E	189	39.267	-55.059	-27.046	1.00	29.41	E	C
ATOM	19163	O	VAL	E	189	39.140	-54.961	-28.275	1.00	30.71	E	O
ATOM	19165	N	VAL	E	190	38.582	-55.918	-26.301	1.00	28.75	E	N
ATOM	19166	CA	VAL	E	190	37.430	-56.640	-26.811	1.00	28.68	E	C
ATOM	19168	CB	VAL	E	190	37.812	-58.010	-27.455	1.00	25.83	E	C
ATOM	19170	CG1	VAL	E	190	38.337	-58.999	-26.405	1.00	23.01	E	C
ATOM	19174	CG2	VAL	E	190	36.618	-58.598	-28.187	1.00	25.43	E	C
ATOM	19178	C	VAL	E	190	36.446	-56.826	-25.665	1.00	28.03	E	C
ATOM	19179	O	VAL	E	190	36.850	-57.039	-24.518	1.00	24.88	E	O
ATOM	19181	N	THR	E	191	35.157	-56.691	-25.969	1.00	33.99	E	N
ATOM	19182	CA	THR	E	191	34.109	-57.015	-25.001	1.00	32.71	E	C
ATOM	19184	CB	THR	E	191	33.000	-55.947	-24.932	1.00	34.46	E	C
ATOM	19186	OG1	THR	E	191	32.706	-55.470	-26.252	1.00	35.11	E	O
ATOM	19188	CG2	THR	E	191	33.432	-54.786	-24.037	1.00	31.69	E	C
ATOM	19192	C	THR	E	191	33.499	-58.362	-25.352	1.00	33.75	E	C
ATOM	19193	O	THR	E	191	33.254	-58.677	-26.525	1.00	34.60	E	O
ATOM	19195	N	VAL	E	192	33.281	-59.150	-24.310	1.00	35.15	E	N
ATOM	19196	CA	VAL	E	192	32.743	-60.490	-24.414	1.00	35.77	E	C
ATOM	19198	CB	VAL	E	192	33.851	-61.557	-24.231	1.00	31.08	E	C
ATOM	19200	CG1	VAL	E	192	34.944	-61.406	-25.293	1.00	22.78	E	C
ATOM	19204	CG2	VAL	E	192	34.458	-61.474	-22.837	1.00	26.54	E	C
ATOM	19208	C	VAL	E	192	31.732	-60.618	-23.286	1.00	38.94	E	C
ATOM	19209	O	VAL	E	192	31.725	-59.786	-22.380	1.00	43.53	E	O
ATOM	19211	N	PRO	E	193	30.861	-61.639	-23.335	1.00	40.85	E	N
ATOM	19212	CA	PRO	E	193	30.013	-61.909	-22.163	1.00	39.64	E	C
ATOM	19214	CB	PRO	E	193	29.158	-63.100	-22.610	1.00	39.94	E	C
ATOM	19217	CG	PRO	E	193	29.204	-63.064	-24.116	1.00	41.62	E	C
ATOM	19220	CD	PRO	E	193	30.570	-62.556	-24.452	1.00	40.08	E	C
ATOM	19223	C	PRO	E	193	30.813	-62.263	-20.906	1.00	40.97	E	C
ATOM	19224	O	PRO	E	193	31.916	-62.803	-21.001	1.00	41.96	E	O
ATOM	19225	N	SER	E	194	30.255	-61.948	-19.737	1.00	42.70	E	N
ATOM	19226	CA	SER	E	194	30.847	-62.342	-18.454	1.00	44.61	E	C
ATOM	19228	CB	SER	E	194	30.069	-61.712	-17.290	1.00	45.69	E	C
ATOM	19231	OG	SER	E	194	30.261	-60.310	-17.231	1.00	45.41	E	O
ATOM	19233	C	SER	E	194	30.861	-63.868	-18.273	1.00	45.36	E	C
ATOM	19234	O	SER	E	194	31.709	-64.410	-17.568	1.00	38.09	E	O
ATOM	19236	N	SER	E	195	29.897	-64.537	-18.905	1.00	49.26	E	N
ATOM	19237	CA	SER	E	195	29.755	-65.989	-18.855	1.00	49.05	E	C

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ATOM  19239  CB  SER E 195      28.452 -66.392 -19.548  1.00 50.36      E    C
ATOM  19242  OG  SER E 195      27.364 -65.643 -19.039  1.00 50.11      E    O
ATOM  19244  C   SER E 195      30.921 -66.705 -19.530  1.00 49.31      E    C
ATOM  19245  O   SER E 195      31.355 -67.767 -19.076  1.00 46.72      E    O
ATOM  19247  N   SER E 196      31.424 -66.109 -20.610  1.00 48.32      E    N
ATOM  19248  CA  SER E 196      32.483 -66.715 -21.411  1.00 49.47      E    C
ATOM  19250  CB  SER E 196      32.607 -65.991 -22.755  1.00 50.33      E    C
ATOM  19253  OG  SER E 196      33.441 -64.848 -22.631  1.00 48.99      E    O
ATOM  19255  C   SER E 196      33.857 -66.708 -20.741  1.00 50.79      E    C
ATOM  19256  O   SER E 196      34.753 -67.423 -21.187  1.00 53.27      E    O
ATOM  19258  N   LEU E 197      34.036 -65.900 -19.697  1.00 50.67      E    N
ATOM  19259  CA  LEU E 197      35.374 -65.646 -19.148  1.00 50.78      E    C
ATOM  19261  CB  LEU E 197      35.324 -64.629 -17.991  1.00 47.28      E    C
ATOM  19264  CG  LEU E 197      35.356 -63.150 -18.403  1.00 43.24      E    C
ATOM  19266  CD1 LEU E 197      35.177 -62.249 -17.195  1.00 41.58      E    C
ATOM  19270  CD2 LEU E 197      36.652 -62.812 -19.126  1.00 41.70      E    C
ATOM  19274  C   LEU E 197      36.096 -66.921 -18.715  1.00 53.03      E    C
ATOM  19275  O   LEU E 197      37.155 -67.250 -19.261  1.00 54.58      E    O
ATOM  19277  N   GLY E 198      35.518 -67.629 -17.747  1.00 52.83      E    N
ATOM  19278  CA  GLY E 198      36.096 -68.872 -17.234  1.00 54.16      E    C
ATOM  19281  C   GLY E 198      36.186 -69.973 -18.278  1.00 55.07      E    C
ATOM  19282  O   GLY E 198      37.159 -70.728 -18.309  1.00 55.44      E    O
ATOM  19284  N   THR E 199      35.168 -70.055 -19.132  1.00 54.51      E    N
ATOM  19285  CA  THR E 199      35.113 -71.040 -20.213  1.00 53.83      E    C
ATOM  19287  CB  THR E 199      33.701 -71.070 -20.852  1.00 55.74      E    C
ATOM  19289  OG1 THR E 199      32.809 -71.778 -19.988  1.00 57.29      E    O
ATOM  19291  CG2 THR E 199      33.713 -71.734 -22.233  1.00 55.26      E    C
ATOM  19295  C   THR E 199      36.144 -70.776 -21.314  1.00 54.93      E    C
ATOM  19296  O   THR E 199      37.101 -71.539 -21.476  1.00 55.55      E    O
ATOM  19298  N   GLN E 200      35.941 -69.686 -22.054  1.00 53.15      E    N
ATOM  19299  CA  GLN E 200      36.660 -69.422 -23.297  1.00 49.21      E    C
ATOM  19301  CB  GLN E 200      35.836 -68.464 -24.159  1.00 52.98      E    C
ATOM  19304  CG  GLN E 200      36.422 -68.142 -25.541  1.00 55.83      E    C
ATOM  19307  CD  GLN E 200      36.541 -69.357 -26.445  1.00 57.96      E    C
ATOM  19308  OE1 GLN E 200      35.848 -70.362 -26.258  1.00 60.60      E    O
ATOM  19309  NE2 GLN E 200      37.421 -69.267 -27.438  1.00 57.40      E    N
ATOM  19312  C   GLN E 200      38.057 -68.853 -23.065  1.00 46.45      E    C
ATOM  19313  O   GLN E 200      38.295 -68.135 -22.095  1.00 47.37      E    O
ATOM  19315  N   THR E 201      38.974 -69.181 -23.972  1.00 43.88      E    N
ATOM  19316  CA  THR E 201      40.351 -68.695 -23.909  1.00 42.86      E    C
ATOM  19318  CB  THR E 201      41.341 -69.806 -24.303  1.00 42.43      E    C
ATOM  19320  OG1 THR E 201      41.207 -70.899 -23.386  1.00 43.67      E    O
ATOM  19322  CG2 THR E 201      42.790 -69.309 -24.275  1.00 41.67      E    C
ATOM  19326  C   THR E 201      40.526 -67.480 -24.821  1.00 40.23      E    C
ATOM  19327  O   THR E 201      40.157 -67.523 -26.002  1.00 41.83      E    O
ATOM  19329  N   TYR E 202      41.072 -66.398 -24.263  1.00 36.97      E    N
ATOM  19330  CA  TYR E 202      41.293 -65.157 -25.015  1.00 36.22      E    C
ATOM  19332  CB  TYR E 202      40.550 -63.990 -24.370  1.00 33.84      E    C
ATOM  19335  CG  TYR E 202      39.047 -64.168 -24.408  1.00 33.82      E    C
ATOM  19336  CD1 TYR E 202      38.355 -64.103 -25.611  1.00 32.06      E    C
ATOM  19338  CE1 TYR E 202      36.984 -64.279 -25.657  1.00 33.56      E    C
ATOM  19340  CZ  TYR E 202      36.289 -64.525 -24.484  1.00 32.96      E    C
ATOM  19341  OH  TYR E 202      34.929 -64.695 -24.536  1.00 35.16      E    O
ATOM  19343  CE2 TYR E 202      36.947 -64.588 -23.281  1.00 31.54      E    C
ATOM  19345  CD2 TYR E 202      38.321 -64.414 -23.245  1.00 31.54      E    C
ATOM  19347  C   TYR E 202      42.774 -64.836 -25.140  1.00 35.17      E    C
ATOM  19348  O   TYR E 202      43.451 -64.592 -24.142  1.00 35.22      E    O
ATOM  19350  N   ILE E 203      43.260 -64.851 -26.382  1.00 36.40      E    N
ATOM  19351  CA  ILE E 203      44.669 -64.615 -26.703  1.00 35.88      E    C
ATOM  19353  CB  ILE E 203      45.334 -65.881 -27.308  1.00 37.23      E    C
ATOM  19355  CG1 ILE E 203      45.228 -67.080 -26.352  1.00 38.30      E    C
ATOM  19358  CD1 ILE E 203      45.356 -68.423 -27.051  1.00 36.62      E    C
ATOM  19362  CG2 ILE E 203      46.797 -65.604 -27.653  1.00 37.50      E    C
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ATOM  19366  C   ILE E 203      44.756 -63.508 -27.747  1.00 34.13           E    C
ATOM  19367  O   ILE E 203      44.060 -63.564 -28.765  1.00 31.41           E    O
ATOM  19369  N   CYS E 204      45.596 -62.507 -27.502  1.00 35.38           E    N
ATOM  19370  CA  CYS E 204      45.828 -61.453 -28.492  1.00 36.41           E    C
ATOM  19372  CB  CYS E 204      45.907 -60.067 -27.841  1.00 37.36           E    C
ATOM  19375  SG  CYS E 204      47.309 -59.800 -26.758  1.00 41.10           E    S
ATOM  19377  C   CYS E 204      47.100 -61.768 -29.258  1.00 35.87           E    C
ATOM  19378  O   CYS E 204      48.111 -62.127 -28.663  1.00 37.21           E    O
ATOM  19380  N   ASN E 205      47.036 -61.636 -30.578  1.00 37.15           E    N
ATOM  19381  CA  ASN E 205      48.155 -61.958 -31.456  1.00 36.31           E    C
ATOM  19383  CB  ASN E 205      47.671 -62.835 -32.612  1.00 35.45           E    C
ATOM  19386  CG  ASN E 205      46.679 -63.900 -32.158  1.00 36.58           E    C
ATOM  19387  OD1 ASN E 205      45.498 -63.853 -32.506  1.00 37.24           E    O
ATOM  19388  ND2 ASN E 205      47.151 -64.844 -31.349  1.00 36.66           E    N
ATOM  19391  C   ASN E 205      48.794 -60.674 -31.979  1.00 35.69           E    C
ATOM  19392  O   ASN E 205      48.181 -59.954 -32.768  1.00 41.33           E    O
ATOM  19394  N   VAL E 206      50.019 -60.396 -31.529  1.00 32.20           E    N
ATOM  19395  CA  VAL E 206      50.698 -59.132 -31.801  1.00 32.81           E    C
ATOM  19397  CB  VAL E 206      51.182 -58.502 -30.482  1.00 29.12           E    C
ATOM  19399  CG1 VAL E 206      51.866 -57.151 -30.729  1.00 25.18           E    C
ATOM  19403  CG2 VAL E 206      50.008 -58.344 -29.518  1.00 30.09           E    C
ATOM  19407  C   VAL E 206      51.889 -59.324 -32.743  1.00 34.70           E    C
ATOM  19408  O   VAL E 206      52.811 -60.079 -32.432  1.00 32.02           E    O
ATOM  19410  N   ASN E 207      51.870 -58.648 -33.892  1.00 39.36           E    N
ATOM  19411  CA  ASN E 207      52.994 -58.721 -34.828  1.00 38.54           E    C
ATOM  19413  CB  ASN E 207      52.571 -59.349 -36.168  1.00 43.66           E    C
ATOM  19416  CG  ASN E 207      53.758 -59.985 -36.936  1.00 47.20           E    C
ATOM  19417  OD1 ASN E 207      54.932 -59.672 -36.686  1.00 52.32           E    O
ATOM  19418  ND2 ASN E 207      53.443 -60.885 -37.871  1.00 46.99           E    N
ATOM  19421  C   ASN E 207      53.612 -57.351 -35.065  1.00 36.96           E    C
ATOM  19422  O   ASN E 207      52.915 -56.406 -35.405  1.00 38.93           E    O
ATOM  19424  N   HIS E 208      54.926 -57.264 -34.877  1.00 32.62           E    N
ATOM  19425  CA  HIS E 208      55.706 -56.073 -35.192  1.00 34.24           E    C
ATOM  19427  CB  HIS E 208      56.221 -55.437 -33.893  1.00 28.36           E    C
ATOM  19430  CG  HIS E 208      57.118 -54.253 -34.089  1.00 25.55           E    C
ATOM  19431  ND1 HIS E 208      56.695 -53.076 -34.669  1.00 28.06           E    N
ATOM  19433  CE1 HIS E 208      57.696 -52.215 -34.691  1.00 26.42           E    C
ATOM  19435  NE2 HIS E 208      58.745 -52.781 -34.125  1.00 23.38           E    N
ATOM  19437  CD2 HIS E 208      58.404 -54.048 -33.730  1.00 24.47           E    C
ATOM  19439  C   HIS E 208      56.843 -56.534 -36.100  1.00 37.20           E    C
ATOM  19440  O   HIS E 208      57.859 -57.026 -35.630  1.00 37.65           E    O
ATOM  19442  N   LYS E 209      56.651 -56.406 -37.411  1.00 40.81           E    N
ATOM  19443  CA  LYS E 209      57.598 -56.970 -38.379  1.00 41.45           E    C
ATOM  19445  CB  LYS E 209      57.055 -56.892 -39.811  1.00 42.60           E    C
ATOM  19448  CG  LYS E 209      55.892 -57.819 -40.074  1.00 42.27           E    C
ATOM  19451  CD  LYS E 209      55.529 -57.850 -41.554  1.00 44.38           E    C
ATOM  19454  CE  LYS E 209      54.060 -58.239 -41.764  1.00 45.63           E    C
ATOM  19457  NZ  LYS E 209      53.687 -58.378 -43.199  1.00 45.39           E    N
ATOM  19461  C   LYS E 209      58.986 -56.343 -38.301  1.00 42.10           E    C
ATOM  19462  O   LYS E 209      59.980 -57.067 -38.316  1.00 43.30           E    O
ATOM  19464  N   PRO E 210      59.073 -55.005 -38.182  1.00 42.48           E    N
ATOM  19465  CA  PRO E 210      60.403 -54.393 -38.119  1.00 42.34           E    C
ATOM  19467  CB  PRO E 210      60.099 -52.940 -37.754  1.00 42.17           E    C
ATOM  19470  CG  PRO E 210      58.757 -52.691 -38.325  1.00 42.97           E    C
ATOM  19473  CD  PRO E 210      58.008 -53.987 -38.123  1.00 43.57           E    C
ATOM  19476  C   PRO E 210      61.368 -55.020 -37.097  1.00 44.50           E    C
ATOM  19477  O   PRO E 210      62.582 -54.879 -37.249  1.00 47.03           E    O
ATOM  19478  N   SER E 211      60.843 -55.705 -36.082  1.00 44.02           E    N
ATOM  19479  CA  SER E 211      61.685 -56.363 -35.086  1.00 43.72           E    C
ATOM  19481  CB  SER E 211      61.436 -55.738 -33.717  1.00 41.80           E    C
ATOM  19484  OG  SER E 211      60.318 -56.334 -33.084  1.00 40.66           E    O
ATOM  19486  C   SER E 211      61.449 -57.875 -35.015  1.00 44.74           E    C
ATOM  19487  O   SER E 211      61.874 -58.526 -34.058  1.00 47.19           E    O
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ATOM  19489  N   ASN E 212      60.784 -58.437 -36.022  1.00 46.57      E    N
ATOM  19490  CA  ASN E 212      60.427 -59.862 -36.022  1.00 48.28      E    C
ATOM  19492  CB  ASN E 212      61.652 -60.740 -36.313  1.00 51.99      E    C
ATOM  19495  CG  ASN E 212      62.389 -60.341 -37.578  1.00 54.97      E    C
ATOM  19496  OD1 ASN E 212      61.913 -59.526 -38.368  1.00 56.53      E    O
ATOM  19497  ND2 ASN E 212      63.568 -60.924 -37.773  1.00 56.67      E    N
ATOM  19500  C   ASN E 212      59.805 -60.319 -34.698  1.00 49.83      E    C
ATOM  19501  O   ASN E 212      60.056 -61.441 -34.247  1.00 49.62      E    O
ATOM  19503  N   THR E 213      59.014 -59.449 -34.070  1.00 49.07      E    N
ATOM  19504  CA  THR E 213      58.333 -59.785 -32.826  1.00 46.21      E    C
ATOM  19506  CB  THR E 213      58.120 -58.553 -31.945  1.00 45.85      E    C
ATOM  19508  OG1 THR E 213      59.391 -58.017 -31.560  1.00 43.91      E    O
ATOM  19510  CG2 THR E 213      57.322 -58.915 -30.697  1.00 47.53      E    C
ATOM  19514  C   THR E 213      56.988 -60.399 -33.160  1.00 43.49      E    C
ATOM  19515  O   THR E 213      56.162 -59.768 -33.807  1.00 43.98      E    O
ATOM  19517  N   LYS E 214      56.788 -61.641 -32.738  1.00 46.87      E    N
ATOM  19518  CA  LYS E 214      55.516 -62.336 -32.909  1.00 50.09      E    C
ATOM  19520  CB  LYS E 214      55.626 -63.423 -33.990  1.00 53.30      E    C
ATOM  19523  CG  LYS E 214      54.905 -63.065 -35.300  1.00 57.32      E    C
ATOM  19526  CD  LYS E 214      55.438 -63.810 -36.541  1.00 58.48      E    C
ATOM  19529  CE  LYS E 214      55.735 -65.291 -36.280  1.00 62.04      E    C
ATOM  19532  NZ  LYS E 214      54.591 -66.000 -35.638  1.00 64.04      E    N
ATOM  19536  C   LYS E 214      55.100 -62.918 -31.566  1.00 48.58      E    C
ATOM  19537  O   LYS E 214      55.484 -64.036 -31.220  1.00 50.07      E    O
ATOM  19539  N   VAL E 215      54.320 -62.134 -30.820  1.00 47.43      E    N
ATOM  19540  CA  VAL E 215      53.931 -62.462 -29.447  1.00 45.45      E    C
ATOM  19542  CB  VAL E 215      54.176 -61.259 -28.507  1.00 42.61      E    C
ATOM  19544  CG1 VAL E 215      53.807 -61.603 -27.075  1.00 42.46      E    C
ATOM  19548  CG2 VAL E 215      55.628 -60.808 -28.586  1.00 44.38      E    C
ATOM  19552  C   VAL E 215      52.457 -62.844 -29.371  1.00 43.31      E    C
ATOM  19553  O   VAL E 215      51.614 -62.170 -29.952  1.00 46.91      E    O
ATOM  19555  N   ASP E 216      52.158 -63.936 -28.673  1.00 42.98      E    N
ATOM  19556  CA  ASP E 216      50.788 -64.263 -28.265  1.00 45.24      E    C
ATOM  19558  CB  ASP E 216      50.406 -65.684 -28.695  1.00 47.29      E    C
ATOM  19561  CG  ASP E 216      50.281 -65.837 -30.205  1.00 47.73      E    C
ATOM  19562  OD1 ASP E 216      49.978 -64.855 -30.913  1.00 45.19      E    O
ATOM  19563  OD2 ASP E 216      50.479 -66.966 -30.686  1.00 50.79      E    O
ATOM  19564  C   ASP E 216      50.676 -64.133 -26.737  1.00 46.47      E    C
ATOM  19565  O   ASP E 216      51.598 -64.514 -26.007  1.00 45.91      E    O
ATOM  19567  N   LYS E 217      49.553 -63.596 -26.259  1.00 44.76      E    N
ATOM  19568  CA  LYS E 217      49.344 -63.390 -24.827  1.00 44.01      E    C
ATOM  19570  CB  LYS E 217      49.581 -61.920 -24.470  1.00 46.16      E    C
ATOM  19573  CG  LYS E 217      49.649 -61.623 -22.972  1.00 46.48      E    C
ATOM  19576  CD  LYS E 217      51.030 -61.918 -22.407  1.00 47.39      E    C
ATOM  19579  CE  LYS E 217      51.015 -61.894 -20.897  1.00 48.11      E    C
ATOM  19582  NZ  LYS E 217      52.316 -61.434 -20.351  1.00 49.85      E    N
ATOM  19586  C   LYS E 217      47.941 -63.811 -24.391  1.00 42.42      E    C
ATOM  19587  O   LYS E 217      46.955 -63.219 -24.808  1.00 41.36      E    O
ATOM  19589  N   LYS E 218      47.859 -64.830 -23.543  1.00 43.11      E    N
ATOM  19590  CA  LYS E 218      46.585 -65.212 -22.944  1.00 43.66      E    C
ATOM  19592  CB  LYS E 218      46.677 -66.590 -22.273  1.00 45.68      E    C
ATOM  19595  CG  LYS E 218      45.318 -67.244 -21.948  1.00 46.25      E    C
ATOM  19598  CD  LYS E 218      45.458 -68.319 -20.854  1.00 47.40      E    C
ATOM  19601  CE  LYS E 218      44.159 -69.097 -20.596  1.00 48.51      E    C
ATOM  19604  NZ  LYS E 218      43.052 -68.275 -20.023  1.00 50.07      E    N
ATOM  19608  C   LYS E 218      46.185 -64.144 -21.924  1.00 42.07      E    C
ATOM  19609  O   LYS E 218      47.026 -63.641 -21.172  1.00 40.49      E    O
ATOM  19611  N   VAL E 219      44.902 -63.792 -21.922  1.00 41.33      E    N
ATOM  19612  CA  VAL E 219      44.359 -62.800 -21.005  1.00 40.40      E    C
ATOM  19614  CB  VAL E 219      43.702 -61.630 -21.776  1.00 37.59      E    C
ATOM  19616  CG1 VAL E 219      43.182 -60.579 -20.814  1.00 36.25      E    C
ATOM  19620  CG2 VAL E 219      44.694 -61.021 -22.767  1.00 36.64      E    C
ATOM  19624  C   VAL E 219      43.324 -63.493 -20.132  1.00 37.88      E    C
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ATOM  19625  O   VAL E 219      42.375 -64.079 -20.643  1.00 33.13           E    O
ATOM  19627  N   GLU E 220      43.512 -63.438 -18.818  1.00 41.61           E    N
ATOM  19628  CA  GLU E 220      42.573 -64.076 -17.889  1.00 43.58           E    C
ATOM  19630  CB  GLU E 220      42.991 -65.524 -17.621  1.00 45.82           E    C
ATOM  19633  CG  GLU E 220      44.453 -65.718 -17.213  1.00 46.18           E    C
ATOM  19636  CD  GLU E 220      44.917 -67.163 -17.346  1.00 46.30           E    C
ATOM  19637  OE1 GLU E 220      44.069 -68.066 -17.539  1.00 45.96           E    O
ATOM  19638  OE2 GLU E 220      46.140 -67.396 -17.262  1.00 47.92           E    O
ATOM  19639  C   GLU E 220      42.454 -63.294 -16.589  1.00 41.18           E    C
ATOM  19640  O   GLU E 220      43.352 -62.529 -16.259  1.00 41.04           E    O
ATOM  19642  N   PRO E 221      41.342 -63.477 -15.848  1.00 41.60           E    N
ATOM  19643  CA  PRO E 221      41.107 -62.660 -14.644  1.00 45.81           E    C
ATOM  19645  CB  PRO E 221      39.768 -63.189 -14.109  1.00 42.70           E    C
ATOM  19648  CG  PRO E 221      39.136 -63.898 -15.254  1.00 40.42           E    C
ATOM  19651  CD  PRO E 221      40.253 -64.446 -16.072  1.00 39.34           E    C
ATOM  19654  C   PRO E 221      42.197 -62.803 -13.577  1.00 47.97           E    C
ATOM  19655  O   PRO E 221      42.730 -63.895 -13.398  1.00 50.30           E    O
ATOM  19656  N   LYS E 222      42.525 -61.709 -12.887  1.00 52.07           E    N
ATOM  19657  CA  LYS E 222      43.501 -61.745 -11.779  1.00 53.07           E    C
ATOM  19659  CB  LYS E 222      44.229 -60.395 -11.646  1.00 54.66           E    C
ATOM  19662  CG  LYS E 222      45.673 -60.489 -11.114  1.00 54.68           E    C
ATOM  19665  CD  LYS E 222      46.034 -59.355 -10.129  1.00 55.47           E    C
ATOM  19668  CE  LYS E 222      45.851 -59.798  -8.660  1.00 56.24           E    C
ATOM  19671  NZ  LYS E 222      45.990 -58.691  -7.662  1.00 55.37           E    N
ATOM  19675  C   LYS E 222      42.779 -62.069 -10.468  1.00 53.36           E    C
ATOM  19676  O   LYS E 222      41.676 -61.569 -10.236  1.00 54.04           E    O
ATOM  19678  N   SER E 223      43.399 -62.895  -9.619  1.00 54.19           E    N
ATOM  19679  CA  SER E 223      42.852 -63.227  -8.290  1.00 54.01           E    C
ATOM  19681  CB  SER E 223      43.310 -64.621  -7.856  1.00 52.50           E    C
ATOM  19684  OG  SER E 223      44.719 -64.737  -7.936  1.00 50.56           E    O
ATOM  19686  C   SER E 223      43.264 -62.191  -7.236  1.00 54.58           E    C
ATOM  19687  O   SER E 223      43.401 -62.502  -6.048  1.00 53.60           E    O
ATOM  19689  O3  GOL G   1      15.644 -12.225 -31.670  1.00 46.05           G    O
ATOM  19691  C3  GOL G   1      15.907 -12.056 -30.280  1.00 47.89           G    C
ATOM  19694  C2  GOL G   1      15.938 -10.576 -29.870  1.00 46.30           G    C
ATOM  19696  O2  GOL G   1      16.263  -9.769 -30.987  1.00 45.94           G    O
ATOM  19698  C1  GOL G   1      14.585 -10.095 -29.345  1.00 47.01           G    C
ATOM  19701  O1  GOL G   1      14.210 -10.684 -28.122  1.00 44.95           G    O
ATOM  19703  O3  GOL G   2      52.092 -55.065 -76.953  1.00 19.73           G    O
ATOM  19705  C3  GOL G   2      52.164 -55.853 -78.129  1.00 23.77           G    C
ATOM  19708  C2  GOL G   2      51.437 -55.188 -79.290  1.00 21.18           G    C
ATOM  19710  O2  GOL G   2      51.782 -55.810 -80.509  1.00 20.50           G    O
ATOM  19712  C1  GOL G   2      49.926 -55.318 -79.068  1.00 20.44           G    C
ATOM  19715  O1  GOL G   2      49.239 -54.191 -79.577  1.00 21.26           G    O
ATOM  19717  O3  GOL G   3      65.965 -55.248 -63.330  1.00 57.18           G    O
ATOM  19719  C3  GOL G   3      66.479 -55.583 -62.056  1.00 57.77           G    C
ATOM  19722  C2  GOL G   3      65.540 -55.177 -60.920  1.00 55.71           G    C
ATOM  19724  O2  GOL G   3      66.160 -55.508 -59.689  1.00 54.46           G    O
ATOM  19726  C1  GOL G   3      65.158 -53.692 -61.058  1.00 54.65           G    C
ATOM  19729  O1  GOL G   3      65.149 -52.979 -59.837  1.00 52.71           G    O
ATOM  19731  O3  GOL G   4      36.529 -47.221 -69.327  1.00 26.15           G    O
ATOM  19733  C3  GOL G   4      36.387 -46.616 -70.598  1.00 33.10           G    C
ATOM  19736  C2  GOL G   4      36.498 -45.100 -70.437  1.00 33.87           G    C
ATOM  19738  O2  GOL G   4      37.055 -44.363 -71.524  1.00 31.17           G    O
ATOM  19740  C1  GOL G   4      35.146 -44.489 -70.154  1.00 26.93           G    C
ATOM  19743  O1  GOL G   4      35.402 -43.118 -70.211  1.00 17.42           G    O
ATOM  19745  O3  GOL G   5      53.349 -53.881 -94.776  1.00 46.57           G    O
ATOM  19747  C3  GOL G   5      52.799 -52.620 -94.458  1.00 50.34           G    C
ATOM  19750  C2  GOL G   5      53.748 -51.779 -93.600  1.00 54.72           G    C
ATOM  19752  O2  GOL G   5      54.208 -52.527 -92.487  1.00 53.84           G    O
ATOM  19754  C1  GOL G   5      54.936 -51.265 -94.425  1.00 57.21           G    C
ATOM  19757  O1  GOL G   5      55.296 -49.962 -94.007  1.00 57.71           G    O
ATOM  19759  O3  GOL G   6      59.790 -59.263 -84.436  1.00 47.17           G    O
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ATOM  19761  C3  GOL G   6      58.733 -60.153 -84.149  1.00 47.82      G    C
ATOM  19764  C2  GOL G   6      57.356 -59.672 -84.624  1.00 47.98      G    C
ATOM  19766  O2  GOL G   6      57.341 -58.284 -84.898  1.00 47.56      G    O
ATOM  19768  C1  GOL G   6      56.818 -60.437 -85.833  1.00 47.02      G    C
ATOM  19771  O1  GOL G   6      55.485 -60.841 -85.566  1.00 43.63      G    O
ATOM  19773  O3  GOL G   7      53.713 -35.146 -51.931  1.00 40.24      G    O
ATOM  19775  C3  GOL G   7      55.013 -34.581 -51.814  1.00 46.78      G    C
ATOM  19778  C2  GOL G   7      56.095 -35.427 -52.517  1.00 46.26      G    C
ATOM  19780  O2  GOL G   7      56.863 -34.629 -53.385  1.00 46.86      G    O
ATOM  19782  C1  GOL G   7      57.068 -36.089 -51.549  1.00 46.65      G    C
ATOM  19785  O1  GOL G   7      58.320 -35.443 -51.629  1.00 45.82      G    O
ATOM  19787  O3  GOL G   8      -9.741 -10.697 -55.319  1.00 25.89      G    O
ATOM  19789  C3  GOL G   8      -9.353  -9.682 -54.405  1.00 25.72      G    C
ATOM  19792  C2  GOL G   8     -10.493  -9.038 -53.584  1.00 20.92      G    C
ATOM  19794  O2  GOL G   8     -11.792  -9.137 -54.161  1.00 13.98      G    O
ATOM  19796  C1  GOL G   8     -10.559  -9.578 -52.179  1.00 24.21      G    C
ATOM  19799  O1  GOL G   8      -9.297  -9.619 -51.562  1.00 22.66      G    O
ATOM  19801  O3  GOL G   9      23.754 -54.401 -57.185  1.00 39.94      G    O
ATOM  19803  C3  GOL G   9      24.397 -54.111 -58.425  1.00 42.14      G    C
ATOM  19806  C2  GOL G   9      25.919 -53.952 -58.250  1.00 40.94      G    C
ATOM  19808  O2  GOL G   9      26.315 -54.789 -57.201  1.00 36.99      G    O
ATOM  19810  C1  GOL G   9      26.755 -54.318 -59.492  1.00 42.14      G    C
ATOM  19813  O1  GOL G   9      26.810 -53.296 -60.476  1.00 38.73      G    O
ATOM  19815  O3  GOL G  10       2.145 -23.190 -61.347  1.00 51.92      G    O
ATOM  19817  C3  GOL G  10       3.547 -23.378 -61.329  1.00 52.73      G    C
ATOM  19820  C2  GOL G  10       3.914 -24.815 -60.947  1.00 52.10      G    C
ATOM  19822  O2  GOL G  10       3.653 -25.030 -59.570  1.00 49.20      G    O
ATOM  19824  C1  GOL G  10       3.182 -25.828 -61.835  1.00 50.19      G    C
ATOM  19827  O1  GOL G  10       2.024 -26.336 -61.195  1.00 49.25      G    O
ATOM  19829 ZN   ZN  I   1       4.956 -34.114 -61.087  1.00 25.84      I   ZN
ATOM  19830 ZN   ZN  I   2      48.678 -30.113 -66.514  1.00 20.35      I   ZN
ATOM  19831 ZN   ZN  I   3      62.846 -55.911 -82.250  1.00 26.53      I   ZN
ATOM  19832 ZN   ZN  I   4      38.466 -12.195 -34.686  1.00 61.87      I   ZN
ATOM  19833 ZN   ZN  I   5       5.806 -22.193 -58.517  1.00 86.90      I   ZN
ATOM  19834 ZN   ZN  I   6       1.732 -11.390 -76.111  1.00133.94      I   ZN
ATOM  19835  S   SO4 I   7      34.756 -42.392-103.062  1.00 71.34      I    S
ATOM  19836  O1  SO4 I   7      36.066 -41.877-103.455  1.00 70.77      I    O
ATOM  19837  O2  SO4 I   7      33.704 -41.813-103.894  1.00 71.26      I    O
ATOM  19838  O3  SO4 I   7      34.766 -43.840-103.200  1.00 73.57      I    O
ATOM  19839  O4  SO4 I   7      34.476 -42.081-101.669  1.00 72.03      I    O
ATOM  19840  S   SO4 I   8     -18.190 -24.987 -80.132  1.00 43.16      I    S
ATOM  19841  O1  SO4 I   8     -19.063 -26.015 -80.685  1.00 47.41      I    O
ATOM  19842  O2  SO4 I   8     -17.648 -25.431 -78.846  1.00 37.60      I    O
ATOM  19843  O3  SO4 I   8     -19.000 -23.813 -79.851  1.00 41.03      I    O
ATOM  19844  O4  SO4 I   8     -17.134 -24.708 -81.117  1.00 39.84      I    O
ATOM  19845  S   SO4 I   9      -5.111 -15.184 -69.182  1.00 95.52      I    S
ATOM  19846  O1  SO4 I   9      -4.436 -16.135 -70.071  1.00 95.33      I    O
ATOM  19847  O2  SO4 I   9      -6.254 -15.845 -68.563  1.00 95.42      I    O
ATOM  19848  O3  SO4 I   9      -5.608 -14.044 -69.951  1.00 93.42      I    O
ATOM  19849  O4  SO4 I   9      -4.184 -14.723 -68.146  1.00 93.82      I    O
ATOM  19850  OW0 WAT M   1      32.447 -52.213 -28.369  1.00 13.61      M    O
ATOM  19853  OW0 WAT M   2      43.667 -53.676 -61.408  1.00 17.23      M    O
ATOM  19856  OW0 WAT M   3      39.955  -9.300 -47.861  1.00 41.36      M    O
ATOM  19859  OW0 WAT M   4      38.518 -49.564 -47.346  1.00 18.23      M    O
ATOM  19862  OW0 WAT M   5      45.855 -63.208 -71.780  1.00 21.22      M    O
ATOM  19865  OW0 WAT M   6       2.380 -10.736 -71.113  1.00 46.11      M    O
ATOM  19868  OW0 WAT M   7      36.936 -53.594 -60.034  1.00 22.76      M    O
ATOM  19871  OW0 WAT M   8      39.684 -52.094 -55.626  1.00 11.11      M    O
ATOM  19874  OW0 WAT M   9      57.718 -48.274 -40.882  1.00 21.01      M    O
ATOM  19877  OW0 WAT M  10      59.874 -52.890 -48.581  1.00 21.89      M    O
ATOM  19880  OW0 WAT M  11      40.931 -52.821 -53.220  1.00 18.56      M    O
ATOM  19883  OW0 WAT M  12      28.694 -46.022 -38.596  1.00 24.32      M    O
ATOM  19886  OW0 WAT M  13      36.638 -53.121 -57.166  1.00 26.22      M    O
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ATOM  19889  OW0 WAT M  14      36.706 -51.271 -74.659  1.00 26.60           M    O
ATOM  19892  OW0 WAT M  15      22.655 -43.522 -55.307  1.00 17.11           M    O
ATOM  19895  OW0 WAT M  16      32.973 -53.562 -35.803  1.00 30.84           M    O
ATOM  19898  OW0 WAT M  17      35.322 -43.959 -78.938  1.00 35.02           M    O
ATOM  19901  OW0 WAT M  18      32.881 -13.459 -35.424  1.00 29.50           M    O
ATOM  19904  OW0 WAT M  19      30.077 -49.664 -47.842  1.00 24.59           M    O
ATOM  19907  OW0 WAT M  20       7.391 -28.329 -62.497  1.00 45.79           M    O
ATOM  19910  OW0 WAT M  21      32.317 -38.328 -88.292  1.00 33.98           M    O
ATOM  19913  OW0 WAT M  22       6.907 -40.387 -50.076  1.00 27.28           M    O
ATOM  19916  OW0 WAT M  23     -18.929 -21.721 -58.173  1.00 38.25           M    O
ATOM  19919  OW0 WAT M  24      23.138 -52.138 -42.463  1.00 30.67           M    O
ATOM  19922  OW0 WAT M  25      42.662 -55.039 -53.944  1.00 16.46           M    O
ATOM  19925  OW0 WAT M  26      41.555 -41.997 -46.029  1.00 32.15           M    O
ATOM  19928  OW0 WAT M  27      54.754 -66.740 -90.878  1.00 40.45           M    O
ATOM  19931  OW0 WAT M  28      21.396 -41.984 -37.940  1.00 17.00           M    O
ATOM  19934  OW0 WAT M  29      42.492 -72.023 -81.488  1.00 34.62           M    O
ATOM  19937  OW0 WAT M  30      30.534 -39.421 -60.977  1.00 16.31           M    O
ATOM  19940  OW0 WAT M  31      37.599 -40.892 -34.338  1.00 33.76           M    O
ATOM  19943  OW0 WAT M  32      49.371 -62.274 -85.500  1.00 35.83           M    O
ATOM  19946  OW0 WAT M  33      32.108 -13.135 -33.034  1.00 21.74           M    O
ATOM  19949  OW0 WAT M  34      -7.950   0.970 -56.407  1.00 23.19           M    O
ATOM  19952  OW0 WAT M  35      24.860 -10.430 -41.359  1.00 45.73           M    O
ATOM  19955  OW0 WAT M  36     -19.332 -13.591 -49.789  1.00 28.92           M    O
ATOM  19958  OW0 WAT M  37      68.844 -46.749 -43.240  1.00 27.78           M    O
ATOM  19961  OW0 WAT M  38     -22.526 -12.433 -57.418  1.00 35.52           M    O
ATOM  19964  OW0 WAT M  39      34.045 -48.536 -65.990  1.00  9.87           M    O
ATOM  19967  OW0 WAT M  40      21.650 -50.754 -51.056  1.00 28.21           M    O
ATOM  19970  OW0 WAT M  41      21.813 -10.200 -51.201  1.00 36.44           M    O
ATOM  19973  OW0 WAT M  42      33.683 -46.431 -78.260  1.00 28.04           M    O
ATOM  19976  OW0 WAT M  43      47.157 -43.077 -43.120  1.00 28.78           M    O
ATOM  19979  OW0 WAT M  44      31.952 -51.688 -30.144  1.00 18.93           M    O
ATOM  19982  OW0 WAT M  45      22.774 -53.965 -53.796  1.00 23.46           M    O
ATOM  19985  OW0 WAT M  46      45.605 -54.549 -36.052  1.00 26.10           M    O
ATOM  19988  OW0 WAT M  47      26.524 -45.407 -61.123  1.00 20.13           M    O
ATOM  19991  OW0 WAT M  48      32.651 -47.885 -30.913  1.00 29.90           M    O
ATOM  19994  OW0 WAT M  49      34.226 -41.327 -41.389  1.00 33.57           M    O
ATOM  19997  OW0 WAT M  50      33.360   0.714 -38.214  1.00 46.09           M    O
ATOM  20000  OW0 WAT M  51      54.150 -52.248 -44.063  1.00 28.07           M    O
ATOM  20003  OW0 WAT M  52      31.109 -45.088 -85.518  1.00 39.75           M    O
ATOM  20006  OW0 WAT M  53     -29.772 -12.663 -85.086  1.00 28.32           M    O
ATOM  20009  OW0 WAT M  54      37.723 -10.746 -15.154  1.00 37.06           M    O
ATOM  20012  OW0 WAT M  55      35.779 -51.578 -14.654  1.00 29.25           M    O
ATOM  20015  OW0 WAT M  56      -7.296   6.351 -63.298  1.00 26.61           M    O
ATOM  20018  OW0 WAT M  57      33.290 -40.774 -38.512  1.00 26.57           M    O
ATOM  20021  OW0 WAT M  58      34.928  -9.246 -35.370  1.00 35.96           M    O
ATOM  20024  OW0 WAT M  59      34.964 -50.093 -37.158  1.00 32.14           M    O
ATOM  20027  OW0 WAT M  60      42.674 -31.549 -83.873  1.00 29.16           M    O
ATOM  20030  OW0 WAT M  61     -12.422 -22.493 -60.061  1.00 32.20           M    O
ATOM  20033  OW0 WAT M  62      45.399 -55.935 -50.842  1.00 31.92           M    O
ATOM  20036  OW0 WAT M  63      32.518 -48.393 -42.112  1.00 37.08           M    O
ATOM  20039  OW0 WAT M  64      30.888 -51.096 -50.144  1.00 29.52           M    O
ATOM  20042  OW0 WAT M  65       6.751  -0.391 -34.223  1.00 49.91           M    O
ATOM  20045  OW0 WAT M  66      -8.546 -29.662 -68.949  1.00  9.99           M    O
ATOM  20048  OW0 WAT M  67      20.864 -50.221 -48.762  1.00 28.44           M    O
ATOM  20051  OW0 WAT M  68      41.096 -60.076 -63.006  1.00 25.20           M    O
ATOM  20054  OW0 WAT M  69      54.407 -54.801 -38.178  1.00 33.00           M    O
ATOM  20057  OW0 WAT M  70      43.404 -48.198 -84.642  1.00 20.80           M    O
ATOM  20060  OW0 WAT M  71      22.918 -47.808 -58.133  1.00 23.93           M    O
ATOM  20063  OW0 WAT M  72      50.250 -53.312 -17.607  1.00 31.63           M    O
ATOM  20066  OW0 WAT M  73     -29.746 -12.309 -69.229  1.00 32.99           M    O
ATOM  20069  OW0 WAT M  74      21.206  -9.173 -47.551  1.00 46.07           M    O
ATOM  20072  OW0 WAT M  75     -11.643 -28.378 -66.482  1.00 21.29           M    O
ATOM  20075  OW0 WAT M  76     -12.034  11.848 -65.011  1.00 32.38           M    O
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ATOM  20078  OW0 WAT M  77      26.610 -49.497 -63.568  1.00 20.61      M    O
ATOM  20081  OW0 WAT M  78      49.568 -21.186 -11.757  1.00 54.01      M    O
ATOM  20084  OW0 WAT M  79      50.555 -59.882 -14.706  1.00 30.62      M    O
ATOM  20087  OW0 WAT M  80      36.584   0.126 -35.316  1.00 42.91      M    O
ATOM  20090  OW0 WAT M  81     -31.498  -7.402 -85.582  1.00 34.72      M    O
ATOM  20093  OW0 WAT M  82      37.292 -55.311 -17.164  1.00 32.25      M    O
ATOM  20096  OW0 WAT M  83      41.294 -62.543 -59.528  1.00 21.78      M    O
ATOM  20099  OW0 WAT M  84      -7.151 -19.370 -35.262  1.00 41.50      M    O
ATOM  20102  OW0 WAT M  85      35.221 -10.243 -49.200  1.00 31.10      M    O
ATOM  20105  OW0 WAT M  86      42.355 -56.137 -51.393  1.00 28.48      M    O
ATOM  20108  OW0 WAT M  87      43.146 -60.656 -64.450  1.00 22.78      M    O
ATOM  20111  OW0 WAT M  88     -20.147  -7.515 -56.101  1.00 26.77      M    O
ATOM  20114  OW0 WAT M  89      61.876 -56.102 -45.752  1.00 28.56      M    O
ATOM  20117  OW0 WAT M  90      38.863   9.044 -26.507  1.00 44.62      M    O
ATOM  20120  OW0 WAT M  91      37.455 -10.303 -36.122  1.00 42.93      M    O
ATOM  20123  OW0 WAT M  92     -22.756 -22.193 -59.900  1.00 45.91      M    O
ATOM  20126  OW0 WAT M  93      31.176 -39.939 -65.985  1.00 34.61      M    O
ATOM  20129  OW0 WAT M  94      41.436 -72.033 -79.172  1.00 42.71      M    O
ATOM  20132  OW0 WAT M  95      58.508 -63.071 -36.039  1.00 56.23      M    O
ATOM  20135  OW0 WAT M  96     -25.811 -18.278 -59.536  1.00 32.21      M    O
ATOM  20138  OW0 WAT M  97      39.310 -52.834 -48.801  1.00 27.28      M    O
ATOM  20141  OW0 WAT M  98      33.363 -62.846 -32.990  1.00 36.31      M    O
ATOM  20144  OW0 WAT M  99      32.538  -9.531 -49.020  1.00 38.46      M    O
ATOM  20147  OW0 WAT M 100      35.980 -42.881 -74.344  1.00 47.87      M    O
ATOM  20150  OW0 WAT M 101      37.539 -50.141 -33.519  1.00 30.75      M    O
ATOM  20153  OW0 WAT M 102       3.492 -22.105 -57.950  1.00 41.77      M    O
ATOM  20156  OW0 WAT M 103      45.725 -46.595 -26.678  1.00 29.39      M    O
ATOM  20159  OW0 WAT M 104      -6.322 -20.181 -47.556  1.00 27.90      M    O
ATOM  20162  OW0 WAT M 105      61.208 -56.929 -86.317  1.00 38.81      M    O
ATOM  20165  OW0 WAT M 106      66.676 -45.522 -38.489  1.00 31.17      M    O
ATOM  20168  OW0 WAT M 107      44.669 -46.424 -43.364  1.00 32.00      M    O
ATOM  20171  OW0 WAT M 108      46.540 -22.002  -0.088  1.00 35.73      M    O
ATOM  20174  OW0 WAT M 109      28.585 -41.210 -67.573  1.00 24.60      M    O
ATOM  20177  OW0 WAT M 110      36.156   3.773 -32.069  1.00 37.12      M    O
ATOM  20180  OW0 WAT M 111     -19.831 -12.315 -68.033  1.00 28.68      M    O
ATOM  20183  OW0 WAT M 112      35.385 -40.254 -74.683  1.00 24.65      M    O
ATOM  20186  OW0 WAT M 113      23.186 -44.471 -23.295  1.00 39.07      M    O
ATOM  20189  OW0 WAT M 114      35.755 -53.155 -75.603  1.00 32.92      M    O
ATOM  20192  OW0 WAT M 115      54.918 -65.782 -93.310  1.00 36.42      M    O
ATOM  20195  OW0 WAT M 116      46.997 -62.185 -18.320  1.00 38.84      M    O
ATOM  20198  OW0 WAT M 117      41.055 -42.790 -34.877  1.00 29.51      M    O
ATOM  20201  OW0 WAT M 118      42.140 -37.827 -45.166  1.00 29.44      M    O
ATOM  20204  OW0 WAT M 119      34.426 -48.186 -39.707  1.00 32.56      M    O
ATOM  20207  OW0 WAT M 120      36.915 -42.688 -42.160  1.00 32.98      M    O
ATOM  20210  OW0 WAT M 121      28.304 -12.554 -57.767  1.00 39.16      M    O
ATOM  20213  OW0 WAT M 122      36.595 -50.463 -48.265  1.00 32.34      M    O
ATOM  20216  OW0 WAT M 123     -22.469 -10.062 -56.334  1.00 22.95      M    O
ATOM  20219  OW0 WAT M 124      34.430 -48.553 -76.973  1.00 33.24      M    O
ATOM  20222  OW0 WAT M 125     -26.127  -4.667 -70.808  1.00 33.23      M    O
ATOM  20225  OW0 WAT M 126     -27.828  -8.374 -59.067  1.00 19.84      M    O
ATOM  20228  OW0 WAT M 127     -31.963  -9.683 -82.802  1.00 36.00      M    O
ATOM  20231  OW0 WAT M 128     -32.011  -6.514 -87.893  1.00 40.12      M    O
ATOM  20234  OW0 WAT M 129     -29.458  -6.576 -81.340  1.00 36.57      M    O
ATOM  20237  OW0 WAT M 130      40.919 -52.898  -6.066  1.00 42.35      M    O
ATOM  20240  OW0 WAT M 131     -16.430  10.124 -69.881  1.00 46.95      M    O
ATOM  20243  OW0 WAT M 132      51.233 -23.823 -13.332  1.00 38.53      M    O
ATOM  20246  OW0 WAT M 133      47.215 -51.600 -17.510  1.00 34.97      M    O
ATOM  20249  OW0 WAT M 134      52.367 -55.193 -40.633  1.00 39.71      M    O
ATOM  20252  OW0 WAT M 135      43.584 -63.498 -64.027  1.00 29.82      M    O
ATOM  20255  OW0 WAT M 136      26.143 -41.264 -66.488  1.00 26.86      M    O
ATOM  20258  OW0 WAT M 137      33.624 -43.934 -74.827  1.00 28.33      M    O
ATOM  20261  OW0 WAT M 138     -17.182 -26.897 -74.243  1.00 38.04      M    O
ATOM  20264  OW0 WAT M 139      62.509 -44.270 -30.655  1.00 40.08      M    O
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ATOM  20267  OW0 WAT M 140      24.602 -52.514 -61.486  1.00 36.11           M    O
ATOM  20270  OW0 WAT M 141     -20.563 -23.058 -66.219  1.00 37.41           M    O
ATOM  20273  OW0 WAT M 142      -5.083   0.041 -48.826  1.00 37.36           M    O
ATOM  20276  OW0 WAT M 143      24.927 -47.306 -59.764  1.00 34.56           M    O
ATOM  20279  OW0 WAT M 144      40.439 -60.198 -59.664  1.00 33.11           M    O
ATOM  20282  OW0 WAT M 145      49.715 -69.990 -82.724  1.00 27.68           M    O
ATOM  20285  OW0 WAT M 146      36.089 -50.651 -69.304  1.00 31.88           M    O
ATOM  20288  OW0 WAT M 147      36.824  -7.928 -37.568  1.00 41.97           M    O
ATOM  20291  OW0 WAT M 148      59.311 -40.442 -38.365  1.00 32.43           M    O
ATOM  20294  OW0 WAT M 149      -4.834   5.888 -63.790  1.00 33.48           M    O
ATOM  20297  OW0 WAT M 150      29.159 -43.652 -84.009  1.00 37.06           M    O
ATOM  20300  OW0 WAT M 151      63.527 -57.757 -81.797  1.00 33.87           M    O
ATOM  20303  OW0 WAT M 152      44.009 -30.045 -29.453  1.00 39.31           M    O
ATOM  20306  OW0 WAT M 153     -17.518  -3.802 -55.802  1.00 29.57           M    O
ATOM  20309  OW0 WAT M 154      34.554 -47.423 -32.559  1.00 36.00           M    O
ATOM  20312  OW0 WAT M 155      39.401 -53.923 -51.617  1.00 24.94           M    O
ATOM  20315  OW0 WAT M 156      21.226 -14.524 -42.265  1.00 12.93           M    O
ATOM  20318  OW0 WAT M 157      50.087 -49.822 -36.029  1.00 34.29           M    O
ATOM  20321  OW0 WAT M 158      30.118 -53.063 -32.998  1.00 39.47           M    O
ATOM  20324  OW0 WAT M 159      17.856 -47.458 -43.654  1.00 34.39           M    O
ATOM  20327  OW0 WAT M 160      23.169 -52.701 -44.907  1.00 35.16           M    O
ATOM  20330  OW0 WAT M 161      26.409 -55.938 -18.337  1.00 38.68           M    O
ATOM  20333  OW0 WAT M 162      21.920 -14.170 -44.563  1.00 25.88           M    O
ATOM  20336  OW0 WAT M 163      55.700 -41.092 -11.775  1.00 33.81           M    O
ATOM  20339  OW0 WAT M 164     -18.275   5.273 -69.261  1.00 44.92           M    O
ATOM  20342  OW0 WAT M 165      57.511 -63.012 -89.586  1.00 42.41           M    O
ATOM  20345  OW0 WAT M 166      53.286 -18.009 -18.268  1.00 54.86           M    O
ATOM  20348  OW0 WAT M 167      40.204 -43.748 -43.549  1.00 34.83           M    O
ATOM  20351  OW0 WAT M 168      21.440 -45.343 -59.672  1.00 41.72           M    O
ATOM  20354  OW0 WAT M 169       5.190 -19.719 -62.708  1.00 32.23           M    O
ATOM  20357  OW0 WAT M 170     -23.211   5.742 -73.923  1.00 33.19           M    O
ATOM  20360  OW0 WAT M 171      67.844 -48.104 -40.213  1.00 34.45           M    O
ATOM  20363  OW0 WAT M 172      35.502 -45.595 -41.516  1.00 37.75           M    O
ATOM  20366  OW0 WAT M 173      -7.750 -28.255 -81.808  1.00 42.45           M    O
ATOM  20369  OW0 WAT M 174      39.841 -63.746 -20.076  1.00 38.63           M    O
ATOM  20372  OW0 WAT M 175      48.424 -47.505 -35.290  1.00 41.09           M    O
ATOM  20375  OW0 WAT M 176      16.343   1.414 -41.239  1.00 40.93           M    O
ATOM  20378  OW0 WAT M 177      16.584 -40.599 -42.471  1.00 40.01           M    O
ATOM  20381  OW0 WAT M 178      46.067 -29.464 -85.047  1.00 42.90           M    O
ATOM  20384  OW0 WAT M 179      61.119 -50.705 -22.849  1.00 34.07           M    O
ATOM  20387  OW0 WAT M 180      39.823 -76.724 -97.320  1.00 43.44           M    O
ATOM  20390  OW0 WAT M 181     -23.258 -11.404 -62.617  1.00 23.42           M    O
ATOM  20393  OW0 WAT M 182      15.909 -43.915 -46.581  1.00 27.40           M    O
ATOM  20396  OW0 WAT M 183      65.971 -57.589 -85.815  1.00 17.42           M    O
ATOM  20399  OW0 WAT M 184      47.083 -73.092 -93.529  1.00 35.45           M    O
ATOM  20402  OW0 WAT M 185      42.156 -60.698 -55.738  1.00 32.53           M    O
ATOM  20405  OW0 WAT M 186      38.525 -44.405 -81.077  1.00 24.51           M    O
ATOM  20408  OW0 WAT M 187      66.053 -57.959 -83.343  1.00 19.90           M    O
ATOM  20411  OW0 WAT M 188     -31.968  -6.914 -83.125  1.00 40.25           M    O
ATOM  20414  OW0 WAT M 189      47.635 -44.665 -35.833  1.00 23.17           M    O
ATOM  20417  OW0 WAT M 190      32.874 -53.413 -32.102  1.00 40.82           M    O
ATOM  20420  OW0 WAT M 191     -20.696 -21.995 -64.037  1.00 25.74           M    O
ATOM  20423  OW0 WAT M 192     -33.453  -9.233 -88.263  1.00 26.61           M    O
ATOM  20426  OW0 WAT M 193      44.551 -54.068  -8.211  1.00 43.39           M    O
ATOM  20429  OW0 WAT M 194      28.538 -16.303 -32.375  1.00 39.17           M    O
ATOM  20432  OW0 WAT M 195      42.968 -28.457 -31.909  1.00 43.02           M    O
ATOM  20435  OW0 WAT M 196     -36.022  -2.141 -88.086  1.00 47.69           M    O
ATOM  20438  OW0 WAT M 197      67.527 -48.415 -52.554  1.00 72.95           M    O
ATOM  20441  OW0 WAT M 198     -25.011 -15.863 -56.526  1.00 27.60           M    O
ATOM  20444  OW0 WAT M 199      53.618 -19.047 -11.793  1.00 54.88           M    O
ATOM  20447  OW0 WAT M 200      38.680 -44.165 -67.257  1.00 13.32           M    O
ATOM  20450  OW0 WAT M 201      35.342 -49.879 -34.505  1.00 32.46           M    O
ATOM  20453  OW0 WAT M 202      32.699 -53.194 -63.584  1.00 39.46           M    O
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ATOM  20456  OW0 WAT M 203      62.230 -60.015 -81.080  1.00 39.19      M    O
ATOM  20459  OW0 WAT M 204      42.609 -54.150 -46.852  1.00 31.03      M    O
ATOM  20462  OW0 WAT M 205      57.421 -58.795 -79.913  1.00 24.40      M    O
ATOM  20465  OW0 WAT M 206      -1.781 -28.928 -79.505  1.00 30.44      M    O
ATOM  20468  OW0 WAT M 207     -16.069 -23.873 -71.249  1.00 24.55      M    O
ATOM  20471  OW0 WAT M 208      33.233 -13.718 -54.796  1.00 39.03      M    O
ATOM  20474  OW0 WAT M 209       0.038 -27.618 -29.119  1.00 37.71      M    O
ATOM  20477  OW0 WAT M 210       6.611  -9.334 -26.819  1.00 33.12      M    O
ATOM  20480  OW0 WAT M 211     -33.477  -3.575 -76.066  1.00 54.07      M    O
ATOM  20483  OW0 WAT M 212      44.969 -43.820 -43.980  1.00 42.81      M    O
ATOM  20486  OW0 WAT M 213      48.011 -53.687 -18.743  1.00 51.34      M    O
ATOM  20489  OW0 WAT M 214      34.877  -1.161 -36.603  1.00 44.40      M    O
ATOM  20492  OW0 WAT M 215      27.256 -10.720 -56.343  1.00 44.52      M    O
ATOM  20495  OW0 WAT M 216     -14.928 -22.932 -59.120  1.00 38.92      M    O
ATOM  20498  OW0 WAT M 217       3.318 -36.154 -47.180  1.00 29.93      M    O
ATOM  20501  OW0 WAT M 218      41.634   1.468  -6.527  1.00 46.18      M    O
ATOM  20504  OW0 WAT M 219      41.474 -40.742  -6.705  1.00 37.58      M    O
ATOM  20507  OW0 WAT M 220      46.166 -25.386   3.099  1.00 47.88      M    O
ATOM  20510  OW0 WAT M 221      15.110 -44.667 -43.353  1.00 35.80      M    O
ATOM  20513  OW0 WAT M 222      26.651 -45.961 -90.553  1.00 45.01      M    O
ATOM  20516  OW0 WAT M 223      42.138 -30.682 -78.964  1.00 38.34      M    O
ATOM  20519  OW0 WAT M 224      18.110 -40.906 -51.600  1.00 39.80      M    O
ATOM  20522  OW0 WAT M 225      37.421 -53.752 -34.765  1.00 28.13      M    O
ATOM  20525  OW0 WAT M 226      24.010 -13.937 -48.939  1.00 33.66      M    O
ATOM  20528  OW0 WAT M 227     -10.788  -1.598 -51.705  1.00 52.26      M    O
ATOM  20531  OW0 WAT M 228      -9.342  -0.548 -53.275  1.00 35.04      M    O
ATOM  20534  OW0 WAT M 229      36.740  -0.153  -7.777  1.00 51.87      M    O
ATOM  20537  OW0 WAT M 230     -32.194  -7.600 -90.379  1.00 41.64      M    O
ATOM  20540  OW0 WAT M 231     -26.129   4.021 -80.611  1.00 33.87      M    O
ATOM  20543  OW0 WAT M 232      38.422 -27.110 -22.773  1.00 32.00      M    O
ATOM  20546  OW0 WAT M 233      40.442 -51.632-112.574  1.00 53.56      M    O
ATOM  20549  OW0 WAT M 234      47.043 -45.923 -28.488  1.00 43.38      M    O
ATOM  20552  OW0 WAT M 235      45.425 -71.690 -21.363  1.00 55.91      M    O
ATOM  20555  OW0 WAT M 236      39.537 -40.377 -40.802  1.00 32.06      M    O
ATOM  20558  OW0 WAT M 237      48.727 -43.288 -94.057  1.00 31.30      M    O
ATOM  20561  OW0 WAT M 238      50.398 -49.249-106.653  1.00 56.65      M    O
ATOM  20564  OW0 WAT M 239      44.815 -55.207 -15.507  1.00 36.92      M    O
ATOM  20567  OW0 WAT M 240      44.862 -40.975 -44.004  1.00 34.57      M    O
ATOM  20570  OW0 WAT M 241      20.468 -43.491 -34.014  1.00 33.16      M    O
ATOM  20573  OW0 WAT M 242      39.745 -46.962 -35.925  1.00 38.42      M    O
ATOM  20576  OW0 WAT M 243      40.728  -5.740 -34.599  1.00 60.57      M    O
ATOM  20579  OW0 WAT M 244      58.026 -63.703 -10.983  1.00 44.36      M    O
ATOM  20582  OW0 WAT M 245      20.661 -12.785 -32.651  1.00 41.75      M    O
ATOM  20585  OW0 WAT M 246      36.631 -52.972 -71.532  1.00 37.47      M    O
ATOM  20588  OW0 WAT M 247      16.218 -40.288 -44.656  1.00 38.75      M    O
ATOM  20591  OW0 WAT M 248     -20.443 -15.570 -50.453  1.00 37.27      M    O
ATOM  20594  OW0 WAT M 249     -26.712 -14.177 -67.370  1.00 33.35      M    O
ATOM  20597  OW0 WAT M 250      26.801 -48.130 -65.969  1.00 29.89      M    O
ATOM  20600  OW0 WAT M 251      23.983 -45.680 -36.859  1.00 31.19      M    O
ATOM  20603  OW0 WAT M 252      44.471 -47.180   3.932  1.00 58.60      M    O
ATOM  20606  OW0 WAT M 253      67.762 -55.189 -83.670  1.00 18.58      M    O
ATOM  20609  OW0 WAT M 254      44.174 -22.799   4.057  1.00 48.79      M    O
ATOM  20612  OW0 WAT M 255      65.520 -52.434 -47.248  1.00 37.60      M    O
ATOM  20615  OW0 WAT M 256     -37.423  -2.441 -84.852  1.00 44.25      M    O
ATOM  20618  OW0 WAT M 257     -22.530 -14.860 -54.710  1.00 22.70      M    O
ATOM  20621  OW0 WAT M 258      51.441 -21.275 -13.718  1.00 55.28      M    O
ATOM  20624  OW0 WAT M 259     -12.665 -23.438 -57.688  1.00 50.48      M    O
ATOM  20627  OW0 WAT M 260     -25.351 -10.633 -78.176  1.00 17.97      M    O
ATOM  20630  OW0 WAT M 261     -35.720  -2.329 -75.507  1.00 27.77      M    O
ATOM  20633  OW0 WAT M 262     -28.699 -20.359 -76.813  1.00 26.38      M    O
ATOM  20636  OW0 WAT M 263      59.905 -58.747 -81.014  1.00 18.26      M    O
ATOM  20639  OW0 WAT M 264      68.534 -45.248 -54.627  1.00 98.21      M    O
ATOM  20642  OW0 WAT M 265      66.436 -41.158 -57.812  1.00 33.12      M    O
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ATOM	20645	OW0	WAT	M	266	39.448	-61.439	-80.879	1.00	42.76	M	O
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ATOM	20651	OW0	WAT	M	268	38.386	-48.043	-37.593	1.00	31.76	M	O
ATOM	20654	OW0	WAT	M	269	53.358	-20.178	-15.234	1.00	52.57	M	O
ATOM	20657	OW0	WAT	M	270	-22.519	-12.929	-60.286	1.00	23.47	M	O
ATOM	20660	OW0	WAT	M	271	29.993	-11.889	-53.915	1.00	35.87	M	O
ATOM	20663	OW0	WAT	M	272	-26.961	-4.297	-68.346	1.00	23.34	M	O
ATOM	20666	OW0	WAT	M	273	35.728	-51.272	-85.479	1.00	29.40	M	O
ATOM	20669	OW0	WAT	M	274	51.082	-60.955	-17.074	1.00	39.07	M	O
ATOM	20672	OW0	WAT	M	275	41.608	-66.431	-21.460	1.00	41.24	M	O
ATOM	20675	OW0	WAT	M	276	41.981	11.396	-28.323	1.00	49.20	M	O
ATOM	20678	OW0	WAT	M	277	39.938	-36.047	-21.926	1.00	34.42	M	O
ATOM	20681	OW0	WAT	M	278	8.268	-5.038	-51.658	1.00	32.46	M	O
ATOM	20684	OW0	WAT	M	279	47.217	-23.456	1.933	1.00	66.95	M	O
ATOM	20687	OW0	WAT	M	280	-14.853	-28.368	-59.133	1.00	59.46	M	O
ATOM	20690	OW0	WAT	M	281	37.222	-24.247	-19.339	1.00	35.18	M	O
ATOM	20693	OW0	WAT	M	282	-28.062	-11.254	-65.147	1.00	23.28	M	O
ATOM	20696	OW0	WAT	M	283	19.153	-48.870	-54.179	1.00	32.97	M	O
ATOM	20699	OW0	WAT	M	284	18.096	-46.750	-51.008	1.00	35.77	M	O
ATOM	20702	OW0	WAT	M	285	39.696	-7.478	-38.142	1.00	37.96	M	O
ATOM	20705	OW0	WAT	M	286	-17.119	-22.318	-60.187	1.00	44.41	M	O
ATOM	20708	OW0	WAT	M	287	28.895	-39.266	-81.605	1.00	34.39	M	O
ATOM	20711	OW0	WAT	M	288	44.164	-59.144	-70.482	1.00	26.53	M	O
ATOM	20714	OW0	WAT	M	289	33.107	-40.826	-73.405	1.00	34.79	M	O
ATOM	20717	OW0	WAT	M	291	20.915	-9.083	-58.169	1.00	40.42	M	O
ATOM	20720	OW0	WAT	M	292	42.850	-44.946	-43.707	1.00	44.62	M	O
ATOM	20723	OW0	WAT	M	293	52.787	-12.518	-31.149	1.00	57.81	M	O
ATOM	20726	OW0	WAT	M	294	57.834	-61.205	-15.578	1.00	59.41	M	O
ATOM	20729	OW0	WAT	M	295	44.343	-29.933	-83.442	1.00	39.09	M	O
ATOM	20732	OW0	WAT	M	296	47.442	-47.618	-24.479	1.00	46.94	M	O
ATOM	20735	OW0	WAT	M	297	-6.527	3.500	-35.886	1.00	58.84	M	O
ATOM	20738	OW0	WAT	M	298	-8.820	0.874	-51.018	1.00	28.32	M	O
ATOM	20741	OW0	WAT	M	299	24.915	-8.214	-28.776	1.00	34.48	M	O
ATOM	20744	OW0	WAT	M	300	24.463	3.357	-27.018	1.00	47.53	M	O
ATOM	20747	OW0	WAT	M	301	35.011	-39.597	-81.067	1.00	30.92	M	O
ATOM	20750	OW0	WAT	M	302	48.350	-30.299	-68.338	1.00	15.67	M	O
ATOM	20753	OW0	WAT	M	303	19.895	-46.110	-32.631	1.00	36.01	M	O
ATOM	20756	OW0	WAT	M	304	-11.105	-14.521	-91.856	1.00	48.66	M	O
ATOM	20759	OW0	WAT	M	305	44.415	-25.440	-63.348	1.00	41.69	M	O
ATOM	20762	OW0	WAT	M	306	67.272	-52.831	-65.409	1.00	41.62	M	O
ATOM	20765	OW0	WAT	M	307	39.866	-7.617	-40.709	1.00	50.17	M	O
ATOM	20768	OW0	WAT	M	308	25.337	-9.638	-55.041	1.00	39.09	M	O
ATOM	20771	OW0	WAT	M	309	21.271	-44.722	-27.408	1.00	29.34	M	O
ATOM	20774	OW0	WAT	M	310	43.969	-66.640	-10.160	1.00	40.77	M	O
ATOM	20777	OW0	WAT	M	311	32.973	-60.518	-28.444	1.00	34.58	M	O
ATOM	20780	OW0	WAT	M	312	51.418	-61.205	-62.864	1.00	38.28	M	O
ATOM	20783	OW0	WAT	M	313	24.400	-41.668	-64.362	1.00	38.88	M	O
ATOM	20786	OW0	WAT	M	314	39.709	-56.452	-55.760	1.00	45.26	M	O
ATOM	20789	OW0	WAT	M	315	45.896	-36.144	-66.896	1.00	5.60	M	O
ATOM	20792	OW0	WAT	M	316	48.670	-42.039	-85.646	1.00	40.07	M	O
ATOM	20795	OW0	WAT	M	317	15.105	-40.504	-52.720	1.00	40.09	M	O
ATOM	20798	OW0	WAT	M	318	26.363	-15.529	-48.335	1.00	18.60	M	O
ATOM	20801	OW0	WAT	M	319	28.102	-45.304	-68.954	1.00	41.18	M	O
ATOM	20804	OW0	WAT	M	320	44.528	-72.016	-82.839	1.00	36.67	M	O
ATOM	20807	OW0	WAT	M	321	18.333	1.791	-23.914	1.00	59.64	M	O
ATOM	20810	OW0	WAT	M	322	-9.923	-17.749	-62.750	1.00	19.99	M	O
ATOM	20813	OW0	WAT	M	323	-22.024	1.433	-69.296	1.00	36.58	M	O
ATOM	20816	OW0	WAT	M	324	5.312	-40.149	-48.462	1.00	31.65	M	O
ATOM	20819	OW0	WAT	M	325	42.368	10.604	-31.303	1.00	44.36	M	O
ATOM	20822	OW0	WAT	M	326	39.484	-0.450	-7.068	1.00	63.90	M	O
ATOM	20825	OW0	WAT	M	327	-18.770	13.635	-73.858	1.00	26.43	M	O
ATOM	20828	OW0	WAT	M	328	40.358	-10.443	-41.286	1.00	44.30	M	O
ATOM	20831	OW0	WAT	M	329	38.631	-49.988	-40.798	1.00	50.18	M	O

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ATOM  20834  OW0 WAT M 330      21.685 -44.260 -36.646  1.00 28.68           M    O
ATOM  20837  OW0 WAT M 331     -37.942   0.101 -85.721  1.00 60.19           M    O
ATOM  20840  OW0 WAT M 332     -20.528   3.183 -65.480  1.00 39.04           M    O
ATOM  20843  OW0 WAT M 333      31.171 -33.221 -40.349  1.00 38.44           M    O
ATOM  20846  OW0 WAT M 334      38.680 -18.140 -44.714  1.00 32.29           M    O
ATOM  20849  OW0 WAT M 335      35.258 -52.507 -47.145  1.00 38.35           M    O
ATOM  20852  OW0 WAT M 336     -20.480 -14.421 -90.069  1.00 36.12           M    O
ATOM  20855  OW0 WAT M 337      49.267 -20.336 -36.796  1.00 34.45           M    O
ATOM  20858  OW0 WAT M 338      38.029 -13.235 -48.617  1.00 39.98           M    O
ATOM  20861  OW0 WAT M 339      54.476 -65.570 -27.666  1.00 36.72           M    O
ATOM  20864  OW0 WAT M 340       8.519 -26.339 -40.464  1.00 11.85           M    O
ATOM  20867  OW0 WAT M 341      37.431 -45.522 -65.348  1.00 16.29           M    O
ATOM  20870  OW0 WAT M 342      42.491 -30.249 -33.808  1.00 47.17           M    O
ATOM  20873  OW0 WAT M 343      37.345 -10.992 -38.649  1.00 30.59           M    O
ATOM  20876  OW0 WAT M 344      56.376 -56.621 -87.679  1.00 24.42           M    O
ATOM  20879  OW0 WAT M 346      56.469 -45.206 -37.553  1.00 42.32           M    O
ATOM  20882  OW0 WAT M 347      20.328 -49.406 -41.374  1.00 31.43           M    O
ATOM  20885  OW0 WAT M 348      52.136 -48.707 -96.513  1.00 54.50           M    O
ATOM  20888  OW0 WAT M 349      71.854 -44.869 -51.089  1.00 46.81           M    O
ATOM  20891  OW0 WAT M 350       8.244   1.179 -43.400  1.00 36.23           M    O
ATOM  20894  OW0 WAT M 351      10.406 -38.596 -43.644  1.00 32.30           M    O
ATOM  20897  OW0 WAT M 352      39.862 -35.210 -72.512  1.00 26.18           M    O
ATOM  20900  OW0 WAT M 353      39.058 -28.333 -60.274  1.00 21.96           M    O
ATOM  20903  OW0 WAT M 354      39.010 -40.814  -6.690  1.00 39.00           M    O
ATOM  20906  OW0 WAT M 355      44.843 -56.441  -6.414  1.00 56.98           M    O
ATOM  20909  OW0 WAT M 356      32.041 -41.933 -63.791  1.00 15.02           M    O
ATOM  20912  OW0 WAT M 357      56.062 -63.330 -85.229  1.00 34.49           M    O
ATOM  20915  OW0 WAT M 358      35.301 -41.816 -72.218  1.00 26.20           M    O
ATOM  20918  OW0 WAT M 359      41.794 -30.618 -81.029  1.00 48.94           M    O
ATOM  20921  OW0 WAT M 360      32.467 -45.574 -70.028  1.00 32.96           M    O
ATOM  20924  OW0 WAT M 361      43.401  -7.879 -44.871  1.00 32.10           M    O
ATOM  20927  OW0 WAT M 363     -27.014  -8.244 -69.462  1.00 46.03           M    O
ATOM  20930  OW0 WAT M 364     -34.582 -11.504 -90.373  1.00 39.81           M    O
ATOM  20933  OW0 WAT M 365      30.215 -10.601 -48.977  1.00 60.57           M    O
ATOM  20936  OW0 WAT M 366      -5.847 -27.276 -59.940  1.00 35.20           M    O
ATOM  20939  OW0 WAT M 367      19.174 -48.472 -57.532  1.00 34.92           M    O
ATOM  20942  OW0 WAT M 368     -38.776  -2.050 -87.119  1.00 52.58           M    O
ATOM  20945  OW0 WAT M 369      43.979 -65.925 -61.934  1.00 38.92           M    O
ATOM  20948  OW0 WAT M 370      40.856 -34.086 -22.140  1.00 49.90           M    O
ATOM  20951  OW0 WAT M 371      41.164 -73.496 -21.346  1.00 34.37           M    O
ATOM  20954  OW0 WAT M 372      37.462 -72.181-110.052  1.00 52.43           M    O
ATOM  20957  OW0 WAT M 373      14.355 -26.700 -39.247  1.00 13.79           M    O
ATOM  20960  OW0 WAT M 374      35.795 -12.537 -57.904  1.00 40.83           M    O
ATOM  20963  OW0 WAT M 375      49.107 -12.435 -31.838  1.00 42.68           M    O
ATOM  20966  OW0 WAT M 376      50.015  -3.729 -18.360  1.00 58.15           M    O
ATOM  20969  OW0 WAT M 377     -37.908  -2.270 -82.388  1.00 37.27           M    O
ATOM  20972  OW0 WAT M 378       0.411 -13.677 -65.747  1.00 29.64           M    O
ATOM  20975  OW0 WAT M 379     -31.482 -11.249 -79.765  1.00 30.63           M    O
ATOM  20978  OW0 WAT M 380     -18.858  13.648 -76.463  1.00 22.86           M    O
ATOM  20981  OW0 WAT M 381      39.572 -60.429 -71.177  1.00 36.53           M    O
ATOM  20984  OW0 WAT M 382      70.770 -45.988 -48.635  1.00 45.74           M    O
ATOM  20987  OW0 WAT M 383      35.691  -8.744 -45.545  1.00 61.26           M    O
ATOM  20990  OW0 WAT M 384     -17.227   9.921 -76.261  1.00 31.77           M    O
ATOM  20993  OW0 WAT M 385      -3.030 -12.310 -90.631  1.00 61.27           M    O
ATOM  20996  OW0 WAT M 386      55.227 -61.972 -14.169  1.00 49.61           M    O
ATOM  20999  OW0 WAT M 387      58.027 -20.402 -13.833  1.00 65.05           M    O
ATOM  21002  OW0 WAT M 388      62.076 -58.928 -85.518  1.00 34.94           M    O
ATOM  21005  OW0 WAT M 389      -3.319  -2.971 -62.583  1.00 31.66           M    O
ATOM  21008  OW0 WAT M 390      14.036  -9.490 -43.872  1.00 19.90           M    O
ATOM  21011  OW0 WAT M 391      15.011 -11.786 -44.411  1.00 19.55           M    O
ATOM  21014  OW0 WAT M 392      14.519 -12.647 -46.797  1.00 22.83           M    O
ATOM  21017  OW0 WAT M 393      15.378 -12.089 -49.994  1.00 22.10           M    O
ATOM  21020  OW0 WAT M 394      61.287 -35.058 -55.325  1.00 15.07           M    O
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ATOM  21026  OW0 WAT M 396      27.231 -32.456 -49.693  1.00 13.66           M    O
ATOM  21029  OW0 WAT M 397      25.641 -34.647 -49.012  1.00 19.67           M    O
ATOM  21032  OW0 WAT M 398      28.653 -30.471 -50.144  1.00 21.43           M    O
ATOM  21035  OW0 WAT M 399       7.315  -6.796 -53.179  1.00 22.99           M    O
ATOM  21038  OW0 WAT M 400      -6.201 -17.176 -78.996  1.00 31.48           M    O
ATOM  21041  OW0 WAT M 401      45.670 -41.977 -71.767  1.00 25.22           M    O
ATOM  21044  OW0 WAT M 402      48.028 -40.349 -71.324  1.00 21.73           M    O
ATOM  21047  OW0 WAT M 403      45.046 -43.142 -69.604  1.00 14.84           M    O
ATOM  21050  OW0 WAT M 404      26.612 -31.703 -61.308  1.00 17.64           M    O
ATOM  21053  OW0 WAT M 405      27.341 -34.063 -61.533  1.00 17.54           M    O
ATOM  21056  OW0 WAT M 406      25.585 -22.442 -57.994  1.00 19.59           M    O
ATOM  21059  OW0 WAT M 407      55.070 -62.023 -77.592  1.00 17.92           M    O
ATOM  21062  OW0 WAT M 408      25.232 -39.080 -65.600  1.00 26.50           M    O
ATOM  21065  OW0 WAT M 409      18.971 -20.317 -31.727  1.00 21.90           M    O
ATOM  21068  OW0 WAT M 410     -12.546  -2.538 -50.057  1.00 32.25           M    O
ATOM  21071  OW0 WAT M 411      21.115 -11.807 -57.983  1.00 26.74           M    O
ATOM  21074  OW0 WAT M 412       9.607 -33.809 -61.795  1.00 24.89           M    O
ATOM  21077  OW0 WAT M 413      44.485 -29.213 -67.347  1.00 24.33           M    O
ATOM  21080  OW0 WAT M 414      16.403 -27.709 -62.404  1.00 35.33           M    O
ATOM  21083  OW0 WAT M 415       7.691 -28.407 -32.028  1.00 43.48           M    O
ATOM  21086  OW0 WAT M 416      40.079 -58.369 -65.262  1.00 30.98           M    O
ATOM  21089  OW0 WAT M 417      -9.116 -24.813 -82.829  1.00 20.21           M    O
ATOM  21092  OW0 WAT M 418      56.996 -38.359 -66.357  1.00 23.16           M    O
ATOM  21095  OW0 WAT M 419      29.994 -31.313 -66.722  1.00 23.58           M    O
ATOM  21098  OW0 WAT M 420      39.737 -50.634 -64.166  1.00 24.65           M    O
ATOM  21101  OW0 WAT M 421       6.280 -21.556 -54.205  1.00 11.77           M    O
ATOM  21104  OW0 WAT M 422      62.768 -56.576 -66.528  1.00 29.64           M    O
ATOM  21107  OW0 WAT M 423       1.947 -34.646 -41.599  1.00 45.06           M    O
ATOM  21110  OW0 WAT M 424      52.923 -45.625 -71.408  1.00 26.82           M    O
ATOM  21113  OW0 WAT M 425     -13.647  -7.528 -49.386  1.00 24.31           M    O
ATOM  21116  OW0 WAT M 426     -26.155  -5.382 -84.106  1.00 25.40           M    O
ATOM  21119  OW0 WAT M 427      17.752 -32.337 -57.445  1.00 20.30           M    O
ATOM  21122  OW0 WAT M 428      19.541 -11.451 -42.838  1.00 29.00           M    O
ATOM  21125  OW0 WAT M 429      21.655 -26.948 -57.734  1.00 14.90           M    O
ATOM  21128  OW0 WAT M 430      49.503 -13.082 -27.324  1.00 41.39           M    O
ATOM  21131  OW0 WAT M 431      40.791 -63.010 -78.897  1.00 22.23           M    O
ATOM  21134  OW0 WAT M 432      -5.460 -13.118 -76.798  1.00 24.38           M    O
ATOM  21137  OW0 WAT M 433      -2.286 -23.273 -69.959  1.00 30.11           M    O
ATOM  21140  OW0 WAT M 434      67.030 -57.639 -64.529  1.00 36.51           M    O
ATOM  21143  OW0 WAT M 435      34.947 -26.298 -39.600  1.00 31.04           M    O
ATOM  21146  OW0 WAT M 436      -5.663  -9.241 -30.501  1.00 45.59           M    O
ATOM  21149  OW0 WAT M 437      44.785 -44.930 -59.569  1.00 12.23           M    O
ATOM  21152  OW0 WAT M 438       1.561 -31.854 -58.890  1.00 21.50           M    O
ATOM  21155  OW0 WAT M 439      -6.323 -14.848 -84.012  1.00 33.34           M    O
ATOM  21158  OW0 WAT M 440      -5.276 -25.386 -38.794  1.00 28.28           M    O
ATOM  21161  OW0 WAT M 441       7.667  -4.051 -26.893  1.00 38.28           M    O
ATOM  21164  OW0 WAT M 442      51.203 -66.029 -62.070  1.00 34.77           M    O
ATOM  21167  OW0 WAT M 443      31.607 -15.817 -22.006  1.00 27.23           M    O
ATOM  21170  OW0 WAT M 444       1.964  -6.256 -60.692  1.00 29.53           M    O
ATOM  21173  OW0 WAT M 445      22.233 -19.103 -25.109  1.00 33.82           M    O
ATOM  21176  OW0 WAT M 446      37.209  -2.357 -10.730  1.00 41.78           M    O
ATOM  21179  OW0 WAT M 447      46.591 -37.495 -56.735  1.00 19.78           M    O
ATOM  21182  OW0 WAT M 448      47.703 -46.018 -45.948  1.00 24.30           M    O
ATOM  21185  OW0 WAT M 449      51.062 -58.894 -72.621  1.00 17.19           M    O
ATOM  21188  OW0 WAT M 450      40.855 -28.256 -53.103  1.00 31.25           M    O
ATOM  21191  OW0 WAT M 451      37.008 -30.829 -42.263  1.00 32.88           M    O
ATOM  21194  OW0 WAT M 452       7.222   1.349 -49.011  1.00 33.73           M    O
ATOM  21197  OW0 WAT M 453      -3.007 -24.678 -49.295  1.00 19.34           M    O
ATOM  21200  OW0 WAT M 454      33.955 -29.833 -55.991  1.00 17.98           M    O
ATOM  21203  OW0 WAT M 455     -22.530  -7.961 -78.047  1.00 20.93           M    O
ATOM  21206  OW0 WAT M 456     -15.322 -20.501 -85.131  1.00 23.76           M    O
ATOM  21209  OW0 WAT M 457      12.064 -35.182 -58.437  1.00 33.09           M    O
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ATOM  21212  OW0 WAT M 458      44.454 -31.611 -58.219  1.00 22.83      M    O
ATOM  21215  OW0 WAT M 459     -13.526 -12.979 -72.662  1.00 19.48      M    O
ATOM  21218  OW0 WAT M 460      27.934 -33.264 -65.550  1.00 27.93      M    O
ATOM  21221  OW0 WAT M 461      35.926 -26.819 -64.730  1.00 27.45      M    O
ATOM  21224  OW0 WAT M 462      49.400 -38.267 -48.737  1.00 22.50      M    O
ATOM  21227  OW0 WAT M 463      50.809 -58.201 -81.883  1.00 22.25      M    O
ATOM  21230  OW0 WAT M 464       5.666  -4.676 -51.349  1.00 20.41      M    O
ATOM  21233  OW0 WAT M 465      37.647 -28.230 -71.211  1.00 22.21      M    O
ATOM  21236  OW0 WAT M 466      42.830 -27.621 -41.931  1.00 41.22      M    O
ATOM  21239  OW0 WAT M 467      50.315 -34.663 -12.566  1.00 39.94      M    O
ATOM  21242  OW0 WAT M 468      17.559 -35.999 -41.770  1.00 37.09      M    O
ATOM  21245  OW0 WAT M 469      21.691 -41.946 -23.375  1.00 43.11      M    O
ATOM  21248  OW0 WAT M 470      65.462 -51.424 -49.700  1.00 27.34      M    O
ATOM  21251  OW0 WAT M 471      17.199 -17.238 -61.379  1.00 27.38      M    O
ATOM  21254  OW0 WAT M 472      53.087 -48.284 -77.979  1.00 21.86      M    O
ATOM  21257  OW0 WAT M 473      39.726 -10.594 -33.090  1.00 52.53      M    O
ATOM  21260  OW0 WAT M 474      37.294 -46.529 -95.772  1.00 28.76      M    O
ATOM  21263  OW0 WAT M 475      59.737 -60.396 -56.210  1.00 21.00      M    O
ATOM  21266  OW0 WAT M 476       7.565 -11.135 -47.722  1.00 18.49      M    O
ATOM  21269  OW0 WAT M 477       1.651 -29.812 -40.989  1.00 32.76      M    O
ATOM  21272  OW0 WAT M 478      67.211 -36.121 -46.233  1.00 35.11      M    O
ATOM  21275  OW0 WAT M 479     -26.374 -18.269 -69.912  1.00 26.49      M    O
ATOM  21278  OW0 WAT M 480      -8.780  -3.341 -49.781  1.00 27.70      M    O
ATOM  21281  OW0 WAT M 481      51.874 -34.322 -58.440  1.00 20.09      M    O
ATOM  21284  OW0 WAT M 482      38.147 -15.991 -51.696  1.00 32.80      M    O
ATOM  21287  OW0 WAT M 483      12.425  -5.343 -38.083  1.00 26.36      M    O
ATOM  21290  OW0 WAT M 484     -14.141 -19.902 -74.173  1.00 16.76      M    O
ATOM  21293  OW0 WAT M 485      52.620 -29.946 -65.436  1.00 33.33      M    O
ATOM  21296  OW0 WAT M 486      -8.957 -30.148 -77.690  1.00 33.33      M    O
ATOM  21299  OW0 WAT M 487     -15.731 -14.002 -86.167  1.00 29.57      M    O
ATOM  21302  OW0 WAT M 488      29.641 -54.046 -41.106  1.00 40.87      M    O
ATOM  21305  OW0 WAT M 489      36.590 -20.413 -56.724  1.00 32.47      M    O
ATOM  21308  OW0 WAT M 490      31.344 -15.311 -18.596  1.00 32.99      M    O
ATOM  21311  OW0 WAT M 491      -8.534 -14.349 -37.230  1.00 33.63      M    O
ATOM  21314  OW0 WAT M 492      37.563 -18.055 -54.283  1.00 34.70      M    O
ATOM  21317  OW0 WAT M 493      54.050 -54.095 -45.905  1.00 18.25      M    O
ATOM  21320  OW0 WAT M 494       0.194 -21.826 -50.992  1.00 19.06      M    O
ATOM  21323  OW0 WAT M 495      16.544 -29.256 -36.778  1.00 32.90      M    O
ATOM  21326  OW0 WAT M 496      13.020 -25.079 -33.142  1.00 26.97      M    O
ATOM  21329  OW0 WAT M 497      -9.519 -18.166 -78.763  1.00 31.87      M    O
ATOM  21332  OW0 WAT M 498     -21.864 -21.244 -93.001  1.00 43.69      M    O
ATOM  21335  OW0 WAT M 499      38.932 -24.963 -57.225  1.00 43.58      M    O
ATOM  21338  OW0 WAT M 500      34.759 -27.089 -56.474  1.00 39.59      M    O
ATOM  21341  OW0 WAT M 501      51.735 -60.894 -83.751  1.00 27.64      M    O
ATOM  21344  OW0 WAT M 502     -13.102 -14.088 -75.358  1.00 20.49      M    O
ATOM  21347  OW0 WAT M 503      37.801 -77.159 -93.534  1.00 38.06      M    O
ATOM  21350  OW0 WAT M 504      19.011 -20.908 -59.429  1.00 22.73      M    O
ATOM  21353  OW0 WAT M 505      39.614 -61.775 -66.340  1.00 44.31      M    O
ATOM  21356  OW0 WAT M 506      61.743 -44.056 -64.619  1.00 24.08      M    O
ATOM  21359  OW0 WAT M 507     -10.196 -24.430 -55.639  1.00 42.83      M    O
ATOM  21362  OW0 WAT M 508     -15.417  -5.380 -49.844  1.00 29.79      M    O
ATOM  21365  OW0 WAT M 509      -2.906 -31.915 -41.544  1.00 39.27      M    O
ATOM  21368  OW0 WAT M 510      54.255 -61.202 -68.808  1.00 36.67      M    O
ATOM  21371  OW0 WAT M 511      52.102  -3.937 -24.151  1.00 53.19      M    O
ATOM  21374  OW0 WAT M 512      70.152 -41.675 -51.096  1.00 26.14      M    O
ATOM  21377  OW0 WAT M 513      12.121  -8.573 -30.014  1.00 30.41      M    O
ATOM  21380  OW0 WAT M 514       5.663 -26.999 -39.943  1.00 29.78      M    O
ATOM  21383  OW0 WAT M 515      45.412 -61.583 -16.631  1.00 32.81      M    O
ATOM  21386  OW0 WAT M 516      46.521 -50.242 -45.864  1.00 29.76      M    O
ATOM  21389  OW0 WAT M 517      29.945 -21.983 -36.901  1.00 23.78      M    O
ATOM  21392  OW0 WAT M 518     -21.479 -26.460 -73.199  1.00 28.51      M    O
ATOM  21395  OW0 WAT M 519      -8.472 -11.698 -34.975  1.00 39.60      M    O
ATOM  21398  OW0 WAT M 520     -20.027 -10.165 -79.638  1.00 21.53      M    O
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ATOM	21401	OW0	WAT	M	521	14.644	-33.226	-59.242	1.00	25.56		M	O
ATOM	21404	OW0	WAT	M	522	57.444	-56.105	-84.829	1.00	31.11		M	O
ATOM	21407	OW0	WAT	M	523	11.389	-6.247	-41.845	1.00	28.82		M	O
ATOM	21410	OW0	WAT	M	524	43.355	-38.733	-21.227	1.00	31.35		M	O
ATOM	21413	OW0	WAT	M	525	6.801	-1.519	-38.913	1.00	33.33		M	O
ATOM	21416	OW0	WAT	M	526	-4.348	-13.735	-30.142	1.00	42.57		M	O
ATOM	21419	OW0	WAT	M	527	43.786	-37.403	-51.764	1.00	21.10		M	O
ATOM	21422	OW0	WAT	M	528	41.585	-34.782	-88.114	1.00	33.93		M	O
ATOM	21425	OW0	WAT	M	529	46.671	-22.711	-2.830	1.00	31.60		M	O
ATOM	21428	OW0	WAT	M	530	17.851	-19.184	-24.467	1.00	36.02		M	O
ATOM	21431	OW0	WAT	M	531	49.300	-15.784	-27.255	1.00	37.19		M	O
ATOM	21434	OW0	WAT	M	532	14.537	-7.715	-39.740	1.00	34.92		M	O
ATOM	21437	OW0	WAT	M	533	26.029	-20.696	-59.771	1.00	27.11		M	O
ATOM	21440	OW0	WAT	M	534	36.163	-26.017	-28.426	1.00	35.10		M	O
ATOM	21443	OW0	WAT	M	535	-4.814	4.588	-82.163	1.00	37.10		M	O
ATOM	21446	OW0	WAT	M	536	17.502	-9.988	-35.729	1.00	39.42		M	O
ATOM	21449	OW0	WAT	M	537	25.623	-21.910	-38.629	1.00	27.75		M	O
ATOM	21452	OW0	WAT	M	538	57.726	-66.521	-58.305	1.00	39.28		M	O
ATOM	21455	OW0	WAT	M	539	13.149	-13.874	-22.983	1.00	29.22		M	O
ATOM	21458	OW0	WAT	M	540	-4.238	-21.492	-63.608	1.00	20.38		M	O
ATOM	21461	OW0	WAT	M	541	40.304	-23.398	-5.002	1.00	38.81		M	O
ATOM	21464	OW0	WAT	M	542	9.114	-32.600	-42.057	1.00	25.99		M	O
ATOM	21467	OW0	WAT	M	543	36.196	-53.182	-95.103	1.00	23.10		M	O
ATOM	21470	OW0	WAT	M	544	15.628	-26.173	-55.259	1.00	23.22		M	O
ATOM	21473	OW0	WAT	M	545	62.385	-59.098	-56.148	1.00	32.00		M	O
ATOM	21476	OW0	WAT	M	546	20.218	-21.832	-37.784	1.00	25.77		M	O
ATOM	21479	OW0	WAT	M	547	19.204	-10.029	-38.770	1.00	35.96		M	O
ATOM	21482	OW0	WAT	M	548	17.827	-35.204	-48.552	1.00	17.13		M	O
ATOM	21485	OW0	WAT	M	549	13.345	-11.635	-51.778	1.00	26.69		M	O
ATOM	21488	OW0	WAT	M	550	56.671	-56.713	-78.477	1.00	19.48		M	O
ATOM	21491	OW0	WAT	M	551	-7.793	-15.891	-34.975	1.00	34.04		M	O
ATOM	21494	OW0	WAT	M	552	-5.155	-22.116	-80.280	1.00	26.48		M	O
ATOM	21497	OW0	WAT	M	553	0.445	-6.248	-53.997	1.00	24.89		M	O
ATOM	21500	OW0	WAT	M	554	-11.479	-16.352	-50.937	1.00	30.55		M	O
ATOM	21503	OW0	WAT	M	555	32.236	-26.577	-63.276	1.00	39.16		M	O
ATOM	21506	OW0	WAT	M	556	45.738	-61.897	-67.607	1.00	28.05		M	O
ATOM	21509	OW0	WAT	M	557	49.185	-43.993	-44.216	1.00	33.16		M	O
ATOM	21512	OW0	WAT	M	558	-12.334	-16.697	-84.837	1.00	36.26		M	O
ATOM	21515	OW0	WAT	M	559	28.500	-19.665	-60.873	1.00	33.82		M	O
ATOM	21518	OW0	WAT	M	560	46.449	-37.509	-25.730	1.00	32.43		M	O
ATOM	21521	OW0	WAT	M	561	1.349	-7.396	-27.787	1.00	41.01		M	O
ATOM	21524	OW0	WAT	M	562	-4.947	-23.771	-32.636	1.00	49.08		M	O
ATOM	21527	OW0	WAT	M	563	38.455	-25.525	-53.315	1.00	25.69		M	O
ATOM	21530	OW0	WAT	M	564	7.839	-32.766	-34.964	1.00	42.94		M	O
ATOM	21533	OW0	WAT	M	565	55.225	-58.929	-46.898	1.00	28.56		M	O
ATOM	21536	OW0	WAT	M	566	54.139	-39.498	-22.877	1.00	35.47		M	O
ATOM	21539	OW0	WAT	M	567	28.312	-21.090	-30.345	1.00	36.90		M	O
ATOM	21542	OW0	WAT	M	568	-14.094	-4.209	-57.103	1.00	17.73		M	O
ATOM	21545	OW0	WAT	M	569	48.822	-35.906	-61.013	1.00	28.34		M	O
ATOM	21548	OW0	WAT	M	570	36.997	-34.164	-72.752	1.00	17.70		M	O
ATOM	21551	OW0	WAT	M	571	31.142	-22.381	-32.871	1.00	31.88		M	O
ATOM	21554	OW0	WAT	M	572	6.066	-33.997	-33.843	1.00	36.12		M	O
ATOM	21557	OW0	WAT	M	573	-6.868	-6.501	-68.030	1.00	21.80		M	O
ATOM	21560	OW0	WAT	M	574	61.385	-31.023	-46.441	1.00	40.57		M	O
ATOM	21563	OW0	WAT	M	575	51.881	-62.118	-55.572	1.00	30.33		M	O
ATOM	21566	OW0	WAT	M	576	-24.465	-15.192	-73.229	1.00	23.04		M	O
ATOM	21569	OW0	WAT	M	577	27.180	-3.327	-12.434	1.00	37.93		M	O
ATOM	21572	OW0	WAT	M	578	17.746	-37.508	-47.314	1.00	26.99		M	O
ATOM	21575	OW0	WAT	M	579	-24.323	1.666	-85.718	1.00	35.44		M	O
ATOM	21578	OW0	WAT	M	580	18.344	-32.521	-37.368	1.00	33.91		M	O
ATOM	21581	OW0	WAT	M	581	45.070	-65.115	-66.786	1.00	47.02		M	O
ATOM	21584	OW0	WAT	M	582	37.099	-26.589	-25.718	1.00	43.44		M	O
ATOM	21587	OW0	WAT	M	583	28.564	-36.192	-17.960	1.00	39.91		M	O

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ATOM  21590  OW0 WAT M 584      42.836 -37.758 -94.545  1.00 24.48      M    O
ATOM  21593  OW0 WAT M 585      57.195 -38.132 -39.975  1.00 39.28      M    O
ATOM  21596  OW0 WAT M 586       6.017 -28.445 -37.538  1.00 31.36      M    O
ATOM  21599  OW0 WAT M 587      54.387 -60.834 -98.425  1.00 38.27      M    O
ATOM  21602  OW0 WAT M 588       0.926  -8.799 -43.833  1.00 22.75      M    O
ATOM  21605  OW0 WAT M 589      15.375 -38.583 -42.065  1.00 47.58      M    O
ATOM  21608  OW0 WAT M 590       7.535 -35.906 -58.561  1.00 22.77      M    O
ATOM  21611  OW0 WAT M 591      45.538  -8.783  -9.739  1.00 38.32      M    O
ATOM  21614  OW0 WAT M 592      62.506 -32.178 -41.581  1.00 41.88      M    O
ATOM  21617  OW0 WAT M 593      59.638 -43.057 -69.886  1.00 30.16      M    O
ATOM  21620  OW0 WAT M 594      32.646 -55.714-112.456  1.00 47.72      M    O
ATOM  21623  OW0 WAT M 595      30.783 -54.896 -16.393  1.00 44.19      M    O
ATOM  21626  OW0 WAT M 596     -27.349   3.594 -73.874  1.00 45.04      M    O
ATOM  21629  OW0 WAT M 597      48.454 -46.729  -0.339  1.00 40.47      M    O
ATOM  21632  OW0 WAT M 598      46.099 -36.095 -54.587  1.00 36.54      M    O
ATOM  21635  OW0 WAT M 599      -6.437 -18.281 -46.462  1.00 29.79      M    O
ATOM  21638  OW0 WAT M 600      45.360 -36.857 -16.481  1.00 41.28      M    O
ATOM  21641  OW0 WAT M 601      64.881 -39.115 -36.379  1.00 39.58      M    O
ATOM  21644  OW0 WAT M 602      28.236 -22.600 -39.847  1.00 23.66      M    O
ATOM  21647  OW0 WAT M 603      21.512 -18.921 -59.664  1.00 25.27      M    O
ATOM  21650  OW0 WAT M 604      25.225 -39.077 -58.403  1.00 24.98      M    O
ATOM  21653  OW0 WAT M 605       5.542 -32.281 -60.611  1.00 13.32      M    O
ATOM  21656  OW0 WAT M 606       7.921 -19.603 -44.866  1.00 16.24      M    O
ATOM  21659  OW0 WAT M 607      55.141 -37.873 -44.225  1.00 37.35      M    O
ATOM  21662  OW0 WAT M 608      53.834 -47.240 -75.787  1.00 23.84      M    O
ATOM  21665  OW0 WAT M 609      19.088 -12.646 -59.463  1.00 37.74      M    O
ATOM  21668  OW0 WAT M 610      33.510 -63.261 -79.622  1.00 33.30      M    O
ATOM  21671  OW0 WAT M 611      20.804 -22.349 -35.012  1.00 42.20      M    O
ATOM  21674  OW0 WAT M 612      -9.682 -20.622 -40.682  1.00 46.33      M    O
ATOM  21677  OW0 WAT M 613      20.633 -27.659 -38.330  1.00 23.48      M    O
ATOM  21680  OW0 WAT M 614      52.090 -33.590 -49.955  1.00 32.56      M    O
ATOM  21683  OW0 WAT M 615      50.716 -35.162 -54.657  1.00 24.70      M    O
ATOM  21686  OW0 WAT M 616      38.651 -26.505 -61.576  1.00 43.71      M    O
ATOM  21689  OW0 WAT M 617      43.425 -33.910 -71.567  1.00 31.18      M    O
ATOM  21692  OW0 WAT M 618      36.830 -48.731-110.446  1.00 41.19      M    O
ATOM  21695  OW0 WAT M 619      34.901  -0.219 -13.019  1.00 47.34      M    O
ATOM  21698  OW0 WAT M 620     -19.858   6.404 -77.003  1.00 25.52      M    O
ATOM  21701  OW0 WAT M 621      38.510 -60.264 -73.506  1.00 26.78      M    O
ATOM  21704  OW0 WAT M 622      31.515 -33.670 -71.980  1.00 36.81      M    O
ATOM  21707  OW0 WAT M 623      -2.291   5.433 -62.832  1.00 43.39      M    O
ATOM  21710  OW0 WAT M 624      35.919 -21.498 -59.571  1.00 37.73      M    O
ATOM  21713  OW0 WAT M 625      50.245 -70.023 -79.904  1.00 29.35      M    O
ATOM  21716  OW0 WAT M 626       4.528 -37.803 -55.213  1.00 31.92      M    O
ATOM  21719  OW0 WAT M 627      43.201  -9.310  -8.097  1.00 38.20      M    O
ATOM  21722  OW0 WAT M 628      14.513  -7.179 -46.801  1.00 48.11      M    O
ATOM  21725  OW0 WAT M 629      42.831 -21.277 -45.455  1.00 38.65      M    O
ATOM  21728  OW0 WAT M 630      19.335 -26.966 -63.218  1.00 31.13      M    O
ATOM  21731  OW0 WAT M 631      14.637 -25.627 -60.097  1.00 32.38      M    O
ATOM  21734  OW0 WAT M 632     -15.363 -11.871 -88.260  1.00 43.98      M    O
ATOM  21737  OW0 WAT M 633      35.124 -31.692 -10.109  1.00 49.70      M    O
ATOM  21740  OW0 WAT M 634      44.882 -44.216 -78.940  1.00 37.79      M    O
ATOM  21743  OW0 WAT M 635      14.634 -28.510 -34.754  1.00 33.96      M    O
ATOM  21746  OW0 WAT M 636      48.609 -35.633 -70.127  1.00 31.76      M    O
ATOM  21749  OW0 WAT M 637      -9.408 -23.846 -40.155  1.00 37.29      M    O
ATOM  21752  OW0 WAT M 638      39.385 -70.055 -19.671  1.00 47.36      M    O
ATOM  21755  OW0 WAT M 639      30.746 -37.701 -35.300  1.00 35.56      M    O
ATOM  21758  OW0 WAT M 640      -2.150 -10.812 -86.771  1.00 42.84      M    O
ATOM  21761  OW0 WAT M 641      19.433 -32.368 -40.075  1.00 41.76      M    O
ATOM  21764  OW0 WAT M 642      19.891 -22.107 -21.302  1.00 38.58      M    O
ATOM  21767  OW0 WAT M 643      37.115 -37.030 -27.830  1.00 46.24      M    O
ATOM  21770  OW0 WAT M 644      52.913 -63.067 -65.939  1.00 25.87      M    O
ATOM  21773  OW0 WAT M 645      40.293 -42.193 -95.322  1.00 37.86      M    O
ATOM  21776  OW0 WAT M 646      54.474 -41.636 -38.276  1.00 38.74      M    O
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ATOM  21779  OW0 WAT M 647       1.335 -19.986 -14.091  1.00 35.23           M    O
ATOM  21782  OW0 WAT M 648     -12.155  -6.692 -56.221  1.00 22.59           M    O
ATOM  21785  OW0 WAT M 649      38.499 -28.994 -52.228  1.00 22.08           M    O
ATOM  21788  OW0 WAT M 650      45.513 -67.734 -31.020  1.00 40.40           M    O
ATOM  21791  OW0 WAT M 651      16.342 -16.722 -21.425  1.00 36.04           M    O
ATOM  21794  OW0 WAT M 652      62.974 -54.787 -53.130  1.00 35.00           M    O
ATOM  21797  OW0 WAT M 653      52.375 -39.690 -20.717  1.00 38.20           M    O
ATOM  21800  OW0 WAT M 654      39.076 -39.672 -92.978  1.00 38.59           M    O
ATOM  21803  OW0 WAT M 655     -14.652 -22.356 -53.130  1.00 41.80           M    O
ATOM  21806  OW0 WAT M 656      -4.040  -4.791 -65.073  1.00 32.05           M    O
ATOM  21809  OW0 WAT M 657      27.312 -47.134 -24.462  1.00 32.55           M    O
ATOM  21812  OW0 WAT M 658      -8.891  -6.337 -37.347  1.00 34.84           M    O
ATOM  21815  OW0 WAT M 659      -6.078 -11.420 -27.412  1.00 51.65           M    O
ATOM  21818  OW0 WAT M 660      40.763 -60.900 -34.090  1.00 29.14           M    O
ATOM  21821  OW0 WAT M 661      44.902 -41.309 -74.105  1.00 38.79           M    O
ATOM  21824  OW0 WAT M 662      29.171 -26.084 -64.063  1.00 43.74           M    O
ATOM  21827  OW0 WAT M 663       1.457  -3.041 -50.847  1.00 29.18           M    O
ATOM  21830  OW0 WAT M 664      28.422 -15.382 -42.820  1.00 29.07           M    O
ATOM  21833  OW0 WAT M 665      18.165 -24.793 -62.438  1.00 33.16           M    O
ATOM  21836  OW0 WAT M 666     -10.548  -1.067 -88.149  1.00 42.65           M    O
ATOM  21839  OW0 WAT M 667      46.417 -44.587 -25.146  1.00 39.73           M    O
ATOM  21842  OW0 WAT M 668      32.085 -24.050 -59.896  1.00 38.93           M    O
ATOM  21845  OW0 WAT M 669       3.190 -19.906 -67.640  1.00 32.41           M    O
ATOM  21848  OW0 WAT M 670       4.786 -28.297 -42.151  1.00 26.69           M    O
ATOM  21851  OW0 WAT M 671      52.183 -29.282 -33.856  1.00 46.68           M    O
ATOM  21854  OW0 WAT M 672      33.581 -28.589 -70.543  1.00 48.01           M    O
ATOM  21857  OW0 WAT M 673      43.184 -40.665 -31.328  1.00 45.82           M    O
ATOM  21860  OW0 WAT M 674      26.221 -52.908 -47.071  1.00 44.78           M    O
ATOM  21863  OW0 WAT M 675       7.081 -15.497 -58.152  1.00 23.77           M    O
ATOM  21866  OW0 WAT M 676      21.531 -45.630 -56.306  1.00 32.55           M    O
ATOM  21869  OW0 WAT M 677       6.718  -7.925 -64.684  1.00 43.17           M    O
ATOM  21872  OW0 WAT M 678      26.137 -53.752 -94.947  1.00 48.96           M    O
ATOM  21875  OW0 WAT M 679      24.795 -66.885 -81.157  1.00 46.82           M    O
ATOM  21878  OW0 WAT M 680      24.044   2.209 -30.937  1.00 42.71           M    O
ATOM  21881  OW0 WAT M 681      46.209 -53.015 -45.876  1.00 33.78           M    O
ATOM  21884  OW0 WAT M 682      50.584 -44.354 -41.859  1.00 31.07           M    O
ATOM  21887  OW0 WAT M 683      15.148 -18.815 -63.079  1.00 40.32           M    O
ATOM  21890  OW0 WAT M 684      48.153 -37.977  -5.462  1.00 39.95           M    O
ATOM  21893  OW0 WAT M 685      43.529 -70.864-109.066  1.00 44.18           M    O
ATOM  21896  OW0 WAT M 686     -12.728 -17.789 -52.847  1.00 38.23           M    O
ATOM  21899  OW0 WAT M 687     -20.142 -24.800 -77.260  1.00 32.57           M    O
ATOM  21902  OW0 WAT M 688       5.921 -37.660 -57.379  1.00 32.62           M    O
ATOM  21905  OW0 WAT M 689      -1.176 -13.135 -36.244  1.00 30.51           M    O
ATOM  21908  OW0 WAT M 690      -0.746  -4.677 -52.203  1.00 34.78           M    O
ATOM  21911  OW0 WAT M 691       3.922 -29.806 -37.725  1.00 31.87           M    O
ATOM  21914  OW0 WAT M 692       2.342 -10.270 -23.464  1.00 38.48           M    O
ATOM  21917  OW0 WAT M 693      22.542 -37.042 -56.547  1.00 41.05           M    O
ATOM  21920  OW0 WAT M 694      34.910 -55.867 -17.411  1.00 49.07           M    O
ATOM  21923  OW0 WAT M 695      13.890 -28.735 -37.148  1.00 33.09           M    O
ATOM  21926  OW0 WAT M 696      27.251 -30.046 -58.684  1.00 34.81           M    O
ATOM  21929  OW0 WAT M 697      36.882 -26.949 -36.537  1.00 36.91           M    O
ATOM  21932  OW0 WAT M 698       1.892 -29.337 -45.934  1.00 22.82           M    O
ATOM  21935  OW0 WAT M 699     -17.464  -1.207 -55.183  1.00 27.37           M    O
ATOM  21938  OW0 WAT M 700      -1.013 -28.711 -54.666  1.00 34.87           M    O
ATOM  21941  OW0 WAT M 701      25.729 -32.891 -37.422  1.00 48.18           M    O
ATOM  21944  OW0 WAT M 702      60.263 -56.219 -43.744  1.00 33.86           M    O
ATOM  21947  OW0 WAT M 703     -12.920  10.746 -76.312  1.00 47.36           M    O
ATOM  21950  OW0 WAT M 704      46.925 -35.206 -63.315  1.00 17.21           M    O
ATOM  21953  OW0 WAT M 705      17.453  -7.166 -24.119  1.00 30.97           M    O
ATOM  21956  OW0 WAT M 706      36.886 -15.576 -34.272  1.00 31.04           M    O
ATOM  21959  OW0 WAT M 707      57.586 -50.288 -60.808  1.00 25.26           M    O
ATOM  21962  OW0 WAT M 708      34.358 -15.982 -34.503  1.00 39.20           M    O
ATOM  21965  OW0 WAT M 709      54.755 -32.288 -67.318  1.00 40.61           M    O
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ATOM  21968  OW0 WAT M 710     -4.387 -26.723 -45.137  1.00 35.97      M    O
ATOM  21971  OW0 WAT M 711    -20.749   2.349 -60.414  1.00 39.68      M    O
ATOM  21974  OW0 WAT M 712     27.022 -52.533 -40.504  1.00 34.52      M    O
ATOM  21977  OW0 WAT M 713     64.748 -64.693 -62.247  1.00 39.99      M    O
ATOM  21980  OW0 WAT M 714     -6.071 -19.611 -78.971  1.00 46.26      M    O
ATOM  21983  OW0 WAT M 715     54.924 -58.627 -89.284  1.00 36.41      M    O
ATOM  21986  OW0 WAT M 716     59.775 -41.273 -67.407  1.00 30.17      M    O
ATOM  21989  OW0 WAT M 717     -8.688 -22.361 -57.341  1.00 35.16      M    O
ATOM  21992  OW0 WAT M 718      5.245  -3.116 -28.594  1.00 42.41      M    O
ATOM  21995  OW0 WAT M 719     51.058 -55.705 -63.989  1.00 25.83      M    O
ATOM  21998  OW0 WAT M 720     23.388 -18.650 -61.155  1.00 35.34      M    O
ATOM  22001  OW0 WAT M 721      3.648  -4.753 -58.357  1.00 37.00      M    O
ATOM  22004  OW0 WAT M 722     32.426 -61.361 -81.156  1.00 50.30      M    O
ATOM  22007  OW0 WAT M 723     51.955 -31.585 -51.498  1.00 44.97      M    O
ATOM  22010  OW0 WAT M 724     32.422 -18.234 -20.292  1.00 43.39      M    O
ATOM  22013  OW0 WAT M 725     37.827 -32.062 -50.333  1.00 28.25      M    O
ATOM  22016  OW0 WAT M 726    -18.103  -0.294 -89.287  1.00 42.39      M    O
ATOM  22019  OW0 WAT M 727     33.595 -45.859 -86.332  1.00 48.15      M    O
ATOM  22022  OW0 WAT M 728     38.983   9.672 -28.984  1.00 40.03      M    O
ATOM  22025  OW0 WAT M 729     17.680 -10.006 -60.365  1.00 40.57      M    O
ATOM  22028  OW0 WAT M 730      6.674 -28.466 -19.692  1.00 41.65      M    O
ATOM  22031  OW0 WAT M 731    -19.453 -25.192 -65.498  1.00 41.34      M    O
ATOM  22034  OW0 WAT M 732     23.218 -34.571 -50.204  1.00 39.73      M    O
ATOM  22037  OW0 WAT M 733     34.378 -46.906  -7.851  1.00 42.45      M    O
ATOM  22040  OW0 WAT M 734     31.748   0.101  -6.654  1.00 48.04      M    O
ATOM  22043  OW0 WAT M 735     44.905 -68.353 -55.921  1.00 49.97      M    O
ATOM  22046  OW0 WAT M 736     48.265 -67.318 -97.369  1.00 34.18      M    O
ATOM  22049  OW0 WAT M 737     16.966 -36.913 -58.133  1.00 28.81      M    O
ATOM  22052  OW0 WAT M 738    -14.859 -18.321 -87.173  1.00 46.91      M    O
ATOM  22055  OW0 WAT M 739     51.974 -25.382 -20.345  1.00 49.17      M    O
ATOM  22058  OW0 WAT M 740     55.446 -59.384 -22.995  1.00 37.86      M    O
ATOM  22061  OW0 WAT M 741     65.128 -60.926 -57.253  1.00 43.53      M    O
ATOM  22064  OW0 WAT M 742     45.079 -33.503 -53.965  1.00 50.30      M    O
ATOM  22067  OW0 WAT M 743     50.242 -44.293 -99.217  1.00 51.56      M    O
ATOM  22070  OW0 WAT M 744    -21.127 -11.325 -51.972  1.00 40.76      M    O
ATOM  22073  OW0 WAT M 745     52.213 -16.771 -22.803  1.00 61.98      M    O
ATOM  22076  OW0 WAT M 746     52.595 -62.102-101.082  1.00 43.57      M    O
ATOM  22079  OW0 WAT M 747     32.239 -35.429 -35.182  1.00 51.23      M    O
ATOM  22082  OW0 WAT M 748     62.992 -63.211 -56.501  1.00 41.67      M    O
ATOM  22085  OW0 WAT M 749     -7.339 -22.246 -32.208  1.00 50.36      M    O
ATOM  22088  OW0 WAT M 750     -0.808  -8.784 -88.953  1.00 44.06      M    O
ATOM  22091  OW0 WAT M 751    -21.203  -8.813 -89.672  1.00 45.63      M    O
ATOM  22094  OW0 WAT M 752     45.649 -36.372 -23.030  1.00 42.44      M    O
ATOM  22097  OW0 WAT M 753     46.788 -26.317 -41.901  1.00 40.85      M    O
ATOM  22100  OW0 WAT M 754     48.950 -34.559 -49.015  1.00 39.56      M    O
ATOM  22103  OW0 WAT M 755     63.373 -33.479 -43.706  1.00 36.57      M    O
ATOM  22106  OW0 WAT M 756     30.730 -36.860 -32.965  1.00 27.57      M    O
ATOM  22109  OW0 WAT M 757     46.289 -43.113 -76.599  1.00 32.10      M    O
ATOM  22112  OW0 WAT M 758     54.388 -30.480 -53.157  1.00 30.81      M    O
ATOM  22115  OW0 WAT M 759     43.356 -23.340 -47.218  1.00 39.40      M    O
ATOM  22118  OW0 WAT M 760     45.715 -32.684 -70.007  1.00 27.61      M    O
ATOM  22121  OW0 WAT M 761    -22.557 -10.203 -53.653  1.00 39.09      M    O
ATOM  22124  OW0 WAT M 762     65.337 -55.843 -53.702  1.00 37.26      M    O
ATOM  22127  OW0 WAT M 763     40.294 -23.114 -58.663  1.00 39.90      M    O
ATOM  22130  OW0 WAT M 764     53.373 -27.068 -34.959  1.00 40.35      M    O
ATOM  22133  OW0 WAT M 765     28.400 -53.712 -48.283  1.00 32.10      M    O
ATOM  22136  OW0 WAT M 766     -3.884 -27.771 -42.084  1.00 26.03      M    O
ATOM  22139  OW0 WAT M 767     52.056 -33.006 -66.187  1.00 29.01      M    O
ATOM  22142  OW0 WAT M 768     36.229 -25.960 -59.736  1.00 41.91      M    O
ATOM  22145  OW0 WAT M 769     20.706 -30.334 -37.784  1.00 34.66      M    O
ATOM  22148  OW0 WAT M 770     61.654 -44.976 -68.888  1.00 30.76      M    O
ATOM  22151  OW0 WAT M 771      4.448 -38.169 -59.293  1.00 27.82      M    O
ATOM  22154  OW0 WAT M 772    -19.573 -10.767 -89.289  1.00 37.80      M    O
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ATOM  22157  OW0 WAT M 773     -21.484   4.628 -58.633  1.00 35.60      M    O
ATOM  22160  OW0 WAT M 774      48.013 -37.385 -28.624  1.00 47.68      M    O
ATOM  22163  OW0 WAT M 775     -15.638 -22.543 -50.591  1.00 36.58      M    O
ATOM  22166  OW0 WAT M 776      63.285 -62.674 -53.815  1.00 37.68      M    O
ATOM  22169  OW0 WAT M 777      53.648 -43.870 -39.244  1.00 34.20      M    O
ATOM  22172  OW0 WAT M 778       7.770  -2.192 -30.734  1.00 41.71      M    O
ATOM  22175  OW0 WAT M 779      21.452 -36.791 -59.817  1.00 37.22      M    O
ATOM  22178  OW0 WAT M 780      11.899 -25.661 -61.109  1.00 27.38      M    O
ATOM  22181  OW0 WAT M 781      65.611 -62.263 -60.299  1.00 46.88      M    O
ATOM  22184  OW0 WAT M 782       8.628  -7.004 -63.181  1.00 40.81      M    O
ATOM  22187  OW0 WAT M 783      50.283 -67.804 -99.034  1.00 39.81      M    O
ATOM  22190  OW0 WAT M 784      -5.974 -14.094 -65.902  1.00 33.51      M    O
ATOM  22193  OW0 WAT M 785      -4.442 -19.990 -70.765  1.00 26.82      M    O
ATOM  22196  OW0 WAT M 786      25.811 -56.592 -83.676  1.00 45.11      M    O
END
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四、指定代表圖：

(一)本案指定代表圖為：第（1）圖。

(二)本代表圖之元件符號簡單說明：

(無元件符號說明)

五、本案若有化學式時，請揭示最能顯示發明特徵的化學式：

(無)