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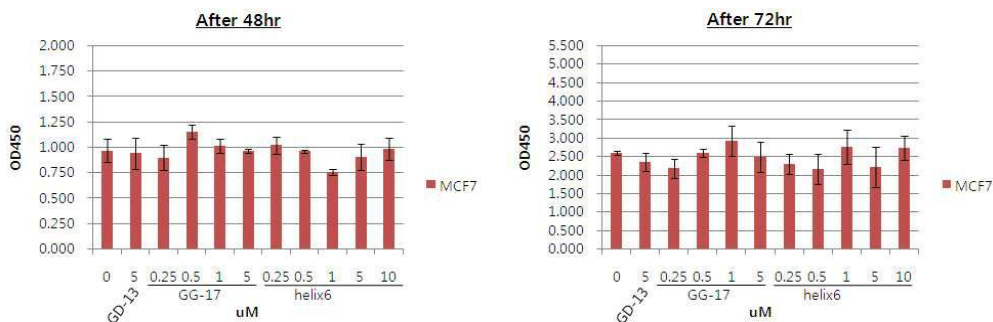
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(54) 발명의 명칭 **대장암에 특이적인 항암 활성을 갖는 신규 펩타이드, 이를 포함하는 NDRG 2 결정체 및 이의 용도**

**(57) 요약**

본 발명은 대장암세포에 특이적인 활성을 갖는 신규 펩타이드 항암제에 관한 것으로서, 보다 상세하게는 하기 일 반식(I)의 아미노산 서열로 나타내는 대장암 예방 또는 치료용 펩타이드, 상기 펩타이드를 포함하는 인간 NDRG2 및 이의 변이체의 결정체, 상기 펩타이드를 유효성분으로 포함하고 약제학적 담체를 더 포함하는 치료용 약학적 조성물, 및 상기 펩타이드 또는 조성물을 치료를 필요로 하는 개체에 투여하는 단계를 포함하는 인간을 제외한 동물의 대장암을 치료하는 방법에 관한 것이다. 본 발명의 펩타이드를 포함하는 대장암 예방 또는 치료용 조성물, 이를 유효성분으로 포함하는 약학적 조성물은 대장암세포주에 뛰어난 선별력을 가지고 작용하므로, 대장 암에 대한 항암제의 효과적인 유효성분으로 유용하게 사용될 수 있다.

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**특허청구의 범위**

**청구항 1**

하기 일반식(I)의 아미노산 서열로 나타내는 대장암 예방 또는 치료용 펩타이드:



여기에서, X<sup>1</sup>은 M 또는 I이고; X<sup>2</sup>은 H, S 또는 T이고; X<sup>3</sup>은 L 또는 I이고; X<sup>4</sup>은 T 또는 S이고; 및 X<sup>5</sup>은 L 또는 W이다.

**청구항 2**

제1항에 있어서, 상기 펩타이드는 서열번호 1의 아미노산 서열로 나타내는 펩타이드.

**청구항 3**

제1항에 있어서, 상기 펩타이드는 NDRG2의 6번째 헬릭스 유래인 것을 특징으로 하는 펩타이드.

**청구항 4**

제1항에 있어서, 상기 펩타이드는 추가적으로 세포 내재화 서열을 포함하는 것을 특징으로 하는 펩타이드.

**청구항 5**

제4항에 있어서, 상기 세포 내재화 서열은 폴리아르기닌, 안테나페디아, TAT, HIV-Tat, 페네트라틴, Antp-3A (Antp 돌연변이), Buforin II, 트란스포탄, MAP (모텔 양친매성 펩티드), K-FGF, Ku70, 프리온, pVEC, Pep-1, SynB1, Pep-7, HN-1, BGSC (비스-구아니디늄-스퍼미딘-콜레스테롤) 및 BGTC (비스-구아니디늄-트렌-콜레스테롤)로 이루어지는 군으로부터 선택되는 단백질의 아미노산 서열을 포함하는 것을 특징으로 하는 펩타이드.

**청구항 6**

제1항에 있어서, 상기 펩타이드는 고농도의 염에서도 안정적인 활성을 유지하기 위해 N-말단 또는 C-말단에 캡핑 모티브(capping motif)를 추가로 포함하는 것을 특징으로 하는 펩타이드.

**청구항 7**

삭제

**청구항 8**

삭제

**청구항 9**

삭제

**청구항 10**

삭제

**청구항 11**

삭제

**청구항 12**

삭제

**청구항 13**

제1항 내지 제6항 중 어느 한 항의 펩타이드를 유효성분으로 하여, 약제학적으로 허용되는 담체를 더 포함하는 것을 특징으로 하는 대장암 예방 또는 치료용 약학적 조성물.

**청구항 14**

제1항 내지 제6항 중 어느 한 항에 기재된 펩타이드를 치료를 필요로 하는 개체에 투여하는 단계를 포함하는, 인간을 제외한 동물의 대장암을 치료하는 방법.

**청구항 15**

제13항에 기재된 치료용 조성물을 치료를 필요로 하는 개체에 투여하는 단계를 포함하는, 인간을 제외한 동물의 대장암을 치료하는 방법.

**명세서**

**기술분야**

[0001] 본 발명은 대장암세포에 특이적인 항암 활성을 갖는 하기 일반식(I)의 아미노산 서열로 나타내는 대장암 예방 또는 치료용 펩타이드, 상기 펩타이드를 포함하는 인간 NDRG2 및 이의 변이체의 결정체, 상기 펩타이드를 유효 성분으로 포함하고 약제학적 담체를 더 포함하는 치료용 약학적 조성물, 및 상기 펩타이드 또는 조성물을 치료를 필요로 하는 개체에 투여하는 단계를 포함하는 인간을 제외한 동물의 대장암을 치료하는 방법에 관한 것이다.

[0002] (I)  $GWX^1DWAAX^2KX^3X^4GX^5T$

[0003] 여기에서,  $X^1$ 은 M 또는 I이고;  $X^2$ 은 H, S 또는 T이고;  $X^3$ 은 L 또는 I이고;  $X^4$ 은 T 또는 S이고; 및  $X^5$ 은 L 또는 W이다.

**배경기술**

[0004] 현재 사용되고 있는 항암제의 대부분은 화학요법에 의해 개발된 것으로 암의 종류에 따라 약리작용이 다양하고, 독성에 의한 부작용이 다양하게 나타났기 때문에 암치료시 문제점으로 지적되고 있다. 또한 항암제는 암세포의 성장을 효과적으로 억제하기도 하지만, 때로는 정상조직에도 침투하여 정상조직, 특히 세포분열이 활발한 조직 세포에도 손상을 입히기 때문에 골수기능저하, 위장장애, 탈모증을 유발하기도 하고 암세포가 성장, 증식과 전이를 일으키는 과정에서 변이되면서 항암제에 대한 저항성을 보이는 등 암 치료의 커다란 문제점으로 대두되고 있다.

[0005] 따라서, 항암제가 지니는 정상세포에 대한 독성과 암세포의 저항성의 심각한 문제를 해결할 수 있는 효과적인 항암제의 개발에 관한 연구가 활발히 진행되어 오고 있다. 이러한 연구로서 지금까지는 주로 종양세포에 특이한 항원 및 이를 표적하는 항체를 개발하여 왔으나, 항체의 경우 면역반응의 우려 및 조직 내 침투의 낮은 효율성 등의 문제점이 존재하였다. 반면 펩타이드의 경우는 분자량이 작아 면역반응의 우려가 적고 조직 내 침투가 용이한 장점을 갖으므로 암 표적 펩타이드를 기존의 항암제와 연결하게 되면 종양에 선택적으로 약물을 전달하는

지능형 약물전달체로 활용되어 질 수 있어, 암 표적 펩타이드의 개발이 요구되고 있다.

- [0006] 한편, 암 중에서 대장암의 경우, 이로 인한 사망율이 미국에서 흡연 관련된 암을 제외하면 암으로 인한 사망자 중에서 가장 높은 부분을 차지한다. 또한, 현재 우리나라에서 대장암 발생율이 매우 현저하게 증가하고 있는 것으로 알려져 있고, 남성의 경우 위암, 폐암, 간암에 이어 네번째로 높은 사망율을 차지하고 있으며, 여성의 경우 역시 유사하다. 대장암 빈도는 남성이 여성보다 많은 것으로 조사되어 지고 있으며, 연령별로는 50대가 가장 많고, 60대가 그 뒤를 잇고 있다. 특히 우리나라는 유럽이나 미국과 비교했을 때, 발생 연령이 10살 정도 어린 경향이 있다.
- [0007] 이러한, 대장암은 Wnt 신호 전달 체계의 유전자 불활성화와 관련되어 있는 것으로 알려져 있다. Wnt 리간드는 핵공(nuclear pore)을 통한 세포질  $\beta$ -카테닌의 신속한 이동에 의해 핵에 도달하는 신호전달의 일련 반응을 개시하는데, 대장암의 많은 경우에서 이러한 Wnt 신호가 활성화되거나 종양 억제자 APC(adenomatous polyposis coli)의 기능이 불활성화되어 GSK-3 $\beta$  활성화가 차단되는 것으로 알려져 있다. 이러한 기작은 세포질내에서의  $\beta$ -카테닌이 높은 수준으로 축적되고 이어서 TCF(T-cell factor) 또는 LEF(lymphoid enhancer factor)와 복합체를 형성한 후, 핵안으로 이동하여 cyclin D1 및 c-Myc을 포함하는 Wnt 타겟 유전자를 활성화시키는 것으로 알려져 있다.
- [0008] 최근에 본 발명자들은 대한민국공개특허 제10-2010-0127498호에 NDRG군 유전자에 속하는 NDRG2가 GSK-3 $\beta$ 의 인산화 조절을 통해 TCF/ $\beta$ -카테닌 신호전달 조절에 관여하고, 대장암 세포 내에서 그 발현이 감소되어 있어 대장암 진단 마커로서 이용되어질 수 있음을 보고하였다.
- [0009] NDRG군 유전자는 N-Myc 돌연변이 쥐에서 발현이 증가하는 유전자로서 Ndr1이라는 이름으로 처음 알려지기 시작하였다. 이의 인간 홀로로그(human ortholog) NDRG1이 인간 세포주에서 동정 되면서부터 Drg1, Cap43, RTP/rit42 등과 같은 이름으로 불려지기 시작하였다. 이러한 NDRG군 유전자에는 서로 다른 4종류의 구성 유전자들이 보고되어 있으며, 이들은 높은 상동성(homology)을 가지지만 개체의 발달과 성장에 따라 발현 형태가 상당히 다른 것으로 보고되어 있다. 즉, NDRG1은 거의 모든 조직과 세포에서 발현되는 반면, NDRG2는 뇌, 심장, 근육, 신장 및 간세포 등에서 발현되고, NDRG3는 뇌, 심장, 신장 등에서 발현되며, NDRG4는 오직 뇌와 심장 세포에서만 제한적으로 발현되는 것으로 알려져 있다.
- [0010] 지금까지 보고된 연구결과들에 의하면 NDRG2가 종양 억제자로서 중요한 역할을 할 것으로 추정되고 있으나, 배양된 세포 및 동물 시스템에서 NDRG2의 기능에 관해 많은 연구들이 행해졌음에도 불구하고, 세포내에서 NDRG2의 정확한 역할은 아직까지도 명확하게 밝혀져 있지 않다. 다만, NDRG2는 중추 신경계에서 항우울제 및 전기경련(electroconvulsive) 치료의 신규 타겟 분자로서 확인되었고, NDRG2가 글루코코르티코이드(glucocorticoids)에 반응하여 신경 분화, 시냅스 형성 및 축색의 생존에 추정 역할을 한다는 것이 보고되었다. 또한, 인간 뇌 질환인 알츠하이머 질환에서 상향 조절된다고 보고되고 있으며, 성숙 유도 자극에 의해 단핵세포(monocyte), CD34 전구세포 및 백혈병 세포의 DC 분화 과정에 관여된다는 보고도 알려져 있다. 따라서, NDRG2는 다양한 조직 또는 기관의 세포 분화 및 유지를 조절하는데 특이적인 기능을 할 것으로 예상되어지고 있다.
- [0011] NDRG군의 구조는 N-말단 부분에  $\alpha/\beta$  하이드롤라아제 도메인(hydrolase domain)이 존재할 것으로 분석되어 왔고, C-말단 부분에는 3개의 잘 보존된 Akt 인산화 아미노산과 몇 개의 인산화가 가능한 아미노산이 존재하고 있는 것으로 보고되고 있다. Burchfield 등은 NDRG2가 C2C12 골격근 세포에서 인슐린-의존적 인산화에 의해 조절된다는 것을 보고하였다. 또한, NDRG2가 알도스테론과 같은 무기질코르티코이드 호르몬에 의해 유도되고, 인 비트로에서 SGK1(serum- and glucocorticoidinduced kinase 1)에 의해 인산화되는 생리학적인 기질로 인식된다는 것이 보고되어 있다. 그러나, NDRG2의 정확한 생리학적인 기능은 아직 확실히 밝혀져 있지 않다. 이와 같이 명확한 기능이 밝혀지고 있지 않는 것은 NDRG2를 비롯한 NDRG군 단백질의 정확한 삼차원 구조의 부재로 인해 분자적 수준에서의 기능 메커니즘이 정확히 규명되지 않았기 때문이다.
- [0012] 이러한 배경하에서, 본 발명자들은 신규 항암 펩타이드를 찾기 위해 예의 노력한 결과, NDRG2 단백질의 삼차-입체구조를 확인하여 이 단백질은 8개의  $\beta$  가닥(strand)과 13개의  $\alpha$  헬릭스(helix)로 구성된 도메인으로 구성되어 있으며, 특히 6번째 헬릭스가 대장암 세포의 TCF/ $\beta$ -카테닌 신호전달 조절에 중요한 역할을 하는 것을 밝히는 동시에, NDRG2 유래의  $\alpha 6$  펩타이드가 정상세포 및 간암, 자궁경부암, 유방암과 같은 타 암세포에는 영향을

미치지 않고, 대장암세포에만 선택적으로 작용하여 암세포의 증식을 억제하는 것을 확인함으로써 본 발명을 완성하였다.

**발명의 내용**

**해결하려는 과제**

- [0013] 따라서, 본 발명의 목적은 상기 일반식(I)의 아미노산 서열로 나타내는 대장암 예방 또는 치료용 펩타이드를 제공하는 것이다.
- [0014] 본 발명의 또 다른 목적은 상기 펩타이드를 포함하는 인간 NDRG2 및 이의 변이체의 결정체를 제공하는 것이다.
- [0015] 본 발명의 또 다른 목적은 상기 펩타이드를 유효성분으로 포함하고 약제학적 담체를 더 포함하는 치료용 약학적 조성물을 제공하는 것이다.
- [0016] 본 발명의 또 다른 목적은 상기 펩타이드 또는 조성물을 치료를 필요로 하는 개체에 투여하는 단계를 포함하는, 인간을 제외한 동물의 대장암을 치료하는 방법을 제공하는 것이다.

**과제의 해결 수단**

- [0017] 상기 목적을 달성하기 위해, 본 발명은 하기 일반식(I)의 아미노산 서열로 나타내는 대장암 예방 또는 치료용 펩타이드를 제공한다.
- [0018] (I)  $GWX^1DWAAX^2KX^3X^4GX^5T$
- [0019] 여기에서,  $X^1$ 은 M 또는 I이고;  $X^2$ 은 H, S 또는 T이고;  $X^3$ 은 L 또는 I이고;  $X^4$ 은 T 또는 S이고; 및  $X^5$ 은 L 또는 W이다.
- [0020] 본 발명에서 용어, “펩타이드(peptide)”란 아미드 결합(또는 펩타이드 결합)으로 연결된 아미노산으로 이루어진 폴리머를 의미한다. 본 발명의 목적상, 대장암세포에 대해 높은 선별력을 지니고, 강력한 항암활성을 나타내는 펩타이드를 의미한다. 본 발명의 펩타이드는 상기 일반식(I)을 가지며, 이때  $X^1$ 은 M 또는 I이고;  $X^2$ 은 H, S 또는 T이고;  $X^3$ 은 L 또는 I이고;  $X^4$ 은 T 또는 S이고; 및  $X^5$ 은 L 또는 W이다. 이러한 펩타이드 구조는  $\alpha$  헬릭스 구조를 갖는 것이 특징이다. 바람직하게는 NDRG2 단백질과 상동성을 갖는 NDRG 패밀리 단백질 내에 보존된 6번째 헬릭스를 암호화하는 서열번호 1 내지 4으로 나타내는 펩타이드일 수 있다. 더욱 바람직하게, 본 발명의 펩타이드는 아미노산 서열이 GWMDWAAHKL TGLT인 서열번호 1로 나타내는 펩타이드이다.
- [0021] 상기 아미노산 서열은 NDRG2 단백질의 6번째 헬릭스로부터 유래된 것으로서 바람직하게는 게놈정보를 통해 얻어진 서열번호 1로 나타내는 아미노산 서열을 암호화하는 뉴클레오타이드 서열을 갖는 절편일 수 있으나, NDRG2 단백질의 6번째 헬릭스와 상동성을 갖고 대장암세포의 증식을 억제할 수 있는 상기 일반식(I)로 나타내는 아미노산 서열을 암호화하는 뉴클레오타이드 서열들 모두 이에 해당한다.
- [0022] 본 발명의 일 실시예에서는 본 발명에 따른 펩타이드를 인간의 간암 세포주(Hep3B), 인간의 자궁경부암 세포주(HeLa), 인간의 유방암 세포주(MCF7) 및 인간의 대장암 세포주(SW620)에 처리하여 대장암 세포주(SW620)에 대해서 선택적으로 세포의 증식을 억제하는 것을 확인하였다(실시예 4).
- [0023] 본 발명의 펩타이드는 효과적으로 세포 내로 들어가기 위해 내재화 서열 혹은 단백질 변환 도메인에 연결될 수 있다.
- [0024] 최근의 연구 보고에 의하면 다양한 세포 내재화 서열, 예를 들어 HIV 바이러스의 TAT 전이활성 도메인, 안테나 페디아 등을 원형질막을 가로질러 수송할 수 있는 트랜스포탄(transportan)이 알려져 있다. 또한, 폴리아르기닌은 원형질막을 가로질러 펩타이드와 단백질을 훨씬 더 효율적으로 수송함으로써 펩타이드를 세포 내로 수송하는

매력적인 도구로 알려져 있다.

- [0025] 따라서, 본 발명의 펩타이드는 세포 내재화 수송물질 또는 서열을 포함할 수 있다. 세포 내재화 서열은 공지되어 있거나 새롭게 당해 기술분야에서 발견된 임의의 내재화 서열, 또는 그것의 보존성 변이체일 수 있다. 세포 내재화 수송물질 및 서열의 비-제한적인 예로는 폴리아르기닌(예컨대 R9), 안테나페디아 서열, TAT, HIVTat, 페네트라틴(Penetratin), Antp-3A(Antp 돌연변이체), Buforin II, 트랜스포탄, MAP(모델 양친매성 펩티드), K-FGF, Ku70, 프리온, pVEC, Pep-1, SynB1, Pep-7, HN-1, BGSC(비스-구아니디늄-스피리딘-콜레스테롤) 및 BGTC(비스-구아니디늄-트렌-콜레스테롤)가 포함된다.
- [0026] 또한, 본 발명의 상기 펩타이드는 고농도의 염에서도 안정적인 활성을 유지하기 위해 N-말단과 C-말단에 캡핑 모티프(capping motif)를 더 포함할 수 있다. 상기 일반식(I)의 아미노산 서열로 나타내는 본 발명의 펩타이드는 N-말단과 C-말단 쪽에 일정한 서열을 갖는 N-말단 단편과 C-말단 단편을 포함함으로써, 전체 펩타이드의 이차구조가 염 농도에 상관없이 구조적 안정화를 피할 수 있다. 이러한 특징은 펩타이드가 생체 내에서 와해되기 쉽다는 구조적 취약점을 보완할 수 있어, 펩타이드의 약리 활성을 이용한 제제화에 매우 유리한 점을 갖는다.
- [0027] 추가적으로, 본 발명의 펩타이드는 표적화 서열, 태그(tag), 표지된 잔기, 반감기 또는 펩타이드의 안정성을 증가시키기 위한 특정 목적으로 고안된 추가의 아미노산 서열도 포함할 수 있다. 또한, 본 발명의 펩타이드는 이펙터(effectors), 약물, 프로드럭, 독소, 펩타이드, 전달 분자 등의 커플링 파트너와 연결될 수 있다.
- [0028] 또한, 본 발명의 펩타이드는 약학적으로 허용 가능한 염의 형태로 제조될 수 있다. 구체적으로 산을 첨가함으로써 염을 형성할 수 있고, 예를 들어 무기산(예: 염산, 히드로브롬산, 인산, 질산, 황산 등), 유기 카복실산(예: 아세트산, 트리플루오로아세트산과 같은 할로 아세트산, 프로피온산, 말레산, 숙신산, 말산, 시트르산, 타르타르산, 살리실산), 및 산성 당(글루쿠론산, 갈락투론산, 글루콘산, 아스코르브산), 산성 폴리사카리드(예: 히알루론산, 콘드로이틴 황페이트, 아르기닌산), 콘드로이틴 황페이트와 같은 술폰산 당 에스테르를 포함하는 유기 술폰산(예: 메탄, 술폰산, p-톨루엔 술폰산) 등을 첨가하여 염을 형성할 수 있다.
- [0029] 본 발명의 펩타이드는 당 분야에 널리 공지된 다양한 방법으로 획득할 수 있다. 상세하게는 시험관 내에서 합성하는 방법, 및 무세포 단백질 합성법 등과 같은 화학적 합성 또는 단백질 발현 시스템을 이용한 유전공학적 방법 등으로 제조될 수 있으나, 하기 펩타이드의 제조방법을 통해 기술하는 바와 같이 화학적 합성 방법을 이용하여 제조하는 것이 바람직하다.
- [0030] 본 발명의 펩타이드는 계놈정보를 통해 얻어진 NDRG2 단백질의 6번째 헬릭스로부터 유래된 서열번호 1로 나타내는 아미노산 서열 또는 이를 암호화하는 뉴클레오타이드 서열을 이용하여 유전공학적 방법을 통해 생산되어질 수 있다.
- [0031] 본 발명에서 "발현벡터"란 적당한 숙주세포에서 목적 펩타이드를 발현할 수 있는 재조합 벡터로서, 유전자 삽입물이 발현되도록 작동하게 연결된 필수적인 조절 요소를 포함하는 유전자 제작물을 말한다. 본 발명의 발현벡터는 적합한 발현벡터가 일반적으로 가지고 있는 요소로서 프로모터, 오퍼레이터, 개시코돈 같은 발현조절 요소들을 포함한다. 개시 코돈 및 종결 코돈은 일반적으로 폴리펩타이드를 암호화하는 뉴클레오타이드 서열의 일부로 간주되며, 유전자 제작물이 투여되었을 때 개체에서 반드시 작용을 나타내야 하며 코딩 서열과 인프레임(in frame)에 있어야 한다. 벡터의 프로모터는 구성적 또는 유도성일 수 있다.
- [0032] 또한, 세포 배양액으로부터 단백질의 분리를 촉진하기 위하여 융합 폴리펩타이드의 배출을 위한 시그널 서열을 포함할 수 있다. 특이적인 개시 시그널은 또한 삽입된 핵산 서열의 효율적인 번역에 필요할 수도 있다. 이들 시그널은 ATG 개시코돈 및 인접한 서열들을 포함한다. 어떤 경우에는, ATG 개시 코돈을 포함할 수 있는 외인성 번역 조절 시그널이 제공되어야 한다. 이들 외인성 번역 조절 시그널들 및 개시 코돈들은 다양한 천연 및 합성 공급원일 수 있다. 발현 효율은 적당한 전사 또는 번역 강화 인자의 도입에 의하여 증가될 수 있다.
- [0033] 발현벡터는 통상의 모든 발현벡터를 다 사용할 수 있다. 예를 들어, 플라스미드 DNA, 파아지 DNA 등이 사용될



수 있다. 플라스미드 DNA의 구체적인 예로는 pUC18, pIDTSAMRT-AMP 같은 상업적인 플라스미드를 포함한다. 본 발명에 사용될 수 있는 플라스미드의 다른 예로는 대장균 유래 플라스미드(pYG601BR322, pBR325, pUC118 및 pUC119), 바실러스 서브틸리스(*Bacillus subtilis*)-유래 플라스미드(pUB110 및 pTP5) 및 효모-유래 플라스미드 (YEp13, YEp24 및 YCp50)가 있다. 파아지 DNA의 구체적인 예로는 λ-파아지(Charon4A, Charon21A, EMBL3, EMBL4, λgt10, λgt11 및 λZAP)가 있다. 또한, 리트로바이러스(retrovirus), 아데노바이러스(adenovirus) 또는 백신시아 바이러스(vaccinia virus)와 같은 동물 바이러스, 배콜로바이러스(baculovirus)와 같은 곤충 바이러스가 또한 사용될 수 있다. 이러한 발현백터는 숙주 세포에 따라서 단백질의 발현량과 수식 등이 다르게 나타나므로, 목적에 가장 적합한 숙주세포를 선택하여 사용하면 된다.

[0034] 또한, 본 발명에서 용어, "형질전환"은 상기 뉴클레오타이드 절편이 숙주 유기체의 게놈 안으로 이동하여 목적 하는 펩타이드를 발현할 수 있도록, 유전적으로 안정한 유전을 일으키는 것을 말한다.

[0035] 본 발명의 형질전환 방법은 임의의 형질전환 방법이 사용될 수 있으며, 당업계의 통상적인 방법에 따라 용이하게 수행할 수 있다. 일반적으로 형질전환 방법에는 CaCl<sub>2</sub> 침전법, CaCl<sub>2</sub> 방법에 DMSO(dimethyl sulfoxide)라는 환원물질을 사용함으로써 효율을 높인 Hanahan 방법, 전기천공법(electroporation), 인산칼슘 침전법, 원형질 융합법, 실리콘 카바이드 섬유를 이용한 교반법, 아그로박테리아 매개된 형질전환법, PEG를 이용한 형질전환법, 텍스트란 설페이트, 리포펙타민 및 건조/억제 매개된 형질전환 방법 등이 있다.

[0036] 숙주는 본 발명의 펩타이드를 발현하도록 하는 한 특별히 제한되지는 않는다. 본 발명에 사용될 수 있는 숙주의 특정한 예로는 대장균(*E. coli*)과 같은 에스케리키아(*Escherichia*)속 세균 바실러스 서브틸리스(*Bacillus subtilis*)같은 바실러스(*Bacillus*)속 세균 슈도모나스 푸티다(*Pseudomonas putida*)같은 슈도모나스(*Pseudomonas*)속 세균 사카로마이세스 세레비지애(*Saccharomyces cerevisiae*), 스킴조사카로마이세스 폼베(*Schizosaccharomyces pombe*)같은 효모 동물세포 및 곤충 세포가 있다.

[0037] 또 하나의 양태로서, 본 발명은 상기 펩타이드를 포함하는 인간 NDRG2 및 이의 변이체들의 결정체를 제공한다.

[0038] 배경기술에서 나열하였듯이 NDRG군의 구조는 N-말단 부분에 α/β 하이드롤라아제 도메인(hydrolase domain)이 존재할 것으로 분석되어 왔고, C-말단 부분에는 3개의 잘 보존된 Akt 인산화 아미노산들이 존재하고 또한 몇 개의 인산화 가능성이 있는 아미노산들이 있을 것으로 알려져 왔으나 NDRG군의 단백질 수준에서의 기능 연구는 거의 전무한 상황이다. 따라서, 본 발명에서는 NDRG군에 속하는 NDRG2 단백질의 명확한 기능을 밝히기 위해 NDRG2 단백질 및 이의 변이체들의 삼차-입체구조를 규명하였다.

[0039] 일반적으로 표적 단백질의 입체구조의 규명에 있어서, 표적 단백질이 수용성이며 결정성인 것이 중요하다. 본 발명에 따른 NDRG2 단백질은 수용성이므로, 이의 3차원 구조 규명을 위해서는 결정성을 갖도록 하기 위한 결정화 단계가 필요하다. 이러한 결정화 단계에는 일반적으로 x-선 결정화법(x-ray crystallograpy)이 사용되며, 이러한 x-선 결정화법을 사용하기 위한 전 처리 단계로서 여러 가지 결정화 방법이 수행되어야 한다. 본 발명의 구체 예에 있어서, 이와 같은 결정화 방법으로서 통상적인 농도 평형을 이용한 방법이 사용될 수 있으며, 예컨대, 증기 평형법 (예컨대, 방울혼합증기평형법(Sitting- or Hanging-drop vapour diffusion method): Jancrik J. et al., Appl. Cryst., 24, 409-411, 1991) 또는 투석법 (연속식 또는 회분식) 등이 사용될 수 있다. 바람직하게는 sitting-drop vapour diffusion을 이용한 증기 평형법을 사용하는 것이다.

[0040] 방울 혼합 증기 평형법의 결정화 원리와 과정은 다음과 같다. 밀폐된 공간에 모액의 작은 방울과 이보다 훨씬 큰 규모의 저수조(reservoir) 용액이 분리된 채 공존할 때, 이들 사이에서 물 또는 다른 휘발성 물질의 이동이 일어나게 된다. 한편, 단백질의 용액 조건 중 열역학적으로 준안정 상태인 과포화 상태에서 침전체의 변화에 따라 단백질의 침전이 일어나며, 침전 속도가 느리게 진행되면서 안정된 결정화 상태가 된다. 여기에 사용 가능한 침전체는 잘 알려져 있으며, 이들은 농축 상태의 단백질 용액의 용해도를 줄여주는 역할을 하게 된다. 이때, 단백질 분자 주위의 상대적인 흡착층을 감소시키기 위하여, 단백질 분자들이 서로 응집하여 결정을 형성하게 된다. 따라서, 저수조 용액은 이와 같은 침전체를 비롯하여, 버퍼용액, 염, 세정제(detergent)등이 다양한 농도로 섞여 있게 되는데, 단백질 용액과 이런 다양한 조건의 저수조 용액이 보통의 경우 약 1:1의 비율로 섞여서 방울을 형성하게 된다. 이렇게 얻어진 방울을 실리콘으로 코팅된 유리 슬라이드에 얹어 뒤집은 상태로 준비된 플레이트에 얹어 밀봉한다. 초기에는 방울 중의 단백질의 농도가 저수조 용액의 농도와 차이가 있어서 단백질이 결정 상태로 존재하지 않지만, 밀봉된 상태로 놓아두면 서서히 평형이 이루어지게 되는데, 이때 상기에서 설명한 원리에 의하여 특정 상태의 조건에서 결정이 형성되는 것이다. 이와 같은 방울 혼합 증기 평형법에서 저수조



용액 중의 침전제뿐만 아니라 염, 버퍼용액 및 세정제의 종류와 적정 농도, 용액의 pH 및 실험 온도는 단백질의 종류에 따라 달리 선택되고, 경우에 따라서는 단백질의 결정 형성에 있어서 아주 중요한 요소가 된다. 상기의 방울혼합주기 평형법에는 sitting과 hanging의 두 가지 방법이 있는데, 이들의 차이점은, hanging 방법은 밀폐된 공간 내에 단백질과 침전제가 섞인 방울(drop)을 커버 슬라이드에 매달아 결정을 얻는 것이고, sitting 방법은 bridge라고 불리는 보조 장치 위에 방울을 올려놓는 다는 것이다. 결과적으로 밀폐된 공간에 단백질과 침전물이 섞인 방울(이하, '단백질 방울')과 저수조에 담긴 침전물이 직접적으로 섞이지 않게 공간적으로 분리되어야 하며, 이렇게 분리된 상태에서 단백질 방울과 저수조 내 침전물이 농도의 평형을 이루기 위해 단백질 방울내의 물 분자가 서서히 침전물 쪽으로 이동 하게 되어 결과적으로 단백질 방울은 점차 농축되는 현상을 보이게 되며, 이러한 조건하에서 단백질의 결정이 형성이 된다. 따라서 상기 sitting과 hanging 방법 중 어느 것을 선택 하여도 요구되는 pH, 온도, 압력, 시간 조건은 동일하다.

[0041] 또 다른 방법으로서 투석법(dialysis)이 있다. 투석법은 단백질 용액이 다공성의 막으로 구성된 튜브(dialysis tube) 내에 존재하고 외부에는 침전제를 포함하는 저수조 용액 존재하며, 이 때 다공성 막 (dialysis membrane)은 크기가 작은 물 분자 만 이동이 가능하므로 단백질 용액 내부의 물 분자가 다공성 막을 통과하여 침전물 쪽으로 서서히 이동하면서 농축되고, 그 결과 결정이 생성된다.

[0042] 본 발명에서 수용성 NDRG2 및 이의 변이체를 결정화시키기 위하여 NDRG2 또는 이의 변이체의 단백질 용액 및 저수조 용액을 농도 평형법, 예컨대 방울 혼합 증기 평형법, 투석법 등을 사용하여 반응시켜 결정화를 수행한다.

[0043] 상기 저수조 용액은 버퍼용액 및 침전제를 포함하는 것을 사용한다. 상기 버퍼용액으로서 pH를 조절하여 단백질을 안정화시키기 위한 것으로, pH 4 내지 9.5, 바람직하게는 pH 4.6 내지 9, 더욱 바람직하게는 6.4 내지 8.0 인 모든 버퍼용액이 사용 가능하며, 예컨대, 칼슘 아세테이트, 소듐 카코딜레이트, 소듐 클로라이드, 이미다졸로 이루어진 군에서 선택된 1종 이상의 것을 사용할 수 있다. 상기 침전제는 결정화를 위하여 침전을 형성하는 물질로서 탄소수 1 내지 4의 직쇄 또는 분지쇄 알코올 및 폴리에틸렌 글라이콜(PEG) (중량평균분자량 200 이상, 바람직하게는 400 내지 20,000, 보다 바람직하게는 8000)로 이루어진 군에서 선택된 1종 이상을 사용할 수 있다. 또한, 필요에 따라 구조 분석이 용이한 결정 형태를 갖도록 하는 역할을 하는 금속염을 추가로 첨가할 수 있다. 이러한 금속염은 모든 알칼리금속염 및 알칼리토금속염으로 이루어진 군에서 선택된 1종 이상의 것일 수 있으며, 바람직하게는 염화물, 시아네이트 계열, 티오시아네이트 계열, 산화물, 질산화물, 수산화물, 황산화물 등에서 선택된 1종 이상일 수 있고, 예컨대, 리튬 클로라이드, 마그네슘 클로라이드, 소듐 티오시아네이트 등일 수 있다.

[0044] 전체 저수조 용액 내에서의 버퍼용액, 금속염 및 침전제의 농도는 사용되는 단백질 용액의 농도에 따라서 적절하게 조절할 수 있다. 저수조 용액내의 침전제의 농도가 지나치게 높으면 단백질이 침전되는 현상이 생길 수 있고, 상기 범위보다 낮으면 결정이 생기지 않게 되어 바람직하지 않다. 또한, 상기 버퍼용액은 주로 저수조 용액 내에서의 단백질의 안정성과 관련된 것이며, 그 농도가 적정 범위를 벗어나면 저수조 용액 내에서 적절한 단백질의 안정성을 얻을 수 없으며, 소망하는 결정도 얻기 힘들다. 상기 저수조 용액은 상기와 같은 성분 외에도 통상적으로 사용 가능한 염, 버퍼용액 및 세정제 등을 추가로 포함할 수 있다.

[0045] 또한, 본 발명은 x-선 결정화 법을 통하여 얻어진 상기와 같은 방법으로 결정화된 NDRG2 및 이의 변이체의 결정체의 3차원 결정 구조를 제공한다. 본 발명의 한 구체예에 있어서, 상기 결정의 3차원 구조를 알아내기 위하여, x-선 영상 플레이트를 사용하여 회절 패턴을 얻고, 다중 파장 분석법(MAD: multiwavelength anomalous dispersion)으로 위상(phase)정보를 얻을 수 있다. 상기와 같이 얻어진 NDRG2 및 이의 변이체의 결정의 x-선 회절 패턴 및 위상 정보로부터 전자 밀도 지도를 작성하고, 다시 이로부터 원자 좌표를 도출함으로써 3차원 구조를 얻을 수 있다.

[0046] x-선을 사용한 회절 패턴 데이터의 수집 방법은 x-선의 공급원에 따라 일반 실험실에서 얻는 방법(home source) 및 방사광 가속기(synchrotron)를 이용하는 방법으로 나눌 수 있다. 이 중에서 방사광을 이용하면 결정 크기가 50 $\mu$ m 정도의 작은 결정까지도 가능하고, 하나의 파장뿐 아니라 여러 파장에서 데이터를 모을 수 있기 때문에 신속한 구조를 얻을 수 있다. 따라서, 본 발명의 바람직한 구체예에서는 방사광 가속기를 이용하여 x-선 회절 실험을 통해 회절 패턴 데이터를 얻을 수 있으며, 이와 같이 얻어진 본 발명에 따른 NDRG2 및 이의 변이체의 결정의 회절 패턴 데이터는 다음의 표 1에 나타낸 바와 같다.

[0047] [표 1]

**Crystallographic data collection and refinement statistics**

Dataset	hNDRG2	hNDRG2_K2A	hNDRG2_K2Y
<b>Beamline (PAL)</b>	<b>4A(MXW)</b>	<b>6C(MXII)</b>	<b>6C(MXII)</b>
Wavelength	0.9795	1.23985	1.23985
Space group	P2 <sub>1</sub> 2 <sub>1</sub> 2 <sub>1</sub>	P2 <sub>1</sub> 2 <sub>1</sub> 2 <sub>1</sub>	P3 <sub>1</sub> 2 <sub>1</sub>
Cell dimensions (Å)			
<i>a</i>	86.41	86.23	93.10
<i>b</i>	88.90	88.05	93.10
<i>c</i>	126.80	126.91	90.21
Resolution (Å)	2.80(2.90-2.80)	2.00(2.07-2.00)	2.15(2.23-2.15)
No. of total reflections	160,865	291,415	227,387
No. of unique reflections	24,361	63,329	24,942
Redundancy	6.6(6.3)	4.6(3.1)	9.1(6.6)
Completeness (%)	99.6(99.0)	96.5(92.2)	99.9(99.8)
<i>R</i> <sub>sym</sub> (%) <sup>a</sup>	10.5(41.5)	13.6(44.3)	8.0(49.6)
<i>I</i> / $\sigma$ ( <i>I</i> )	19.1(4.5)	11.17(1.83)	28.16(2.78)
Refinement			
Resolution (Å)	40.00-2.81	30.00-2.00	30.0-2.15
Reflections in work/test sets	23,070/1,242	60,071/3,217	23,642/1,268
<i>R</i> <sub>cryst</sub> / <i>R</i> <sub>free</sub> (%) <sup>b,c</sup>	20.1/25.9	18.0/23.3	17.3/20.8
R.m.s. deviations			
Bond lengths (Å)	0.029	0.011	0.015
Bond angles (°)	2.332	1.342	1.463
Model composition			
Protein residues	843	843	281
Solvent	3 acetates	4 acetates, 3 glycerols	2 imidazoles
Metals		1 Ca ion	1 Cl ion
Waters	93	399	137
B-Values (Å <sup>2</sup> )			
Geometry			
Most favored regions (%)	90.3	92.7	92.0
Additional allowed regions (%)	9.7	7.3	8.0
PDB accession code	2XMQ	2XMR	2XMS

The numbers in parentheses describe the relevant value for the highest resolution shell.

<sup>a</sup>*R*<sub>sym</sub> =  $\sum_i ||I_i - \langle I \rangle| / \sum_i I_i$  where *I<sub>i</sub>* is the intensity of the *i*-th observation and  $\langle I \rangle$  is the mean intensity of the reflections.

<sup>b</sup>*R*<sub>cryst</sub> =  $\sum ||F_{obs} - |F_{calc}|| / \sum |F_{obs}|$  where *F<sub>calc</sub>* and *F<sub>obs</sub>* are the calculated and observed structure factor amplitude, respectively.

<sup>c</sup>*R*<sub>free</sub> =  $\sum ||F_{obs} - |F_{calc}|| / \sum |F_{obs}|$  where all reflections belong to a test set of randomly selected data.

[0048]

[0049] 위상 정보는 중금속 치환법(Multiple isomorphous replacement), 다중파장 분석법(Multiwavelength anomalous dispersion), 구조 치환법(Molecular replacement) 등에 의하여 얻어질 수 있으나, 바람직하게는 구조 치환법을 사용하는 것이다.

[0050] 정밀화 단계는 x-선 데이터로부터 나온 전자밀도를 컴퓨터 프로그램으로 컴퓨터 모니터에 구현하여 거기에 가장 맞는 구조로 수정함으로써 수행된다. 정밀화 단계를 수행한 결과는 표 1에 나타냈으며, 본 발명에 따른 NDRG2 및 이의 변이체들의 삼차-입체구조는 하기의 표 2 내지 4와 같이 원자 모델로 표현된다.

[0051] [표 2]

[0052] 인간 NDRG2 단백질의 X, Y, Z 원자좌표

[0053]	ATOM	1	N	ALA	A	24	15.973	-14.107	8.074	1.00	62.75	N
[0054]	ATOM	2	CA	ALA	A	24	15.369	-15.189	8.914	1.00	62.41	C
[0055]	ATOM	3	C	ALA	A	24	16.184	-15.550	10.221	1.00	61.36	C
[0056]	ATOM	4	O	ALA	A	24	16.577	-16.734	10.443	1.00	61.67	O
[0057]	ATOM	5	CB	ALA	A	24	15.059	-16.470	8.039	1.00	63.32	C

[0058]	ATOM	6	N	LYS	A	25	16.396	-14.551	11.092	1.00	58.66	N
[0059]	ATOM	7	CA	LYS	A	25	17.045	-14.792	12.410	1.00	56.35	C
[0060]	ATOM	8	C	LYS	A	25	16.140	-15.176	13.633	1.00	54.92	C
[0061]	ATOM	9	O	LYS	A	25	15.373	-14.320	14.091	1.00	54.12	O
[0062]	ATOM	10	CB	LYS	A	25	18.031	-13.653	12.792	1.00	56.83	C
[0063]	ATOM	11	CG	LYS	A	25	19.515	-13.857	12.190	1.00	57.92	C
[0064]	ATOM	12	CD	LYS	A	25	20.749	-13.256	13.048	1.00	58.23	C
[0065]	ATOM	13	CE	LYS	A	25	20.691	-13.513	14.669	1.00	58.92	C
[0066]	ATOM	14	NZ	LYS	A	25	20.159	-14.872	15.228	1.00	58.56	N
[0067]	ATOM	15	N	THR	A	26	16.266	-16.434	14.144	1.00	51.94	N
[0068]	ATOM	16	CA	THR	A	26	15.642	-16.907	15.403	1.00	50.08	C
[0069]	ATOM	17	C	THR	A	26	16.339	-16.402	16.678	1.00	48.44	C
[0070]	ATOM	18	O	THR	A	26	17.576	-16.338	16.752	1.00	49.69	O
[0071]	ATOM	19	CB	THR	A	26	15.591	-18.434	15.440	1.00	49.49	C
[0072]	ATOM	20	OG1	THR	A	26	14.629	-18.842	14.497	1.00	51.27	O
[0073]	ATOM	21	CG2	THR	A	26	15.156	-18.996	16.795	1.00	48.85	C
[0074]	ATOM	22	N	HIS	A	27	15.561	-16.027	17.692	1.00	46.18	N
[0075]	ATOM	23	CA	HIS	A	27	16.125	-15.470	18.910	1.00	44.39	C
[0076]	ATOM	24	C	HIS	A	27	15.322	-16.059	20.040	1.00	44.50	C
[0077]	ATOM	25	O	HIS	A	27	14.351	-16.708	19.803	1.00	44.62	O
[0078]	ATOM	26	CB	HIS	A	27	16.017	-13.948	18.935	1.00	43.01	C
[0079]	ATOM	27	CG	HIS	A	27	16.787	-13.234	17.850	1.00	43.27	C
[0080]	ATOM	28	ND1	HIS	A	27	17.396	-12.008	18.035	1.00	43.34	N
[0081]	ATOM	29	CD2	HIS	A	27	17.029	-13.549	16.552	1.00	42.30	C
[0082]	ATOM	30	CE1	HIS	A	27	17.994	-11.607	16.919	1.00	40.85	C
[0083]	ATOM	31	NE2	HIS	A	27	17.778	-12.522	15.993	1.00	42.64	N
[0084]	ATOM	32	N	SER	A	28	15.719	-15.796	21.271	1.00	44.72	N
[0085]	ATOM	33	CA	SER	A	28	15.140	-16.384	22.424	1.00	44.93	C
[0086]	ATOM	34	C	SER	A	28	15.409	-15.384	23.556	1.00	45.28	C
[0087]	ATOM	35	O	SER	A	28	16.504	-14.885	23.641	1.00	46.12	O
[0088]	ATOM	36	CB	SER	A	28	15.862	-17.679	22.666	1.00	44.10	C
[0089]	ATOM	37	OG	SER	A	28	15.421	-18.222	23.857	1.00	46.69	O
[0090]	ATOM	38	N	VAL	A	29	14.433	-15.041	24.397	1.00	45.32	N
[0091]	ATOM	39	CA	VAL	A	29	14.711	-14.193	25.559	1.00	45.49	C
[0092]	ATOM	40	C	VAL	A	29	14.112	-14.665	26.839	1.00	45.39	C
[0093]	ATOM	41	O	VAL	A	29	13.086	-15.350	26.868	1.00	45.50	O

[0094]	ATOM	42	CB	VAL	A	29	14.227	-12.686	25.470	1.00	45.43	C
[0095]	ATOM	43	CG1	VAL	A	29	14.920	-11.971	24.444	1.00	46.67	C
[0096]	ATOM	44	CG2	VAL	A	29	12.732	-12.543	25.309	1.00	45.69	C
[0097]	ATOM	45	N	GLU	A	30	14.706	-14.195	27.917	1.00	44.92	N
[0098]	ATOM	46	CA	GLU	A	30	14.225	-14.584	29.216	1.00	44.90	C
[0099]	ATOM	47	C	GLU	A	30	13.334	-13.606	29.761	1.00	44.12	C
[0100]	ATOM	48	O	GLU	A	30	13.470	-12.402	29.466	1.00	43.85	O
[0101]	ATOM	49	CB	GLU	A	30	15.362	-14.852	30.120	1.00	44.86	C
[0102]	ATOM	50	CG	GLU	A	30	15.838	-16.106	29.527	1.00	49.28	C
[0103]	ATOM	51	CD	GLU	A	30	16.649	-16.991	30.444	1.00	55.39	C
[0104]	ATOM	52	OE1	GLU	A	30	17.735	-16.399	30.946	1.00	54.75	O
[0105]	ATOM	53	OE2	GLU	A	30	16.181	-18.243	30.601	1.00	55.26	O
[0106]	ATOM	54	N	THR	A	31	12.357	-14.111	30.505	1.00	43.54	N
[0107]	ATOM	55	CA	THR	A	31	11.343	-13.247	31.108	1.00	42.51	C
[0108]	ATOM	56	C	THR	A	31	11.056	-13.892	32.429	1.00	43.24	C
[0109]	ATOM	57	O	THR	A	31	11.463	-15.038	32.678	1.00	42.57	O
[0110]	ATOM	58	CB	THR	A	31	10.038	-13.210	30.297	1.00	42.30	C
[0111]	ATOM	59	OG1	THR	A	31	9.363	-14.458	30.455	1.00	43.29	O
[0112]	ATOM	60	CG2	THR	A	31	10.278	-13.048	28.820	1.00	40.09	C
[0113]	ATOM	61	N	PRO	A	32	10.322	-13.176	33.278	1.00	43.80	N
[0114]	ATOM	62	CA	PRO	A	32	10.004	-13.706	34.601	1.00	43.83	C
[0115]	ATOM	63	C	PRO	A	32	9.243	-15.000	34.555	1.00	44.52	C
[0116]	ATOM	64	O	PRO	A	32	9.071	-15.622	35.589	1.00	44.80	O
[0117]	ATOM	65	CB	PRO	A	32	9.187	-12.580	35.255	1.00	43.11	C
[0118]	ATOM	66	CG	PRO	A	32	9.482	-11.352	34.458	1.00	44.59	C
[0119]	ATOM	67	CD	PRO	A	32	9.814	-11.805	33.063	1.00	43.63	C
[0120]	ATOM	68	N	TYR	A	33	8.803	-15.407	33.362	1.00	45.53	N
[0121]	ATOM	69	CA	TYR	A	33	7.946	-16.596	33.254	1.00	46.15	C
[0122]	ATOM	70	C	TYR	A	33	8.490	-17.563	32.250	1.00	46.27	C
[0123]	ATOM	71	O	TYR	A	33	7.727	-18.345	31.645	1.00	46.69	O
[0124]	ATOM	72	CB	TYR	A	33	6.480	-16.268	32.937	1.00	45.84	C
[0125]	ATOM	73	CG	TYR	A	33	5.944	-15.030	33.618	1.00	45.98	C
[0126]	ATOM	74	CD1	TYR	A	33	5.222	-15.135	34.823	1.00	45.47	C
[0127]	ATOM	75	CD2	TYR	A	33	6.137	-13.772	33.052	1.00	44.46	C
[0128]	ATOM	76	CE1	TYR	A	33	4.737	-14.013	35.451	1.00	44.42	C
[0129]	ATOM	77	CE2	TYR	A	33	5.652	-12.663	33.648	1.00	44.51	C

[0130]	ATOM	78	CZ	TYR	A	33	4.956	-12.764	34.850	1.00	46.47	C
[0131]	ATOM	79	OH	TYR	A	33	4.459	-11.576	35.414	1.00	48.14	O
[0132]	ATOM	80	N	GLY	A	34	9.813	-17.561	32.129	1.00	46.20	N
[0133]	ATOM	81	CA	GLY	A	34	10.505	-18.623	31.423	1.00	46.02	C
[0134]	ATOM	82	C	GLY	A	34	10.818	-17.975	30.129	1.00	46.34	C
[0135]	ATOM	83	O	GLY	A	34	10.732	-16.750	29.993	1.00	47.21	O
[0136]	ATOM	84	N	SER	A	35	11.178	-18.753	29.146	1.00	45.56	N
[0137]	ATOM	85	CA	SER	A	35	11.657	-18.042	27.998	1.00	45.20	C
[0138]	ATOM	86	C	SER	A	35	10.693	-18.092	26.767	1.00	44.37	C
[0139]	ATOM	87	O	SER	A	35	9.813	-18.986	26.664	1.00	44.64	O
[0140]	ATOM	88	CB	SER	A	35	13.122	-18.393	27.745	1.00	44.97	C
[0141]	ATOM	89	OG	SER	A	35	13.152	-19.410	26.812	1.00	46.67	O
[0142]	ATOM	90	N	VAL	A	36	10.831	-17.117	25.875	1.00	42.73	N
[0143]	ATOM	91	CA	VAL	A	36	9.994	-17.056	24.717	1.00	41.68	C
[0144]	ATOM	92	C	VAL	A	36	10.861	-16.900	23.497	1.00	41.73	C
[0145]	ATOM	93	O	VAL	A	36	11.841	-16.193	23.545	1.00	41.37	O
[0146]	ATOM	94	CB	VAL	A	36	8.999	-15.890	24.848	1.00	41.67	C
[0147]	ATOM	95	CG1	VAL	A	36	9.726	-14.598	24.918	1.00	40.92	C
[0148]	ATOM	96	CG2	VAL	A	36	8.082	-15.873	23.669	1.00	40.57	C
[0149]	ATOM	97	N	THR	A	37	10.485	-17.579	22.425	1.00	41.79	N
[0150]	ATOM	98	CA	THR	A	37	11.231	-17.635	21.187	1.00	42.35	C
[0151]	ATOM	99	C	THR	A	37	10.552	-16.822	20.117	1.00	42.43	C
[0152]	ATOM	100	O	THR	A	37	9.338	-16.813	20.064	1.00	43.35	O
[0153]	ATOM	101	CB	THR	A	37	11.196	-19.071	20.692	1.00	42.74	C
[0154]	ATOM	102	OG1	THR	A	37	12.243	-19.763	21.340	1.00	43.58	O
[0155]	ATOM	103	CG2	THR	A	37	11.397	-19.187	19.133	1.00	44.45	C
[0156]	ATOM	104	N	PHE	A	38	11.299	-16.148	19.248	1.00	42.21	N
[0157]	ATOM	105	CA	PHE	A	38	10.675	-15.370	18.173	1.00	42.00	C
[0158]	ATOM	106	C	PHE	A	38	11.588	-15.281	16.971	1.00	42.01	C
[0159]	ATOM	107	O	PHE	A	38	12.782	-15.485	17.087	1.00	41.43	O
[0160]	ATOM	108	CB	PHE	A	38	10.292	-13.986	18.649	1.00	41.49	C
[0161]	ATOM	109	CG	PHE	A	38	11.351	-13.308	19.422	1.00	42.25	C
[0162]	ATOM	110	CD1	PHE	A	38	11.497	-13.533	20.775	1.00	43.78	C
[0163]	ATOM	111	CD2	PHE	A	38	12.204	-12.408	18.815	1.00	43.15	C
[0164]	ATOM	112	CE1	PHE	A	38	12.485	-12.878	21.513	1.00	43.94	C
[0165]	ATOM	113	CE2	PHE	A	38	13.211	-11.739	19.556	1.00	43.22	C

[0166]	ATOM	114	CZ	PHE	A	38	13.345	-11.979	20.893	1.00	42.60	C
[0167]	ATOM	115	N	THR	A	39	11.020	-14.962	15.821	1.00	42.03	N
[0168]	ATOM	116	CA	THR	A	39	11.785	-14.936	14.617	1.00	42.20	C
[0169]	ATOM	117	C	THR	A	39	11.550	-13.628	13.875	1.00	42.62	C
[0170]	ATOM	118	O	THR	A	39	10.435	-13.229	13.748	1.00	43.60	O
[0171]	ATOM	119	CB	THR	A	39	11.405	-16.158	13.841	1.00	42.42	C
[0172]	ATOM	120	OG1	THR	A	39	11.952	-17.292	14.524	1.00	43.08	O
[0173]	ATOM	121	CG2	THR	A	39	11.934	-16.136	12.414	1.00	41.85	C
[0174]	ATOM	122	N	VAL	A	40	12.611	-12.958	13.437	1.00	43.54	N
[0175]	ATOM	123	CA	VAL	A	40	12.613	-11.581	12.849	1.00	44.08	C
[0176]	ATOM	124	C	VAL	A	40	12.868	-11.583	11.318	1.00	44.90	C
[0177]	ATOM	125	O	VAL	A	40	13.772	-12.224	10.825	1.00	44.46	O
[0178]	ATOM	126	CB	VAL	A	40	13.688	-10.644	13.571	1.00	43.79	C
[0179]	ATOM	127	CG1	VAL	A	40	13.880	-9.357	12.864	1.00	42.22	C
[0180]	ATOM	128	CG2	VAL	A	40	13.315	-10.339	15.036	1.00	43.01	C
[0181]	ATOM	129	N	TYR	A	41	12.042	-10.896	10.558	1.00	46.39	N
[0182]	ATOM	130	CA	TYR	A	41	12.255	-10.889	9.132	1.00	48.30	C
[0183]	ATOM	131	C	TYR	A	41	12.295	-9.522	8.667	1.00	50.19	C
[0184]	ATOM	132	O	TYR	A	41	11.448	-8.708	9.049	1.00	49.94	O
[0185]	ATOM	133	CB	TYR	A	41	11.118	-11.510	8.350	1.00	47.75	C
[0186]	ATOM	134	CG	TYR	A	41	11.022	-12.968	8.432	1.00	47.77	C
[0187]	ATOM	135	CD1	TYR	A	41	10.517	-13.570	9.583	1.00	46.83	C
[0188]	ATOM	136	CD2	TYR	A	41	11.418	-13.769	7.362	1.00	49.58	C
[0189]	ATOM	137	CE1	TYR	A	41	10.420	-14.939	9.677	1.00	47.48	C
[0190]	ATOM	138	CE2	TYR	A	41	11.318	-15.157	7.423	1.00	48.98	C
[0191]	ATOM	139	CZ	TYR	A	41	10.808	-15.737	8.588	1.00	48.73	C
[0192]	ATOM	140	OH	TYR	A	41	10.680	-17.104	8.703	1.00	48.59	O
[0193]	ATOM	141	N	GLY	A	42	13.229	-9.309	7.756	1.00	52.73	N
[0194]	ATOM	142	CA	GLY	A	42	13.362	-8.030	7.085	1.00	56.71	C
[0195]	ATOM	143	C	GLY	A	42	14.491	-7.293	7.739	1.00	59.08	C
[0196]	ATOM	144	O	GLY	A	42	14.941	-7.638	8.833	1.00	59.19	O
[0197]	ATOM	145	N	THR	A	43	14.972	-6.269	7.080	1.00	61.72	N
[0198]	ATOM	146	CA	THR	A	43	16.066	-5.532	7.684	1.00	64.35	C
[0199]	ATOM	147	C	THR	A	43	15.283	-4.338	8.171	1.00	65.44	C
[0200]	ATOM	148	O	THR	A	43	14.159	-4.160	7.653	1.00	66.95	O
[0201]	ATOM	149	CB	THR	A	43	17.140	-5.196	6.619	1.00	64.62	C



[0202]	ATOM	150	OG1	THR	A	43	16.952	-3.858	6.172	1.00	65.79	O
[0203]	ATOM	151	CG2	THR	A	43	17.060	-6.148	5.367	1.00	64.19	C
[0204]	ATOM	152	N	PRO	A	44	15.816	-3.524	9.138	1.00	66.25	N
[0205]	ATOM	153	CA	PRO	A	44	14.742	-2.701	9.793	1.00	65.63	C
[0206]	ATOM	154	C	PRO	A	44	14.238	-1.605	8.929	1.00	63.59	C
[0207]	ATOM	155	O	PRO	A	44	14.744	-1.393	7.801	1.00	64.08	O
[0208]	ATOM	156	CB	PRO	A	44	15.399	-2.104	11.061	1.00	66.49	C
[0209]	ATOM	157	CG	PRO	A	44	16.789	-2.761	11.123	1.00	67.62	C
[0210]	ATOM	158	CD	PRO	A	44	17.147	-3.233	9.712	1.00	66.06	C
[0211]	ATOM	159	N	LYS	A	45	13.202	-0.977	9.443	1.00	60.05	N
[0212]	ATOM	160	CA	LYS	A	45	12.855	0.302	8.975	1.00	58.55	C
[0213]	ATOM	161	C	LYS	A	45	12.637	1.078	10.260	1.00	60.34	C
[0214]	ATOM	162	O	LYS	A	45	11.625	0.921	10.909	1.00	60.66	O
[0215]	ATOM	163	CB	LYS	A	45	11.638	0.193	8.050	1.00	56.06	C
[0216]	ATOM	164	CG	LYS	A	45	11.748	-1.021	7.054	1.00	50.27	C
[0217]	ATOM	165	CD	LYS	A	45	12.682	-0.715	5.845	1.00	47.22	C
[0218]	ATOM	166	CE	LYS	A	45	12.729	-1.927	4.903	1.00	47.01	C
[0219]	ATOM	167	NZ	LYS	A	45	12.898	-1.645	3.457	1.00	46.08	N
[0220]	ATOM	168	N	PRO	A	46	13.608	1.902	10.640	1.00	62.84	N
[0221]	ATOM	169	CA	PRO	A	46	13.586	2.472	11.958	1.00	63.67	C
[0222]	ATOM	170	C	PRO	A	46	12.378	3.388	12.123	1.00	63.52	C
[0223]	ATOM	171	O	PRO	A	46	12.019	3.663	13.271	1.00	63.78	O
[0224]	ATOM	172	CB	PRO	A	46	14.903	3.269	12.043	1.00	64.86	C
[0225]	ATOM	173	CG	PRO	A	46	15.685	2.922	10.844	1.00	65.59	C
[0226]	ATOM	174	CD	PRO	A	46	14.714	2.410	9.818	1.00	64.03	C
[0227]	ATOM	175	N	LYS	A	47	11.757	3.845	11.016	1.00	62.62	N
[0228]	ATOM	176	CA	LYS	A	47	10.615	4.803	11.088	1.00	61.80	C
[0229]	ATOM	177	C	LYS	A	47	9.192	4.177	10.781	1.00	59.15	C
[0230]	ATOM	178	O	LYS	A	47	8.225	4.806	10.269	1.00	59.39	O
[0231]	ATOM	179	CB	LYS	A	47	10.987	6.145	10.376	1.00	63.65	C
[0232]	ATOM	180	CG	LYS	A	47	10.863	6.262	8.791	1.00	67.26	C
[0233]	ATOM	181	CD	LYS	A	47	11.347	5.034	7.974	1.00	72.60	C
[0234]	ATOM	182	CE	LYS	A	47	10.663	4.940	6.534	1.00	73.11	C
[0235]	ATOM	183	NZ	LYS	A	47	11.574	4.164	5.631	1.00	74.08	N
[0236]	ATOM	184	N	ARG	A	48	9.100	2.895	11.113	1.00	55.11	N
[0237]	ATOM	185	CA	ARG	A	48	7.883	2.111	11.034	1.00	50.97	C

[0238]	ATOM	186	C	ARG	A	48	7.750	1.243	12.246	1.00	48.70	C
[0239]	ATOM	187	O	ARG	A	48	8.731	0.754	12.704	1.00	48.22	O
[0240]	ATOM	188	CB	ARG	A	48	8.005	1.164	9.881	1.00	50.40	C
[0241]	ATOM	189	CG	ARG	A	48	8.142	1.809	8.586	1.00	49.01	C
[0242]	ATOM	190	CD	ARG	A	48	6.897	2.477	8.203	1.00	47.40	C
[0243]	ATOM	191	NE	ARG	A	48	7.196	3.863	7.992	1.00	50.84	N
[0244]	ATOM	192	CZ	ARG	A	48	6.822	4.535	6.924	1.00	53.93	C
[0245]	ATOM	193	NH1	ARG	A	48	6.104	3.948	5.977	1.00	49.99	N
[0246]	ATOM	194	NH2	ARG	A	48	7.168	5.792	6.807	1.00	52.13	N
[0247]	ATOM	195	N	PRO	A	49	6.547	0.987	12.740	1.00	46.62	N
[0248]	ATOM	196	CA	PRO	A	49	6.427	0.004	13.783	1.00	44.53	C
[0249]	ATOM	197	C	PRO	A	49	6.912	-1.383	13.271	1.00	42.29	C
[0250]	ATOM	198	O	PRO	A	49	7.161	-1.567	12.089	1.00	42.07	O
[0251]	ATOM	199	CB	PRO	A	49	4.919	0.042	14.089	1.00	44.09	C
[0252]	ATOM	200	CG	PRO	A	49	4.326	0.513	12.871	1.00	44.52	C
[0253]	ATOM	201	CD	PRO	A	49	5.231	1.553	12.417	1.00	46.33	C
[0254]	ATOM	202	N	ALA	A	50	7.067	-2.342	14.159	1.00	39.98	N
[0255]	ATOM	203	CA	ALA	A	50	7.266	-3.679	13.681	1.00	38.80	C
[0256]	ATOM	204	C	ALA	A	50	5.923	-4.444	13.614	1.00	37.29	C
[0257]	ATOM	205	O	ALA	A	50	5.036	-4.248	14.463	1.00	37.54	O
[0258]	ATOM	206	CB	ALA	A	50	8.279	-4.379	14.556	1.00	39.21	C
[0259]	ATOM	207	N	ILE	A	51	5.736	-5.288	12.617	1.00	34.99	N
[0260]	ATOM	208	CA	ILE	A	51	4.568	-6.140	12.668	1.00	33.32	C
[0261]	ATOM	209	C	ILE	A	51	4.890	-7.382	13.482	1.00	32.35	C
[0262]	ATOM	210	O	ILE	A	51	5.712	-8.196	13.092	1.00	31.50	O
[0263]	ATOM	211	CB	ILE	A	51	4.079	-6.545	11.302	1.00	33.24	C
[0264]	ATOM	212	CG1	ILE	A	51	3.830	-5.279	10.482	1.00	33.49	C
[0265]	ATOM	213	CG2	ILE	A	51	2.819	-7.363	11.436	1.00	31.02	C
[0266]	ATOM	214	CD1	ILE	A	51	3.531	-5.514	8.985	1.00	30.68	C
[0267]	ATOM	215	N	LEU	A	52	4.237	-7.500	14.630	1.00	31.38	N
[0268]	ATOM	216	CA	LEU	A	52	4.483	-8.586	15.563	1.00	30.39	C
[0269]	ATOM	217	C	LEU	A	52	3.279	-9.518	15.549	1.00	29.50	C
[0270]	ATOM	218	O	LEU	A	52	2.157	-9.076	15.736	1.00	29.98	O
[0271]	ATOM	219	CB	LEU	A	52	4.722	-8.022	16.951	1.00	29.98	C
[0272]	ATOM	220	CG	LEU	A	52	5.077	-9.047	18.018	1.00	32.08	C
[0273]	ATOM	221	CD1	LEU	A	52	5.912	-8.498	19.175	1.00	31.51	C

[0274]	ATOM	222	CD2	LEU	A	52	3.773	-9.674	18.571	1.00	31.64	C
[0275]	ATOM	223	N	THR	A	53	3.490	-10.798	15.269	1.00	27.95	N
[0276]	ATOM	224	CA	THR	A	53	2.351	-11.676	15.263	1.00	27.40	C
[0277]	ATOM	225	C	THR	A	53	2.359	-12.600	16.481	1.00	28.01	C
[0278]	ATOM	226	O	THR	A	53	3.488	-12.968	16.968	1.00	29.42	O
[0279]	ATOM	227	CB	THR	A	53	2.231	-12.530	13.979	1.00	26.47	C
[0280]	ATOM	228	OG1	THR	A	53	3.277	-13.430	13.959	1.00	26.29	O
[0281]	ATOM	229	CG2	THR	A	53	2.462	-11.748	12.811	1.00	27.55	C
[0282]	ATOM	230	N	TYR	A	54	1.167	-13.026	16.948	1.00	26.05	N
[0283]	ATOM	231	CA	TYR	A	54	1.104	-14.032	17.983	1.00	25.65	C
[0284]	ATOM	232	C	TYR	A	54	-0.004	-15.022	17.642	1.00	25.92	C
[0285]	ATOM	233	O	TYR	A	54	-1.126	-14.631	17.347	1.00	26.71	O
[0286]	ATOM	234	CB	TYR	A	54	0.817	-13.351	19.286	1.00	25.90	C
[0287]	ATOM	235	CG	TYR	A	54	1.346	-14.028	20.545	1.00	26.35	C
[0288]	ATOM	236	CD1	TYR	A	54	0.802	-15.254	20.967	1.00	25.79	C
[0289]	ATOM	237	CD2	TYR	A	54	2.355	-13.390	21.380	1.00	23.86	C
[0290]	ATOM	238	CE1	TYR	A	54	1.277	-15.872	22.138	1.00	24.59	C
[0291]	ATOM	239	CE2	TYR	A	54	2.784	-13.953	22.530	1.00	23.18	C
[0292]	ATOM	240	CZ	TYR	A	54	2.265	-15.222	22.917	1.00	26.49	C
[0293]	ATOM	241	OH	TYR	A	54	2.682	-15.865	24.077	1.00	28.39	O
[0294]	ATOM	242	N	HIS	A	55	0.292	-16.307	17.727	1.00	24.65	N
[0295]	ATOM	243	CA	HIS	A	55	-0.564	-17.326	17.139	1.00	23.74	C
[0296]	ATOM	244	C	HIS	A	55	-1.589	-17.914	18.099	1.00	24.28	C
[0297]	ATOM	245	O	HIS	A	55	-1.509	-17.718	19.289	1.00	22.66	O
[0298]	ATOM	246	CB	HIS	A	55	0.316	-18.448	16.638	1.00	22.74	C
[0299]	ATOM	247	CG	HIS	A	55	0.947	-19.207	17.737	1.00	22.41	C
[0300]	ATOM	248	ND1	HIS	A	55	2.122	-18.873	18.309	1.00	24.99	N
[0301]	ATOM	249	CD2	HIS	A	55	0.535	-20.241	18.453	1.00	22.23	C
[0302]	ATOM	250	CE1	HIS	A	55	2.435	-19.689	19.308	1.00	24.03	C
[0303]	ATOM	251	NE2	HIS	A	55	1.490	-20.553	19.399	1.00	23.90	N
[0304]	ATOM	252	N	ASP	A	56	-2.540	-18.664	17.541	1.00	25.80	N
[0305]	ATOM	253	CA	ASP	A	56	-3.562	-19.389	18.339	1.00	27.10	C
[0306]	ATOM	254	C	ASP	A	56	-3.132	-20.662	18.987	1.00	26.92	C
[0307]	ATOM	255	O	ASP	A	56	-2.101	-21.191	18.674	1.00	27.02	O
[0308]	ATOM	256	CB	ASP	A	56	-4.778	-19.700	17.511	1.00	27.58	C
[0309]	ATOM	257	CG	ASP	A	56	-6.052	-19.489	18.277	1.00	30.67	C

[0310]	ATOM	258	OD1	ASP	A	56	-6.010	-19.408	19.539	1.00	30.06	O
[0311]	ATOM	259	OD2	ASP	A	56	-7.100	-19.413	17.595	1.00	31.66	O
[0312]	ATOM	260	N	VAL	A	57	-3.947	-21.146	19.901	1.00	27.74	N
[0313]	ATOM	261	CA	VAL	A	57	-3.689	-22.417	20.623	1.00	28.24	C
[0314]	ATOM	262	C	VAL	A	57	-3.636	-23.592	19.676	1.00	28.57	C
[0315]	ATOM	263	O	VAL	A	57	-4.537	-23.715	18.896	1.00	28.80	O
[0316]	ATOM	264	CB	VAL	A	57	-4.836	-22.727	21.596	1.00	28.20	C
[0317]	ATOM	265	CG1	VAL	A	57	-4.600	-24.048	22.259	1.00	28.32	C
[0318]	ATOM	266	CG2	VAL	A	57	-4.950	-21.651	22.630	1.00	25.51	C
[0319]	ATOM	267	N	GLY	A	58	-2.591	-24.421	19.741	1.00	28.62	N
[0320]	ATOM	268	CA	GLY	A	58	-2.517	-25.620	18.935	1.00	28.44	C
[0321]	ATOM	269	C	GLY	A	58	-1.608	-25.413	17.781	1.00	29.46	C
[0322]	ATOM	270	O	GLY	A	58	-1.193	-26.377	17.141	1.00	30.18	O
[0323]	ATOM	271	N	LEU	A	59	-1.281	-24.149	17.523	1.00	29.03	N
[0324]	ATOM	272	CA	LEU	A	59	-0.422	-23.790	16.395	1.00	28.49	C
[0325]	ATOM	273	C	LEU	A	59	0.865	-23.145	16.871	1.00	28.86	C
[0326]	ATOM	274	O	LEU	A	59	1.064	-22.963	18.071	1.00	28.39	O
[0327]	ATOM	275	CB	LEU	A	59	-1.134	-22.737	15.591	1.00	27.42	C
[0328]	ATOM	276	CG	LEU	A	59	-2.535	-23.113	15.243	1.00	25.94	C
[0329]	ATOM	277	CD1	LEU	A	59	-3.033	-21.974	14.439	1.00	23.45	C
[0330]	ATOM	278	CD2	LEU	A	59	-2.558	-24.420	14.468	1.00	22.71	C
[0331]	ATOM	279	N	ASN	A	60	1.705	-22.760	15.910	1.00	29.46	N
[0332]	ATOM	280	CA	ASN	A	60	2.782	-21.826	16.176	1.00	30.64	C
[0333]	ATOM	281	C	ASN	A	60	2.867	-20.898	14.981	1.00	31.56	C
[0334]	ATOM	282	O	ASN	A	60	2.058	-21.024	14.099	1.00	32.50	O
[0335]	ATOM	283	CB	ASN	A	60	4.085	-22.550	16.449	1.00	30.88	C
[0336]	ATOM	284	CG	ASN	A	60	4.416	-23.604	15.400	1.00	31.68	C
[0337]	ATOM	285	OD1	ASN	A	60	3.839	-23.669	14.282	1.00	32.72	O
[0338]	ATOM	286	ND2	ASN	A	60	5.395	-24.434	15.755	1.00	29.56	N
[0339]	ATOM	287	N	TYR	A	61	3.794	-19.953	14.956	1.00	32.71	N
[0340]	ATOM	288	CA	TYR	A	61	3.938	-19.061	13.857	1.00	33.33	C
[0341]	ATOM	289	C	TYR	A	61	3.860	-19.877	12.570	1.00	34.13	C
[0342]	ATOM	290	O	TYR	A	61	3.088	-19.591	11.634	1.00	33.40	O
[0343]	ATOM	291	CB	TYR	A	61	5.282	-18.300	13.914	1.00	34.24	C
[0344]	ATOM	292	CG	TYR	A	61	5.643	-17.846	12.515	1.00	36.88	C
[0345]	ATOM	293	CD1	TYR	A	61	4.895	-16.808	11.869	1.00	39.77	C

[0346]	ATOM	294	CD2	TYR	A	61	6.627	-18.477	11.786	1.00	38.54	C
[0347]	ATOM	295	CE1	TYR	A	61	5.133	-16.397	10.550	1.00	39.66	C
[0348]	ATOM	296	CE2	TYR	A	61	6.886	-18.079	10.454	1.00	41.26	C
[0349]	ATOM	297	CZ	TYR	A	61	6.128	-17.046	9.854	1.00	42.82	C
[0350]	ATOM	298	OH	TYR	A	61	6.387	-16.677	8.542	1.00	44.49	O
[0351]	ATOM	299	N	LYS	A	62	4.657	-20.918	12.495	1.00	35.36	N
[0352]	ATOM	300	CA	LYS	A	62	4.767	-21.629	11.235	1.00	36.57	C
[0353]	ATOM	301	C	LYS	A	62	3.418	-22.161	10.670	1.00	35.91	C
[0354]	ATOM	302	O	LYS	A	62	3.175	-22.105	9.436	1.00	36.35	O
[0355]	ATOM	303	CB	LYS	A	62	5.731	-22.798	11.397	1.00	38.47	C
[0356]	ATOM	304	CG	LYS	A	62	5.829	-23.746	10.130	1.00	42.85	C
[0357]	ATOM	305	CD	LYS	A	62	7.263	-23.670	9.499	1.00	52.26	C
[0358]	ATOM	306	CE	LYS	A	62	7.603	-24.966	8.595	1.00	52.05	C
[0359]	ATOM	307	NZ	LYS	A	62	8.209	-26.024	9.526	1.00	54.57	N
[0360]	ATOM	308	N	SER	A	63	2.577	-22.739	11.529	1.00	34.71	N
[0361]	ATOM	309	CA	SER	A	63	1.280	-23.269	11.051	1.00	33.51	C
[0362]	ATOM	310	C	SER	A	63	0.161	-22.262	11.186	1.00	32.65	C
[0363]	ATOM	311	O	SER	A	63	-0.888	-22.533	10.724	1.00	32.77	O
[0364]	ATOM	312	CB	SER	A	63	0.875	-24.544	11.793	1.00	33.14	C
[0365]	ATOM	313	OG	SER	A	63	0.855	-24.343	13.203	1.00	33.27	O
[0366]	ATOM	314	N	CYS	A	64	0.356	-21.140	11.862	1.00	31.63	N
[0367]	ATOM	315	CA	CYS	A	64	-0.712	-20.187	11.985	1.00	31.70	C
[0368]	ATOM	316	C	CYS	A	64	-0.640	-19.008	10.978	1.00	32.31	C
[0369]	ATOM	317	O	CYS	A	64	-1.650	-18.624	10.362	1.00	31.94	O
[0370]	ATOM	318	CB	CYS	A	64	-0.711	-19.601	13.368	1.00	31.86	C
[0371]	ATOM	319	SG	CYS	A	64	-2.081	-18.351	13.658	1.00	32.94	S
[0372]	ATOM	320	N	PHE	A	65	0.567	-18.483	10.801	1.00	32.46	N
[0373]	ATOM	321	CA	PHE	A	65	0.775	-17.274	10.088	1.00	33.41	C
[0374]	ATOM	322	C	PHE	A	65	1.688	-17.419	8.837	1.00	34.98	C
[0375]	ATOM	323	O	PHE	A	65	1.643	-16.553	7.938	1.00	34.91	O
[0376]	ATOM	324	CB	PHE	A	65	1.376	-16.274	11.054	1.00	32.40	C
[0377]	ATOM	325	CG	PHE	A	65	0.398	-15.645	11.935	1.00	33.03	C
[0378]	ATOM	326	CD1	PHE	A	65	-0.644	-14.920	11.422	1.00	32.25	C
[0379]	ATOM	327	CD2	PHE	A	65	0.541	-15.720	13.324	1.00	34.72	C
[0380]	ATOM	328	CE1	PHE	A	65	-1.561	-14.293	12.268	1.00	32.33	C
[0381]	ATOM	329	CE2	PHE	A	65	-0.356	-15.086	14.211	1.00	33.42	C

[0382]	ATOM	330	CZ	PHE	A	65	-1.416	-14.368	13.667	1.00	33.72	C
[0383]	ATOM	331	N	GLN	A	66	2.523	-18.467	8.765	1.00	35.66	N
[0384]	ATOM	332	CA	GLN	A	66	3.463	-18.516	7.636	1.00	36.29	C
[0385]	ATOM	333	C	GLN	A	66	2.773	-18.476	6.273	1.00	36.88	C
[0386]	ATOM	334	O	GLN	A	66	3.157	-17.656	5.443	1.00	37.69	O
[0387]	ATOM	335	CB	GLN	A	66	4.368	-19.731	7.684	1.00	36.47	C
[0388]	ATOM	336	CG	GLN	A	66	5.342	-19.817	6.529	1.00	37.07	C
[0389]	ATOM	337	CD	GLN	A	66	6.363	-20.921	6.734	1.00	39.29	C
[0390]	ATOM	338	OE1	GLN	A	66	7.557	-20.657	7.042	1.00	36.29	O
[0391]	ATOM	339	NE2	GLN	A	66	5.900	-22.181	6.595	1.00	38.78	N
[0392]	ATOM	340	N	PRO	A	67	1.754	-19.337	6.020	1.00	36.57	N
[0393]	ATOM	341	CA	PRO	A	67	1.091	-19.170	4.718	1.00	37.32	C
[0394]	ATOM	342	C	PRO	A	67	0.680	-17.705	4.469	1.00	38.46	C
[0395]	ATOM	343	O	PRO	A	67	1.004	-17.182	3.434	1.00	38.63	O
[0396]	ATOM	344	CB	PRO	A	67	-0.155	-20.060	4.809	1.00	36.59	C
[0397]	ATOM	345	CG	PRO	A	67	0.153	-21.025	5.819	1.00	36.51	C
[0398]	ATOM	346	CD	PRO	A	67	1.128	-20.399	6.807	1.00	36.65	C
[0399]	ATOM	347	N	LEU	A	68	-0.001	-17.023	5.405	1.00	39.50	N
[0400]	ATOM	348	CA	LEU	A	68	-0.310	-15.574	5.183	1.00	39.31	C
[0401]	ATOM	349	C	LEU	A	68	0.950	-14.673	4.861	1.00	39.67	C
[0402]	ATOM	350	O	LEU	A	68	1.019	-14.025	3.779	1.00	39.52	O
[0403]	ATOM	351	CB	LEU	A	68	-1.108	-15.017	6.350	1.00	38.98	C
[0404]	ATOM	352	CG	LEU	A	68	-1.435	-13.555	6.223	1.00	39.36	C
[0405]	ATOM	353	CD1	LEU	A	68	-2.412	-13.359	5.099	1.00	40.93	C
[0406]	ATOM	354	CD2	LEU	A	68	-2.025	-13.024	7.513	1.00	39.62	C
[0407]	ATOM	355	N	PHE	A	69	1.954	-14.663	5.741	1.00	38.55	N
[0408]	ATOM	356	CA	PHE	A	69	3.098	-13.857	5.439	1.00	38.34	C
[0409]	ATOM	357	C	PHE	A	69	3.920	-14.223	4.232	1.00	39.91	C
[0410]	ATOM	358	O	PHE	A	69	4.691	-13.411	3.815	1.00	41.17	O
[0411]	ATOM	359	CB	PHE	A	69	3.937	-13.612	6.651	1.00	37.34	C
[0412]	ATOM	360	CG	PHE	A	69	3.288	-12.674	7.600	1.00	36.39	C
[0413]	ATOM	361	CD1	PHE	A	69	2.201	-13.075	8.355	1.00	36.23	C
[0414]	ATOM	362	CD2	PHE	A	69	3.702	-11.360	7.671	1.00	35.69	C
[0415]	ATOM	363	CE1	PHE	A	69	1.560	-12.215	9.209	1.00	35.28	C
[0416]	ATOM	364	CE2	PHE	A	69	3.079	-10.491	8.493	1.00	35.70	C
[0417]	ATOM	365	CZ	PHE	A	69	1.979	-10.938	9.289	1.00	37.05	C



[0418]	ATOM	366	N	GLN	A	70	3.752	-15.399	3.633	1.00	41.04	N
[0419]	ATOM	367	CA	GLN	A	70	4.533	-15.759	2.442	1.00	41.42	C
[0420]	ATOM	368	C	GLN	A	70	3.726	-15.641	1.188	1.00	42.66	C
[0421]	ATOM	369	O	GLN	A	70	4.293	-15.777	0.129	1.00	43.46	O
[0422]	ATOM	370	CB	GLN	A	70	5.064	-17.172	2.533	1.00	40.69	C
[0423]	ATOM	371	CG	GLN	A	70	6.282	-17.294	3.412	1.00	40.15	C
[0424]	ATOM	372	CD	GLN	A	70	6.783	-18.742	3.436	1.00	42.00	C
[0425]	ATOM	373	OE1	GLN	A	70	6.163	-19.642	2.985	1.00	40.69	O
[0426]	ATOM	374	NE2	GLN	A	70	7.888	-18.931	3.967	1.00	39.02	N
[0427]	ATOM	375	N	PHE	A	71	2.414	-15.439	1.309	1.00	43.66	N
[0428]	ATOM	376	CA	PHE	A	71	1.553	-15.039	0.200	1.00	45.22	C
[0429]	ATOM	377	C	PHE	A	71	2.168	-13.853	-0.495	1.00	45.62	C
[0430]	ATOM	378	O	PHE	A	71	2.539	-12.870	0.126	1.00	45.78	O
[0431]	ATOM	379	CB	PHE	A	71	0.232	-14.569	0.741	1.00	46.27	C
[0432]	ATOM	380	CG	PHE	A	71	-0.831	-14.468	-0.262	1.00	49.28	C
[0433]	ATOM	381	CD1	PHE	A	71	-1.119	-15.557	-1.125	1.00	53.03	C
[0434]	ATOM	382	CD2	PHE	A	71	-1.610	-13.315	-0.318	1.00	51.55	C
[0435]	ATOM	383	CE1	PHE	A	71	-2.171	-15.482	-2.075	1.00	53.08	C
[0436]	ATOM	384	CE2	PHE	A	71	-2.658	-13.195	-1.250	1.00	53.04	C
[0437]	ATOM	385	CZ	PHE	A	71	-2.944	-14.284	-2.135	1.00	53.37	C
[0438]	ATOM	386	N	GLU	A	72	2.284	-13.947	-1.803	1.00	46.25	N
[0439]	ATOM	387	CA	GLU	A	72	3.016	-12.953	-2.569	1.00	46.21	C
[0440]	ATOM	388	C	GLU	A	72	2.487	-11.484	-2.420	1.00	45.11	C
[0441]	ATOM	389	O	GLU	A	72	3.261	-10.525	-2.261	1.00	43.33	O
[0442]	ATOM	390	CB	GLU	A	72	3.009	-13.394	-4.015	1.00	46.80	C
[0443]	ATOM	391	CG	GLU	A	72	2.916	-12.245	-5.035	1.00	51.76	C
[0444]	ATOM	392	CD	GLU	A	72	4.056	-12.332	-6.116	1.00	57.74	C
[0445]	ATOM	393	OE1	GLU	A	72	4.103	-13.388	-6.845	1.00	59.14	O
[0446]	ATOM	394	OE2	GLU	A	72	4.888	-11.348	-6.218	1.00	57.51	O
[0447]	ATOM	395	N	ASP	A	73	1.169	-11.317	-2.449	1.00	44.22	N
[0448]	ATOM	396	CA	ASP	A	73	0.654	-9.996	-2.166	1.00	44.69	C
[0449]	ATOM	397	C	ASP	A	73	1.058	-9.418	-0.786	1.00	44.23	C
[0450]	ATOM	398	O	ASP	A	73	1.227	-8.194	-0.618	1.00	44.03	O
[0451]	ATOM	399	CB	ASP	A	73	-0.847	-9.945	-2.411	1.00	45.19	C
[0452]	ATOM	400	CG	ASP	A	73	-1.202	-10.290	-3.894	1.00	48.02	C
[0453]	ATOM	401	OD1	ASP	A	73	-0.350	-10.078	-4.819	1.00	50.44	O

[0454]	ATOM	402	OD2	ASP	A	73	-2.328	-10.792	-4.144	1.00	50.00	O
[0455]	ATOM	403	N	MET	A	74	1.252	-10.298	0.187	1.00	43.86	N
[0456]	ATOM	404	CA	MET	A	74	1.450	-9.845	1.532	1.00	43.29	C
[0457]	ATOM	405	C	MET	A	74	2.916	-9.542	1.573	1.00	43.90	C
[0458]	ATOM	406	O	MET	A	74	3.329	-8.572	2.193	1.00	44.16	O
[0459]	ATOM	407	CB	MET	A	74	0.963	-10.889	2.535	1.00	42.70	C
[0460]	ATOM	408	CG	MET	A	74	1.331	-10.597	3.939	1.00	43.00	C
[0461]	ATOM	409	SD	MET	A	74	0.554	-9.091	4.529	1.00	43.15	S
[0462]	ATOM	410	CE	MET	A	74	-0.973	-9.817	5.195	1.00	42.05	C
[0463]	ATOM	411	N	GLN	A	75	3.708	-10.332	0.857	1.00	44.47	N
[0464]	ATOM	412	CA	GLN	A	75	5.110	-10.011	0.722	1.00	45.23	C
[0465]	ATOM	413	C	GLN	A	75	5.270	-8.527	0.264	1.00	46.53	C
[0466]	ATOM	414	O	GLN	A	75	5.994	-7.725	0.885	1.00	46.92	O
[0467]	ATOM	415	CB	GLN	A	75	5.779	-11.011	-0.237	1.00	45.21	C
[0468]	ATOM	416	CG	GLN	A	75	6.576	-12.211	0.464	1.00	44.58	C
[0469]	ATOM	417	CD	GLN	A	75	7.517	-11.756	1.604	1.00	46.29	C
[0470]	ATOM	418	OE1	GLN	A	75	7.152	-11.822	2.763	1.00	45.03	O
[0471]	ATOM	419	NE2	GLN	A	75	8.709	-11.247	1.265	1.00	46.07	N
[0472]	ATOM	420	N	GLU	A	76	4.535	-8.176	-0.792	1.00	47.78	N
[0473]	ATOM	421	CA	GLU	A	76	4.592	-6.887	-1.449	1.00	49.14	C
[0474]	ATOM	422	C	GLU	A	76	4.498	-5.784	-0.390	1.00	48.86	C
[0475]	ATOM	423	O	GLU	A	76	5.368	-4.903	-0.317	1.00	49.12	O
[0476]	ATOM	424	CB	GLU	A	76	3.411	-6.801	-2.441	1.00	50.43	C
[0477]	ATOM	425	CG	GLU	A	76	3.583	-6.040	-3.815	1.00	55.45	C
[0478]	ATOM	426	CD	GLU	A	76	3.128	-6.904	-5.034	1.00	63.09	C
[0479]	ATOM	427	OE1	GLU	A	76	2.050	-6.611	-5.624	1.00	64.89	O
[0480]	ATOM	428	OE2	GLU	A	76	3.847	-7.904	-5.381	1.00	65.81	O
[0481]	ATOM	429	N	ILE	A	77	3.443	-5.861	0.435	1.00	48.26	N
[0482]	ATOM	430	CA	ILE	A	77	3.046	-4.851	1.420	1.00	47.22	C
[0483]	ATOM	431	C	ILE	A	77	3.964	-4.691	2.610	1.00	47.08	C
[0484]	ATOM	432	O	ILE	A	77	4.182	-3.565	3.076	1.00	47.41	O
[0485]	ATOM	433	CB	ILE	A	77	1.740	-5.261	2.016	1.00	47.45	C
[0486]	ATOM	434	CG1	ILE	A	77	0.624	-4.979	1.007	1.00	48.81	C
[0487]	ATOM	435	CG2	ILE	A	77	1.502	-4.611	3.402	1.00	46.92	C
[0488]	ATOM	436	CD1	ILE	A	77	-0.694	-5.530	1.478	1.00	50.44	C
[0489]	ATOM	437	N	ILE	A	78	4.493	-5.801	3.118	1.00	46.26	N

[0490]	ATOM	438	CA	ILE	A	78	5.232	-5.751	4.330	1.00	45.44	C
[0491]	ATOM	439	C	ILE	A	78	6.651	-5.500	4.001	1.00	45.69	C
[0492]	ATOM	440	O	ILE	A	78	7.473	-5.391	4.917	1.00	46.27	O
[0493]	ATOM	441	CB	ILE	A	78	5.107	-7.039	5.149	1.00	45.77	C
[0494]	ATOM	442	CG1	ILE	A	78	5.406	-8.267	4.335	1.00	44.73	C
[0495]	ATOM	443	CG2	ILE	A	78	3.719	-7.196	5.662	1.00	45.11	C
[0496]	ATOM	444	CD1	ILE	A	78	5.543	-9.378	5.228	1.00	44.39	C
[0497]	ATOM	445	N	GLN	A	79	6.980	-5.392	2.711	1.00	45.32	N
[0498]	ATOM	446	CA	GLN	A	79	8.389	-5.088	2.343	1.00	45.01	C
[0499]	ATOM	447	C	GLN	A	79	9.021	-4.005	3.191	1.00	43.37	C
[0500]	ATOM	448	O	GLN	A	79	10.221	-4.011	3.433	1.00	43.64	O
[0501]	ATOM	449	CB	GLN	A	79	8.563	-4.685	0.886	1.00	45.99	C
[0502]	ATOM	450	CG	GLN	A	79	9.843	-5.354	0.344	1.00	49.50	C
[0503]	ATOM	451	CD	GLN	A	79	9.912	-6.912	0.726	1.00	54.50	C
[0504]	ATOM	452	OE1	GLN	A	79	9.899	-7.783	-0.176	1.00	58.61	O
[0505]	ATOM	453	NE2	GLN	A	79	9.947	-7.238	2.052	1.00	50.36	N
[0506]	ATOM	454	N	ASN	A	80	8.166	-3.115	3.657	1.00	41.16	N
[0507]	ATOM	455	CA	ASN	A	80	8.553	-1.928	4.335	1.00	40.37	C
[0508]	ATOM	456	C	ASN	A	80	8.605	-1.928	5.879	1.00	40.05	C
[0509]	ATOM	457	O	ASN	A	80	8.721	-0.867	6.538	1.00	40.88	O
[0510]	ATOM	458	CB	ASN	A	80	7.630	-0.830	3.834	1.00	39.97	C
[0511]	ATOM	459	CG	ASN	A	80	8.325	-0.003	2.787	1.00	41.88	C
[0512]	ATOM	460	OD1	ASN	A	80	8.184	-0.262	1.584	1.00	40.42	O
[0513]	ATOM	461	ND2	ASN	A	80	9.208	0.919	3.238	1.00	40.48	N
[0514]	ATOM	462	N	PHE	A	81	8.533	-3.118	6.454	1.00	38.68	N
[0515]	ATOM	463	CA	PHE	A	81	8.422	-3.240	7.869	1.00	37.48	C
[0516]	ATOM	464	C	PHE	A	81	9.371	-4.365	8.228	1.00	37.88	C
[0517]	ATOM	465	O	PHE	A	81	9.660	-5.246	7.362	1.00	36.90	O
[0518]	ATOM	466	CB	PHE	A	81	6.999	-3.687	8.234	1.00	36.94	C
[0519]	ATOM	467	CG	PHE	A	81	5.920	-2.681	7.936	1.00	35.66	C
[0520]	ATOM	468	CD1	PHE	A	81	5.526	-1.763	8.917	1.00	32.22	C
[0521]	ATOM	469	CD2	PHE	A	81	5.240	-2.695	6.670	1.00	35.00	C
[0522]	ATOM	470	CE1	PHE	A	81	4.502	-0.825	8.611	1.00	34.95	C
[0523]	ATOM	471	CE2	PHE	A	81	4.198	-1.771	6.376	1.00	33.80	C
[0524]	ATOM	472	CZ	PHE	A	81	3.842	-0.838	7.336	1.00	34.02	C
[0525]	ATOM	473	N	VAL	A	82	9.833	-4.331	9.494	1.00	38.09	N

[0526]	ATOM	474	CA	VAL	A	82	10.428	-5.511	10.161	1.00	38.43	C
[0527]	ATOM	475	C	VAL	A	82	9.279	-6.287	10.688	1.00	36.93	C
[0528]	ATOM	476	O	VAL	A	82	8.298	-5.677	11.122	1.00	37.02	O
[0529]	ATOM	477	CB	VAL	A	82	11.129	-5.177	11.465	1.00	38.95	C
[0530]	ATOM	478	CG1	VAL	A	82	12.327	-6.050	11.645	1.00	39.39	C
[0531]	ATOM	479	CG2	VAL	A	82	11.543	-3.734	11.497	1.00	43.83	C
[0532]	ATOM	480	N	ARG	A	83	9.427	-7.615	10.692	1.00	35.73	N
[0533]	ATOM	481	CA	ARG	A	83	8.403	-8.539	11.256	1.00	34.58	C
[0534]	ATOM	482	C	ARG	A	83	8.966	-9.327	12.354	1.00	33.97	C
[0535]	ATOM	483	O	ARG	A	83	10.054	-9.843	12.226	1.00	34.31	O
[0536]	ATOM	484	CB	ARG	A	83	7.814	-9.478	10.208	1.00	34.36	C
[0537]	ATOM	485	CG	ARG	A	83	7.060	-8.695	9.115	1.00	33.38	C
[0538]	ATOM	486	CD	ARG	A	83	8.012	-8.005	8.129	1.00	28.98	C
[0539]	ATOM	487	NE	ARG	A	83	8.453	-9.074	7.231	1.00	31.97	N
[0540]	ATOM	488	CZ	ARG	A	83	9.296	-8.973	6.186	1.00	29.26	C
[0541]	ATOM	489	NH1	ARG	A	83	9.902	-7.809	5.843	1.00	27.43	N
[0542]	ATOM	490	NH2	ARG	A	83	9.550	-10.076	5.495	1.00	25.65	N
[0543]	ATOM	491	N	VAL	A	84	8.241	-9.393	13.457	1.00	33.26	N
[0544]	ATOM	492	CA	VAL	A	84	8.637	-10.244	14.595	1.00	32.35	C
[0545]	ATOM	493	C	VAL	A	84	7.569	-11.307	14.834	1.00	31.32	C
[0546]	ATOM	494	O	VAL	A	84	6.467	-10.970	15.313	1.00	32.49	O
[0547]	ATOM	495	CB	VAL	A	84	8.742	-9.368	15.851	1.00	33.03	C
[0548]	ATOM	496	CG1	VAL	A	84	9.296	-10.137	17.053	1.00	31.06	C
[0549]	ATOM	497	CG2	VAL	A	84	9.596	-8.169	15.533	1.00	32.91	C
[0550]	ATOM	498	N	HIS	A	85	7.869	-12.556	14.523	1.00	29.72	N
[0551]	ATOM	499	CA	HIS	A	85	6.872	-13.634	14.682	1.00	29.83	C
[0552]	ATOM	500	C	HIS	A	85	7.032	-14.452	15.999	1.00	29.93	C
[0553]	ATOM	501	O	HIS	A	85	8.009	-15.200	16.089	1.00	31.32	O
[0554]	ATOM	502	CB	HIS	A	85	6.960	-14.536	13.490	1.00	28.43	C
[0555]	ATOM	503	CG	HIS	A	85	6.642	-13.834	12.207	1.00	29.52	C
[0556]	ATOM	504	ND1	HIS	A	85	5.485	-13.105	12.022	1.00	26.63	N
[0557]	ATOM	505	CD2	HIS	A	85	7.323	-13.754	11.031	1.00	28.11	C
[0558]	ATOM	506	CE1	HIS	A	85	5.472	-12.592	10.798	1.00	25.04	C
[0559]	ATOM	507	NE2	HIS	A	85	6.570	-12.980	10.173	1.00	25.93	N
[0560]	ATOM	508	N	VAL	A	86	6.141	-14.319	16.994	1.00	29.19	N
[0561]	ATOM	509	CA	VAL	A	86	6.416	-14.886	18.312	1.00	29.58	C

[0562]	ATOM	510	C	VAL	A	86	5.822	-16.281	18.344	1.00	31.08	C
[0563]	ATOM	511	O	VAL	A	86	4.798	-16.517	17.733	1.00	32.19	O
[0564]	ATOM	512	CB	VAL	A	86	5.805	-14.005	19.435	1.00	29.55	C
[0565]	ATOM	513	CG1	VAL	A	86	6.034	-14.541	20.795	1.00	27.30	C
[0566]	ATOM	514	CG2	VAL	A	86	6.393	-12.659	19.414	1.00	29.97	C
[0567]	ATOM	515	N	ASP	A	87	6.481	-17.231	19.010	1.00	32.90	N
[0568]	ATOM	516	CA	ASP	A	87	5.917	-18.585	19.281	1.00	33.82	C
[0569]	ATOM	517	C	ASP	A	87	5.696	-18.586	20.790	1.00	33.69	C
[0570]	ATOM	518	O	ASP	A	87	6.620	-18.312	21.584	1.00	34.49	O
[0571]	ATOM	519	CB	ASP	A	87	6.882	-19.726	18.933	1.00	33.69	C
[0572]	ATOM	520	CG	ASP	A	87	7.109	-19.922	17.396	1.00	37.28	C
[0573]	ATOM	521	OD1	ASP	A	87	6.162	-20.072	16.598	1.00	36.47	O
[0574]	ATOM	522	OD2	ASP	A	87	8.308	-20.007	16.996	1.00	41.44	O
[0575]	ATOM	523	N	ALA	A	88	4.485	-18.880	21.210	1.00	32.87	N
[0576]	ATOM	524	CA	ALA	A	88	4.228	-18.947	22.610	1.00	32.37	C
[0577]	ATOM	525	C	ALA	A	88	5.225	-19.945	23.216	1.00	31.98	C
[0578]	ATOM	526	O	ALA	A	88	5.646	-20.865	22.550	1.00	31.05	O
[0579]	ATOM	527	CB	ALA	A	88	2.786	-19.401	22.801	1.00	32.63	C
[0580]	ATOM	528	N	PRO	A	89	5.598	-19.775	24.477	1.00	32.07	N
[0581]	ATOM	529	CA	PRO	A	89	6.546	-20.704	25.078	1.00	32.55	C
[0582]	ATOM	530	C	PRO	A	89	6.158	-22.189	24.862	1.00	32.67	C
[0583]	ATOM	531	O	PRO	A	89	5.003	-22.550	24.937	1.00	33.27	O
[0584]	ATOM	532	CB	PRO	A	89	6.516	-20.330	26.559	1.00	32.67	C
[0585]	ATOM	533	CG	PRO	A	89	6.086	-18.900	26.574	1.00	32.68	C
[0586]	ATOM	534	CD	PRO	A	89	5.131	-18.766	25.434	1.00	32.59	C
[0587]	ATOM	535	N	GLY	A	90	7.103	-23.044	24.529	1.00	32.39	N
[0588]	ATOM	536	CA	GLY	A	90	6.752	-24.429	24.387	1.00	32.37	C
[0589]	ATOM	537	C	GLY	A	90	6.178	-24.763	23.025	1.00	33.09	C
[0590]	ATOM	538	O	GLY	A	90	5.936	-25.926	22.736	1.00	32.69	O
[0591]	ATOM	539	N	MET	A	91	5.964	-23.765	22.168	1.00	34.01	N
[0592]	ATOM	540	CA	MET	A	91	5.247	-24.028	20.915	1.00	35.23	C
[0593]	ATOM	541	C	MET	A	91	6.162	-24.040	19.707	1.00	37.03	C
[0594]	ATOM	542	O	MET	A	91	5.739	-24.477	18.605	1.00	37.24	O
[0595]	ATOM	543	CB	MET	A	91	4.073	-23.057	20.692	1.00	33.96	C
[0596]	ATOM	544	CG	MET	A	91	3.228	-22.818	21.908	1.00	32.48	C
[0597]	ATOM	545	SD	MET	A	91	2.562	-24.377	22.416	1.00	33.10	S

[0598]	ATOM	546	CE	MET	A	91	2.241	-24.120	24.195	1.00	30.46	C
[0599]	ATOM	547	N	GLU	A	92	7.394	-23.548	19.877	1.00	38.61	N
[0600]	ATOM	548	CA	GLU	A	92	8.294	-23.451	18.740	1.00	41.54	C
[0601]	ATOM	549	C	GLU	A	92	8.599	-24.782	18.105	1.00	44.02	C
[0602]	ATOM	550	O	GLU	A	92	8.458	-25.840	18.748	1.00	44.68	O
[0603]	ATOM	551	CB	GLU	A	92	9.563	-22.688	19.074	1.00	41.93	C
[0604]	ATOM	552	CG	GLU	A	92	10.493	-23.235	20.156	1.00	44.01	C
[0605]	ATOM	553	CD	GLU	A	92	10.012	-23.045	21.569	1.00	47.33	C
[0606]	ATOM	554	OE1	GLU	A	92	9.087	-22.280	21.863	1.00	50.58	O
[0607]	ATOM	555	OE2	GLU	A	92	10.571	-23.714	22.425	1.00	49.12	O
[0608]	ATOM	556	N	GLU	A	93	8.975	-24.773	16.827	1.00	46.92	N
[0609]	ATOM	557	CA	GLU	A	93	9.505	-26.042	16.240	1.00	49.78	C
[0610]	ATOM	558	C	GLU	A	93	10.573	-26.682	17.140	1.00	49.34	C
[0611]	ATOM	559	O	GLU	A	93	11.527	-26.034	17.557	1.00	48.83	O
[0612]	ATOM	560	CB	GLU	A	93	10.037	-25.893	14.803	1.00	50.80	C
[0613]	ATOM	561	CG	GLU	A	93	8.877	-25.739	13.753	1.00	57.34	C
[0614]	ATOM	562	CD	GLU	A	93	7.893	-26.970	13.713	1.00	62.53	C
[0615]	ATOM	563	OE1	GLU	A	93	8.469	-28.130	13.727	1.00	62.75	O
[0616]	ATOM	564	OE2	GLU	A	93	6.598	-26.743	13.675	1.00	56.82	O
[0617]	ATOM	565	N	GLY	A	94	10.346	-27.937	17.486	1.00	49.19	N
[0618]	ATOM	566	CA	GLY	A	94	11.288	-28.676	18.291	1.00	49.19	C
[0619]	ATOM	567	C	GLY	A	94	11.348	-28.302	19.753	1.00	49.38	C
[0620]	ATOM	568	O	GLY	A	94	12.323	-28.577	20.393	1.00	50.38	O
[0621]	ATOM	569	N	ALA	A	95	10.322	-27.702	20.331	1.00	49.21	N
[0622]	ATOM	570	CA	ALA	A	95	10.428	-27.324	21.759	1.00	48.20	C
[0623]	ATOM	571	C	ALA	A	95	10.469	-28.519	22.719	1.00	47.53	C
[0624]	ATOM	572	O	ALA	A	95	9.728	-29.506	22.532	1.00	46.81	O
[0625]	ATOM	573	CB	ALA	A	95	9.272	-26.396	22.143	1.00	47.59	C
[0626]	ATOM	574	N	PRO	A	96	11.282	-28.408	23.779	1.00	47.17	N
[0627]	ATOM	575	CA	PRO	A	96	11.182	-29.409	24.886	1.00	46.77	C
[0628]	ATOM	576	C	PRO	A	96	9.799	-29.392	25.576	1.00	45.96	C
[0629]	ATOM	577	O	PRO	A	96	9.238	-28.315	25.835	1.00	45.74	O
[0630]	ATOM	578	CB	PRO	A	96	12.323	-29.020	25.875	1.00	45.82	C
[0631]	ATOM	579	CG	PRO	A	96	12.621	-27.593	25.570	1.00	46.46	C
[0632]	ATOM	580	CD	PRO	A	96	12.337	-27.408	24.030	1.00	47.44	C
[0633]	ATOM	581	N	VAL	A	97	9.284	-30.585	25.852	1.00	45.05	N



[0634]	ATOM	582	CA	VAL	A	97	8.098	-30.775	26.594	1.00	44.22	C
[0635]	ATOM	583	C	VAL	A	97	8.316	-30.357	28.044	1.00	44.47	C
[0636]	ATOM	584	O	VAL	A	97	9.139	-30.871	28.747	1.00	45.09	O
[0637]	ATOM	585	CB	VAL	A	97	7.728	-32.240	26.543	1.00	44.34	C
[0638]	ATOM	586	CG1	VAL	A	97	6.599	-32.564	27.576	1.00	44.83	C
[0639]	ATOM	587	CG2	VAL	A	97	7.332	-32.675	25.118	1.00	43.54	C
[0640]	ATOM	588	N	PHE	A	98	7.545	-29.411	28.515	1.00	44.72	N
[0641]	ATOM	589	CA	PHE	A	98	7.587	-29.068	29.924	1.00	44.71	C
[0642]	ATOM	590	C	PHE	A	98	7.374	-30.280	30.849	1.00	44.59	C
[0643]	ATOM	591	O	PHE	A	98	6.608	-31.218	30.509	1.00	44.87	O
[0644]	ATOM	592	CB	PHE	A	98	6.533	-27.987	30.235	1.00	44.38	C
[0645]	ATOM	593	CG	PHE	A	98	6.870	-26.651	29.685	1.00	45.09	C
[0646]	ATOM	594	CD1	PHE	A	98	8.083	-26.046	29.985	1.00	44.29	C
[0647]	ATOM	595	CD2	PHE	A	98	5.983	-26.000	28.830	1.00	46.32	C
[0648]	ATOM	596	CE1	PHE	A	98	8.399	-24.799	29.430	1.00	43.39	C
[0649]	ATOM	597	CE2	PHE	A	98	6.287	-24.734	28.257	1.00	45.10	C
[0650]	ATOM	598	CZ	PHE	A	98	7.488	-24.126	28.561	1.00	42.59	C
[0651]	ATOM	599	N	PRO	A	99	8.032	-30.260	32.021	1.00	44.24	N
[0652]	ATOM	600	CA	PRO	A	99	7.775	-31.312	33.042	1.00	43.51	C
[0653]	ATOM	601	C	PRO	A	99	6.341	-31.350	33.541	1.00	42.73	C
[0654]	ATOM	602	O	PRO	A	99	5.593	-30.318	33.502	1.00	41.22	O
[0655]	ATOM	603	CB	PRO	A	99	8.703	-30.949	34.214	1.00	43.35	C
[0656]	ATOM	604	CG	PRO	A	99	9.050	-29.471	33.976	1.00	44.82	C
[0657]	ATOM	605	CD	PRO	A	99	9.062	-29.284	32.455	1.00	44.59	C
[0658]	ATOM	606	N	LEU	A	100	5.976	-32.546	34.007	1.00	41.91	N
[0659]	ATOM	607	CA	LEU	A	100	4.785	-32.733	34.794	1.00	42.04	C
[0660]	ATOM	608	C	LEU	A	100	4.704	-31.710	35.934	1.00	42.16	C
[0661]	ATOM	609	O	LEU	A	100	5.722	-31.448	36.602	1.00	41.96	O
[0662]	ATOM	610	CB	LEU	A	100	4.771	-34.158	35.362	1.00	42.34	C
[0663]	ATOM	611	CG	LEU	A	100	3.339	-34.707	35.252	1.00	44.54	C
[0664]	ATOM	612	CD1	LEU	A	100	3.196	-35.605	33.975	1.00	45.02	C
[0665]	ATOM	613	CD2	LEU	A	100	2.814	-35.400	36.576	1.00	45.30	C
[0666]	ATOM	614	N	GLY	A	101	3.504	-31.123	36.111	1.00	42.18	N
[0667]	ATOM	615	CA	GLY	A	101	3.214	-30.085	37.113	1.00	41.63	C
[0668]	ATOM	616	C	GLY	A	101	3.849	-28.742	36.811	1.00	42.41	C
[0669]	ATOM	617	O	GLY	A	101	3.815	-27.834	37.668	1.00	42.41	O

[0670]	ATOM	618	N	TYR A 102	4.439	-28.610	35.597	1.00	42.51	N
[0671]	ATOM	619	CA	TYR A 102	4.865	-27.288	35.072	1.00	42.20	C
[0672]	ATOM	620	C	TYR A 102	3.742	-26.268	35.085	1.00	41.98	C
[0673]	ATOM	621	O	TYR A 102	2.551	-26.572	34.901	1.00	42.33	O
[0674]	ATOM	622	CB	TYR A 102	5.362	-27.345	33.635	1.00	42.30	C
[0675]	ATOM	623	CG	TYR A 102	6.044	-26.027	33.234	1.00	43.37	C
[0676]	ATOM	624	CD1	TYR A 102	7.368	-25.724	33.673	1.00	41.50	C
[0677]	ATOM	625	CD2	TYR A 102	5.356	-25.061	32.444	1.00	45.68	C
[0678]	ATOM	626	CE1	TYR A 102	8.003	-24.530	33.323	1.00	41.33	C
[0679]	ATOM	627	CE2	TYR A 102	5.988	-23.819	32.095	1.00	45.04	C
[0680]	ATOM	628	CZ	TYR A 102	7.316	-23.580	32.534	1.00	43.26	C
[0681]	ATOM	629	OH	TYR A 102	7.937	-22.405	32.176	1.00	42.34	O
[0682]	ATOM	630	N	GLN A 103	4.124	-25.035	35.215	1.00	40.68	N
[0683]	ATOM	631	CA	GLN A 103	3.149	-24.113	35.607	1.00	40.14	C
[0684]	ATOM	632	C	GLN A 103	3.095	-22.997	34.520	1.00	38.86	C
[0685]	ATOM	633	O	GLN A 103	3.694	-21.897	34.614	1.00	38.18	O
[0686]	ATOM	634	CB	GLN A 103	3.738	-23.814	36.919	1.00	40.72	C
[0687]	ATOM	635	CG	GLN A 103	3.404	-22.757	37.568	1.00	44.86	C
[0688]	ATOM	636	CD	GLN A 103	2.521	-22.986	38.751	1.00	50.16	C
[0689]	ATOM	637	OE1	GLN A 103	2.008	-24.131	39.067	1.00	50.59	O
[0690]	ATOM	638	NE2	GLN A 103	2.290	-21.830	39.436	1.00	49.34	N
[0691]	ATOM	639	N	TYR A 104	2.397	-23.308	33.442	1.00	37.13	N
[0692]	ATOM	640	CA	TYR A 104	2.397	-22.390	32.322	1.00	35.66	C
[0693]	ATOM	641	C	TYR A 104	1.876	-20.959	32.641	1.00	35.23	C
[0694]	ATOM	642	O	TYR A 104	0.952	-20.776	33.436	1.00	35.77	O
[0695]	ATOM	643	CB	TYR A 104	1.555	-22.992	31.232	1.00	35.14	C
[0696]	ATOM	644	CG	TYR A 104	1.929	-22.570	29.834	1.00	33.51	C
[0697]	ATOM	645	CD1	TYR A 104	3.054	-23.080	29.212	1.00	29.73	C
[0698]	ATOM	646	CD2	TYR A 104	1.109	-21.713	29.127	1.00	31.40	C
[0699]	ATOM	647	CE1	TYR A 104	3.349	-22.752	27.932	1.00	30.91	C
[0700]	ATOM	648	CE2	TYR A 104	1.384	-21.383	27.831	1.00	31.47	C
[0701]	ATOM	649	CZ	TYR A 104	2.516	-21.891	27.232	1.00	31.84	C
[0702]	ATOM	650	OH	TYR A 104	2.811	-21.494	25.953	1.00	29.76	O
[0703]	ATOM	651	N	PRO A 105	2.453	-19.924	32.012	1.00	34.50	N
[0704]	ATOM	652	CA	PRO A 105	1.962	-18.572	32.162	1.00	33.66	C
[0705]	ATOM	653	C	PRO A 105	0.499	-18.457	31.744	1.00	33.74	C

[0706]	ATOM	654	O	PRO	A	105	0.075	-19.146	30.824	1.00	33.15	O
[0707]	ATOM	655	CB	PRO	A	105	2.796	-17.784	31.169	1.00	33.96	C
[0708]	ATOM	656	CG	PRO	A	105	3.811	-18.624	30.672	1.00	32.86	C
[0709]	ATOM	657	CD	PRO	A	105	3.617	-19.997	31.126	1.00	34.62	C
[0710]	ATOM	658	N	SER	A	106	-0.244	-17.569	32.408	1.00	34.11	N
[0711]	ATOM	659	CA	SER	A	106	-1.611	-17.202	32.022	1.00	34.03	C
[0712]	ATOM	660	C	SER	A	106	-1.565	-16.284	30.825	1.00	34.13	C
[0713]	ATOM	661	O	SER	A	106	-0.481	-15.799	30.458	1.00	34.35	O
[0714]	ATOM	662	CB	SER	A	106	-2.294	-16.453	33.135	1.00	34.44	C
[0715]	ATOM	663	OG	SER	A	106	-1.528	-15.308	33.513	1.00	37.63	O
[0716]	ATOM	664	N	LEU	A	107	-2.714	-16.043	30.180	1.00	33.49	N
[0717]	ATOM	665	CA	LEU	A	107	-2.681	-15.168	29.013	1.00	32.85	C
[0718]	ATOM	666	C	LEU	A	107	-2.040	-13.835	29.404	1.00	32.93	C
[0719]	ATOM	667	O	LEU	A	107	-1.263	-13.285	28.667	1.00	32.52	O
[0720]	ATOM	668	CB	LEU	A	107	-4.082	-14.968	28.438	1.00	32.14	C
[0721]	ATOM	669	CG	LEU	A	107	-4.690	-16.235	27.856	1.00	32.71	C
[0722]	ATOM	670	CD1	LEU	A	107	-5.965	-15.995	27.066	1.00	31.96	C
[0723]	ATOM	671	CD2	LEU	A	107	-3.694	-17.027	27.035	1.00	30.54	C
[0724]	ATOM	672	N	ASP	A	108	-2.378	-13.344	30.593	1.00	34.26	N
[0725]	ATOM	673	CA	ASP	A	108	-1.829	-12.084	31.119	1.00	35.19	C
[0726]	ATOM	674	C	ASP	A	108	-0.293	-12.125	31.188	1.00	34.93	C
[0727]	ATOM	675	O	ASP	A	108	0.416	-11.224	30.710	1.00	34.99	O
[0728]	ATOM	676	CB	ASP	A	108	-2.479	-11.737	32.463	1.00	34.86	C
[0729]	ATOM	677	CG	ASP	A	108	-3.902	-11.118	32.282	1.00	39.56	C
[0730]	ATOM	678	OD1	ASP	A	108	-4.306	-10.844	31.102	1.00	41.75	O
[0731]	ATOM	679	OD2	ASP	A	108	-4.627	-10.893	33.312	1.00	42.87	O
[0732]	ATOM	680	N	GLN	A	109	0.209	-13.226	31.709	1.00	34.36	N
[0733]	ATOM	681	CA	GLN	A	109	1.598	-13.352	31.838	1.00	34.20	C
[0734]	ATOM	682	C	GLN	A	109	2.242	-13.477	30.482	1.00	34.90	C
[0735]	ATOM	683	O	GLN	A	109	3.299	-12.865	30.257	1.00	36.38	O
[0736]	ATOM	684	CB	GLN	A	109	1.950	-14.459	32.809	1.00	34.21	C
[0737]	ATOM	685	CG	GLN	A	109	1.482	-14.144	34.252	1.00	32.29	C
[0738]	ATOM	686	CD	GLN	A	109	1.535	-15.392	35.122	1.00	33.96	C
[0739]	ATOM	687	OE1	GLN	A	109	1.493	-16.541	34.606	1.00	33.71	O
[0740]	ATOM	688	NE2	GLN	A	109	1.627	-15.193	36.439	1.00	29.23	N
[0741]	ATOM	689	N	LEU	A	110	1.620	-14.173	29.542	1.00	35.29	N

[0742]	ATOM	690	CA	LEU	A	110	2.153	-14.148	28.160	1.00	35.47	C
[0743]	ATOM	691	C	LEU	A	110	2.237	-12.709	27.589	1.00	35.09	C
[0744]	ATOM	692	O	LEU	A	110	3.205	-12.382	26.925	1.00	35.58	O
[0745]	ATOM	693	CB	LEU	A	110	1.370	-15.080	27.236	1.00	35.41	C
[0746]	ATOM	694	CG	LEU	A	110	1.388	-16.560	27.648	1.00	37.43	C
[0747]	ATOM	695	CD1	LEU	A	110	0.254	-17.308	27.071	1.00	36.66	C
[0748]	ATOM	696	CD2	LEU	A	110	2.711	-17.306	27.365	1.00	35.79	C
[0749]	ATOM	697	N	ALA	A	111	1.254	-11.852	27.868	1.00	34.90	N
[0750]	ATOM	698	CA	ALA	A	111	1.268	-10.475	27.394	1.00	35.61	C
[0751]	ATOM	699	C	ALA	A	111	2.399	-9.682	28.052	1.00	36.85	C
[0752]	ATOM	700	O	ALA	A	111	3.045	-8.783	27.429	1.00	36.72	O
[0753]	ATOM	701	CB	ALA	A	111	-0.005	-9.825	27.679	1.00	35.38	C
[0754]	ATOM	702	N	ASP	A	112	2.672	-10.054	29.293	1.00	37.25	N
[0755]	ATOM	703	CA	ASP	A	112	3.744	-9.466	29.998	1.00	38.49	C
[0756]	ATOM	704	C	ASP	A	112	5.154	-9.851	29.479	1.00	38.76	C
[0757]	ATOM	705	O	ASP	A	112	6.133	-9.266	29.904	1.00	38.60	O
[0758]	ATOM	706	CB	ASP	A	112	3.590	-9.850	31.439	1.00	38.95	C
[0759]	ATOM	707	CG	ASP	A	112	2.672	-8.941	32.184	1.00	41.97	C
[0760]	ATOM	708	OD1	ASP	A	112	2.491	-7.805	31.723	1.00	46.84	O
[0761]	ATOM	709	OD2	ASP	A	112	2.160	-9.310	33.276	1.00	44.75	O
[0762]	ATOM	710	N	MET	A	113	5.270	-10.841	28.608	1.00	38.89	N
[0763]	ATOM	711	CA	MET	A	113	6.578	-11.239	28.101	1.00	39.71	C
[0764]	ATOM	712	C	MET	A	113	6.917	-10.406	26.918	1.00	40.72	C
[0765]	ATOM	713	O	MET	A	113	8.036	-10.508	26.390	1.00	41.40	O
[0766]	ATOM	714	CB	MET	A	113	6.619	-12.672	27.613	1.00	39.21	C
[0767]	ATOM	715	CG	MET	A	113	6.007	-13.699	28.568	1.00	39.25	C
[0768]	ATOM	716	SD	MET	A	113	6.414	-15.311	27.951	1.00	41.76	S
[0769]	ATOM	717	CE	MET	A	113	5.944	-16.322	29.292	1.00	44.11	C
[0770]	ATOM	718	N	ILE	A	114	5.979	-9.588	26.445	1.00	41.23	N
[0771]	ATOM	719	CA	ILE	A	114	6.258	-8.875	25.203	1.00	40.99	C
[0772]	ATOM	720	C	ILE	A	114	7.256	-7.729	25.381	1.00	41.45	C
[0773]	ATOM	721	O	ILE	A	114	8.190	-7.559	24.569	1.00	41.85	O
[0774]	ATOM	722	CB	ILE	A	114	4.989	-8.472	24.548	1.00	40.97	C
[0775]	ATOM	723	CG1	ILE	A	114	4.228	-9.724	24.246	1.00	41.94	C
[0776]	ATOM	724	CG2	ILE	A	114	5.246	-7.659	23.245	1.00	40.44	C
[0777]	ATOM	725	CD1	ILE	A	114	3.239	-9.541	23.113	1.00	44.95	C

[0778]	ATOM	726	N	PRO	A	115	7.089	-6.927	26.439	1.00	41.76	N
[0779]	ATOM	727	CA	PRO	A	115	8.138	-5.918	26.585	1.00	42.12	C
[0780]	ATOM	728	C	PRO	A	115	9.578	-6.484	26.481	1.00	42.47	C
[0781]	ATOM	729	O	PRO	A	115	10.404	-5.933	25.794	1.00	42.70	O
[0782]	ATOM	730	CB	PRO	A	115	7.852	-5.337	27.975	1.00	41.75	C
[0783]	ATOM	731	CG	PRO	A	115	6.421	-5.602	28.246	1.00	40.78	C
[0784]	ATOM	732	CD	PRO	A	115	6.053	-6.829	27.495	1.00	41.54	C
[0785]	ATOM	733	N	CYS	A	116	9.859	-7.599	27.134	1.00	43.38	N
[0786]	ATOM	734	CA	CYS	A	116	11.167	-8.298	26.988	1.00	44.29	C
[0787]	ATOM	735	C	CYS	A	116	11.640	-8.535	25.557	1.00	43.71	C
[0788]	ATOM	736	O	CYS	A	116	12.821	-8.422	25.300	1.00	44.84	O
[0789]	ATOM	737	CB	CYS	A	116	11.171	-9.629	27.758	1.00	44.33	C
[0790]	ATOM	738	SG	CYS	A	116	10.745	-9.361	29.445	1.00	47.29	S
[0791]	ATOM	739	N	VAL	A	117	10.741	-8.904	24.655	1.00	42.68	N
[0792]	ATOM	740	CA	VAL	A	117	11.081	-9.141	23.285	1.00	41.32	C
[0793]	ATOM	741	C	VAL	A	117	11.427	-7.781	22.656	1.00	42.09	C
[0794]	ATOM	742	O	VAL	A	117	12.470	-7.589	21.988	1.00	41.64	O
[0795]	ATOM	743	CB	VAL	A	117	9.890	-9.789	22.536	1.00	41.07	C
[0796]	ATOM	744	CG1	VAL	A	117	10.227	-9.966	21.076	1.00	38.21	C
[0797]	ATOM	745	CG2	VAL	A	117	9.556	-11.133	23.137	1.00	39.60	C
[0798]	ATOM	746	N	LEU	A	118	10.529	-6.823	22.870	1.00	42.43	N
[0799]	ATOM	747	CA	LEU	A	118	10.660	-5.509	22.245	1.00	42.22	C
[0800]	ATOM	748	C	LEU	A	118	11.939	-4.883	22.700	1.00	43.04	C
[0801]	ATOM	749	O	LEU	A	118	12.723	-4.415	21.848	1.00	43.56	O
[0802]	ATOM	750	CB	LEU	A	118	9.474	-4.617	22.576	1.00	41.61	C
[0803]	ATOM	751	CG	LEU	A	118	8.232	-5.107	21.832	1.00	39.96	C
[0804]	ATOM	752	CD1	LEU	A	118	7.117	-4.134	22.064	1.00	38.24	C
[0805]	ATOM	753	CD2	LEU	A	118	8.532	-5.279	20.346	1.00	37.11	C
[0806]	ATOM	754	N	GLN	A	119	12.168	-4.908	24.031	1.00	42.99	N
[0807]	ATOM	755	CA	GLN	A	119	13.457	-4.475	24.608	1.00	42.60	C
[0808]	ATOM	756	C	GLN	A	119	14.682	-5.128	24.052	1.00	40.81	C
[0809]	ATOM	757	O	GLN	A	119	15.605	-4.497	23.672	1.00	42.60	O
[0810]	ATOM	758	CB	GLN	A	119	13.469	-4.509	26.122	1.00	43.02	C
[0811]	ATOM	759	CG	GLN	A	119	12.956	-3.102	26.636	1.00	47.02	C
[0812]	ATOM	760	CD	GLN	A	119	12.049	-3.173	27.890	1.00	48.89	C
[0813]	ATOM	761	OE1	GLN	A	119	12.433	-3.786	28.962	1.00	49.55	O

[0814]	ATOM	762	NE2	GLN	A	119	10.843	-2.551	27.779	1.00	45.56	N
[0815]	ATOM	763	N	TYR	A	120	14.686	-6.412	23.954	1.00	39.06	N
[0816]	ATOM	764	CA	TYR	A	120	15.831	-7.071	23.444	1.00	37.22	C
[0817]	ATOM	765	C	TYR	A	120	16.119	-6.589	22.020	1.00	37.64	C
[0818]	ATOM	766	O	TYR	A	120	17.258	-6.549	21.620	1.00	38.44	O
[0819]	ATOM	767	CB	TYR	A	120	15.511	-8.554	23.491	1.00	36.21	C
[0820]	ATOM	768	CG	TYR	A	120	16.374	-9.395	22.591	1.00	35.71	C
[0821]	ATOM	769	CD1	TYR	A	120	17.304	-10.163	23.014	1.00	34.41	C
[0822]	ATOM	770	CD2	TYR	A	120	16.246	-9.426	21.317	1.00	33.95	C
[0823]	ATOM	771	CE1	TYR	A	120	18.096	-10.952	22.150	1.00	36.48	C
[0824]	ATOM	772	CE2	TYR	A	120	17.078	-10.204	20.483	1.00	33.09	C
[0825]	ATOM	773	CZ	TYR	A	120	17.979	-10.964	20.903	1.00	36.62	C
[0826]	ATOM	774	OH	TYR	A	120	18.762	-11.741	20.068	1.00	37.77	O
[0827]	ATOM	775	N	LEU	A	121	15.094	-6.228	21.254	1.00	38.24	N
[0828]	ATOM	776	CA	LEU	A	121	15.286	-5.876	19.863	1.00	38.60	C
[0829]	ATOM	777	C	LEU	A	121	15.482	-4.393	19.680	1.00	39.89	C
[0830]	ATOM	778	O	LEU	A	121	15.822	-3.927	18.562	1.00	40.50	O
[0831]	ATOM	779	CB	LEU	A	121	14.050	-6.255	19.088	1.00	37.53	C
[0832]	ATOM	780	CG	LEU	A	121	13.891	-7.744	18.895	1.00	37.43	C
[0833]	ATOM	781	CD1	LEU	A	121	12.431	-8.021	18.472	1.00	37.71	C
[0834]	ATOM	782	CD2	LEU	A	121	14.891	-8.253	17.828	1.00	35.56	C
[0835]	ATOM	783	N	ASN	A	122	15.208	-3.648	20.747	1.00	41.17	N
[0836]	ATOM	784	CA	ASN	A	122	15.045	-2.201	20.610	1.00	43.21	C
[0837]	ATOM	785	C	ASN	A	122	13.941	-1.644	19.706	1.00	43.42	C
[0838]	ATOM	786	O	ASN	A	122	14.105	-0.552	19.168	1.00	43.84	O
[0839]	ATOM	787	CB	ASN	A	122	16.282	-1.596	19.993	1.00	43.82	C
[0840]	ATOM	788	CG	ASN	A	122	17.105	-0.910	20.963	1.00	46.00	C
[0841]	ATOM	789	OD1	ASN	A	122	16.640	-0.072	21.773	1.00	46.45	O
[0842]	ATOM	790	ND2	ASN	A	122	18.379	-1.279	20.936	1.00	46.61	N
[0843]	ATOM	791	N	PHE	A	123	12.856	-2.364	19.502	1.00	43.51	N
[0844]	ATOM	792	CA	PHE	A	123	11.750	-1.768	18.821	1.00	43.57	C
[0845]	ATOM	793	C	PHE	A	123	11.011	-1.053	19.901	1.00	43.66	C
[0846]	ATOM	794	O	PHE	A	123	11.100	-1.454	21.074	1.00	43.69	O
[0847]	ATOM	795	CB	PHE	A	123	10.954	-2.857	18.181	1.00	43.02	C
[0848]	ATOM	796	CG	PHE	A	123	11.721	-3.569	17.125	1.00	44.39	C
[0849]	ATOM	797	CD1	PHE	A	123	12.861	-2.994	16.572	1.00	41.18	C



[0850]	ATOM	798	CD2	PHE	A	123	11.295	-4.785	16.628	1.00	45.52	C
[0851]	ATOM	799	CE1	PHE	A	123	13.535	-3.606	15.575	1.00	41.11	C
[0852]	ATOM	800	CE2	PHE	A	123	12.015	-5.394	15.581	1.00	44.73	C
[0853]	ATOM	801	CZ	PHE	A	123	13.142	-4.797	15.090	1.00	42.07	C
[0854]	ATOM	802	N	SER	A	124	10.329	0.031	19.530	1.00	43.49	N
[0855]	ATOM	803	CA	SER	A	124	9.464	0.711	20.505	1.00	43.50	C
[0856]	ATOM	804	C	SER	A	124	7.968	0.787	20.177	1.00	42.13	C
[0857]	ATOM	805	O	SER	A	124	7.149	1.102	21.047	1.00	42.34	O
[0858]	ATOM	806	CB	SER	A	124	10.047	2.063	20.938	1.00	43.81	C
[0859]	ATOM	807	OG	SER	A	124	10.362	2.810	19.817	1.00	46.39	O
[0860]	ATOM	808	N	THR	A	125	7.614	0.427	18.955	1.00	40.53	N
[0861]	ATOM	809	CA	THR	A	125	6.213	0.412	18.563	1.00	39.10	C
[0862]	ATOM	810	C	THR	A	125	5.909	-0.741	17.618	1.00	37.48	C
[0863]	ATOM	811	O	THR	A	125	6.765	-1.050	16.777	1.00	37.29	O
[0864]	ATOM	812	CB	THR	A	125	5.856	1.721	17.822	1.00	39.83	C
[0865]	ATOM	813	OG1	THR	A	125	6.871	1.979	16.810	1.00	40.55	O
[0866]	ATOM	814	CG2	THR	A	125	5.735	2.884	18.791	1.00	38.34	C
[0867]	ATOM	815	N	ILE	A	126	4.697	-1.329	17.737	1.00	35.59	N
[0868]	ATOM	816	CA	ILE	A	126	4.294	-2.505	16.924	1.00	33.73	C
[0869]	ATOM	817	C	ILE	A	126	2.931	-2.344	16.235	1.00	33.41	C
[0870]	ATOM	818	O	ILE	A	126	2.096	-1.526	16.655	1.00	33.88	O
[0871]	ATOM	819	CB	ILE	A	126	4.227	-3.802	17.803	1.00	34.30	C
[0872]	ATOM	820	CG1	ILE	A	126	3.155	-3.657	18.896	1.00	33.18	C
[0873]	ATOM	821	CG2	ILE	A	126	5.551	-4.081	18.506	1.00	32.86	C
[0874]	ATOM	822	CD1	ILE	A	126	2.593	-4.957	19.528	1.00	30.44	C
[0875]	ATOM	823	N	ILE	A	127	2.694	-3.125	15.189	1.00	31.58	N
[0876]	ATOM	824	CA	ILE	A	127	1.330	-3.382	14.774	1.00	30.04	C
[0877]	ATOM	825	C	ILE	A	127	1.110	-4.838	15.111	1.00	29.54	C
[0878]	ATOM	826	O	ILE	A	127	1.761	-5.703	14.596	1.00	29.39	O
[0879]	ATOM	827	CB	ILE	A	127	1.103	-3.126	13.273	1.00	29.45	C
[0880]	ATOM	828	CG1	ILE	A	127	1.215	-1.637	13.023	1.00	28.95	C
[0881]	ATOM	829	CG2	ILE	A	127	-0.297	-3.563	12.880	1.00	27.09	C
[0882]	ATOM	830	CD1	ILE	A	127	1.623	-1.227	11.552	1.00	25.34	C
[0883]	ATOM	831	N	GLY	A	128	0.172	-5.129	15.970	1.00	29.68	N
[0884]	ATOM	832	CA	GLY	A	128	-0.017	-6.524	16.376	1.00	29.24	C
[0885]	ATOM	833	C	GLY	A	128	-1.017	-7.270	15.547	1.00	28.79	C

[0886]	ATOM	834	O	GLY A 128	-2.058	-6.743	15.174	1.00	28.88	O
[0887]	ATOM	835	N	VAL A 129	-0.673	-8.497	15.199	1.00	28.59	N
[0888]	ATOM	836	CA	VAL A 129	-1.583	-9.366	14.476	1.00	27.43	C
[0889]	ATOM	837	C	VAL A 129	-1.721	-10.634	15.338	1.00	28.28	C
[0890]	ATOM	838	O	VAL A 129	-0.758	-11.381	15.531	1.00	28.51	O
[0891]	ATOM	839	CB	VAL A 129	-1.097	-9.619	13.027	1.00	27.29	C
[0892]	ATOM	840	CG1	VAL A 129	-2.027	-10.593	12.261	1.00	23.53	C
[0893]	ATOM	841	CG2	VAL A 129	-1.030	-8.272	12.237	1.00	26.31	C
[0894]	ATOM	842	N	GLY A 130	-2.901	-10.862	15.914	1.00	28.22	N
[0895]	ATOM	843	CA	GLY A 130	-3.114	-12.139	16.609	1.00	29.10	C
[0896]	ATOM	844	C	GLY A 130	-4.303	-12.965	16.113	1.00	29.76	C
[0897]	ATOM	845	O	GLY A 130	-5.154	-12.430	15.386	1.00	30.70	O
[0898]	ATOM	846	N	VAL A 131	-4.351	-14.246	16.513	1.00	28.60	N
[0899]	ATOM	847	CA	VAL A 131	-5.468	-15.114	16.272	1.00	27.48	C
[0900]	ATOM	848	C	VAL A 131	-5.889	-15.768	17.581	1.00	27.87	C
[0901]	ATOM	849	O	VAL A 131	-5.028	-16.307	18.318	1.00	28.31	O
[0902]	ATOM	850	CB	VAL A 131	-5.110	-16.212	15.264	1.00	28.02	C
[0903]	ATOM	851	CG1	VAL A 131	-6.323	-17.166	15.036	1.00	26.03	C
[0904]	ATOM	852	CG2	VAL A 131	-4.672	-15.642	13.959	1.00	27.13	C
[0905]	ATOM	853	N	GLY A 132	-7.190	-15.738	17.888	1.00	26.67	N
[0906]	ATOM	854	CA	GLY A 132	-7.661	-16.451	19.031	1.00	26.03	C
[0907]	ATOM	855	C	GLY A 132	-6.894	-16.067	20.288	1.00	27.17	C
[0908]	ATOM	856	O	GLY A 132	-6.916	-14.877	20.633	1.00	27.70	O
[0909]	ATOM	857	N	ALA A 133	-6.231	-17.007	20.990	1.00	26.54	N
[0910]	ATOM	858	CA	ALA A 133	-5.556	-16.621	22.223	1.00	27.06	C
[0911]	ATOM	859	C	ALA A 133	-4.610	-15.477	21.871	1.00	27.79	C
[0912]	ATOM	860	O	ALA A 133	-4.469	-14.527	22.663	1.00	28.93	O
[0913]	ATOM	861	CB	ALA A 133	-4.784	-17.771	22.833	1.00	26.72	C
[0914]	ATOM	862	N	GLY A 134	-4.024	-15.534	20.670	1.00	27.03	N
[0915]	ATOM	863	CA	GLY A 134	-2.971	-14.587	20.249	1.00	26.61	C
[0916]	ATOM	864	C	GLY A 134	-3.535	-13.208	20.143	1.00	26.51	C
[0917]	ATOM	865	O	GLY A 134	-2.899	-12.211	20.498	1.00	26.43	O
[0918]	ATOM	866	N	ALA A 135	-4.779	-13.152	19.709	1.00	27.08	N
[0919]	ATOM	867	CA	ALA A 135	-5.505	-11.895	19.639	1.00	27.87	C
[0920]	ATOM	868	C	ALA A 135	-5.777	-11.354	21.027	1.00	28.56	C
[0921]	ATOM	869	O	ALA A 135	-5.531	-10.170	21.301	1.00	29.48	O

[0922]	ATOM	870	CB	ALA	A	135	-6.767	-12.085	18.919	1.00	28.30	C
[0923]	ATOM	871	N	TYR	A	136	-6.226	-12.202	21.932	1.00	27.90	N
[0924]	ATOM	872	CA	TYR	A	136	-6.425	-11.754	23.311	1.00	28.26	C
[0925]	ATOM	873	C	TYR	A	136	-5.108	-11.234	23.928	1.00	28.09	C
[0926]	ATOM	874	O	TYR	A	136	-5.066	-10.164	24.533	1.00	27.89	O
[0927]	ATOM	875	CB	TYR	A	136	-7.014	-12.903	24.164	1.00	28.86	C
[0928]	ATOM	876	CG	TYR	A	136	-7.247	-12.554	25.603	1.00	28.72	C
[0929]	ATOM	877	CD1	TYR	A	136	-6.166	-12.351	26.500	1.00	29.12	C
[0930]	ATOM	878	CD2	TYR	A	136	-8.526	-12.424	26.092	1.00	30.79	C
[0931]	ATOM	879	CE1	TYR	A	136	-6.387	-12.057	27.815	1.00	30.24	C
[0932]	ATOM	880	CE2	TYR	A	136	-8.766	-12.086	27.465	1.00	30.95	C
[0933]	ATOM	881	CZ	TYR	A	136	-7.711	-11.923	28.284	1.00	31.96	C
[0934]	ATOM	882	OH	TYR	A	136	-8.027	-11.634	29.567	1.00	32.95	O
[0935]	ATOM	883	N	ILE	A	137	-4.046	-11.999	23.759	1.00	27.35	N
[0936]	ATOM	884	CA	ILE	A	137	-2.778	-11.605	24.264	1.00	28.11	C
[0937]	ATOM	885	C	ILE	A	137	-2.382	-10.211	23.793	1.00	29.46	C
[0938]	ATOM	886	O	ILE	A	137	-2.018	-9.357	24.623	1.00	29.17	O
[0939]	ATOM	887	CB	ILE	A	137	-1.666	-12.682	23.950	1.00	27.62	C
[0940]	ATOM	888	CG1	ILE	A	137	-1.900	-13.911	24.843	1.00	27.93	C
[0941]	ATOM	889	CG2	ILE	A	137	-0.403	-12.223	24.333	1.00	25.55	C
[0942]	ATOM	890	CD1	ILE	A	137	-1.367	-15.209	24.344	1.00	26.75	C
[0943]	ATOM	891	N	LEU	A	138	-2.411	-9.983	22.475	1.00	30.31	N
[0944]	ATOM	892	CA	LEU	A	138	-1.944	-8.695	21.955	1.00	30.76	C
[0945]	ATOM	893	C	LEU	A	138	-2.850	-7.579	22.425	1.00	31.65	C
[0946]	ATOM	894	O	LEU	A	138	-2.406	-6.459	22.576	1.00	32.72	O
[0947]	ATOM	895	CB	LEU	A	138	-1.877	-8.681	20.441	1.00	30.29	C
[0948]	ATOM	896	CG	LEU	A	138	-0.767	-9.566	19.868	1.00	31.80	C
[0949]	ATOM	897	CD1	LEU	A	138	-0.892	-9.767	18.371	1.00	32.09	C
[0950]	ATOM	898	CD2	LEU	A	138	0.595	-9.030	20.166	1.00	31.94	C
[0951]	ATOM	899	N	ALA	A	139	-4.127	-7.860	22.640	1.00	32.14	N
[0952]	ATOM	900	CA	ALA	A	139	-5.027	-6.877	23.130	1.00	32.34	C
[0953]	ATOM	901	C	ALA	A	139	-4.768	-6.585	24.611	1.00	32.86	C
[0954]	ATOM	902	O	ALA	A	139	-4.816	-5.449	25.051	1.00	34.19	O
[0955]	ATOM	903	CB	ALA	A	139	-6.377	-7.360	22.950	1.00	32.00	C
[0956]	ATOM	904	N	ARG	A	140	-4.501	-7.585	25.415	1.00	32.65	N
[0957]	ATOM	905	CA	ARG	A	140	-4.084	-7.274	26.775	1.00	33.25	C

[0958]	ATOM	906	C	ARG	A	140	-2.761	-6.412	26.783	1.00	33.60	C
[0959]	ATOM	907	O	ARG	A	140	-2.635	-5.457	27.511	1.00	33.55	O
[0960]	ATOM	908	CB	ARG	A	140	-3.959	-8.594	27.571	1.00	32.96	C
[0961]	ATOM	909	CG	ARG	A	140	-3.149	-8.503	28.812	1.00	32.79	C
[0962]	ATOM	910	CD	ARG	A	140	-3.817	-7.670	29.881	1.00	31.41	C
[0963]	ATOM	911	NE	ARG	A	140	-5.095	-8.266	30.224	1.00	34.29	N
[0964]	ATOM	912	CZ	ARG	A	140	-6.130	-7.582	30.715	1.00	37.40	C
[0965]	ATOM	913	NH1	ARG	A	140	-6.015	-6.237	30.947	1.00	34.08	N
[0966]	ATOM	914	NH2	ARG	A	140	-7.260	-8.288	30.984	1.00	37.58	N
[0967]	ATOM	915	N	TYR	A	141	-1.796	-6.790	25.952	1.00	33.83	N
[0968]	ATOM	916	CA	TYR	A	141	-0.589	-6.073	25.789	1.00	33.98	C
[0969]	ATOM	917	C	TYR	A	141	-0.824	-4.537	25.509	1.00	34.63	C
[0970]	ATOM	918	O	TYR	A	141	-0.255	-3.634	26.199	1.00	33.30	O
[0971]	ATOM	919	CB	TYR	A	141	0.250	-6.739	24.686	1.00	34.31	C
[0972]	ATOM	920	CG	TYR	A	141	1.462	-5.899	24.492	1.00	35.43	C
[0973]	ATOM	921	CD1	TYR	A	141	2.498	-5.911	25.428	1.00	35.15	C
[0974]	ATOM	922	CD2	TYR	A	141	1.510	-4.976	23.440	1.00	36.68	C
[0975]	ATOM	923	CE1	TYR	A	141	3.547	-5.073	25.302	1.00	34.65	C
[0976]	ATOM	924	CE2	TYR	A	141	2.579	-4.137	23.303	1.00	36.52	C
[0977]	ATOM	925	CZ	TYR	A	141	3.584	-4.190	24.245	1.00	35.83	C
[0978]	ATOM	926	OH	TYR	A	141	4.655	-3.328	24.111	1.00	38.53	O
[0979]	ATOM	927	N	ALA	A	142	-1.653	-4.276	24.488	1.00	34.73	N
[0980]	ATOM	928	CA	ALA	A	142	-2.153	-2.939	24.161	1.00	34.84	C
[0981]	ATOM	929	C	ALA	A	142	-2.717	-2.209	25.363	1.00	35.03	C
[0982]	ATOM	930	O	ALA	A	142	-2.420	-1.016	25.535	1.00	34.97	O
[0983]	ATOM	931	CB	ALA	A	142	-3.194	-2.979	23.011	1.00	34.30	C
[0984]	ATOM	932	N	LEU	A	143	-3.507	-2.888	26.197	1.00	34.63	N
[0985]	ATOM	933	CA	LEU	A	143	-4.043	-2.180	27.363	1.00	35.13	C
[0986]	ATOM	934	C	LEU	A	143	-2.967	-1.778	28.340	1.00	35.57	C
[0987]	ATOM	935	O	LEU	A	143	-3.082	-0.773	28.990	1.00	36.13	O
[0988]	ATOM	936	CB	LEU	A	143	-5.148	-2.928	28.101	1.00	34.54	C
[0989]	ATOM	937	CG	LEU	A	143	-6.469	-3.178	27.336	1.00	35.89	C
[0990]	ATOM	938	CD1	LEU	A	143	-7.446	-3.798	28.252	1.00	33.55	C
[0991]	ATOM	939	CD2	LEU	A	143	-7.138	-1.972	26.573	1.00	33.53	C
[0992]	ATOM	940	N	ASN	A	144	-1.914	-2.561	28.444	1.00	35.92	N
[0993]	ATOM	941	CA	ASN	A	144	-0.867	-2.247	29.382	1.00	36.57	C

[0994]	ATOM	942	C	ASN A 144	0.126	-1.257	28.818	1.00	37.12	C
[0995]	ATOM	943	O	ASN A 144	0.833	-0.661	29.584	1.00	37.72	O
[0996]	ATOM	944	CB	ASN A 144	-0.106	-3.523	29.821	1.00	37.09	C
[0997]	ATOM	945	CG	ASN A 144	-1.021	-4.585	30.539	1.00	37.00	C
[0998]	ATOM	946	OD1	ASN A 144	-0.864	-5.723	30.464	1.00	35.95	O
[0999]	ATOM	947	ND2	ASN A 144	-1.925	-4.167	31.185	1.00	33.39	N
[1000]	ATOM	948	N	HIS A 145	0.207	-1.097	27.500	1.00	37.31	N
[1001]	ATOM	949	CA	HIS A 145	1.296	-0.350	26.882	1.00	37.79	C
[1002]	ATOM	950	C	HIS A 145	0.785	0.336	25.621	1.00	39.46	C
[1003]	ATOM	951	O	HIS A 145	1.309	0.141	24.487	1.00	38.85	O
[1004]	ATOM	952	CB	HIS A 145	2.516	-1.242	26.598	1.00	37.13	C
[1005]	ATOM	953	CG	HIS A 145	3.063	-1.941	27.826	1.00	38.05	C
[1006]	ATOM	954	ND1	HIS A 145	3.764	-1.284	28.817	1.00	38.34	N
[1007]	ATOM	955	CD2	HIS A 145	2.994	-3.240	28.216	1.00	37.48	C
[1008]	ATOM	956	CE1	HIS A 145	4.094	-2.146	29.765	1.00	37.22	C
[1009]	ATOM	957	NE2	HIS A 145	3.637	-3.337	29.421	1.00	36.94	N
[1010]	ATOM	958	N	PRO A 146	-0.243	1.183	25.814	1.00	41.15	N
[1011]	ATOM	959	CA	PRO A 146	-1.014	1.629	24.645	1.00	41.67	C
[1012]	ATOM	960	C	PRO A 146	-0.158	2.456	23.693	1.00	42.90	C
[1013]	ATOM	961	O	PRO A 146	-0.375	2.430	22.473	1.00	44.49	O
[1014]	ATOM	962	CB	PRO A 146	-2.177	2.399	25.246	1.00	40.77	C
[1015]	ATOM	963	CG	PRO A 146	-1.779	2.742	26.646	1.00	40.76	C
[1016]	ATOM	964	CD	PRO A 146	-0.724	1.768	27.093	1.00	41.08	C
[1017]	ATOM	965	N	ASP A 147	0.848	3.147	24.196	1.00	43.04	N
[1018]	ATOM	966	CA	ASP A 147	1.681	3.974	23.300	1.00	44.22	C
[1019]	ATOM	967	C	ASP A 147	2.726	3.193	22.535	1.00	42.91	C
[1020]	ATOM	968	O	ASP A 147	3.379	3.754	21.674	1.00	42.73	O
[1021]	ATOM	969	CB	ASP A 147	2.364	5.073	24.101	1.00	44.98	C
[1022]	ATOM	970	CG	ASP A 147	2.642	4.608	25.499	1.00	50.54	C
[1023]	ATOM	971	OD1	ASP A 147	3.330	3.500	25.649	1.00	51.52	O
[1024]	ATOM	972	OD2	ASP A 147	2.071	5.300	26.422	1.00	54.29	O
[1025]	ATOM	973	N	THR A 148	2.883	1.911	22.842	1.00	42.33	N
[1026]	ATOM	974	CA	THR A 148	3.754	1.075	22.027	1.00	41.76	C
[1027]	ATOM	975	C	THR A 148	2.958	0.414	20.949	1.00	41.75	C
[1028]	ATOM	976	O	THR A 148	3.545	-0.194	20.040	1.00	42.52	O
[1029]	ATOM	977	CB	THR A 148	4.512	0.022	22.824	1.00	42.16	C

[1030]	ATOM	978	OG1	THR	A	148	3.576	-0.917	23.378	1.00	42.57	O
[1031]	ATOM	979	CG2	THR	A	148	5.411	0.716	23.932	1.00	41.55	C
[1032]	ATOM	980	N	VAL	A	149	1.626	0.536	21.003	1.00	40.77	N
[1033]	ATOM	981	CA	VAL	A	149	0.799	-0.091	19.974	1.00	39.87	C
[1034]	ATOM	982	C	VAL	A	149	0.172	0.896	18.996	1.00	39.90	C
[1035]	ATOM	983	O	VAL	A	149	-0.616	1.689	19.401	1.00	40.55	O
[1036]	ATOM	984	CB	VAL	A	149	-0.242	-0.999	20.610	1.00	39.42	C
[1037]	ATOM	985	CG1	VAL	A	149	-1.116	-1.657	19.546	1.00	37.99	C
[1038]	ATOM	986	CG2	VAL	A	149	0.481	-2.019	21.404	1.00	37.37	C
[1039]	ATOM	987	N	GLU	A	150	0.528	0.811	17.720	1.00	39.41	N
[1040]	ATOM	988	CA	GLU	A	150	-0.030	1.636	16.706	1.00	39.34	C
[1041]	ATOM	989	C	GLU	A	150	-1.257	1.057	16.061	1.00	38.47	C
[1042]	ATOM	990	O	GLU	A	150	-2.015	1.776	15.450	1.00	39.39	O
[1043]	ATOM	991	CB	GLU	A	150	0.992	1.832	15.620	1.00	39.24	C
[1044]	ATOM	992	CG	GLU	A	150	2.119	2.759	16.003	1.00	41.83	C
[1045]	ATOM	993	CD	GLU	A	150	3.001	3.228	14.825	1.00	43.83	C
[1046]	ATOM	994	OE1	GLU	A	150	2.522	3.461	13.653	1.00	44.03	O
[1047]	ATOM	995	OE2	GLU	A	150	4.208	3.412	15.115	1.00	46.86	O
[1048]	ATOM	996	N	GLY	A	151	-1.440	-0.251	16.119	1.00	37.91	N
[1049]	ATOM	997	CA	GLY	A	151	-2.667	-0.867	15.614	1.00	35.51	C
[1050]	ATOM	998	C	GLY	A	151	-2.720	-2.346	15.912	1.00	34.30	C
[1051]	ATOM	999	O	GLY	A	151	-1.660	-3.038	16.080	1.00	34.24	O
[1052]	ATOM	1000	N	LEU	A	152	-3.948	-2.852	15.935	1.00	32.31	N
[1053]	ATOM	1001	CA	LEU	A	152	-4.139	-4.277	16.119	1.00	30.17	C
[1054]	ATOM	1002	C	LEU	A	152	-4.992	-4.861	15.067	1.00	29.05	C
[1055]	ATOM	1003	O	LEU	A	152	-5.933	-4.238	14.735	1.00	29.17	O
[1056]	ATOM	1004	CB	LEU	A	152	-4.748	-4.513	17.462	1.00	29.90	C
[1057]	ATOM	1005	CG	LEU	A	152	-3.828	-4.105	18.601	1.00	27.83	C
[1058]	ATOM	1006	CD1	LEU	A	152	-4.645	-4.160	19.845	1.00	28.20	C
[1059]	ATOM	1007	CD2	LEU	A	152	-2.662	-5.032	18.665	1.00	26.44	C
[1060]	ATOM	1008	N	VAL	A	153	-4.590	-5.995	14.485	1.00	27.95	N
[1061]	ATOM	1009	CA	VAL	A	153	-5.467	-6.841	13.723	1.00	26.84	C
[1062]	ATOM	1010	C	VAL	A	153	-5.813	-7.972	14.653	1.00	28.13	C
[1063]	ATOM	1011	O	VAL	A	153	-4.930	-8.716	15.047	1.00	29.17	O
[1064]	ATOM	1012	CB	VAL	A	153	-4.784	-7.396	12.507	1.00	26.70	C
[1065]	ATOM	1013	CG1	VAL	A	153	-5.696	-8.476	11.802	1.00	24.62	C

[1066]	ATOM	1014	CG2	VAL	A	153	-4.358	-6.275	11.571	1.00	22.73	C
[1067]	ATOM	1015	N	LEU	A	154	-7.077	-8.086	15.062	1.00	28.74	N
[1068]	ATOM	1016	CA	LEU	A	154	-7.471	-9.112	16.030	1.00	29.14	C
[1069]	ATOM	1017	C	LEU	A	154	-8.467	-10.086	15.441	1.00	30.17	C
[1070]	ATOM	1018	O	LEU	A	154	-9.660	-9.737	15.292	1.00	30.58	O
[1071]	ATOM	1019	CB	LEU	A	154	-8.079	-8.513	17.272	1.00	28.90	C
[1072]	ATOM	1020	CG	LEU	A	154	-7.373	-7.387	18.006	1.00	29.70	C
[1073]	ATOM	1021	CD1	LEU	A	154	-8.329	-6.810	18.976	1.00	28.43	C
[1074]	ATOM	1022	CD2	LEU	A	154	-6.216	-7.861	18.717	1.00	27.69	C
[1075]	ATOM	1023	N	ILE	A	155	-7.979	-11.299	15.130	1.00	30.10	N
[1076]	ATOM	1024	CA	ILE	A	155	-8.739	-12.361	14.467	1.00	29.89	C
[1077]	ATOM	1025	C	ILE	A	155	-9.256	-13.321	15.516	1.00	30.49	C
[1078]	ATOM	1026	O	ILE	A	155	-8.500	-13.826	16.322	1.00	31.05	O
[1079]	ATOM	1027	CB	ILE	A	155	-7.836	-13.142	13.456	1.00	29.79	C
[1080]	ATOM	1028	CG1	ILE	A	155	-7.361	-12.171	12.384	1.00	29.05	C
[1081]	ATOM	1029	CG2	ILE	A	155	-8.574	-14.260	12.801	1.00	28.39	C
[1082]	ATOM	1030	CD1	ILE	A	155	-6.048	-12.439	11.837	1.00	25.65	C
[1083]	ATOM	1031	N	ASN	A	156	-10.570	-13.554	15.506	1.00	31.39	N
[1084]	ATOM	1032	CA	ASN	A	156	-11.279	-14.453	16.475	1.00	31.13	C
[1085]	ATOM	1033	C	ASN	A	156	-11.128	-14.133	17.943	1.00	31.14	C
[1086]	ATOM	1034	O	ASN	A	156	-11.101	-15.087	18.754	1.00	31.36	O
[1087]	ATOM	1035	CB	ASN	A	156	-10.831	-15.898	16.318	1.00	31.20	C
[1088]	ATOM	1036	CG	ASN	A	156	-10.998	-16.396	14.912	1.00	31.86	C
[1089]	ATOM	1037	OD1	ASN	A	156	-11.553	-15.767	14.098	1.00	30.37	O
[1090]	ATOM	1038	ND2	ASN	A	156	-10.533	-17.534	14.645	1.00	30.89	N
[1091]	ATOM	1039	N	ILE	A	157	-11.000	-12.844	18.285	1.00	31.01	N
[1092]	ATOM	1040	CA	ILE	A	157	-10.847	-12.439	19.646	1.00	30.87	C
[1093]	ATOM	1041	C	ILE	A	157	-12.136	-12.740	20.385	1.00	32.52	C
[1094]	ATOM	1042	O	ILE	A	157	-13.183	-12.518	19.839	1.00	33.72	O
[1095]	ATOM	1043	CB	ILE	A	157	-10.451	-10.959	19.748	1.00	30.60	C
[1096]	ATOM	1044	CG1	ILE	A	157	-10.212	-10.563	21.205	1.00	31.19	C
[1097]	ATOM	1045	CG2	ILE	A	157	-11.487	-10.068	19.129	1.00	27.06	C
[1098]	ATOM	1046	CD1	ILE	A	157	-9.150	-9.555	21.408	1.00	32.91	C
[1099]	ATOM	1047	N	ASP	A	158	-12.040	-13.288	21.603	1.00	34.05	N
[1100]	ATOM	1048	CA	ASP	A	158	-13.141	-13.435	22.580	1.00	34.44	C
[1101]	ATOM	1049	C	ASP	A	158	-12.677	-12.746	23.879	1.00	34.54	C



[1102]	ATOM	1050	O	ASP	A	158	-11.945	-13.327	24.716	1.00	34.01	O
[1103]	ATOM	1051	CB	ASP	A	158	-13.426	-14.913	22.788	1.00	33.99	C
[1104]	ATOM	1052	CG	ASP	A	158	-14.640	-15.164	23.656	1.00	37.22	C
[1105]	ATOM	1053	OD1	ASP	A	158	-14.912	-14.435	24.659	1.00	38.74	O
[1106]	ATOM	1054	OD2	ASP	A	158	-15.344	-16.128	23.329	1.00	36.75	O
[1107]	ATOM	1055	N	PRO	A	159	-13.079	-11.490	24.057	1.00	35.37	N
[1108]	ATOM	1056	CA	PRO	A	159	-12.475	-10.657	25.112	1.00	35.52	C
[1109]	ATOM	1057	C	PRO	A	159	-13.046	-10.881	26.540	1.00	36.41	C
[1110]	ATOM	1058	O	PRO	A	159	-12.647	-10.116	27.480	1.00	37.01	O
[1111]	ATOM	1059	CB	PRO	A	159	-12.814	-9.240	24.656	1.00	35.02	C
[1112]	ATOM	1060	CG	PRO	A	159	-14.123	-9.356	23.969	1.00	34.90	C
[1113]	ATOM	1061	CD	PRO	A	159	-14.150	-10.774	23.341	1.00	35.41	C
[1114]	ATOM	1062	N	ASN	A	160	-13.933	-11.896	26.715	1.00	36.29	N
[1115]	ATOM	1063	CA	ASN	A	160	-14.593	-12.135	27.988	1.00	36.07	C
[1116]	ATOM	1064	C	ASN	A	160	-14.211	-13.444	28.615	1.00	36.23	C
[1117]	ATOM	1065	O	ASN	A	160	-13.968	-14.389	27.928	1.00	36.92	O
[1118]	ATOM	1066	CB	ASN	A	160	-16.082	-12.112	27.753	1.00	36.83	C
[1119]	ATOM	1067	CG	ASN	A	160	-16.600	-10.747	27.318	1.00	37.20	C
[1120]	ATOM	1068	OD1	ASN	A	160	-17.774	-10.571	27.088	1.00	41.78	O
[1121]	ATOM	1069	ND2	ASN	A	160	-15.750	-9.805	27.234	1.00	37.61	N
[1122]	ATOM	1070	N	ALA	A	161	-14.148	-13.544	29.932	1.00	36.65	N
[1123]	ATOM	1071	CA	ALA	A	161	-13.881	-14.827	30.565	1.00	36.83	C
[1124]	ATOM	1072	C	ALA	A	161	-14.913	-15.803	30.070	1.00	37.95	C
[1125]	ATOM	1073	O	ALA	A	161	-15.919	-15.375	29.541	1.00	37.50	O
[1126]	ATOM	1074	CB	ALA	A	161	-14.006	-14.672	32.005	1.00	35.82	C
[1127]	ATOM	1075	N	LYS	A	162	-14.695	-17.105	30.245	1.00	39.40	N
[1128]	ATOM	1076	CA	LYS	A	162	-15.778	-18.071	30.006	1.00	40.78	C
[1129]	ATOM	1077	C	LYS	A	162	-16.830	-17.914	31.037	1.00	41.64	C
[1130]	ATOM	1078	O	LYS	A	162	-16.512	-17.966	32.248	1.00	41.72	O
[1131]	ATOM	1079	CB	LYS	A	162	-15.301	-19.491	30.158	1.00	41.28	C
[1132]	ATOM	1080	CG	LYS	A	162	-14.795	-20.182	28.919	1.00	43.20	C
[1133]	ATOM	1081	CD	LYS	A	162	-14.735	-21.676	29.172	1.00	42.33	C
[1134]	ATOM	1082	CE	LYS	A	162	-14.377	-22.388	27.911	1.00	41.57	C
[1135]	ATOM	1083	NZ	LYS	A	162	-15.522	-22.222	27.017	1.00	40.89	N
[1136]	ATOM	1084	N	GLY	A	163	-18.077	-17.762	30.583	1.00	42.57	N
[1137]	ATOM	1085	CA	GLY	A	163	-19.259	-17.785	31.470	1.00	44.07	C

[1138]	ATOM	1086	C	GLY	A	163	-19.506	-19.142	32.109	1.00	45.08	C
[1139]	ATOM	1087	O	GLY	A	163	-18.877	-20.126	31.784	1.00	44.62	O
[1140]	ATOM	1088	N	TRP	A	164	-20.419	-19.202	33.053	1.00	46.72	N
[1141]	ATOM	1089	CA	TRP	A	164	-20.670	-20.461	33.710	1.00	47.54	C
[1142]	ATOM	1090	C	TRP	A	164	-21.462	-21.390	32.772	1.00	48.23	C
[1143]	ATOM	1091	O	TRP	A	164	-21.228	-22.576	32.734	1.00	48.27	O
[1144]	ATOM	1092	CB	TRP	A	164	-21.324	-20.274	35.069	1.00	47.40	C
[1145]	ATOM	1093	CG	TRP	A	164	-22.526	-19.433	35.023	1.00	47.65	C
[1146]	ATOM	1094	CD1	TRP	A	164	-22.564	-18.075	35.129	1.00	46.38	C
[1147]	ATOM	1095	CD2	TRP	A	164	-23.877	-19.869	34.846	1.00	45.71	C
[1148]	ATOM	1096	NE1	TRP	A	164	-23.842	-17.650	35.036	1.00	44.77	N
[1149]	ATOM	1097	CE2	TRP	A	164	-24.672	-18.726	34.863	1.00	44.82	C
[1150]	ATOM	1098	CE3	TRP	A	164	-24.485	-21.116	34.681	1.00	46.54	C
[1151]	ATOM	1099	CZ2	TRP	A	164	-26.052	-18.779	34.707	1.00	46.91	C
[1152]	ATOM	1100	CZ3	TRP	A	164	-25.838	-21.180	34.511	1.00	47.66	C
[1153]	ATOM	1101	CH2	TRP	A	164	-26.620	-20.021	34.527	1.00	47.71	C
[1154]	ATOM	1102	N	MET	A	165	-22.349	-20.869	31.965	1.00	48.97	N
[1155]	ATOM	1103	CA	MET	A	165	-22.957	-21.761	31.011	1.00	51.12	C
[1156]	ATOM	1104	C	MET	A	165	-21.958	-22.402	30.021	1.00	50.03	C
[1157]	ATOM	1105	O	MET	A	165	-22.063	-23.565	29.713	1.00	49.81	O
[1158]	ATOM	1106	CB	MET	A	165	-24.045	-21.023	30.283	1.00	50.94	C
[1159]	ATOM	1107	CG	MET	A	165	-25.234	-20.834	31.129	1.00	53.77	C
[1160]	ATOM	1108	SD	MET	A	165	-26.521	-20.141	30.175	1.00	59.15	S
[1161]	ATOM	1109	CE	MET	A	165	-27.081	-21.579	29.083	1.00	59.45	C
[1162]	ATOM	1110	N	ASP	A	166	-21.007	-21.618	29.523	1.00	49.62	N
[1163]	ATOM	1111	CA	ASP	A	166	-19.983	-22.096	28.622	1.00	48.93	C
[1164]	ATOM	1112	C	ASP	A	166	-19.108	-23.180	29.275	1.00	47.26	C
[1165]	ATOM	1113	O	ASP	A	166	-18.801	-24.179	28.679	1.00	46.27	O
[1166]	ATOM	1114	CB	ASP	A	166	-19.068	-20.945	28.191	1.00	50.62	C
[1167]	ATOM	1115	CG	ASP	A	166	-19.782	-19.845	27.419	1.00	54.56	C
[1168]	ATOM	1116	OD1	ASP	A	166	-20.806	-20.170	26.778	1.00	57.73	O
[1169]	ATOM	1117	OD2	ASP	A	166	-19.289	-18.669	27.446	1.00	58.43	O
[1170]	ATOM	1118	N	TRP	A	167	-18.683	-22.938	30.502	1.00	45.36	N
[1171]	ATOM	1119	CA	TRP	A	167	-17.941	-23.915	31.312	1.00	43.68	C
[1172]	ATOM	1120	C	TRP	A	167	-18.611	-25.267	31.444	1.00	43.07	C
[1173]	ATOM	1121	O	TRP	A	167	-17.997	-26.284	31.225	1.00	42.91	O

[1174]	ATOM	1122	CB	TRP	A	167	-17.647	-23.377	32.731	1.00	42.87	C
[1175]	ATOM	1123	CG	TRP	A	167	-16.272	-22.683	32.874	1.00	42.49	C
[1176]	ATOM	1124	CD1	TRP	A	167	-16.030	-21.409	33.334	1.00	41.20	C
[1177]	ATOM	1125	CD2	TRP	A	167	-14.993	-23.221	32.529	1.00	41.61	C
[1178]	ATOM	1126	NE1	TRP	A	167	-14.693	-21.140	33.303	1.00	39.14	N
[1179]	ATOM	1127	CE2	TRP	A	167	-14.028	-22.232	32.817	1.00	40.75	C
[1180]	ATOM	1128	CE3	TRP	A	167	-14.558	-24.450	31.998	1.00	42.42	C
[1181]	ATOM	1129	CZ2	TRP	A	167	-12.658	-22.426	32.580	1.00	39.95	C
[1182]	ATOM	1130	CZ3	TRP	A	167	-13.169	-24.628	31.756	1.00	40.37	C
[1183]	ATOM	1131	CH2	TRP	A	167	-12.259	-23.614	32.056	1.00	40.33	C
[1184]	ATOM	1132	N	ALA	A	168	-19.876	-25.281	31.852	1.00	42.24	N
[1185]	ATOM	1133	CA	ALA	A	168	-20.672	-26.500	31.919	1.00	40.07	C
[1186]	ATOM	1134	C	ALA	A	168	-20.802	-27.125	30.533	1.00	39.99	C
[1187]	ATOM	1135	O	ALA	A	168	-20.670	-28.289	30.385	1.00	40.05	O
[1188]	ATOM	1136	CB	ALA	A	168	-21.924	-26.176	32.423	1.00	40.08	C
[1189]	ATOM	1137	N	ALA	A	169	-21.022	-26.337	29.495	1.00	39.44	N
[1190]	ATOM	1138	CA	ALA	A	169	-21.146	-26.892	28.186	1.00	39.02	C
[1191]	ATOM	1139	C	ALA	A	169	-19.800	-27.495	27.807	1.00	38.88	C
[1192]	ATOM	1140	O	ALA	A	169	-19.744	-28.590	27.250	1.00	39.48	O
[1193]	ATOM	1141	CB	ALA	A	169	-21.602	-25.781	27.162	1.00	38.79	C
[1194]	ATOM	1142	N	HIS	A	170	-18.725	-26.758	28.094	1.00	38.51	N
[1195]	ATOM	1143	CA	HIS	A	170	-17.332	-27.132	27.771	1.00	37.07	C
[1196]	ATOM	1144	C	HIS	A	170	-17.006	-28.482	28.439	1.00	36.91	C
[1197]	ATOM	1145	O	HIS	A	170	-16.584	-29.391	27.763	1.00	37.16	O
[1198]	ATOM	1146	CB	HIS	A	170	-16.391	-25.996	28.199	1.00	36.29	C
[1199]	ATOM	1147	CG	HIS	A	170	-14.948	-26.280	28.021	1.00	35.22	C
[1200]	ATOM	1148	ND1	HIS	A	170	-14.185	-26.863	29.007	1.00	36.27	N
[1201]	ATOM	1149	CD2	HIS	A	170	-14.110	-26.039	26.982	1.00	35.52	C
[1202]	ATOM	1150	CE1	HIS	A	170	-12.937	-26.998	28.582	1.00	35.45	C
[1203]	ATOM	1151	NE2	HIS	A	170	-12.866	-26.503	27.353	1.00	37.31	N
[1204]	ATOM	1152	N	LYS	A	171	-17.297	-28.650	29.720	1.00	36.70	N
[1205]	ATOM	1153	CA	LYS	A	171	-16.974	-29.894	30.444	1.00	37.24	C
[1206]	ATOM	1154	C	LYS	A	171	-17.780	-31.095	29.982	1.00	37.76	C
[1207]	ATOM	1155	O	LYS	A	171	-17.216	-32.193	29.764	1.00	38.77	O
[1208]	ATOM	1156	CB	LYS	A	171	-17.171	-29.727	31.939	1.00	37.58	C
[1209]	ATOM	1157	CG	LYS	A	171	-16.484	-28.481	32.432	1.00	39.73	C

[1210]	ATOM	1158	CD	LYS	A	171	-16.207	-28.428	33.880	1.00	42.01	C
[1211]	ATOM	1159	CE	LYS	A	171	-14.691	-28.143	33.931	1.00	44.65	C
[1212]	ATOM	1160	NZ	LYS	A	171	-14.127	-27.592	35.175	1.00	45.36	N
[1213]	ATOM	1161	N	LEU	A	172	-19.094	-30.896	29.827	1.00	37.47	N
[1214]	ATOM	1162	CA	LEU	A	172	-19.974	-31.769	29.072	1.00	37.24	C
[1215]	ATOM	1163	C	LEU	A	172	-19.267	-32.245	27.811	1.00	37.68	C
[1216]	ATOM	1164	O	LEU	A	172	-18.929	-33.422	27.794	1.00	38.75	O
[1217]	ATOM	1165	CB	LEU	A	172	-21.227	-30.997	28.728	1.00	37.25	C
[1218]	ATOM	1166	CG	LEU	A	172	-22.634	-31.652	28.618	1.00	38.17	C
[1219]	ATOM	1167	CD1	LEU	A	172	-22.571	-32.579	27.451	1.00	36.27	C
[1220]	ATOM	1168	CD2	LEU	A	172	-22.923	-32.563	29.760	1.00	37.84	C
[1221]	ATOM	1169	N	THR	A	173	-18.981	-31.372	26.812	1.00	37.91	N
[1222]	ATOM	1170	CA	THR	A	173	-18.303	-31.804	25.536	1.00	38.76	C
[1223]	ATOM	1171	C	THR	A	173	-17.032	-32.595	25.842	1.00	39.37	C
[1224]	ATOM	1172	O	THR	A	173	-16.762	-33.629	25.212	1.00	40.16	O
[1225]	ATOM	1173	CB	THR	A	173	-17.866	-30.633	24.622	1.00	38.78	C
[1226]	ATOM	1174	OG1	THR	A	173	-18.944	-29.718	24.450	1.00	42.04	O
[1227]	ATOM	1175	CG2	THR	A	173	-17.407	-31.108	23.285	1.00	37.39	C
[1228]	ATOM	1176	N	GLY	A	174	-16.272	-32.120	26.825	1.00	38.81	N
[1229]	ATOM	1177	CA	GLY	A	174	-15.050	-32.736	27.201	1.00	39.45	C
[1230]	ATOM	1178	C	GLY	A	174	-15.085	-34.195	27.580	1.00	40.31	C
[1231]	ATOM	1179	O	GLY	A	174	-14.013	-34.827	27.557	1.00	40.17	O
[1232]	ATOM	1180	N	LEU	A	175	-16.279	-34.721	27.911	1.00	40.45	N
[1233]	ATOM	1181	CA	LEU	A	175	-16.494	-36.138	28.250	1.00	40.22	C
[1234]	ATOM	1182	C	LEU	A	175	-16.581	-37.030	27.014	1.00	40.61	C
[1235]	ATOM	1183	O	LEU	A	175	-16.751	-38.227	27.115	1.00	41.32	O
[1236]	ATOM	1184	CB	LEU	A	175	-17.797	-36.311	29.044	1.00	39.98	C
[1237]	ATOM	1185	CG	LEU	A	175	-17.939	-35.729	30.440	1.00	39.15	C
[1238]	ATOM	1186	CD1	LEU	A	175	-19.351	-35.716	30.900	1.00	36.69	C
[1239]	ATOM	1187	CD2	LEU	A	175	-17.055	-36.448	31.434	1.00	37.29	C
[1240]	ATOM	1188	N	THR	A	176	-16.472	-36.454	25.833	1.00	40.34	N
[1241]	ATOM	1189	CA	THR	A	176	-16.722	-37.158	24.630	1.00	40.27	C
[1242]	ATOM	1190	C	THR	A	176	-15.755	-36.720	23.538	1.00	41.44	C
[1243]	ATOM	1191	O	THR	A	176	-15.611	-37.417	22.529	1.00	42.60	O
[1244]	ATOM	1192	CB	THR	A	176	-18.180	-36.929	24.292	1.00	40.86	C
[1245]	ATOM	1193	OG1	THR	A	176	-18.893	-38.029	24.856	1.00	41.98	O

[1246]	ATOM	1194	CG2	THR	A	176	-18.492	-36.744	22.756	1.00	39.59	C
[1247]	ATOM	1195	N	SER	A	177	-15.086	-35.565	23.708	1.00	40.84	N
[1248]	ATOM	1196	CA	SER	A	177	-14.051	-35.144	22.750	1.00	39.80	C
[1249]	ATOM	1197	C	SER	A	177	-12.668	-35.202	23.360	1.00	39.39	C
[1250]	ATOM	1198	O	SER	A	177	-12.477	-34.833	24.521	1.00	39.23	O
[1251]	ATOM	1199	CB	SER	A	177	-14.303	-33.747	22.240	1.00	40.65	C
[1252]	ATOM	1200	OG	SER	A	177	-15.053	-33.751	21.043	1.00	41.17	O
[1253]	ATOM	1201	N	SER	A	178	-11.704	-35.709	22.608	1.00	38.57	N
[1254]	ATOM	1202	CA	SER	A	178	-10.370	-35.741	23.111	1.00	38.36	C
[1255]	ATOM	1203	C	SER	A	178	-9.975	-34.290	23.138	1.00	39.19	C
[1256]	ATOM	1204	O	SER	A	178	-10.648	-33.406	22.567	1.00	39.45	O
[1257]	ATOM	1205	CB	SER	A	178	-9.456	-36.430	22.130	1.00	38.71	C
[1258]	ATOM	1206	OG	SER	A	178	-9.369	-35.686	20.899	1.00	39.82	O
[1259]	ATOM	1207	N	ILE	A	179	-8.842	-34.014	23.748	1.00	38.98	N
[1260]	ATOM	1208	CA	ILE	A	179	-8.381	-32.653	23.776	1.00	37.99	C
[1261]	ATOM	1209	C	ILE	A	179	-8.009	-32.095	22.370	1.00	36.76	C
[1262]	ATOM	1210	O	ILE	A	179	-8.424	-31.014	22.015	1.00	36.98	O
[1263]	ATOM	1211	CB	ILE	A	179	-7.349	-32.530	24.821	1.00	38.15	C
[1264]	ATOM	1212	CG1	ILE	A	179	-8.126	-32.429	26.131	1.00	36.72	C
[1265]	ATOM	1213	CG2	ILE	A	179	-6.393	-31.348	24.491	1.00	38.73	C
[1266]	ATOM	1214	CD1	ILE	A	179	-7.280	-32.562	27.389	1.00	38.85	C
[1267]	ATOM	1215	N	PRO	A	180	-7.242	-32.843	21.577	1.00	35.07	N
[1268]	ATOM	1216	CA	PRO	A	180	-7.081	-32.382	20.229	1.00	33.97	C
[1269]	ATOM	1217	C	PRO	A	180	-8.441	-32.067	19.572	1.00	34.79	C
[1270]	ATOM	1218	O	PRO	A	180	-8.572	-31.031	18.867	1.00	36.17	O
[1271]	ATOM	1219	CB	PRO	A	180	-6.458	-33.582	19.541	1.00	33.27	C
[1272]	ATOM	1220	CG	PRO	A	180	-5.693	-34.258	20.649	1.00	33.83	C
[1273]	ATOM	1221	CD	PRO	A	180	-6.471	-34.069	21.864	1.00	34.31	C
[1274]	ATOM	1222	N	GLU	A	181	-9.451	-32.924	19.767	1.00	33.84	N
[1275]	ATOM	1223	CA	GLU	A	181	-10.726	-32.649	19.142	1.00	32.81	C
[1276]	ATOM	1224	C	GLU	A	181	-11.204	-31.315	19.644	1.00	32.03	C
[1277]	ATOM	1225	O	GLU	A	181	-11.641	-30.445	18.875	1.00	32.43	O
[1278]	ATOM	1226	CB	GLU	A	181	-11.739	-33.792	19.350	1.00	33.02	C
[1279]	ATOM	1227	CG	GLU	A	181	-11.543	-35.088	18.354	1.00	35.44	C
[1280]	ATOM	1228	CD	GLU	A	181	-11.159	-34.718	16.861	1.00	42.56	C
[1281]	ATOM	1229	OE1	GLU	A	181	-10.379	-35.345	16.057	1.00	42.03	O

[1282]	ATOM	1230	OE2	GLU	A	181	-11.644	-33.687	16.452	1.00	43.02	O
[1283]	ATOM	1231	N	MET	A	182	-11.020	-31.079	20.917	1.00	31.47	N
[1284]	ATOM	1232	CA	MET	A	182	-11.495	-29.785	21.446	1.00	32.87	C
[1285]	ATOM	1233	C	MET	A	182	-10.733	-28.542	20.975	1.00	32.29	C
[1286]	ATOM	1234	O	MET	A	182	-11.329	-27.472	20.798	1.00	32.81	O
[1287]	ATOM	1235	CB	MET	A	182	-11.524	-29.797	22.947	1.00	32.37	C
[1288]	ATOM	1236	CG	MET	A	182	-12.457	-30.843	23.386	1.00	34.40	C
[1289]	ATOM	1237	SD	MET	A	182	-13.230	-30.526	24.925	1.00	39.87	S
[1290]	ATOM	1238	CE	MET	A	182	-14.470	-29.612	24.199	1.00	36.50	C
[1291]	ATOM	1239	N	ILE	A	183	-9.413	-28.677	20.807	1.00	31.59	N
[1292]	ATOM	1240	CA	ILE	A	183	-8.626	-27.626	20.287	1.00	29.71	C
[1293]	ATOM	1241	C	ILE	A	183	-9.039	-27.374	18.846	1.00	30.70	C
[1294]	ATOM	1242	O	ILE	A	183	-9.312	-26.193	18.478	1.00	30.36	O
[1295]	ATOM	1243	CB	ILE	A	183	-7.162	-27.883	20.472	1.00	29.47	C
[1296]	ATOM	1244	CG1	ILE	A	183	-6.805	-27.704	21.959	1.00	28.87	C
[1297]	ATOM	1245	CG2	ILE	A	183	-6.334	-26.877	19.605	1.00	27.20	C
[1298]	ATOM	1246	CD1	ILE	A	183	-5.412	-28.290	22.311	1.00	23.75	C
[1299]	ATOM	1247	N	LEU	A	184	-9.153	-28.442	18.037	1.00	30.18	N
[1300]	ATOM	1248	CA	LEU	A	184	-9.703	-28.244	16.712	1.00	30.87	C
[1301]	ATOM	1249	C	LEU	A	184	-11.050	-27.461	16.708	1.00	31.53	C
[1302]	ATOM	1250	O	LEU	A	184	-11.332	-26.664	15.797	1.00	31.36	O
[1303]	ATOM	1251	CB	LEU	A	184	-9.822	-29.546	15.960	1.00	31.00	C
[1304]	ATOM	1252	CG	LEU	A	184	-8.398	-29.993	15.624	1.00	33.16	C
[1305]	ATOM	1253	CD1	LEU	A	184	-8.217	-31.568	15.763	1.00	34.44	C
[1306]	ATOM	1254	CD2	LEU	A	184	-8.008	-29.458	14.246	1.00	27.98	C
[1307]	ATOM	1255	N	GLY	A	185	-11.874	-27.663	17.741	1.00	31.69	N
[1308]	ATOM	1256	CA	GLY	A	185	-13.188	-27.044	17.743	1.00	32.23	C
[1309]	ATOM	1257	C	GLY	A	185	-13.085	-25.577	18.057	1.00	33.12	C
[1310]	ATOM	1258	O	GLY	A	185	-14.030	-24.819	17.883	1.00	33.70	O
[1311]	ATOM	1259	N	HIS	A	186	-11.915	-25.173	18.528	1.00	33.29	N
[1312]	ATOM	1260	CA	HIS	A	186	-11.639	-23.798	18.857	1.00	32.48	C
[1313]	ATOM	1261	C	HIS	A	186	-11.137	-23.146	17.605	1.00	32.86	C
[1314]	ATOM	1262	O	HIS	A	186	-11.370	-21.996	17.400	1.00	33.84	O
[1315]	ATOM	1263	CB	HIS	A	186	-10.546	-23.758	19.910	1.00	32.47	C
[1316]	ATOM	1264	CG	HIS	A	186	-9.897	-22.428	20.039	1.00	31.52	C
[1317]	ATOM	1265	ND1	HIS	A	186	-10.545	-21.315	20.548	1.00	33.53	N

[1318]	ATOM	1266	CD2	HIS	A	186	-8.658	-22.013	19.699	1.00	28.87	C
[1319]	ATOM	1267	CE1	HIS	A	186	-9.720	-20.280	20.534	1.00	28.83	C
[1320]	ATOM	1268	NE2	HIS	A	186	-8.580	-20.669	20.002	1.00	27.08	N
[1321]	ATOM	1269	N	LEU	A	187	-10.473	-23.875	16.738	1.00	32.71	N
[1322]	ATOM	1270	CA	LEU	A	187	-9.791	-23.250	15.655	1.00	33.05	C
[1323]	ATOM	1271	C	LEU	A	187	-10.683	-23.235	14.493	1.00	35.04	C
[1324]	ATOM	1272	O	LEU	A	187	-10.611	-22.296	13.729	1.00	36.15	O
[1325]	ATOM	1273	CB	LEU	A	187	-8.545	-24.062	15.253	1.00	32.55	C
[1326]	ATOM	1274	CG	LEU	A	187	-7.450	-24.169	16.279	1.00	30.67	C
[1327]	ATOM	1275	CD1	LEU	A	187	-6.388	-25.029	15.800	1.00	26.86	C
[1328]	ATOM	1276	CD2	LEU	A	187	-6.924	-22.773	16.603	1.00	28.01	C
[1329]	ATOM	1277	N	PHE	A	188	-11.467	-24.318	14.300	1.00	36.63	N
[1330]	ATOM	1278	CA	PHE	A	188	-12.308	-24.552	13.080	1.00	37.08	C
[1331]	ATOM	1279	C	PHE	A	188	-13.774	-24.786	13.408	1.00	38.74	C
[1332]	ATOM	1280	O	PHE	A	188	-14.104	-25.118	14.540	1.00	39.56	O
[1333]	ATOM	1281	CB	PHE	A	188	-11.813	-25.745	12.368	1.00	35.24	C
[1334]	ATOM	1282	CG	PHE	A	188	-10.459	-25.577	11.853	1.00	34.61	C
[1335]	ATOM	1283	CD1	PHE	A	188	-10.210	-24.801	10.710	1.00	32.04	C
[1336]	ATOM	1284	CD2	PHE	A	188	-9.386	-26.223	12.475	1.00	32.65	C
[1337]	ATOM	1285	CE1	PHE	A	188	-8.897	-24.682	10.192	1.00	30.60	C
[1338]	ATOM	1286	CE2	PHE	A	188	-8.089	-26.129	11.932	1.00	30.90	C
[1339]	ATOM	1287	CZ	PHE	A	188	-7.864	-25.339	10.781	1.00	30.73	C
[1340]	ATOM	1288	N	SER	A	189	-14.660	-24.578	12.445	1.00	40.41	N
[1341]	ATOM	1289	CA	SER	A	189	-16.077	-24.739	12.728	1.00	42.32	C
[1342]	ATOM	1290	C	SER	A	189	-16.422	-26.194	12.526	1.00	43.30	C
[1343]	ATOM	1291	O	SER	A	189	-15.652	-26.972	11.899	1.00	43.33	O
[1344]	ATOM	1292	CB	SER	A	189	-16.919	-23.914	11.805	1.00	42.12	C
[1345]	ATOM	1293	OG	SER	A	189	-16.974	-24.636	10.621	1.00	44.46	O
[1346]	ATOM	1294	N	GLN	A	190	-17.585	-26.570	13.057	1.00	44.52	N
[1347]	ATOM	1295	CA	GLN	A	190	-17.970	-27.994	13.088	1.00	45.52	C
[1348]	ATOM	1296	C	GLN	A	190	-18.194	-28.427	11.626	1.00	45.98	C
[1349]	ATOM	1297	O	GLN	A	190	-17.641	-29.446	11.170	1.00	46.51	O
[1350]	ATOM	1298	CB	GLN	A	190	-19.175	-28.216	14.023	1.00	45.04	C
[1351]	ATOM	1299	CG	GLN	A	190	-19.020	-29.401	15.082	1.00	47.21	C
[1352]	ATOM	1300	CD	GLN	A	190	-17.687	-29.359	15.973	1.00	47.79	C
[1353]	ATOM	1301	OE1	GLN	A	190	-17.499	-28.515	16.839	1.00	48.74	O



[1354]	ATOM	1302	NE2	GLN	A	190	-16.815	-30.296	15.745	1.00	47.52	N
[1355]	ATOM	1303	N	GLU	A	191	-18.879	-27.581	10.872	1.00	46.66	N
[1356]	ATOM	1304	CA	GLU	A	191	-19.076	-27.794	9.450	1.00	48.63	C
[1357]	ATOM	1305	C	GLU	A	191	-17.781	-28.181	8.784	1.00	48.92	C
[1358]	ATOM	1306	O	GLU	A	191	-17.685	-29.239	8.142	1.00	48.81	O
[1359]	ATOM	1307	CB	GLU	A	191	-19.662	-26.527	8.831	1.00	48.50	C
[1360]	ATOM	1308	CG	GLU	A	191	-19.865	-26.567	7.310	1.00	51.84	C
[1361]	ATOM	1309	CD	GLU	A	191	-20.685	-25.356	6.758	1.00	53.83	C
[1362]	ATOM	1310	OE1	GLU	A	191	-21.757	-24.964	7.371	1.00	56.58	O
[1363]	ATOM	1311	OE2	GLU	A	191	-20.247	-24.829	5.692	1.00	55.80	O
[1364]	ATOM	1312	N	GLU	A	192	-16.760	-27.338	8.971	1.00	50.56	N
[1365]	ATOM	1313	CA	GLU	A	192	-15.412	-27.585	8.397	1.00	51.67	C
[1366]	ATOM	1314	C	GLU	A	192	-14.812	-28.911	8.857	1.00	52.37	C
[1367]	ATOM	1315	O	GLU	A	192	-14.067	-29.549	8.111	1.00	52.66	O
[1368]	ATOM	1316	CB	GLU	A	192	-14.421	-26.538	8.820	1.00	51.90	C
[1369]	ATOM	1317	CG	GLU	A	192	-14.777	-25.120	8.621	1.00	54.19	C
[1370]	ATOM	1318	CD	GLU	A	192	-13.576	-24.200	8.915	1.00	55.86	C
[1371]	ATOM	1319	OE1	GLU	A	192	-13.476	-23.656	10.028	1.00	54.67	O
[1372]	ATOM	1320	OE2	GLU	A	192	-12.727	-24.044	8.026	1.00	57.08	O
[1373]	ATOM	1321	N	LEU	A	193	-15.110	-29.298	10.099	1.00	52.56	N
[1374]	ATOM	1322	CA	LEU	A	193	-14.576	-30.528	10.623	1.00	52.83	C
[1375]	ATOM	1323	C	LEU	A	193	-15.109	-31.762	9.893	1.00	53.50	C
[1376]	ATOM	1324	O	LEU	A	193	-14.285	-32.568	9.441	1.00	53.70	O
[1377]	ATOM	1325	CB	LEU	A	193	-14.738	-30.582	12.129	1.00	52.50	C
[1378]	ATOM	1326	CG	LEU	A	193	-13.826	-29.552	12.788	1.00	50.59	C
[1379]	ATOM	1327	CD1	LEU	A	193	-14.104	-29.571	14.237	1.00	48.67	C
[1380]	ATOM	1328	CD2	LEU	A	193	-12.323	-29.796	12.573	1.00	48.21	C
[1381]	ATOM	1329	N	SER	A	194	-16.438	-31.887	9.720	1.00	53.78	N
[1382]	ATOM	1330	CA	SER	A	194	-16.973	-32.993	8.910	1.00	54.45	C
[1383]	ATOM	1331	C	SER	A	194	-16.623	-32.813	7.446	1.00	54.47	C
[1384]	ATOM	1332	O	SER	A	194	-16.212	-33.765	6.794	1.00	54.62	O
[1385]	ATOM	1333	CB	SER	A	194	-18.466	-33.104	9.010	1.00	54.95	C
[1386]	ATOM	1334	OG	SER	A	194	-18.912	-32.221	10.008	1.00	56.75	O
[1387]	ATOM	1335	N	GLY	A	195	-16.783	-31.592	6.923	1.00	54.27	N
[1388]	ATOM	1336	CA	GLY	A	195	-16.291	-31.255	5.587	1.00	53.63	C
[1389]	ATOM	1337	C	GLY	A	195	-15.025	-32.033	5.340	1.00	53.36	C

[1390]	ATOM	1338	O	GLY	A	195	-14.839	-32.607	4.309	1.00	54.03	O
[1391]	ATOM	1339	N	ASN	A	196	-14.160	-32.078	6.329	1.00	53.17	N
[1392]	ATOM	1340	CA	ASN	A	196	-12.910	-32.817	6.244	1.00	53.25	C
[1393]	ATOM	1341	C	ASN	A	196	-12.020	-32.564	5.012	1.00	54.02	C
[1394]	ATOM	1342	O	ASN	A	196	-11.481	-33.548	4.451	1.00	53.61	O
[1395]	ATOM	1343	CB	ASN	A	196	-13.165	-34.316	6.391	1.00	52.80	C
[1396]	ATOM	1344	CG	ASN	A	196	-12.054	-35.029	7.141	1.00	52.61	C
[1397]	ATOM	1345	OD1	ASN	A	196	-11.378	-34.439	7.994	1.00	54.97	O
[1398]	ATOM	1346	ND2	ASN	A	196	-11.871	-36.308	6.842	1.00	47.58	N
[1399]	ATOM	1347	N	SER	A	197	-11.840	-31.281	4.636	1.00	54.87	N
[1400]	ATOM	1348	CA	SER	A	197	-11.004	-30.864	3.503	1.00	56.19	C
[1401]	ATOM	1349	C	SER	A	197	-9.529	-31.284	3.691	1.00	56.80	C
[1402]	ATOM	1350	O	SER	A	197	-9.162	-31.907	4.686	1.00	57.22	O
[1403]	ATOM	1351	CB	SER	A	197	-11.122	-29.346	3.312	1.00	56.40	C
[1404]	ATOM	1352	OG	SER	A	197	-10.485	-28.636	4.379	1.00	58.85	O
[1405]	ATOM	1353	N	GLU	A	198	-8.673	-30.974	2.735	1.00	57.59	N
[1406]	ATOM	1354	CA	GLU	A	198	-7.285	-31.406	2.858	1.00	58.71	C
[1407]	ATOM	1355	C	GLU	A	198	-6.574	-30.718	4.040	1.00	57.35	C
[1408]	ATOM	1356	O	GLU	A	198	-5.727	-31.329	4.715	1.00	57.22	O
[1409]	ATOM	1357	CB	GLU	A	198	-6.536	-31.124	1.562	1.00	59.74	C
[1410]	ATOM	1358	CG	GLU	A	198	-5.401	-32.098	1.339	1.00	66.21	C
[1411]	ATOM	1359	CD	GLU	A	198	-5.569	-32.872	-0.004	1.00	74.42	C
[1412]	ATOM	1360	OE1	GLU	A	198	-6.052	-32.221	-1.002	1.00	75.05	O
[1413]	ATOM	1361	OE2	GLU	A	198	-5.227	-34.111	-0.041	1.00	75.64	O
[1414]	ATOM	1362	N	LEU	A	199	-6.919	-29.442	4.245	1.00	55.52	N
[1415]	ATOM	1363	CA	LEU	A	199	-6.382	-28.599	5.285	1.00	53.21	C
[1416]	ATOM	1364	C	LEU	A	199	-6.851	-29.119	6.644	1.00	51.92	C
[1417]	ATOM	1365	O	LEU	A	199	-6.061	-29.315	7.556	1.00	51.76	O
[1418]	ATOM	1366	CB	LEU	A	199	-6.939	-27.199	5.067	1.00	53.74	C
[1419]	ATOM	1367	CG	LEU	A	199	-6.382	-26.045	5.874	1.00	53.56	C
[1420]	ATOM	1368	CD1	LEU	A	199	-5.112	-25.544	5.168	1.00	53.77	C
[1421]	ATOM	1369	CD2	LEU	A	199	-7.423	-25.011	5.949	1.00	52.72	C
[1422]	ATOM	1370	N	ILE	A	200	-8.146	-29.358	6.795	1.00	49.43	N
[1423]	ATOM	1371	CA	ILE	A	200	-8.624	-29.913	8.041	1.00	47.17	C
[1424]	ATOM	1372	C	ILE	A	200	-7.878	-31.195	8.368	1.00	46.19	C
[1425]	ATOM	1373	O	ILE	A	200	-7.533	-31.430	9.489	1.00	46.20	O

[1426]	ATOM	1374	CB	ILE	A	200	-10.116	-30.169	8.004	1.00	47.13	C
[1427]	ATOM	1375	CG1	ILE	A	200	-10.882	-28.875	7.721	1.00	48.07	C
[1428]	ATOM	1376	CG2	ILE	A	200	-10.574	-30.770	9.301	1.00	45.22	C
[1429]	ATOM	1377	CD1	ILE	A	200	-10.820	-27.846	8.848	1.00	46.34	C
[1430]	ATOM	1378	N	GLN	A	201	-7.597	-32.043	7.389	1.00	45.20	N
[1431]	ATOM	1379	CA	GLN	A	201	-6.846	-33.295	7.683	1.00	44.55	C
[1432]	ATOM	1380	C	GLN	A	201	-5.467	-32.997	8.222	1.00	43.45	C
[1433]	ATOM	1381	O	GLN	A	201	-5.025	-33.633	9.187	1.00	42.88	O
[1434]	ATOM	1382	CB	GLN	A	201	-6.713	-34.216	6.452	1.00	44.42	C
[1435]	ATOM	1383	CG	GLN	A	201	-8.010	-35.136	6.113	1.00	45.41	C
[1436]	ATOM	1384	CD	GLN	A	201	-8.164	-35.411	4.539	1.00	45.88	C
[1437]	ATOM	1385	OE1	GLN	A	201	-9.103	-34.855	3.888	1.00	43.75	O
[1438]	ATOM	1386	NE2	GLN	A	201	-7.217	-36.234	3.942	1.00	41.46	N
[1439]	ATOM	1387	N	LYS	A	202	-4.830	-31.986	7.613	1.00	43.13	N
[1440]	ATOM	1388	CA	LYS	A	202	-3.457	-31.598	7.904	1.00	42.49	C
[1441]	ATOM	1389	C	LYS	A	202	-3.428	-31.179	9.354	1.00	41.97	C
[1442]	ATOM	1390	O	LYS	A	202	-2.720	-31.761	10.172	1.00	41.82	O
[1443]	ATOM	1391	CB	LYS	A	202	-3.058	-30.448	6.990	1.00	41.93	C
[1444]	ATOM	1392	CG	LYS	A	202	-1.603	-30.143	7.050	1.00	43.16	C
[1445]	ATOM	1393	CD	LYS	A	202	-1.201	-28.881	6.227	1.00	43.48	C
[1446]	ATOM	1394	CE	LYS	A	202	0.300	-28.700	6.218	1.00	41.31	C
[1447]	ATOM	1395	NZ	LYS	A	202	0.560	-27.352	5.867	1.00	40.79	N
[1448]	ATOM	1396	N	TYR	A	203	-4.277	-30.207	9.673	1.00	40.93	N
[1449]	ATOM	1397	CA	TYR	A	203	-4.374	-29.648	11.006	1.00	39.77	C
[1450]	ATOM	1398	C	TYR	A	203	-4.798	-30.664	12.105	1.00	39.83	C
[1451]	ATOM	1399	O	TYR	A	203	-4.244	-30.690	13.255	1.00	40.21	O
[1452]	ATOM	1400	CB	TYR	A	203	-5.206	-28.329	10.947	1.00	39.15	C
[1453]	ATOM	1401	CG	TYR	A	203	-4.338	-27.212	10.387	1.00	37.67	C
[1454]	ATOM	1402	CD1	TYR	A	203	-4.020	-27.154	9.019	1.00	36.56	C
[1455]	ATOM	1403	CD2	TYR	A	203	-3.708	-26.300	11.253	1.00	35.70	C
[1456]	ATOM	1404	CE1	TYR	A	203	-3.163	-26.212	8.562	1.00	34.88	C
[1457]	ATOM	1405	CE2	TYR	A	203	-2.834	-25.351	10.791	1.00	34.32	C
[1458]	ATOM	1406	CZ	TYR	A	203	-2.582	-25.308	9.471	1.00	34.69	C
[1459]	ATOM	1407	OH	TYR	A	203	-1.738	-24.338	9.061	1.00	34.08	O
[1460]	ATOM	1408	N	ARG	A	204	-5.721	-31.550	11.774	1.00	38.47	N
[1461]	ATOM	1409	CA	ARG	A	204	-6.063	-32.591	12.725	1.00	38.03	C

[1462]	ATOM	1410	C	ARG	A	204	-4.805	-33.366	13.102	1.00	37.69	C
[1463]	ATOM	1411	O	ARG	A	204	-4.602	-33.812	14.256	1.00	36.25	O
[1464]	ATOM	1412	CB	ARG	A	204	-7.154	-33.530	12.159	1.00	38.32	C
[1465]	ATOM	1413	CG	ARG	A	204	-7.320	-34.837	13.020	1.00	37.56	C
[1466]	ATOM	1414	CD	ARG	A	204	-8.751	-35.282	13.270	1.00	37.23	C
[1467]	ATOM	1415	NE	ARG	A	204	-9.668	-34.937	12.170	1.00	40.48	N
[1468]	ATOM	1416	CZ	ARG	A	204	-10.825	-34.269	12.304	1.00	42.28	C
[1469]	ATOM	1417	NH1	ARG	A	204	-11.251	-33.869	13.461	1.00	37.12	N
[1470]	ATOM	1418	NH2	ARG	A	204	-11.603	-33.991	11.284	1.00	40.66	N
[1471]	ATOM	1419	N	ASN	A	205	-3.960	-33.508	12.084	1.00	37.56	N
[1472]	ATOM	1420	CA	ASN	A	205	-2.693	-34.226	12.222	1.00	38.04	C
[1473]	ATOM	1421	C	ASN	A	205	-1.590	-33.433	12.995	1.00	37.70	C
[1474]	ATOM	1422	O	ASN	A	205	-1.015	-33.944	13.977	1.00	37.53	O
[1475]	ATOM	1423	CB	ASN	A	205	-2.214	-34.653	10.836	1.00	38.56	C
[1476]	ATOM	1424	CG	ASN	A	205	-0.857	-35.501	10.847	1.00	42.75	C
[1477]	ATOM	1425	OD1	ASN	A	205	0.032	-35.392	11.724	1.00	42.78	O
[1478]	ATOM	1426	ND2	ASN	A	205	-0.772	-36.411	9.868	1.00	42.30	N
[1479]	ATOM	1427	N	ILE	A	206	-1.299	-32.206	12.577	1.00	37.41	N
[1480]	ATOM	1428	CA	ILE	A	206	-0.382	-31.390	13.322	1.00	37.03	C
[1481]	ATOM	1429	C	ILE	A	206	-0.808	-31.431	14.813	1.00	38.50	C
[1482]	ATOM	1430	O	ILE	A	206	0.059	-31.558	15.707	1.00	40.24	O
[1483]	ATOM	1431	CB	ILE	A	206	-0.432	-29.942	12.841	1.00	37.69	C
[1484]	ATOM	1432	CG1	ILE	A	206	0.214	-29.758	11.472	1.00	37.45	C
[1485]	ATOM	1433	CG2	ILE	A	206	0.181	-28.964	13.850	1.00	36.64	C
[1486]	ATOM	1434	CD1	ILE	A	206	-0.115	-28.384	10.822	1.00	35.43	C
[1487]	ATOM	1435	N	ILE	A	207	-2.116	-31.334	15.115	1.00	37.61	N
[1488]	ATOM	1436	CA	ILE	A	207	-2.503	-31.145	16.489	1.00	36.45	C
[1489]	ATOM	1437	C	ILE	A	207	-2.522	-32.446	17.237	1.00	37.32	C
[1490]	ATOM	1438	O	ILE	A	207	-1.943	-32.541	18.335	1.00	37.70	O
[1491]	ATOM	1439	CB	ILE	A	207	-3.821	-30.381	16.628	1.00	36.60	C
[1492]	ATOM	1440	CG1	ILE	A	207	-3.595	-28.935	16.208	1.00	35.55	C
[1493]	ATOM	1441	CG2	ILE	A	207	-4.276	-30.333	18.100	1.00	34.40	C
[1494]	ATOM	1442	CD1	ILE	A	207	-4.767	-28.109	16.235	1.00	32.77	C
[1495]	ATOM	1443	N	THR	A	208	-3.172	-33.465	16.656	1.00	37.38	N
[1496]	ATOM	1444	CA	THR	A	208	-3.279	-34.782	17.327	1.00	36.08	C
[1497]	ATOM	1445	C	THR	A	208	-1.922	-35.488	17.509	1.00	35.98	C

[1498]	ATOM	1446	O	THR	A	208	-1.708	-36.154	18.501	1.00	35.08	O
[1499]	ATOM	1447	CB	THR	A	208	-4.218	-35.691	16.597	1.00	36.25	C
[1500]	ATOM	1448	OG1	THR	A	208	-5.490	-35.037	16.460	1.00	35.70	O
[1501]	ATOM	1449	CG2	THR	A	208	-4.394	-36.942	17.397	1.00	34.31	C
[1502]	ATOM	1450	N	HIS	A	209	-0.987	-35.303	16.586	1.00	36.26	N
[1503]	ATOM	1451	CA	HIS	A	209	0.259	-36.017	16.752	1.00	37.62	C
[1504]	ATOM	1452	C	HIS	A	209	1.384	-35.111	17.166	1.00	38.26	C
[1505]	ATOM	1453	O	HIS	A	209	2.526	-35.518	17.150	1.00	38.52	O
[1506]	ATOM	1454	CB	HIS	A	209	0.603	-36.868	15.505	1.00	37.65	C
[1507]	ATOM	1455	CG	HIS	A	209	-0.490	-37.846	15.140	1.00	40.79	C
[1508]	ATOM	1456	ND1	HIS	A	209	-0.523	-38.567	13.975	1.00	43.26	N
[1509]	ATOM	1457	CD2	HIS	A	209	-1.663	-38.146	15.747	1.00	40.64	C
[1510]	ATOM	1458	CE1	HIS	A	209	-1.634	-39.299	13.895	1.00	41.89	C
[1511]	ATOM	1459	NE2	HIS	A	209	-2.353	-39.045	14.959	1.00	42.41	N
[1512]	ATOM	1460	N	ALA	A	210	1.066	-33.877	17.544	1.00	39.15	N
[1513]	ATOM	1461	CA	ALA	A	210	2.094	-32.908	17.938	1.00	39.73	C
[1514]	ATOM	1462	C	ALA	A	210	2.944	-33.534	19.022	1.00	39.73	C
[1515]	ATOM	1463	O	ALA	A	210	2.355	-34.002	19.977	1.00	40.21	O
[1516]	ATOM	1464	CB	ALA	A	210	1.417	-31.618	18.484	1.00	40.13	C
[1517]	ATOM	1465	N	PRO	A	211	4.311	-33.566	18.855	1.00	39.72	N
[1518]	ATOM	1466	CA	PRO	A	211	5.261	-34.055	19.909	1.00	38.57	C
[1519]	ATOM	1467	C	PRO	A	211	5.099	-33.219	21.149	1.00	37.87	C
[1520]	ATOM	1468	O	PRO	A	211	5.436	-33.649	22.254	1.00	38.39	O
[1521]	ATOM	1469	CB	PRO	A	211	6.645	-33.779	19.332	1.00	38.52	C
[1522]	ATOM	1470	CG	PRO	A	211	6.406	-32.885	18.081	1.00	39.67	C
[1523]	ATOM	1471	CD	PRO	A	211	5.007	-33.169	17.608	1.00	39.31	C
[1524]	ATOM	1472	N	ASN	A	212	4.581	-31.998	20.976	1.00	36.43	N
[1525]	ATOM	1473	CA	ASN	A	212	4.516	-31.060	22.135	1.00	34.90	C
[1526]	ATOM	1474	C	ASN	A	212	3.078	-30.922	22.647	1.00	34.34	C
[1527]	ATOM	1475	O	ASN	A	212	2.685	-29.900	23.285	1.00	33.42	O
[1528]	ATOM	1476	CB	ASN	A	212	5.174	-29.678	21.841	1.00	33.92	C
[1529]	ATOM	1477	CG	ASN	A	212	4.424	-28.900	20.893	1.00	32.87	C
[1530]	ATOM	1478	OD1	ASN	A	212	3.839	-29.479	20.064	1.00	34.39	O
[1531]	ATOM	1479	ND2	ASN	A	212	4.414	-27.594	20.995	1.00	34.97	N
[1532]	ATOM	1480	N	LEU	A	213	2.296	-31.957	22.380	1.00	33.92	N
[1533]	ATOM	1481	CA	LEU	A	213	0.924	-31.865	22.691	1.00	34.24	C

[1534]	ATOM	1482	C	LEU	A	213	0.709	-31.510	24.110	1.00	34.71	C
[1535]	ATOM	1483	O	LEU	A	213	-0.187	-30.759	24.378	1.00	36.36	O
[1536]	ATOM	1484	CB	LEU	A	213	0.195	-33.118	22.354	1.00	33.68	C
[1537]	ATOM	1485	CG	LEU	A	213	-1.287	-33.107	22.768	1.00	35.19	C
[1538]	ATOM	1486	CD1	LEU	A	213	-2.116	-32.172	21.932	1.00	36.22	C
[1539]	ATOM	1487	CD2	LEU	A	213	-1.917	-34.490	22.700	1.00	34.96	C
[1540]	ATOM	1488	N	ASP	A	214	1.497	-32.001	25.041	1.00	35.04	N
[1541]	ATOM	1489	CA	ASP	A	214	1.230	-31.599	26.436	1.00	35.67	C
[1542]	ATOM	1490	C	ASP	A	214	1.461	-30.100	26.683	1.00	34.88	C
[1543]	ATOM	1491	O	ASP	A	214	0.784	-29.518	27.543	1.00	35.37	O
[1544]	ATOM	1492	CB	ASP	A	214	2.051	-32.393	27.474	1.00	37.02	C
[1545]	ATOM	1493	CG	ASP	A	214	1.848	-33.904	27.380	1.00	40.26	C
[1546]	ATOM	1494	OD1	ASP	A	214	2.796	-34.610	27.773	1.00	45.32	O
[1547]	ATOM	1495	OD2	ASP	A	214	0.797	-34.412	26.913	1.00	44.20	O
[1548]	ATOM	1496	N	ASN	A	215	2.411	-29.498	25.960	1.00	32.88	N
[1549]	ATOM	1497	CA	ASN	A	215	2.644	-28.098	26.058	1.00	31.90	C
[1550]	ATOM	1498	C	ASN	A	215	1.430	-27.323	25.571	1.00	32.00	C
[1551]	ATOM	1499	O	ASN	A	215	1.003	-26.348	26.182	1.00	32.57	O
[1552]	ATOM	1500	CB	ASN	A	215	3.867	-27.701	25.240	1.00	31.54	C
[1553]	ATOM	1501	CG	ASN	A	215	5.203	-28.126	25.895	1.00	32.05	C
[1554]	ATOM	1502	OD1	ASN	A	215	5.315	-28.265	27.041	1.00	33.46	O
[1555]	ATOM	1503	ND2	ASN	A	215	6.165	-28.361	25.144	1.00	29.88	N
[1556]	ATOM	1504	N	ILE	A	216	0.863	-27.777	24.473	1.00	31.67	N
[1557]	ATOM	1505	CA	ILE	A	216	-0.249	-27.088	23.831	1.00	31.16	C
[1558]	ATOM	1506	C	ILE	A	216	-1.404	-27.151	24.772	1.00	31.74	C
[1559]	ATOM	1507	O	ILE	A	216	-2.135	-26.193	24.972	1.00	31.78	O
[1560]	ATOM	1508	CB	ILE	A	216	-0.608	-27.795	22.545	1.00	30.85	C
[1561]	ATOM	1509	CG1	ILE	A	216	0.467	-27.564	21.515	1.00	29.07	C
[1562]	ATOM	1510	CG2	ILE	A	216	-1.979	-27.451	22.115	1.00	30.13	C
[1563]	ATOM	1511	CD1	ILE	A	216	0.073	-28.082	20.274	1.00	28.77	C
[1564]	ATOM	1512	N	GLU	A	217	-1.520	-28.260	25.450	1.00	32.51	N
[1565]	ATOM	1513	CA	GLU	A	217	-2.618	-28.347	26.355	1.00	34.64	C
[1566]	ATOM	1514	C	GLU	A	217	-2.554	-27.296	27.429	1.00	33.63	C
[1567]	ATOM	1515	O	GLU	A	217	-3.583	-26.795	27.821	1.00	35.04	O
[1568]	ATOM	1516	CB	GLU	A	217	-2.793	-29.745	26.907	1.00	33.87	C
[1569]	ATOM	1517	CG	GLU	A	217	-4.099	-29.973	27.616	1.00	37.72	C

[1570]	ATOM	1518	CD	GLU	A	217	-4.127	-31.352	28.354	1.00	42.00	C
[1571]	ATOM	1519	OE1	GLU	A	217	-3.576	-32.352	27.773	1.00	45.35	O
[1572]	ATOM	1520	OE2	GLU	A	217	-4.710	-31.428	29.490	1.00	41.88	O
[1573]	ATOM	1521	N	ASN	A	218	-1.385	-26.921	27.892	1.00	32.44	N
[1574]	ATOM	1522	CA	ASN	A	218	-1.315	-25.955	28.970	1.00	32.13	C
[1575]	ATOM	1523	C	ASN	A	218	-1.783	-24.604	28.507	1.00	31.91	C
[1576]	ATOM	1524	O	ASN	A	218	-2.342	-23.811	29.287	1.00	31.13	O
[1577]	ATOM	1525	CB	ASN	A	218	0.140	-25.752	29.370	1.00	33.30	C
[1578]	ATOM	1526	CG	ASN	A	218	0.669	-26.870	30.279	1.00	33.91	C
[1579]	ATOM	1527	OD1	ASN	A	218	0.119	-27.924	30.330	1.00	32.42	O
[1580]	ATOM	1528	ND2	ASN	A	218	1.714	-26.621	30.977	1.00	33.03	N
[1581]	ATOM	1529	N	TYR	A	219	-1.535	-24.358	27.219	1.00	31.06	N
[1582]	ATOM	1530	CA	TYR	A	219	-1.789	-23.045	26.633	1.00	30.49	C
[1583]	ATOM	1531	C	TYR	A	219	-3.298	-22.988	26.472	1.00	30.53	C
[1584]	ATOM	1532	O	TYR	A	219	-3.945	-21.928	26.674	1.00	29.97	O
[1585]	ATOM	1533	CB	TYR	A	219	-1.038	-22.909	25.291	1.00	29.51	C
[1586]	ATOM	1534	CG	TYR	A	219	-1.246	-21.635	24.459	1.00	28.45	C
[1587]	ATOM	1535	CD1	TYR	A	219	-1.613	-20.419	25.042	1.00	27.41	C
[1588]	ATOM	1536	CD2	TYR	A	219	-1.009	-21.647	23.085	1.00	28.25	C
[1589]	ATOM	1537	CE1	TYR	A	219	-1.758	-19.241	24.262	1.00	27.03	C
[1590]	ATOM	1538	CE2	TYR	A	219	-1.137	-20.490	22.311	1.00	27.32	C
[1591]	ATOM	1539	CZ	TYR	A	219	-1.489	-19.303	22.895	1.00	27.45	C
[1592]	ATOM	1540	OH	TYR	A	219	-1.627	-18.205	22.087	1.00	26.89	O
[1593]	ATOM	1541	N	TRP	A	220	-3.850	-24.154	26.121	1.00	30.27	N
[1594]	ATOM	1542	CA	TRP	A	220	-5.298	-24.275	25.952	1.00	30.16	C
[1595]	ATOM	1543	C	TRP	A	220	-5.938	-23.949	27.307	1.00	29.70	C
[1596]	ATOM	1544	O	TRP	A	220	-6.815	-23.100	27.352	1.00	29.44	O
[1597]	ATOM	1545	CB	TRP	A	220	-5.627	-25.647	25.374	1.00	31.16	C
[1598]	ATOM	1546	CG	TRP	A	220	-7.025	-26.143	25.403	1.00	31.45	C
[1599]	ATOM	1547	CD1	TRP	A	220	-7.463	-27.247	26.032	1.00	30.89	C
[1600]	ATOM	1548	CD2	TRP	A	220	-8.128	-25.626	24.689	1.00	33.49	C
[1601]	ATOM	1549	NE1	TRP	A	220	-8.793	-27.420	25.817	1.00	32.61	N
[1602]	ATOM	1550	CE2	TRP	A	220	-9.229	-26.443	24.981	1.00	33.31	C
[1603]	ATOM	1551	CE3	TRP	A	220	-8.329	-24.468	23.913	1.00	34.32	C
[1604]	ATOM	1552	CZ2	TRP	A	220	-10.498	-26.175	24.515	1.00	33.66	C
[1605]	ATOM	1553	CZ3	TRP	A	220	-9.596	-24.207	23.410	1.00	32.48	C



[1606]	ATOM	1554	CH2	TRP	A	220	-10.658	-25.063	23.711	1.00	34.00	C
[1607]	ATOM	1555	N	ASN	A	221	-5.407	-24.487	28.395	1.00	28.66	N
[1608]	ATOM	1556	CA	ASN	A	221	-5.872	-24.077	29.692	1.00	29.96	C
[1609]	ATOM	1557	C	ASN	A	221	-5.765	-22.624	29.970	1.00	30.92	C
[1610]	ATOM	1558	O	ASN	A	221	-6.742	-22.042	30.399	1.00	32.07	O
[1611]	ATOM	1559	CB	ASN	A	221	-5.168	-24.788	30.802	1.00	30.26	C
[1612]	ATOM	1560	CG	ASN	A	221	-5.379	-26.263	30.754	1.00	33.13	C
[1613]	ATOM	1561	OD1	ASN	A	221	-6.408	-26.785	30.389	1.00	36.22	O
[1614]	ATOM	1562	ND2	ASN	A	221	-4.411	-26.938	31.097	1.00	30.26	N
[1615]	ATOM	1563	N	SER	A	222	-4.597	-22.009	29.724	1.00	31.31	N
[1616]	ATOM	1564	CA	SER	A	222	-4.448	-20.599	29.948	1.00	30.88	C
[1617]	ATOM	1565	C	SER	A	222	-5.563	-19.911	29.213	1.00	31.64	C
[1618]	ATOM	1566	O	SER	A	222	-6.296	-19.103	29.787	1.00	31.92	O
[1619]	ATOM	1567	CB	SER	A	222	-3.143	-20.144	29.403	1.00	31.30	C
[1620]	ATOM	1568	OG	SER	A	222	-2.195	-20.103	30.419	1.00	33.22	O
[1621]	ATOM	1569	N	TYR	A	223	-5.729	-20.254	27.937	1.00	31.77	N
[1622]	ATOM	1570	CA	TYR	A	223	-6.795	-19.682	27.186	1.00	31.74	C
[1623]	ATOM	1571	C	TYR	A	223	-8.169	-19.852	27.848	1.00	32.16	C
[1624]	ATOM	1572	O	TYR	A	223	-8.922	-18.899	27.963	1.00	32.15	O
[1625]	ATOM	1573	CB	TYR	A	223	-6.837	-20.255	25.800	1.00	31.45	C
[1626]	ATOM	1574	CG	TYR	A	223	-7.984	-19.664	25.026	1.00	31.78	C
[1627]	ATOM	1575	CD1	TYR	A	223	-7.979	-18.301	24.639	1.00	31.96	C
[1628]	ATOM	1576	CD2	TYR	A	223	-9.135	-20.445	24.758	1.00	32.63	C
[1629]	ATOM	1577	CE1	TYR	A	223	-9.093	-17.729	23.971	1.00	31.72	C
[1630]	ATOM	1578	CE2	TYR	A	223	-10.237	-19.921	24.067	1.00	32.64	C
[1631]	ATOM	1579	CZ	TYR	A	223	-10.221	-18.553	23.664	1.00	33.99	C
[1632]	ATOM	1580	OH	TYR	A	223	-11.345	-18.080	22.986	1.00	34.36	O
[1633]	ATOM	1581	N	ASN	A	224	-8.539	-21.046	28.267	1.00	32.57	N
[1634]	ATOM	1582	CA	ASN	A	224	-9.879	-21.192	28.745	1.00	32.61	C
[1635]	ATOM	1583	C	ASN	A	224	-10.087	-20.430	30.028	1.00	33.98	C
[1636]	ATOM	1584	O	ASN	A	224	-11.231	-20.023	30.359	1.00	33.76	O
[1637]	ATOM	1585	CB	ASN	A	224	-10.182	-22.636	28.955	1.00	32.22	C
[1638]	ATOM	1586	CG	ASN	A	224	-10.352	-23.381	27.662	1.00	32.88	C
[1639]	ATOM	1587	OD1	ASN	A	224	-11.008	-22.873	26.702	1.00	34.91	O
[1640]	ATOM	1588	ND2	ASN	A	224	-9.815	-24.633	27.623	1.00	26.71	N
[1641]	ATOM	1589	N	ASN	A	225	-8.990	-20.241	30.771	1.00	34.53	N

[1642]	ATOM	1590	CA	ASN	A	225	-9.099	-19.647	32.078	1.00	35.18	C
[1643]	ATOM	1591	C	ASN	A	225	-8.977	-18.123	32.068	1.00	36.02	C
[1644]	ATOM	1592	O	ASN	A	225	-8.958	-17.514	33.130	1.00	36.55	O
[1645]	ATOM	1593	CB	ASN	A	225	-8.023	-20.249	32.950	1.00	35.22	C
[1646]	ATOM	1594	CG	ASN	A	225	-8.357	-21.624	33.357	1.00	37.86	C
[1647]	ATOM	1595	OD1	ASN	A	225	-8.726	-21.847	34.478	1.00	42.91	O
[1648]	ATOM	1596	ND2	ASN	A	225	-8.334	-22.550	32.437	1.00	38.97	N
[1649]	ATOM	1597	N	ARG	A	226	-8.883	-17.501	30.897	1.00	36.78	N
[1650]	ATOM	1598	CA	ARG	A	226	-8.613	-16.073	30.762	1.00	37.68	C
[1651]	ATOM	1599	C	ARG	A	226	-9.626	-15.213	31.474	1.00	39.18	C
[1652]	ATOM	1600	O	ARG	A	226	-10.756	-15.689	31.719	1.00	39.39	O
[1653]	ATOM	1601	CB	ARG	A	226	-8.624	-15.688	29.284	1.00	37.35	C
[1654]	ATOM	1602	CG	ARG	A	226	-9.959	-15.724	28.667	1.00	33.75	C
[1655]	ATOM	1603	CD	ARG	A	226	-9.806	-15.565	27.117	1.00	34.21	C
[1656]	ATOM	1604	NE	ARG	A	226	-11.141	-15.550	26.527	1.00	30.06	N
[1657]	ATOM	1605	CZ	ARG	A	226	-11.893	-16.642	26.443	1.00	27.67	C
[1658]	ATOM	1606	NH1	ARG	A	226	-11.438	-17.805	26.851	1.00	24.12	N
[1659]	ATOM	1607	NH2	ARG	A	226	-13.107	-16.571	25.951	1.00	30.07	N
[1660]	ATOM	1608	N	ARG	A	227	-9.240	-13.958	31.765	1.00	40.08	N
[1661]	ATOM	1609	CA	ARG	A	227	-10.145	-13.027	32.424	1.00	41.96	C
[1662]	ATOM	1610	C	ARG	A	227	-10.842	-12.094	31.459	1.00	42.64	C
[1663]	ATOM	1611	O	ARG	A	227	-10.457	-11.990	30.303	1.00	42.83	O
[1664]	ATOM	1612	CB	ARG	A	227	-9.357	-12.168	33.396	1.00	41.68	C
[1665]	ATOM	1613	CG	ARG	A	227	-9.010	-12.784	34.707	1.00	42.91	C
[1666]	ATOM	1614	CD	ARG	A	227	-7.714	-12.442	35.480	1.00	45.86	C
[1667]	ATOM	1615	NE	ARG	A	227	-7.029	-11.091	35.427	1.00	52.81	N
[1668]	ATOM	1616	CZ	ARG	A	227	-7.388	-9.904	34.817	1.00	53.12	C
[1669]	ATOM	1617	NH1	ARG	A	227	-8.565	-9.708	34.135	1.00	54.06	N
[1670]	ATOM	1618	NH2	ARG	A	227	-6.543	-8.842	34.912	1.00	48.15	N
[1671]	ATOM	1619	N	ASP	A	228	-11.862	-11.400	31.932	1.00	44.43	N
[1672]	ATOM	1620	CA	ASP	A	228	-12.397	-10.325	31.160	1.00	46.56	C
[1673]	ATOM	1621	C	ASP	A	228	-11.343	-9.253	30.770	1.00	47.40	C
[1674]	ATOM	1622	O	ASP	A	228	-10.431	-8.885	31.548	1.00	46.89	O
[1675]	ATOM	1623	CB	ASP	A	228	-13.512	-9.696	31.966	1.00	47.53	C
[1676]	ATOM	1624	CG	ASP	A	228	-14.820	-10.398	31.769	1.00	51.64	C
[1677]	ATOM	1625	OD1	ASP	A	228	-15.159	-10.535	30.587	1.00	56.96	O

[1678]	ATOM	1626	OD2	ASP	A	228	-15.531	-10.812	32.733	1.00	55.09	O
[1679]	ATOM	1627	N	LEU	A	229	-11.474	-8.732	29.553	1.00	48.28	N
[1680]	ATOM	1628	CA	LEU	A	229	-10.758	-7.501	29.172	1.00	48.44	C
[1681]	ATOM	1629	C	LEU	A	229	-11.566	-6.248	29.559	1.00	49.79	C
[1682]	ATOM	1630	O	LEU	A	229	-10.980	-5.173	29.772	1.00	50.19	O
[1683]	ATOM	1631	CB	LEU	A	229	-10.433	-7.501	27.676	1.00	47.60	C
[1684]	ATOM	1632	CG	LEU	A	229	-9.281	-8.398	27.213	1.00	45.83	C
[1685]	ATOM	1633	CD1	LEU	A	229	-9.035	-8.255	25.793	1.00	42.63	C
[1686]	ATOM	1634	CD2	LEU	A	229	-8.040	-7.993	27.884	1.00	45.37	C
[1687]	ATOM	1635	N	ASN	A	230	-12.892	-6.397	29.676	1.00	50.93	N
[1688]	ATOM	1636	CA	ASN	A	230	-13.797	-5.284	30.030	1.00	52.52	C
[1689]	ATOM	1637	C	ASN	A	230	-13.773	-4.056	29.174	1.00	54.36	C
[1690]	ATOM	1638	O	ASN	A	230	-13.804	-2.957	29.713	1.00	54.42	O
[1691]	ATOM	1639	CB	ASN	A	230	-13.571	-4.771	31.450	1.00	51.91	C
[1692]	ATOM	1640	CG	ASN	A	230	-13.909	-5.791	32.491	1.00	50.88	C
[1693]	ATOM	1641	OD1	ASN	A	230	-15.076	-6.264	32.661	1.00	50.53	O
[1694]	ATOM	1642	ND2	ASN	A	230	-12.867	-6.193	33.190	1.00	48.67	N
[1695]	ATOM	1643	N	PHE	A	231	-13.690	-4.221	27.857	1.00	57.57	N
[1696]	ATOM	1644	CA	PHE	A	231	-13.814	-3.081	26.958	1.00	59.71	C
[1697]	ATOM	1645	C	PHE	A	231	-15.153	-2.446	27.262	1.00	61.77	C
[1698]	ATOM	1646	O	PHE	A	231	-16.197	-3.114	27.235	1.00	62.63	O
[1699]	ATOM	1647	CB	PHE	A	231	-13.765	-3.535	25.517	1.00	59.10	C
[1700]	ATOM	1648	CG	PHE	A	231	-12.458	-4.094	25.109	1.00	58.68	C
[1701]	ATOM	1649	CD1	PHE	A	231	-11.268	-3.539	25.594	1.00	58.04	C
[1702]	ATOM	1650	CD2	PHE	A	231	-12.407	-5.155	24.191	1.00	58.16	C
[1703]	ATOM	1651	CE1	PHE	A	231	-10.029	-4.043	25.173	1.00	58.21	C
[1704]	ATOM	1652	CE2	PHE	A	231	-11.186	-5.677	23.768	1.00	57.18	C
[1705]	ATOM	1653	CZ	PHE	A	231	-9.990	-5.118	24.247	1.00	57.56	C
[1706]	ATOM	1654	N	GLU	A	232	-15.098	-1.175	27.623	1.00	63.71	N
[1707]	ATOM	1655	CA	GLU	A	232	-16.281	-0.383	27.857	1.00	65.60	C
[1708]	ATOM	1656	C	GLU	A	232	-16.189	0.710	26.786	1.00	65.71	C
[1709]	ATOM	1657	O	GLU	A	232	-15.144	1.385	26.681	1.00	66.08	O
[1710]	ATOM	1658	CB	GLU	A	232	-16.198	0.200	29.261	1.00	66.08	C
[1711]	ATOM	1659	CG	GLU	A	232	-17.514	0.620	29.871	1.00	69.37	C
[1712]	ATOM	1660	CD	GLU	A	232	-17.344	1.832	30.815	1.00	71.41	C
[1713]	ATOM	1661	OE1	GLU	A	232	-16.194	2.124	31.181	1.00	72.55	O

[1714]	ATOM	1662	OE2	GLU	A	232	-18.339	2.504	31.165	1.00	72.33	O
[1715]	ATOM	1663	N	ARG	A	233	-17.241	0.853	25.968	1.00	65.42	N
[1716]	ATOM	1664	CA	ARG	A	233	-17.266	1.932	24.990	1.00	65.26	C
[1717]	ATOM	1665	C	ARG	A	233	-17.323	3.287	25.683	1.00	66.21	C
[1718]	ATOM	1666	O	ARG	A	233	-18.164	3.525	26.515	1.00	65.98	O
[1719]	ATOM	1667	CB	ARG	A	233	-18.373	1.814	23.948	1.00	64.31	C
[1720]	ATOM	1668	CG	ARG	A	233	-18.446	3.106	23.075	1.00	62.20	C
[1721]	ATOM	1669	CD	ARG	A	233	-19.413	3.031	21.928	1.00	59.08	C
[1722]	ATOM	1670	NE	ARG	A	233	-19.248	1.726	21.295	1.00	59.71	N
[1723]	ATOM	1671	CZ	ARG	A	233	-19.843	1.374	20.161	1.00	61.21	C
[1724]	ATOM	1672	NH1	ARG	A	233	-20.628	2.249	19.525	1.00	62.35	N
[1725]	ATOM	1673	NH2	ARG	A	233	-19.646	0.163	19.655	1.00	59.75	N
[1726]	ATOM	1674	N	GLY	A	234	-16.389	4.135	25.248	1.00	67.78	N
[1727]	ATOM	1675	CA	GLY	A	234	-15.909	5.355	25.851	1.00	69.43	C
[1728]	ATOM	1676	C	GLY	A	234	-15.601	5.314	27.337	1.00	71.12	C
[1729]	ATOM	1677	O	GLY	A	234	-15.765	6.340	28.001	1.00	71.60	O
[1730]	ATOM	1678	N	GLY	A	235	-15.191	4.156	27.877	1.00	71.88	N
[1731]	ATOM	1679	CA	GLY	A	235	-14.737	4.061	29.262	1.00	71.97	C
[1732]	ATOM	1680	C	GLY	A	235	-13.228	4.220	29.360	1.00	72.22	C
[1733]	ATOM	1681	O	GLY	A	235	-12.583	4.565	28.372	1.00	72.01	O
[1734]	ATOM	1682	N	ASP	A	236	-12.688	3.972	30.557	1.00	72.52	N
[1735]	ATOM	1683	CA	ASP	A	236	-11.255	4.045	30.824	1.00	73.11	C
[1736]	ATOM	1684	C	ASP	A	236	-10.514	2.915	30.156	1.00	71.70	C
[1737]	ATOM	1685	O	ASP	A	236	-9.332	3.062	29.841	1.00	71.62	O
[1738]	ATOM	1686	CB	ASP	A	236	-10.959	3.957	32.335	1.00	74.40	C
[1739]	ATOM	1687	CG	ASP	A	236	-11.018	5.297	33.012	1.00	78.21	C
[1740]	ATOM	1688	OD1	ASP	A	236	-10.627	6.291	32.349	1.00	81.76	O
[1741]	ATOM	1689	OD2	ASP	A	236	-11.445	5.358	34.197	1.00	81.51	O
[1742]	ATOM	1690	N	ILE	A	237	-11.200	1.778	30.006	1.00	69.69	N
[1743]	ATOM	1691	CA	ILE	A	237	-10.590	0.564	29.478	1.00	67.17	C
[1744]	ATOM	1692	C	ILE	A	237	-11.063	0.388	28.028	1.00	64.81	C
[1745]	ATOM	1693	O	ILE	A	237	-12.087	-0.227	27.762	1.00	64.87	O
[1746]	ATOM	1694	CB	ILE	A	237	-10.811	-0.716	30.401	1.00	67.61	C
[1747]	ATOM	1695	CG1	ILE	A	237	-10.566	-0.404	31.897	1.00	68.77	C
[1748]	ATOM	1696	CG2	ILE	A	237	-9.890	-1.847	29.984	1.00	67.13	C
[1749]	ATOM	1697	CD1	ILE	A	237	-10.978	-1.539	32.949	1.00	66.75	C

[1750]	ATOM	1698	N	THR	A	238	-10.331	0.991	27.112	1.00	61.30	N
[1751]	ATOM	1699	CA	THR	A	238	-10.460	0.686	25.731	1.00	58.92	C
[1752]	ATOM	1700	C	THR	A	238	-9.072	0.718	25.146	1.00	56.03	C
[1753]	ATOM	1701	O	THR	A	238	-8.086	0.981	25.842	1.00	55.77	O
[1754]	ATOM	1702	CB	THR	A	238	-11.164	1.777	24.961	1.00	60.15	C
[1755]	ATOM	1703	OG1	THR	A	238	-10.786	3.036	25.520	1.00	60.44	O
[1756]	ATOM	1704	CG2	THR	A	238	-12.668	1.589	24.944	1.00	62.39	C
[1757]	ATOM	1705	N	LEU	A	239	-9.037	0.437	23.838	1.00	51.60	N
[1758]	ATOM	1706	CA	LEU	A	239	-7.893	0.545	22.954	1.00	47.85	C
[1759]	ATOM	1707	C	LEU	A	239	-7.963	1.946	22.344	1.00	48.34	C
[1760]	ATOM	1708	O	LEU	A	239	-9.043	2.432	22.020	1.00	48.36	O
[1761]	ATOM	1709	CB	LEU	A	239	-8.011	-0.538	21.889	1.00	45.13	C
[1762]	ATOM	1710	CG	LEU	A	239	-8.013	-1.953	22.493	1.00	40.48	C
[1763]	ATOM	1711	CD1	LEU	A	239	-8.401	-2.988	21.500	1.00	36.48	C
[1764]	ATOM	1712	CD2	LEU	A	239	-6.658	-2.317	23.116	1.00	38.69	C
[1765]	ATOM	1713	N	ARG	A	240	-6.823	2.626	22.274	1.00	49.23	N
[1766]	ATOM	1714	CA	ARG	A	240	-6.796	3.970	21.723	1.00	49.52	C
[1767]	ATOM	1715	C	ARG	A	240	-6.145	3.988	20.326	1.00	49.11	C
[1768]	ATOM	1716	O	ARG	A	240	-5.953	5.042	19.739	1.00	50.40	O
[1769]	ATOM	1717	CB	ARG	A	240	-6.109	4.914	22.688	1.00	50.09	C
[1770]	ATOM	1718	CG	ARG	A	240	-6.856	5.122	23.985	1.00	50.55	C
[1771]	ATOM	1719	CD	ARG	A	240	-5.870	5.361	25.169	1.00	53.99	C
[1772]	ATOM	1720	NE	ARG	A	240	-6.388	4.865	26.467	1.00	55.73	N
[1773]	ATOM	1721	CZ	ARG	A	240	-7.488	5.334	27.116	1.00	55.01	C
[1774]	ATOM	1722	NH1	ARG	A	240	-8.254	6.335	26.624	1.00	54.53	N
[1775]	ATOM	1723	NH2	ARG	A	240	-7.850	4.797	28.279	1.00	51.90	N
[1776]	ATOM	1724	N	CYS	A	241	-5.858	2.821	19.780	1.00	47.31	N
[1777]	ATOM	1725	CA	CYS	A	241	-5.308	2.739	18.483	1.00	45.90	C
[1778]	ATOM	1726	C	CYS	A	241	-6.303	2.090	17.521	1.00	45.77	C
[1779]	ATOM	1727	O	CYS	A	241	-7.260	1.396	17.944	1.00	45.88	O
[1780]	ATOM	1728	CB	CYS	A	241	-4.051	1.926	18.549	1.00	45.89	C
[1781]	ATOM	1729	SG	CYS	A	241	-4.367	0.238	18.933	1.00	42.70	S
[1782]	ATOM	1730	N	PRO	A	242	-6.100	2.319	16.206	1.00	44.77	N
[1783]	ATOM	1731	CA	PRO	A	242	-7.025	1.689	15.270	1.00	43.73	C
[1784]	ATOM	1732	C	PRO	A	242	-6.980	0.166	15.377	1.00	42.76	C
[1785]	ATOM	1733	O	PRO	A	242	-5.946	-0.394	15.684	1.00	42.62	O

[1786]	ATOM	1734	CB	PRO A 242	-6.515	2.154	13.917	1.00	43.46	C
[1787]	ATOM	1735	CG	PRO A 242	-5.206	2.735	14.160	1.00	43.54	C
[1788]	ATOM	1736	CD	PRO A 242	-5.079	3.132	15.528	1.00	43.59	C
[1789]	ATOM	1737	N	VAL A 243	-8.108	-0.484	15.112	1.00	41.63	N
[1790]	ATOM	1738	CA	VAL A 243	-8.268	-1.902	15.317	1.00	39.73	C
[1791]	ATOM	1739	C	VAL A 243	-9.037	-2.445	14.158	1.00	39.38	C
[1792]	ATOM	1740	O	VAL A 243	-10.058	-1.899	13.840	1.00	39.99	O
[1793]	ATOM	1741	CB	VAL A 243	-9.047	-2.181	16.636	1.00	39.36	C
[1794]	ATOM	1742	CG1	VAL A 243	-9.616	-3.592	16.678	1.00	39.45	C
[1795]	ATOM	1743	CG2	VAL A 243	-8.163	-1.999	17.832	1.00	38.42	C
[1796]	ATOM	1744	N	MET A 244	-8.551	-3.509	13.510	1.00	39.26	N
[1797]	ATOM	1745	CA	MET A 244	-9.375	-4.285	12.600	1.00	38.53	C
[1798]	ATOM	1746	C	MET A 244	-9.773	-5.657	13.192	1.00	37.98	C
[1799]	ATOM	1747	O	MET A 244	-8.946	-6.538	13.413	1.00	37.95	O
[1800]	ATOM	1748	CB	MET A 244	-8.671	-4.420	11.272	1.00	38.53	C
[1801]	ATOM	1749	CG	MET A 244	-9.433	-5.241	10.349	1.00	39.35	C
[1802]	ATOM	1750	SD	MET A 244	-8.844	-5.173	8.680	1.00	38.36	S
[1803]	ATOM	1751	CE	MET A 244	-7.444	-6.294	8.611	1.00	36.57	C
[1804]	ATOM	1752	N	LEU A 245	-11.050	-5.809	13.488	1.00	37.33	N
[1805]	ATOM	1753	CA	LEU A 245	-11.610	-7.091	13.921	1.00	36.67	C
[1806]	ATOM	1754	C	LEU A 245	-11.869	-7.982	12.694	1.00	36.41	C
[1807]	ATOM	1755	O	LEU A 245	-12.167	-7.461	11.641	1.00	36.53	O
[1808]	ATOM	1756	CB	LEU A 245	-12.904	-6.861	14.747	1.00	36.13	C
[1809]	ATOM	1757	CG	LEU A 245	-12.654	-6.112	16.085	1.00	34.62	C
[1810]	ATOM	1758	CD1	LEU A 245	-13.936	-5.931	16.874	1.00	32.98	C
[1811]	ATOM	1759	CD2	LEU A 245	-11.657	-6.762	17.007	1.00	30.20	C
[1812]	ATOM	1760	N	VAL A 246	-11.715	-9.306	12.838	1.00	35.96	N
[1813]	ATOM	1761	CA	VAL A 246	-11.823	-10.286	11.769	1.00	35.02	C
[1814]	ATOM	1762	C	VAL A 246	-12.399	-11.594	12.339	1.00	36.32	C
[1815]	ATOM	1763	O	VAL A 246	-12.065	-12.035	13.434	1.00	36.38	O
[1816]	ATOM	1764	CB	VAL A 246	-10.457	-10.572	11.195	1.00	34.97	C
[1817]	ATOM	1765	CG1	VAL A 246	-10.546	-11.534	10.058	1.00	32.84	C
[1818]	ATOM	1766	CG2	VAL A 246	-9.804	-9.279	10.719	1.00	34.40	C
[1819]	ATOM	1767	N	VAL A 247	-13.281	-12.223	11.582	1.00	37.87	N
[1820]	ATOM	1768	CA	VAL A 247	-13.910	-13.487	11.966	1.00	38.91	C
[1821]	ATOM	1769	C	VAL A 247	-14.621	-14.090	10.733	1.00	40.87	C

[1822]	ATOM	1770	O	VAL	A	247	-15.104	-13.327	9.861	1.00	40.47	O
[1823]	ATOM	1771	CB	VAL	A	247	-14.901	-13.276	13.159	1.00	38.75	C
[1824]	ATOM	1772	CG1	VAL	A	247	-16.204	-12.661	12.704	1.00	37.35	C
[1825]	ATOM	1773	CG2	VAL	A	247	-15.127	-14.577	13.932	1.00	36.62	C
[1826]	ATOM	1774	N	GLY	A	248	-14.659	-15.445	10.645	1.00	42.96	N
[1827]	ATOM	1775	CA	GLY	A	248	-15.495	-16.152	9.638	1.00	44.54	C
[1828]	ATOM	1776	C	GLY	A	248	-16.999	-16.015	9.904	1.00	46.62	C
[1829]	ATOM	1777	O	GLY	A	248	-17.406	-15.815	11.042	1.00	46.42	O
[1830]	ATOM	1778	N	ASP	A	249	-17.854	-16.110	8.886	1.00	49.25	N
[1831]	ATOM	1779	CA	ASP	A	249	-19.302	-16.097	9.157	1.00	50.01	C
[1832]	ATOM	1780	C	ASP	A	249	-19.683	-17.472	9.674	1.00	49.61	C
[1833]	ATOM	1781	O	ASP	A	249	-19.169	-18.484	9.231	1.00	48.99	O
[1834]	ATOM	1782	CB	ASP	A	249	-20.158	-15.661	7.927	1.00	51.00	C
[1835]	ATOM	1783	CG	ASP	A	249	-21.682	-15.636	8.233	1.00	52.68	C
[1836]	ATOM	1784	OD1	ASP	A	249	-22.186	-14.955	9.187	1.00	55.72	O
[1837]	ATOM	1785	OD2	ASP	A	249	-22.384	-16.327	7.493	1.00	57.60	O
[1838]	ATOM	1786	N	GLN	A	250	-20.552	-17.474	10.656	1.00	49.72	N
[1839]	ATOM	1787	CA	GLN	A	250	-21.008	-18.712	11.269	1.00	50.91	C
[1840]	ATOM	1788	C	GLN	A	250	-19.803	-19.561	11.790	1.00	49.74	C
[1841]	ATOM	1789	O	GLN	A	250	-19.857	-20.789	11.875	1.00	50.38	O
[1842]	ATOM	1790	CB	GLN	A	250	-22.067	-19.508	10.375	1.00	52.01	C
[1843]	ATOM	1791	CG	GLN	A	250	-23.414	-18.785	9.833	1.00	55.10	C
[1844]	ATOM	1792	CD	GLN	A	250	-24.043	-17.604	10.747	1.00	60.37	C
[1845]	ATOM	1793	OE1	GLN	A	250	-24.238	-17.750	11.977	1.00	60.48	O
[1846]	ATOM	1794	NE2	GLN	A	250	-24.379	-16.451	10.101	1.00	59.92	N
[1847]	ATOM	1795	N	ALA	A	251	-18.713	-18.906	12.176	1.00	48.01	N
[1848]	ATOM	1796	CA	ALA	A	251	-17.598	-19.641	12.822	1.00	45.89	C
[1849]	ATOM	1797	C	ALA	A	251	-17.625	-19.555	14.360	1.00	44.55	C
[1850]	ATOM	1798	O	ALA	A	251	-18.338	-18.744	14.932	1.00	45.42	O
[1851]	ATOM	1799	CB	ALA	A	251	-16.320	-19.168	12.308	1.00	46.23	C
[1852]	ATOM	1800	N	PRO	A	252	-16.855	-20.380	15.055	1.00	42.05	N
[1853]	ATOM	1801	CA	PRO	A	252	-17.117	-20.479	16.454	1.00	40.39	C
[1854]	ATOM	1802	C	PRO	A	252	-17.055	-19.174	17.226	1.00	39.49	C
[1855]	ATOM	1803	O	PRO	A	252	-17.722	-18.979	18.186	1.00	38.91	O
[1856]	ATOM	1804	CB	PRO	A	252	-16.009	-21.415	16.926	1.00	40.03	C
[1857]	ATOM	1805	CG	PRO	A	252	-15.646	-22.206	15.791	1.00	40.41	C



[1858]	ATOM	1806	CD	PRO A 252	-15.736	-21.246	14.657	1.00	42.44	C
[1859]	ATOM	1807	N	HIS A 253	-16.266	-18.238	16.800	1.00	40.26	N
[1860]	ATOM	1808	CA	HIS A 253	-16.138	-16.995	17.594	1.00	39.96	C
[1861]	ATOM	1809	C	HIS A 253	-16.872	-15.763	17.043	1.00	40.78	C
[1862]	ATOM	1810	O	HIS A 253	-16.677	-14.652	17.558	1.00	40.91	O
[1863]	ATOM	1811	CB	HIS A 253	-14.635	-16.669	17.794	1.00	38.91	C
[1864]	ATOM	1812	CG	HIS A 253	-13.873	-17.805	18.373	1.00	35.28	C
[1865]	ATOM	1813	ND1	HIS A 253	-13.906	-18.088	19.710	1.00	29.61	N
[1866]	ATOM	1814	CD2	HIS A 253	-13.172	-18.802	17.787	1.00	32.80	C
[1867]	ATOM	1815	CE1	HIS A 253	-13.169	-19.160	19.943	1.00	30.61	C
[1868]	ATOM	1816	NE2	HIS A 253	-12.728	-19.626	18.791	1.00	28.96	N
[1869]	ATOM	1817	N	GLU A 254	-17.720	-15.949	16.036	1.00	41.37	N
[1870]	ATOM	1818	CA	GLU A 254	-18.468	-14.828	15.461	1.00	43.45	C
[1871]	ATOM	1819	C	GLU A 254	-19.212	-13.992	16.490	1.00	42.53	C
[1872]	ATOM	1820	O	GLU A 254	-19.075	-12.798	16.540	1.00	41.37	O
[1873]	ATOM	1821	CB	GLU A 254	-19.418	-15.308	14.373	1.00	43.35	C
[1874]	ATOM	1822	CG	GLU A 254	-20.231	-14.240	13.713	1.00	46.07	C
[1875]	ATOM	1823	CD	GLU A 254	-21.402	-14.771	12.858	1.00	49.52	C
[1876]	ATOM	1824	OE1	GLU A 254	-21.474	-16.000	12.569	1.00	55.31	O
[1877]	ATOM	1825	OE2	GLU A 254	-22.258	-13.918	12.477	1.00	54.75	O
[1878]	ATOM	1826	N	ASP A 255	-19.986	-14.624	17.337	1.00	43.73	N
[1879]	ATOM	1827	CA	ASP A 255	-20.679	-13.867	18.368	1.00	45.68	C
[1880]	ATOM	1828	C	ASP A 255	-19.754	-13.025	19.272	1.00	46.15	C
[1881]	ATOM	1829	O	ASP A 255	-20.103	-11.894	19.632	1.00	46.63	O
[1882]	ATOM	1830	CB	ASP A 255	-21.599	-14.798	19.203	1.00	46.39	C
[1883]	ATOM	1831	CG	ASP A 255	-22.746	-15.449	18.350	1.00	49.25	C
[1884]	ATOM	1832	OD1	ASP A 255	-22.957	-15.050	17.173	1.00	48.96	O
[1885]	ATOM	1833	OD2	ASP A 255	-23.419	-16.387	18.851	1.00	52.34	O
[1886]	ATOM	1834	N	ALA A 256	-18.601	-13.594	19.681	1.00	46.44	N
[1887]	ATOM	1835	CA	ALA A 256	-17.681	-12.928	20.610	1.00	44.85	C
[1888]	ATOM	1836	C	ALA A 256	-17.071	-11.789	19.876	1.00	44.57	C
[1889]	ATOM	1837	O	ALA A 256	-16.912	-10.744	20.464	1.00	45.05	O
[1890]	ATOM	1838	CB	ALA A 256	-16.589	-13.846	21.088	1.00	44.49	C
[1891]	ATOM	1839	N	VAL A 257	-16.720	-11.983	18.604	1.00	43.50	N
[1892]	ATOM	1840	CA	VAL A 257	-16.182	-10.873	17.824	1.00	42.72	C
[1893]	ATOM	1841	C	VAL A 257	-17.201	-9.749	17.636	1.00	43.68	C

[1894]	ATOM	1842	O	VAL A 257	-16.878	-8.600	17.881	1.00	44.15	O
[1895]	ATOM	1843	CB	VAL A 257	-15.544	-11.317	16.497	1.00	41.98	C
[1896]	ATOM	1844	CG1	VAL A 257	-15.148	-10.107	15.680	1.00	38.58	C
[1897]	ATOM	1845	CG2	VAL A 257	-14.346	-12.167	16.806	1.00	39.50	C
[1898]	ATOM	1846	N	VAL A 258	-18.430	-10.091	17.229	1.00	44.86	N
[1899]	ATOM	1847	CA	VAL A 258	-19.551	-9.141	17.087	1.00	45.09	C
[1900]	ATOM	1848	C	VAL A 258	-19.687	-8.387	18.386	1.00	46.01	C
[1901]	ATOM	1849	O	VAL A 258	-19.735	-7.176	18.372	1.00	46.48	O
[1902]	ATOM	1850	CB	VAL A 258	-20.919	-9.812	16.690	1.00	44.29	C
[1903]	ATOM	1851	CG1	VAL A 258	-22.020	-8.881	16.865	1.00	42.88	C
[1904]	ATOM	1852	CG2	VAL A 258	-20.920	-10.273	15.285	1.00	45.25	C
[1905]	ATOM	1853	N	GLU A 259	-19.715	-9.085	19.513	1.00	47.02	N
[1906]	ATOM	1854	CA	GLU A 259	-19.969	-8.410	20.739	1.00	48.80	C
[1907]	ATOM	1855	C	GLU A 259	-18.882	-7.380	20.969	1.00	48.79	C
[1908]	ATOM	1856	O	GLU A 259	-19.158	-6.204	21.239	1.00	50.34	O
[1909]	ATOM	1857	CB	GLU A 259	-20.067	-9.371	21.877	1.00	49.54	C
[1910]	ATOM	1858	CG	GLU A 259	-19.546	-8.720	23.138	1.00	55.55	C
[1911]	ATOM	1859	CD	GLU A 259	-20.500	-8.829	24.328	1.00	61.15	C
[1912]	ATOM	1860	OE1	GLU A 259	-20.854	-9.986	24.684	1.00	63.66	O
[1913]	ATOM	1861	OE2	GLU A 259	-20.858	-7.763	24.912	1.00	62.83	O
[1914]	ATOM	1862	N	CYS A 260	-17.638	-7.812	20.810	1.00	47.72	N
[1915]	ATOM	1863	CA	CYS A 260	-16.441	-6.969	20.915	1.00	46.13	C
[1916]	ATOM	1864	C	CYS A 260	-16.494	-5.690	20.094	1.00	45.26	C
[1917]	ATOM	1865	O	CYS A 260	-16.145	-4.630	20.599	1.00	44.88	O
[1918]	ATOM	1866	CB	CYS A 260	-15.208	-7.790	20.548	1.00	45.86	C
[1919]	ATOM	1867	SG	CYS A 260	-13.704	-7.039	21.045	1.00	44.89	S
[1920]	ATOM	1868	N	ASN A 261	-16.929	-5.805	18.840	1.00	43.77	N
[1921]	ATOM	1869	CA	ASN A 261	-17.177	-4.631	18.008	1.00	43.20	C
[1922]	ATOM	1870	C	ASN A 261	-18.089	-3.607	18.670	1.00	44.27	C
[1923]	ATOM	1871	O	ASN A 261	-17.862	-2.427	18.611	1.00	44.78	O
[1924]	ATOM	1872	CB	ASN A 261	-17.793	-5.030	16.681	1.00	42.09	C
[1925]	ATOM	1873	CG	ASN A 261	-17.689	-3.935	15.639	1.00	40.23	C
[1926]	ATOM	1874	OD1	ASN A 261	-16.726	-3.171	15.625	1.00	39.28	O
[1927]	ATOM	1875	ND2	ASN A 261	-18.636	-3.894	14.718	1.00	38.17	N
[1928]	ATOM	1876	N	SER A 262	-19.112	-4.059	19.357	1.00	45.86	N
[1929]	ATOM	1877	CA	SER A 262	-19.974	-3.135	20.087	1.00	46.77	C

[1930]	ATOM	1878	C	SER A 262	-19.283	-2.468	21.319	1.00	47.18	C
[1931]	ATOM	1879	O	SER A 262	-19.782	-1.458	21.833	1.00	48.28	O
[1932]	ATOM	1880	CB	SER A 262	-21.261	-3.857	20.519	1.00	46.97	C
[1933]	ATOM	1881	OG	SER A 262	-21.065	-4.537	21.762	1.00	46.50	O
[1934]	ATOM	1882	N	LYS A 263	-18.160	-3.002	21.816	1.00	47.14	N
[1935]	ATOM	1883	CA	LYS A 263	-17.473	-2.335	22.964	1.00	47.09	C
[1936]	ATOM	1884	C	LYS A 263	-16.340	-1.385	22.582	1.00	48.44	C
[1937]	ATOM	1885	O	LYS A 263	-15.884	-0.585	23.409	1.00	49.47	O
[1938]	ATOM	1886	CB	LYS A 263	-17.041	-3.328	24.077	1.00	45.70	C
[1939]	ATOM	1887	CG	LYS A 263	-18.227	-4.140	24.531	1.00	43.57	C
[1940]	ATOM	1888	CD	LYS A 263	-18.526	-4.296	25.981	1.00	40.43	C
[1941]	ATOM	1889	CE	LYS A 263	-20.067	-3.994	26.246	1.00	40.72	C
[1942]	ATOM	1890	NZ	LYS A 263	-20.979	-5.234	26.194	1.00	40.30	N
[1943]	ATOM	1891	N	LEU A 264	-15.895	-1.419	21.339	1.00	50.30	N
[1944]	ATOM	1892	CA	LEU A 264	-14.758	-0.587	20.991	1.00	52.47	C
[1945]	ATOM	1893	C	LEU A 264	-15.203	0.648	20.238	1.00	54.63	C
[1946]	ATOM	1894	O	LEU A 264	-16.258	0.638	19.573	1.00	55.74	O
[1947]	ATOM	1895	CB	LEU A 264	-13.748	-1.362	20.154	1.00	52.06	C
[1948]	ATOM	1896	CG	LEU A 264	-13.013	-2.493	20.853	1.00	51.35	C
[1949]	ATOM	1897	CD1	LEU A 264	-12.444	-3.388	19.791	1.00	50.54	C
[1950]	ATOM	1898	CD2	LEU A 264	-11.927	-2.021	21.783	1.00	50.05	C
[1951]	ATOM	1899	N	ASP A 265	-14.373	1.689	20.331	1.00	56.02	N
[1952]	ATOM	1900	CA	ASP A 265	-14.521	2.964	19.593	1.00	57.30	C
[1953]	ATOM	1901	C	ASP A 265	-14.705	2.866	18.029	1.00	57.24	C
[1954]	ATOM	1902	O	ASP A 265	-13.737	2.570	17.312	1.00	57.15	O
[1955]	ATOM	1903	CB	ASP A 265	-13.331	3.888	20.006	1.00	58.04	C
[1956]	ATOM	1904	CG	ASP A 265	-13.361	5.303	19.348	1.00	60.05	C
[1957]	ATOM	1905	OD1	ASP A 265	-14.270	5.663	18.518	1.00	60.23	O
[1958]	ATOM	1906	OD2	ASP A 265	-12.405	6.042	19.671	1.00	61.58	O
[1959]	ATOM	1907	N	PRO A 266	-15.936	3.166	17.520	1.00	56.85	N
[1960]	ATOM	1908	CA	PRO A 266	-16.312	2.937	16.110	1.00	56.41	C
[1961]	ATOM	1909	C	PRO A 266	-15.515	3.749	15.106	1.00	55.75	C
[1962]	ATOM	1910	O	PRO A 266	-15.442	3.395	13.919	1.00	55.31	O
[1963]	ATOM	1911	CB	PRO A 266	-17.780	3.350	16.058	1.00	56.39	C
[1964]	ATOM	1912	CG	PRO A 266	-18.247	3.482	17.477	1.00	56.48	C
[1965]	ATOM	1913	CD	PRO A 266	-17.045	3.729	18.316	1.00	56.73	C

[1966]	ATOM	1914	N	THR A 267	-14.923	4.831	15.593	1.00	55.25	N
[1967]	ATOM	1915	CA	THR A 267	-14.144	5.740	14.748	1.00	55.12	C
[1968]	ATOM	1916	C	THR A 267	-12.850	5.110	14.271	1.00	53.79	C
[1969]	ATOM	1917	O	THR A 267	-12.384	5.369	13.197	1.00	54.02	O
[1970]	ATOM	1918	CB	THR A 267	-13.824	7.116	15.475	1.00	55.73	C
[1971]	ATOM	1919	OG1	THR A 267	-13.360	6.874	16.791	1.00	55.80	O
[1972]	ATOM	1920	CG2	THR A 267	-15.067	8.014	15.610	1.00	55.41	C
[1973]	ATOM	1921	N	GLN A 268	-12.287	4.250	15.091	1.00	53.14	N
[1974]	ATOM	1922	CA	GLN A 268	-10.988	3.609	14.845	1.00	51.50	C
[1975]	ATOM	1923	C	GLN A 268	-11.079	2.069	14.697	1.00	51.50	C
[1976]	ATOM	1924	O	GLN A 268	-10.070	1.382	14.791	1.00	52.25	O
[1977]	ATOM	1925	CB	GLN A 268	-10.106	3.820	16.076	1.00	50.94	C
[1978]	ATOM	1926	CG	GLN A 268	-9.984	5.172	16.611	1.00	48.89	C
[1979]	ATOM	1927	CD	GLN A 268	-8.599	5.433	17.027	1.00	50.59	C
[1980]	ATOM	1928	OE1	GLN A 268	-7.867	5.579	16.216	1.00	52.13	O
[1981]	ATOM	1929	NE2	GLN A 268	-8.239	5.464	18.247	1.00	47.93	N
[1982]	ATOM	1930	N	THR A 269	-12.268	1.513	14.535	1.00	50.51	N
[1983]	ATOM	1931	CA	THR A 269	-12.428	0.099	14.572	1.00	49.57	C
[1984]	ATOM	1932	C	THR A 269	-13.231	-0.271	13.363	1.00	49.80	C
[1985]	ATOM	1933	O	THR A 269	-14.385	0.077	13.247	1.00	50.44	O
[1986]	ATOM	1934	CB	THR A 269	-13.120	-0.339	15.844	1.00	49.27	C
[1987]	ATOM	1935	OG1	THR A 269	-12.345	0.097	16.982	1.00	50.79	O
[1988]	ATOM	1936	CG2	THR A 269	-13.263	-1.822	15.892	1.00	48.44	C
[1989]	ATOM	1937	N	SER A 270	-12.604	-0.966	12.431	1.00	49.48	N
[1990]	ATOM	1938	CA	SER A 270	-13.353	-1.665	11.421	1.00	49.50	C
[1991]	ATOM	1939	C	SER A 270	-13.477	-3.139	11.757	1.00	48.67	C
[1992]	ATOM	1940	O	SER A 270	-12.787	-3.665	12.591	1.00	48.68	O
[1993]	ATOM	1941	CB	SER A 270	-12.671	-1.499	10.106	1.00	49.88	C
[1994]	ATOM	1942	OG	SER A 270	-11.294	-1.549	10.355	1.00	52.45	O
[1995]	ATOM	1943	N	PHE A 271	-14.383	-3.784	11.069	1.00	48.13	N
[1996]	ATOM	1944	CA	PHE A 271	-14.843	-5.126	11.311	1.00	47.39	C
[1997]	ATOM	1945	C	PHE A 271	-15.012	-5.829	9.977	1.00	46.63	C
[1998]	ATOM	1946	O	PHE A 271	-15.960	-5.562	9.252	1.00	46.13	O
[1999]	ATOM	1947	CB	PHE A 271	-16.226	-5.047	11.924	1.00	47.93	C
[2000]	ATOM	1948	CG	PHE A 271	-16.827	-6.375	12.270	1.00	49.57	C
[2001]	ATOM	1949	CD1	PHE A 271	-16.035	-7.524	12.439	1.00	52.05	C

[2002]	ATOM	1950	CD2	PHE	A	271	-18.178	-6.465	12.536	1.00	52.14	C
[2003]	ATOM	1951	CE1	PHE	A	271	-16.606	-8.762	12.825	1.00	51.72	C
[2004]	ATOM	1952	CE2	PHE	A	271	-18.772	-7.700	12.918	1.00	53.79	C
[2005]	ATOM	1953	CZ	PHE	A	271	-17.986	-8.854	13.067	1.00	51.73	C
[2006]	ATOM	1954	N	LEU	A	272	-14.078	-6.704	9.647	1.00	45.94	N
[2007]	ATOM	1955	CA	LEU	A	272	-14.170	-7.568	8.501	1.00	45.13	C
[2008]	ATOM	1956	C	LEU	A	272	-14.742	-8.923	8.912	1.00	45.80	C
[2009]	ATOM	1957	O	LEU	A	272	-14.078	-9.714	9.568	1.00	46.71	O
[2010]	ATOM	1958	CB	LEU	A	272	-12.790	-7.774	7.988	1.00	44.90	C
[2011]	ATOM	1959	CG	LEU	A	272	-12.609	-8.642	6.749	1.00	46.17	C
[2012]	ATOM	1960	CD1	LEU	A	272	-13.323	-7.971	5.637	1.00	48.22	C
[2013]	ATOM	1961	CD2	LEU	A	272	-11.099	-8.781	6.385	1.00	43.16	C
[2014]	ATOM	1962	N	LYS	A	273	-15.998	-9.179	8.578	1.00	46.03	N
[2015]	ATOM	1963	CA	LYS	A	273	-16.619	-10.495	8.754	1.00	45.66	C
[2016]	ATOM	1964	C	LYS	A	273	-16.567	-11.230	7.421	1.00	46.43	C
[2017]	ATOM	1965	O	LYS	A	273	-17.117	-10.795	6.452	1.00	45.64	O
[2018]	ATOM	1966	CB	LYS	A	273	-18.063	-10.315	9.239	1.00	45.22	C
[2019]	ATOM	1967	CG	LYS	A	273	-18.824	-11.602	9.478	1.00	44.52	C
[2020]	ATOM	1968	CD	LYS	A	273	-20.361	-11.380	9.381	1.00	45.02	C
[2021]	ATOM	1969	CE	LYS	A	273	-21.070	-11.849	10.672	1.00	45.11	C
[2022]	ATOM	1970	NZ	LYS	A	273	-22.053	-10.773	11.215	1.00	48.92	N
[2023]	ATOM	1971	N	MET	A	274	-15.865	-12.331	7.335	1.00	48.52	N
[2024]	ATOM	1972	CA	MET	A	274	-15.630	-12.851	6.001	1.00	51.51	C
[2025]	ATOM	1973	C	MET	A	274	-16.555	-13.985	5.676	1.00	53.02	C
[2026]	ATOM	1974	O	MET	A	274	-16.638	-14.945	6.448	1.00	53.07	O
[2027]	ATOM	1975	CB	MET	A	274	-14.181	-13.280	5.797	1.00	51.01	C
[2028]	ATOM	1976	CG	MET	A	274	-13.224	-12.154	5.888	1.00	52.38	C
[2029]	ATOM	1977	SD	MET	A	274	-11.517	-12.684	6.093	1.00	54.21	S
[2030]	ATOM	1978	CE	MET	A	274	-11.047	-13.083	4.436	1.00	58.19	C
[2031]	ATOM	1979	N	ALA	A	275	-17.244	-13.886	4.527	1.00	55.14	N
[2032]	ATOM	1980	CA	ALA	A	275	-18.023	-15.013	4.012	1.00	56.39	C
[2033]	ATOM	1981	C	ALA	A	275	-17.037	-16.142	3.603	1.00	56.98	C
[2034]	ATOM	1982	O	ALA	A	275	-15.902	-15.867	3.135	1.00	56.75	O
[2035]	ATOM	1983	CB	ALA	A	275	-18.917	-14.532	2.851	1.00	56.20	C
[2036]	ATOM	1984	N	ASP	A	276	-17.426	-17.392	3.834	1.00	57.26	N
[2037]	ATOM	1985	CA	ASP	A	276	-16.655	-18.565	3.303	1.00	58.57	C

[2038]	ATOM	1986	C	ASP A 276	-15.206	-18.790	3.797	1.00	57.71	C
[2039]	ATOM	1987	O	ASP A 276	-14.365	-19.364	3.082	1.00	57.42	O
[2040]	ATOM	1988	CB	ASP A 276	-16.598	-18.520	1.760	1.00	59.62	C
[2041]	ATOM	1989	CG	ASP A 276	-17.966	-18.639	1.122	1.00	62.65	C
[2042]	ATOM	1990	OD1	ASP A 276	-18.510	-19.755	1.012	1.00	65.72	O
[2043]	ATOM	1991	OD2	ASP A 276	-18.502	-17.601	0.741	1.00	65.79	O
[2044]	ATOM	1992	N	SER A 277	-14.908	-18.348	5.013	1.00	56.38	N
[2045]	ATOM	1993	CA	SER A 277	-13.537	-18.391	5.465	1.00	54.23	C
[2046]	ATOM	1994	C	SER A 277	-13.318	-19.380	6.589	1.00	52.70	C
[2047]	ATOM	1995	O	SER A 277	-12.172	-19.855	6.776	1.00	53.21	O
[2048]	ATOM	1996	CB	SER A 277	-13.091	-17.006	5.888	1.00	54.17	C
[2049]	ATOM	1997	OG	SER A 277	-13.906	-16.558	6.928	1.00	55.06	O
[2050]	ATOM	1998	N	GLY A 278	-14.394	-19.682	7.326	1.00	50.18	N
[2051]	ATOM	1999	CA	GLY A 278	-14.336	-20.620	8.442	1.00	47.24	C
[2052]	ATOM	2000	C	GLY A 278	-13.576	-20.028	9.616	1.00	45.40	C
[2053]	ATOM	2001	O	GLY A 278	-13.533	-18.815	9.790	1.00	45.33	O
[2054]	ATOM	2002	N	GLY A 279	-12.969	-20.892	10.407	1.00	43.18	N
[2055]	ATOM	2003	CA	GLY A 279	-12.415	-20.503	11.679	1.00	40.26	C
[2056]	ATOM	2004	C	GLY A 279	-11.027	-19.917	11.567	1.00	38.11	C
[2057]	ATOM	2005	O	GLY A 279	-10.606	-19.161	12.449	1.00	38.31	O
[2058]	ATOM	2006	N	GLN A 280	-10.330	-20.262	10.511	1.00	34.71	N
[2059]	ATOM	2007	CA	GLN A 280	-9.040	-19.707	10.295	1.00	33.20	C
[2060]	ATOM	2008	C	GLN A 280	-9.008	-18.918	8.931	1.00	32.92	C
[2061]	ATOM	2009	O	GLN A 280	-8.476	-19.356	7.881	1.00	32.50	O
[2062]	ATOM	2010	CB	GLN A 280	-8.017	-20.829	10.387	1.00	32.75	C
[2063]	ATOM	2011	CG	GLN A 280	-7.995	-21.545	11.702	1.00	29.79	C
[2064]	ATOM	2012	CD	GLN A 280	-7.391	-20.699	12.801	1.00	29.70	C
[2065]	ATOM	2013	OE1	GLN A 280	-8.038	-20.483	13.810	1.00	30.20	O
[2066]	ATOM	2014	NE2	GLN A 280	-6.164	-20.200	12.614	1.00	27.03	N
[2067]	ATOM	2015	N	PRO A 281	-9.588	-17.732	8.961	1.00	32.17	N
[2068]	ATOM	2016	CA	PRO A 281	-9.654	-16.930	7.777	1.00	32.00	C
[2069]	ATOM	2017	C	PRO A 281	-8.247	-16.704	7.284	1.00	33.34	C
[2070]	ATOM	2018	O	PRO A 281	-8.059	-16.684	6.057	1.00	35.47	O
[2071]	ATOM	2019	CB	PRO A 281	-10.179	-15.595	8.266	1.00	31.39	C
[2072]	ATOM	2020	CG	PRO A 281	-10.753	-15.823	9.588	1.00	31.38	C
[2073]	ATOM	2021	CD	PRO A 281	-10.131	-17.052	10.149	1.00	31.86	C

[2074]	ATOM	2022	N	GLN	A	282	-7.237	-16.562	8.153	1.00	32.92	N
[2075]	ATOM	2023	CA	GLN	A	282	-5.920	-16.355	7.574	1.00	32.94	C
[2076]	ATOM	2024	C	GLN	A	282	-5.367	-17.599	6.882	1.00	34.33	C
[2077]	ATOM	2025	O	GLN	A	282	-4.468	-17.504	6.057	1.00	35.19	O
[2078]	ATOM	2026	CB	GLN	A	282	-4.931	-15.755	8.535	1.00	32.35	C
[2079]	ATOM	2027	CG	GLN	A	282	-4.231	-16.649	9.549	1.00	31.07	C
[2080]	ATOM	2028	CD	GLN	A	282	-5.109	-17.562	10.372	1.00	32.26	C
[2081]	ATOM	2029	OE1	GLN	A	282	-4.580	-18.447	10.912	1.00	32.98	O
[2082]	ATOM	2030	NE2	GLN	A	282	-6.378	-17.362	10.493	1.00	28.68	N
[2083]	ATOM	2031	N	LEU	A	283	-5.890	-18.780	7.155	1.00	34.72	N
[2084]	ATOM	2032	CA	LEU	A	283	-5.427	-19.848	6.287	1.00	35.69	C
[2085]	ATOM	2033	C	LEU	A	283	-6.348	-20.027	5.060	1.00	36.38	C
[2086]	ATOM	2034	O	LEU	A	283	-5.904	-20.517	4.062	1.00	36.68	O
[2087]	ATOM	2035	CB	LEU	A	283	-5.246	-21.160	7.033	1.00	35.14	C
[2088]	ATOM	2036	CG	LEU	A	283	-4.382	-20.982	8.215	1.00	35.24	C
[2089]	ATOM	2037	CD1	LEU	A	283	-4.992	-21.898	9.180	1.00	36.59	C
[2090]	ATOM	2038	CD2	LEU	A	283	-2.965	-21.436	7.882	1.00	36.93	C
[2091]	ATOM	2039	N	THR	A	284	-7.621	-19.698	5.117	1.00	36.69	N
[2092]	ATOM	2040	CA	THR	A	284	-8.430	-20.063	3.964	1.00	38.51	C
[2093]	ATOM	2041	C	THR	A	284	-8.536	-18.879	3.024	1.00	40.26	C
[2094]	ATOM	2042	O	THR	A	284	-8.691	-19.050	1.805	1.00	40.96	O
[2095]	ATOM	2043	CB	THR	A	284	-9.836	-20.472	4.332	1.00	38.33	C
[2096]	ATOM	2044	OG1	THR	A	284	-10.422	-19.434	5.130	1.00	37.77	O
[2097]	ATOM	2045	CG2	THR	A	284	-9.816	-21.807	5.114	1.00	37.99	C
[2098]	ATOM	2046	N	GLN	A	285	-8.429	-17.664	3.582	1.00	40.50	N
[2099]	ATOM	2047	CA	GLN	A	285	-8.520	-16.461	2.738	1.00	40.15	C
[2100]	ATOM	2048	C	GLN	A	285	-7.381	-15.491	2.715	1.00	39.25	C
[2101]	ATOM	2049	O	GLN	A	285	-7.570	-14.294	2.793	1.00	37.86	O
[2102]	ATOM	2050	CB	GLN	A	285	-9.908	-15.848	2.869	1.00	40.44	C
[2103]	ATOM	2051	CG	GLN	A	285	-10.587	-16.835	1.965	1.00	43.53	C
[2104]	ATOM	2052	CD	GLN	A	285	-11.967	-16.781	1.858	1.00	47.28	C
[2105]	ATOM	2053	OE1	GLN	A	285	-12.457	-15.887	2.331	1.00	47.77	O
[2106]	ATOM	2054	NE2	GLN	A	285	-12.638	-17.713	1.204	1.00	45.76	N
[2107]	ATOM	2055	N	PRO	A	286	-6.192	-16.002	2.530	1.00	39.68	N
[2108]	ATOM	2056	CA	PRO	A	286	-5.024	-15.124	2.609	1.00	40.26	C
[2109]	ATOM	2057	C	PRO	A	286	-5.195	-13.890	1.745	1.00	41.12	C



[2110]	ATOM	2058	O	PRO	A	286	-4.939	-12.790	2.243	1.00	41.68	O
[2111]	ATOM	2059	CB	PRO	A	286	-3.886	-15.961	2.032	1.00	40.74	C
[2112]	ATOM	2060	CG	PRO	A	286	-4.556	-17.293	1.479	1.00	40.85	C
[2113]	ATOM	2061	CD	PRO	A	286	-5.888	-17.394	2.155	1.00	40.11	C
[2114]	ATOM	2062	N	GLY	A	287	-5.607	-14.083	0.470	1.00	41.40	N
[2115]	ATOM	2063	CA	GLY	A	287	-5.949	-13.033	-0.494	1.00	40.50	C
[2116]	ATOM	2064	C	GLY	A	287	-6.749	-11.857	0.008	1.00	40.61	C
[2117]	ATOM	2065	O	GLY	A	287	-6.267	-10.731	-0.022	1.00	41.15	O
[2118]	ATOM	2066	N	LYS	A	288	-7.971	-12.095	0.465	1.00	40.61	N
[2119]	ATOM	2067	CA	LYS	A	288	-8.809	-11.024	1.023	1.00	41.63	C
[2120]	ATOM	2068	C	LYS	A	288	-8.257	-10.339	2.352	1.00	40.09	C
[2121]	ATOM	2069	O	LYS	A	288	-8.416	-9.144	2.615	1.00	40.07	O
[2122]	ATOM	2070	CB	LYS	A	288	-10.204	-11.628	1.268	1.00	41.79	C
[2123]	ATOM	2071	CG	LYS	A	288	-11.406	-10.800	0.803	1.00	44.13	C
[2124]	ATOM	2072	CD	LYS	A	288	-12.661	-11.173	1.633	1.00	46.54	C
[2125]	ATOM	2073	CE	LYS	A	288	-13.956	-11.265	0.762	1.00	49.91	C
[2126]	ATOM	2074	NZ	LYS	A	288	-14.104	-10.011	-0.133	1.00	51.28	N
[2127]	ATOM	2075	N	LEU	A	289	-7.621	-11.121	3.195	1.00	38.62	N
[2128]	ATOM	2076	CA	LEU	A	289	-7.213	-10.651	4.488	1.00	36.67	C
[2129]	ATOM	2077	C	LEU	A	289	-6.058	-9.770	4.240	1.00	36.14	C
[2130]	ATOM	2078	O	LEU	A	289	-5.926	-8.755	4.922	1.00	35.55	O
[2131]	ATOM	2079	CB	LEU	A	289	-6.844	-11.824	5.411	1.00	36.28	C
[2132]	ATOM	2080	CG	LEU	A	289	-6.197	-11.494	6.726	1.00	35.21	C
[2133]	ATOM	2081	CD1	LEU	A	289	-7.024	-10.575	7.492	1.00	32.54	C
[2134]	ATOM	2082	CD2	LEU	A	289	-5.996	-12.713	7.502	1.00	34.10	C
[2135]	ATOM	2083	N	THR	A	290	-5.237	-10.143	3.246	1.00	35.28	N
[2136]	ATOM	2084	CA	THR	A	290	-4.108	-9.312	2.776	1.00	35.37	C
[2137]	ATOM	2085	C	THR	A	290	-4.534	-8.002	2.176	1.00	35.43	C
[2138]	ATOM	2086	O	THR	A	290	-3.919	-6.959	2.399	1.00	35.61	O
[2139]	ATOM	2087	CB	THR	A	290	-3.329	-9.976	1.688	1.00	35.51	C
[2140]	ATOM	2088	OG1	THR	A	290	-2.824	-11.238	2.166	1.00	37.58	O
[2141]	ATOM	2089	CG2	THR	A	290	-2.177	-9.060	1.232	1.00	34.34	C
[2142]	ATOM	2090	N	GLU	A	291	-5.596	-8.044	1.415	1.00	35.26	N
[2143]	ATOM	2091	CA	GLU	A	291	-6.167	-6.822	0.978	1.00	36.19	C
[2144]	ATOM	2092	C	GLU	A	291	-6.722	-5.962	2.068	1.00	35.13	C
[2145]	ATOM	2093	O	GLU	A	291	-6.585	-4.746	1.989	1.00	34.77	O

[2146]	ATOM	2094	CB	GLU	A	291	-7.203	-7.081	-0.073	1.00	36.95	C
[2147]	ATOM	2095	CG	GLU	A	291	-6.724	-6.629	-1.454	1.00	40.83	C
[2148]	ATOM	2096	CD	GLU	A	291	-7.965	-6.374	-2.313	1.00	47.97	C
[2149]	ATOM	2097	OE1	GLU	A	291	-8.464	-7.445	-2.758	1.00	49.84	O
[2150]	ATOM	2098	OE2	GLU	A	291	-8.483	-5.181	-2.481	1.00	47.12	O
[2151]	ATOM	2099	N	ALA	A	292	-7.330	-6.577	3.074	1.00	35.00	N
[2152]	ATOM	2100	CA	ALA	A	292	-7.870	-5.837	4.178	1.00	35.28	C
[2153]	ATOM	2101	C	ALA	A	292	-6.719	-5.230	4.987	1.00	36.28	C
[2154]	ATOM	2102	O	ALA	A	292	-6.797	-4.112	5.583	1.00	36.59	O
[2155]	ATOM	2103	CB	ALA	A	292	-8.656	-6.715	5.000	1.00	35.38	C
[2156]	ATOM	2104	N	PHE	A	293	-5.606	-5.946	4.999	1.00	36.48	N
[2157]	ATOM	2105	CA	PHE	A	293	-4.481	-5.448	5.743	1.00	35.80	C
[2158]	ATOM	2106	C	PHE	A	293	-3.940	-4.194	5.045	1.00	35.72	C
[2159]	ATOM	2107	O	PHE	A	293	-3.539	-3.234	5.691	1.00	35.98	O
[2160]	ATOM	2108	CB	PHE	A	293	-3.467	-6.563	5.939	1.00	35.21	C
[2161]	ATOM	2109	CG	PHE	A	293	-2.446	-6.254	6.952	1.00	33.64	C
[2162]	ATOM	2110	CD1	PHE	A	293	-2.815	-5.870	8.208	1.00	31.26	C
[2163]	ATOM	2111	CD2	PHE	A	293	-1.095	-6.331	6.638	1.00	34.65	C
[2164]	ATOM	2112	CE1	PHE	A	293	-1.867	-5.548	9.133	1.00	32.99	C
[2165]	ATOM	2113	CE2	PHE	A	293	-0.117	-5.998	7.562	1.00	32.13	C
[2166]	ATOM	2114	CZ	PHE	A	293	-0.485	-5.608	8.809	1.00	32.04	C
[2167]	ATOM	2115	N	LYS	A	294	-3.995	-4.176	3.716	1.00	35.80	N
[2168]	ATOM	2116	CA	LYS	A	294	-3.470	-3.032	2.928	1.00	35.64	C
[2169]	ATOM	2117	C	LYS	A	294	-4.239	-1.779	3.311	1.00	35.63	C
[2170]	ATOM	2118	O	LYS	A	294	-3.646	-0.786	3.697	1.00	35.69	O
[2171]	ATOM	2119	CB	LYS	A	294	-3.588	-3.360	1.456	1.00	35.42	C
[2172]	ATOM	2120	CG	LYS	A	294	-3.159	-2.318	0.443	1.00	36.03	C
[2173]	ATOM	2121	CD	LYS	A	294	-3.266	-2.965	-0.958	1.00	38.07	C
[2174]	ATOM	2122	CE	LYS	A	294	-3.221	-1.965	-2.093	1.00	40.84	C
[2175]	ATOM	2123	NZ	LYS	A	294	-2.149	-2.308	-3.089	1.00	41.06	N
[2176]	ATOM	2124	N	TYR	A	295	-5.562	-1.862	3.265	1.00	35.71	N
[2177]	ATOM	2125	CA	TYR	A	295	-6.454	-0.744	3.628	1.00	36.25	C
[2178]	ATOM	2126	C	TYR	A	295	-6.341	-0.362	5.082	1.00	36.47	C
[2179]	ATOM	2127	O	TYR	A	295	-6.551	0.787	5.453	1.00	37.51	O
[2180]	ATOM	2128	CB	TYR	A	295	-7.919	-1.067	3.290	1.00	35.85	C
[2181]	ATOM	2129	CG	TYR	A	295	-8.017	-1.407	1.832	1.00	36.83	C

[2182]	ATOM	2130	CD1	TYR	A	295	-7.331	-0.609	0.850	1.00	39.23	C
[2183]	ATOM	2131	CD2	TYR	A	295	-8.767	-2.501	1.399	1.00	34.47	C
[2184]	ATOM	2132	CE1	TYR	A	295	-7.390	-0.940	-0.528	1.00	38.13	C
[2185]	ATOM	2133	CE2	TYR	A	295	-8.817	-2.816	0.053	1.00	35.43	C
[2186]	ATOM	2134	CZ	TYR	A	295	-8.103	-2.038	-0.886	1.00	36.64	C
[2187]	ATOM	2135	OH	TYR	A	295	-8.123	-2.336	-2.197	1.00	38.76	O
[2188]	ATOM	2136	N	PHE	A	296	-6.039	-1.340	5.914	1.00	36.24	N
[2189]	ATOM	2137	CA	PHE	A	296	-5.932	-1.065	7.330	1.00	35.28	C
[2190]	ATOM	2138	C	PHE	A	296	-4.665	-0.260	7.546	1.00	35.90	C
[2191]	ATOM	2139	O	PHE	A	296	-4.692	0.686	8.243	1.00	36.85	O
[2192]	ATOM	2140	CB	PHE	A	296	-5.897	-2.365	8.142	1.00	34.91	C
[2193]	ATOM	2141	CG	PHE	A	296	-5.682	-2.170	9.625	1.00	31.04	C
[2194]	ATOM	2142	CD1	PHE	A	296	-6.686	-1.608	10.418	1.00	28.60	C
[2195]	ATOM	2143	CD2	PHE	A	296	-4.514	-2.610	10.218	1.00	28.67	C
[2196]	ATOM	2144	CE1	PHE	A	296	-6.516	-1.451	11.738	1.00	30.76	C
[2197]	ATOM	2145	CE2	PHE	A	296	-4.274	-2.454	11.587	1.00	29.63	C
[2198]	ATOM	2146	CZ	PHE	A	296	-5.250	-1.879	12.356	1.00	32.87	C
[2199]	ATOM	2147	N	LEU	A	297	-3.562	-0.609	6.919	1.00	35.88	N
[2200]	ATOM	2148	CA	LEU	A	297	-2.386	0.202	6.959	1.00	35.83	C
[2201]	ATOM	2149	C	LEU	A	297	-2.563	1.586	6.375	1.00	36.65	C
[2202]	ATOM	2150	O	LEU	A	297	-2.187	2.573	6.974	1.00	36.97	O
[2203]	ATOM	2151	CB	LEU	A	297	-1.358	-0.471	6.118	1.00	35.98	C
[2204]	ATOM	2152	CG	LEU	A	297	-0.799	-1.768	6.692	1.00	37.00	C
[2205]	ATOM	2153	CD1	LEU	A	297	0.184	-2.477	5.724	1.00	37.27	C
[2206]	ATOM	2154	CD2	LEU	A	297	-0.154	-1.601	8.136	1.00	34.80	C
[2207]	ATOM	2155	N	GLN	A	298	-3.098	1.677	5.173	1.00	37.35	N
[2208]	ATOM	2156	CA	GLN	A	298	-3.506	2.997	4.641	1.00	37.52	C
[2209]	ATOM	2157	C	GLN	A	298	-4.308	3.708	5.681	1.00	37.60	C
[2210]	ATOM	2158	O	GLN	A	298	-4.125	4.867	5.895	1.00	37.68	O
[2211]	ATOM	2159	CB	GLN	A	298	-4.333	2.872	3.344	1.00	36.64	C
[2212]	ATOM	2160	CG	GLN	A	298	-3.492	2.251	2.324	1.00	36.22	C
[2213]	ATOM	2161	CD	GLN	A	298	-4.154	2.109	1.049	1.00	36.44	C
[2214]	ATOM	2162	OE1	GLN	A	298	-3.512	1.689	0.092	1.00	37.44	O
[2215]	ATOM	2163	NE2	GLN	A	298	-5.446	2.475	0.980	1.00	35.22	N
[2216]	ATOM	2164	N	GLY	A	299	-5.189	2.995	6.339	1.00	38.08	N
[2217]	ATOM	2165	CA	GLY	A	299	-6.069	3.621	7.295	1.00	40.32	C

[2218]	ATOM	2166	C	GLY	A	299	-5.349	4.407	8.355	1.00	41.56	C
[2219]	ATOM	2167	O	GLY	A	299	-5.823	5.447	8.808	1.00	41.45	O
[2220]	ATOM	2168	N	MET	A	300	-4.199	3.903	8.771	1.00	43.58	N
[2221]	ATOM	2169	CA	MET	A	300	-3.374	4.634	9.708	1.00	45.79	C
[2222]	ATOM	2170	C	MET	A	300	-2.308	5.470	9.031	1.00	46.12	C
[2223]	ATOM	2171	O	MET	A	300	-1.392	5.893	9.657	1.00	47.20	O
[2224]	ATOM	2172	CB	MET	A	300	-2.787	3.739	10.778	1.00	45.17	C
[2225]	ATOM	2173	CG	MET	A	300	-2.439	2.337	10.335	1.00	48.21	C
[2226]	ATOM	2174	SD	MET	A	300	-2.286	1.030	11.679	1.00	49.92	S
[2227]	ATOM	2175	CE	MET	A	300	-0.692	1.458	12.288	1.00	52.81	C
[2228]	ATOM	2176	N	GLY	A	301	-2.464	5.768	7.762	1.00	46.77	N
[2229]	ATOM	2177	CA	GLY	A	301	-1.577	6.705	7.121	1.00	47.36	C
[2230]	ATOM	2178	C	GLY	A	301	-0.276	6.131	6.601	1.00	47.83	C
[2231]	ATOM	2179	O	GLY	A	301	0.662	6.865	6.343	1.00	47.02	O
[2232]	ATOM	2180	N	TYR	A	302	-0.205	4.822	6.437	1.00	49.05	N
[2233]	ATOM	2181	CA	TYR	A	302	0.967	4.247	5.790	1.00	50.36	C
[2234]	ATOM	2182	C	TYR	A	302	0.624	3.885	4.390	1.00	51.81	C
[2235]	ATOM	2183	O	TYR	A	302	-0.324	3.167	4.152	1.00	52.42	O
[2236]	ATOM	2184	CB	TYR	A	302	1.486	3.015	6.498	1.00	49.60	C
[2237]	ATOM	2185	CG	TYR	A	302	2.078	3.334	7.814	1.00	49.19	C
[2238]	ATOM	2186	CD1	TYR	A	302	3.204	4.152	7.911	1.00	48.33	C
[2239]	ATOM	2187	CD2	TYR	A	302	1.487	2.861	8.985	1.00	47.93	C
[2240]	ATOM	2188	CE1	TYR	A	302	3.734	4.464	9.153	1.00	48.72	C
[2241]	ATOM	2189	CE2	TYR	A	302	2.005	3.172	10.205	1.00	48.63	C
[2242]	ATOM	2190	CZ	TYR	A	302	3.117	3.959	10.286	1.00	48.51	C
[2243]	ATOM	2191	OH	TYR	A	302	3.549	4.218	11.528	1.00	48.61	O
[2244]	ATOM	2192	N	MET	A	303	1.390	4.410	3.460	1.00	53.70	N
[2245]	ATOM	2193	CA	MET	A	303	1.214	4.092	2.066	1.00	56.23	C
[2246]	ATOM	2194	C	MET	A	303	1.435	2.601	1.852	1.00	57.14	C
[2247]	ATOM	2195	O	MET	A	303	2.480	2.060	2.183	1.00	57.53	O
[2248]	ATOM	2196	CB	MET	A	303	2.188	4.925	1.247	1.00	56.17	C
[2249]	ATOM	2197	CG	MET	A	303	1.853	6.421	1.244	1.00	58.65	C
[2250]	ATOM	2198	SD	MET	A	303	0.748	6.887	-0.084	1.00	62.67	S
[2251]	ATOM	2199	CE	MET	A	303	-0.276	5.341	-0.320	1.00	64.44	C
[2252]	ATOM	2200	N	ALA	A	304	0.445	1.901	1.338	1.00	58.22	N
[2253]	ATOM	2201	CA	ALA	A	304	0.620	0.462	1.304	1.00	59.03	C

[2254]	ATOM	2202	C	ALA A 304	0.291	-0.123	-0.031	1.00	59.63	C
[2255]	ATOM	2203	O	ALA A 304	1.112	-0.860	-0.545	1.00	60.08	O
[2256]	ATOM	2204	CB	ALA A 304	-0.184	-0.206	2.382	1.00	59.41	C
[2257]	ATOM	2205	OXT	ALA A 304	-0.772	0.100	-0.593	1.00	59.90	O
[2258]	TER	2206		ALA A 304						
[2259]	ATOM	2207	N	ALA B 24	-2.337	26.622	19.753	1.00	62.84	N
[2260]	ATOM	2208	CA	ALA B 24	-1.303	27.722	19.508	1.00	62.04	C
[2261]	ATOM	2209	C	ALA B 24	-0.395	28.065	20.761	1.00	61.50	C
[2262]	ATOM	2210	O	ALA B 24	-0.465	29.194	21.294	1.00	61.74	O
[2263]	ATOM	2211	CB	ALA B 24	-2.015	29.041	18.898	1.00	63.02	C
[2264]	ATOM	2212	N	LYS B 25	0.446	27.112	21.211	1.00	58.95	N
[2265]	ATOM	2213	CA	LYS B 25	1.265	27.293	22.444	1.00	56.76	C
[2266]	ATOM	2214	C	LYS B 25	2.771	27.734	22.228	1.00	54.91	C
[2267]	ATOM	2215	O	LYS B 25	3.606	26.923	21.742	1.00	54.32	O
[2268]	ATOM	2216	CB	LYS B 25	1.129	26.042	23.390	1.00	57.04	C
[2269]	ATOM	2217	CG	LYS B 25	0.084	26.253	24.585	1.00	58.04	C
[2270]	ATOM	2218	CD	LYS B 25	0.389	25.594	26.057	1.00	58.05	C
[2271]	ATOM	2219	CE	LYS B 25	1.831	25.696	26.614	1.00	58.17	C
[2272]	ATOM	2220	NZ	LYS B 25	2.471	27.078	26.397	1.00	59.00	N
[2273]	ATOM	2221	N	THR B 26	3.100	28.988	22.604	1.00	51.76	N
[2274]	ATOM	2222	CA	THR B 26	4.487	29.514	22.526	1.00	50.40	C
[2275]	ATOM	2223	C	THR B 26	5.458	28.983	23.590	1.00	48.56	C
[2276]	ATOM	2224	O	THR B 26	5.105	28.942	24.731	1.00	50.26	O
[2277]	ATOM	2225	CB	THR B 26	4.509	31.044	22.575	1.00	49.72	C
[2278]	ATOM	2226	OG1	THR B 26	4.067	31.512	21.301	1.00	51.32	O
[2279]	ATOM	2227	CG2	THR B 26	5.944	31.604	22.775	1.00	49.34	C
[2280]	ATOM	2228	N	HIS B 27	6.670	28.590	23.233	1.00	45.95	N
[2281]	ATOM	2229	CA	HIS B 27	7.611	28.041	24.195	1.00	44.42	C
[2282]	ATOM	2230	C	HIS B 27	8.941	28.709	24.014	1.00	44.82	C
[2283]	ATOM	2231	O	HIS B 27	9.171	29.425	23.042	1.00	45.01	O
[2284]	ATOM	2232	CB	HIS B 27	7.803	26.546	23.992	1.00	42.85	C
[2285]	ATOM	2233	CG	HIS B 27	6.599	25.737	24.326	1.00	43.32	C
[2286]	ATOM	2234	ND1	HIS B 27	6.036	24.836	23.444	1.00	43.26	N
[2287]	ATOM	2235	CD2	HIS B 27	5.787	25.740	25.421	1.00	42.17	C
[2288]	ATOM	2236	CE1	HIS B 27	4.971	24.269	23.986	1.00	40.47	C
[2289]	ATOM	2237	NE2	HIS B 27	4.803	24.798	25.195	1.00	42.43	N

[2290]	ATOM	2238	N	SER	B	28	9.844	28.460	24.942	1.00	45.32	N
[2291]	ATOM	2239	CA	SER	B	28	11.164	29.089	24.930	1.00	45.43	C
[2292]	ATOM	2240	C	SER	B	28	12.155	28.108	25.550	1.00	45.07	C
[2293]	ATOM	2241	O	SER	B	28	11.817	27.433	26.499	1.00	45.77	O
[2294]	ATOM	2242	CB	SER	B	28	11.113	30.414	25.680	1.00	44.26	C
[2295]	ATOM	2243	OG	SER	B	28	12.405	30.913	25.610	1.00	46.71	O
[2296]	ATOM	2244	N	VAL	B	29	13.335	27.930	24.990	1.00	45.23	N
[2297]	ATOM	2245	CA	VAL	B	29	14.304	27.073	25.717	1.00	45.52	C
[2298]	ATOM	2246	C	VAL	B	29	15.650	27.682	25.791	1.00	45.43	C
[2299]	ATOM	2247	O	VAL	B	29	16.024	28.545	24.998	1.00	45.35	O
[2300]	ATOM	2248	CB	VAL	B	29	14.571	25.635	25.165	1.00	45.27	C
[2301]	ATOM	2249	CG1	VAL	B	29	13.453	24.729	25.453	1.00	46.67	C
[2302]	ATOM	2250	CG2	VAL	B	29	14.941	25.676	23.726	1.00	45.27	C
[2303]	ATOM	2251	N	GLU	B	30	16.421	27.174	26.739	1.00	45.34	N
[2304]	ATOM	2252	CA	GLU	B	30	17.807	27.630	26.845	1.00	44.94	C
[2305]	ATOM	2253	C	GLU	B	30	18.742	26.705	26.342	1.00	43.54	C
[2306]	ATOM	2254	O	GLU	B	30	18.529	25.528	26.446	1.00	42.73	O
[2307]	ATOM	2255	CB	GLU	B	30	18.135	28.021	28.228	1.00	45.02	C
[2308]	ATOM	2256	CG	GLU	B	30	17.510	29.318	28.195	1.00	49.14	C
[2309]	ATOM	2257	CD	GLU	B	30	17.900	30.222	29.210	1.00	54.31	C
[2310]	ATOM	2258	OE1	GLU	B	30	18.106	29.709	30.358	1.00	55.33	O
[2311]	ATOM	2259	OE2	GLU	B	30	17.905	31.436	28.857	1.00	53.91	O
[2312]	ATOM	2260	N	THR	B	31	19.738	27.285	25.715	1.00	42.87	N
[2313]	ATOM	2261	CA	THR	B	31	20.737	26.502	25.050	1.00	42.73	C
[2314]	ATOM	2262	C	THR	B	31	22.057	27.177	25.313	1.00	43.48	C
[2315]	ATOM	2263	O	THR	B	31	22.084	28.331	25.780	1.00	42.82	O
[2316]	ATOM	2264	CB	THR	B	31	20.571	26.487	23.543	1.00	42.60	C
[2317]	ATOM	2265	OG1	THR	B	31	21.154	27.694	23.021	1.00	42.64	O
[2318]	ATOM	2266	CG2	THR	B	31	19.053	26.253	23.097	1.00	40.10	C
[2319]	ATOM	2267	N	PRO	B	32	23.170	26.456	25.038	1.00	43.94	N
[2320]	ATOM	2268	CA	PRO	B	32	24.513	27.049	25.212	1.00	43.79	C
[2321]	ATOM	2269	C	PRO	B	32	24.649	28.402	24.518	1.00	44.84	C
[2322]	ATOM	2270	O	PRO	B	32	25.514	29.194	24.871	1.00	45.72	O
[2323]	ATOM	2271	CB	PRO	B	32	25.430	26.046	24.584	1.00	42.66	C
[2324]	ATOM	2272	CG	PRO	B	32	24.638	24.764	24.690	1.00	44.99	C
[2325]	ATOM	2273	CD	PRO	B	32	23.207	25.049	24.607	1.00	43.35	C

[2326]	ATOM	2274	N	TYR	B	33	23.793	28.717	23.559	1.00	45.67	N
[2327]	ATOM	2275	CA	TYR	B	33	23.997	29.972	22.810	1.00	46.17	C
[2328]	ATOM	2276	C	TYR	B	33	22.859	30.967	22.912	1.00	46.25	C
[2329]	ATOM	2277	O	TYR	B	33	22.621	31.734	21.994	1.00	46.30	O
[2330]	ATOM	2278	CB	TYR	B	33	24.336	29.708	21.361	1.00	45.77	C
[2331]	ATOM	2279	CG	TYR	B	33	25.281	28.560	21.189	1.00	45.96	C
[2332]	ATOM	2280	CD1	TYR	B	33	26.663	28.765	21.080	1.00	45.11	C
[2333]	ATOM	2281	CD2	TYR	B	33	24.783	27.253	21.083	1.00	45.11	C
[2334]	ATOM	2282	CE1	TYR	B	33	27.545	27.708	20.907	1.00	44.13	C
[2335]	ATOM	2283	CE2	TYR	B	33	25.638	26.192	20.899	1.00	44.82	C
[2336]	ATOM	2284	CZ	TYR	B	33	27.032	26.446	20.818	1.00	46.26	C
[2337]	ATOM	2285	OH	TYR	B	33	27.915	25.425	20.625	1.00	48.36	O
[2338]	ATOM	2286	N	GLY	B	34	22.205	30.948	24.073	1.00	46.42	N
[2339]	ATOM	2287	CA	GLY	B	34	21.125	31.845	24.389	1.00	46.03	C
[2340]	ATOM	2288	C	GLY	B	34	19.880	31.099	24.090	1.00	46.41	C
[2341]	ATOM	2289	O	GLY	B	34	19.894	29.873	23.899	1.00	47.09	O
[2342]	ATOM	2290	N	SER	B	35	18.780	31.823	24.041	1.00	45.77	N
[2343]	ATOM	2291	CA	SER	B	35	17.539	31.110	24.050	1.00	45.12	C
[2344]	ATOM	2292	C	SER	B	35	16.841	31.200	22.722	1.00	44.04	C
[2345]	ATOM	2293	O	SER	B	35	17.100	32.118	21.953	1.00	44.36	O
[2346]	ATOM	2294	CB	SER	B	35	16.711	31.509	25.269	1.00	45.38	C
[2347]	ATOM	2295	OG	SER	B	35	15.984	32.649	25.010	1.00	46.74	O
[2348]	ATOM	2296	N	VAL	B	36	16.053	30.184	22.425	1.00	42.38	N
[2349]	ATOM	2297	CA	VAL	B	36	15.324	30.079	21.189	1.00	41.42	C
[2350]	ATOM	2298	C	VAL	B	36	13.822	29.858	21.477	1.00	41.54	C
[2351]	ATOM	2299	O	VAL	B	36	13.435	29.113	22.376	1.00	41.13	O
[2352]	ATOM	2300	CB	VAL	B	36	15.919	28.976	20.283	1.00	40.89	C
[2353]	ATOM	2301	CG1	VAL	B	36	15.816	27.666	20.919	1.00	40.80	C
[2354]	ATOM	2302	CG2	VAL	B	36	15.208	28.890	18.996	1.00	39.65	C
[2355]	ATOM	2303	N	THR	B	37	13.000	30.515	20.684	1.00	41.79	N
[2356]	ATOM	2304	CA	THR	B	37	11.567	30.507	20.797	1.00	42.22	C
[2357]	ATOM	2305	C	THR	B	37	10.963	29.645	19.736	1.00	41.93	C
[2358]	ATOM	2306	O	THR	B	37	11.410	29.625	18.628	1.00	42.39	O
[2359]	ATOM	2307	CB	THR	B	37	11.109	31.915	20.611	1.00	42.47	C
[2360]	ATOM	2308	OG1	THR	B	37	11.238	32.579	21.862	1.00	43.22	O
[2361]	ATOM	2309	CG2	THR	B	37	9.714	31.981	20.164	1.00	44.36	C



[2362]	ATOM	2310	N	PHE	B	38	9.919	28.913	20.057	1.00	41.99	N
[2363]	ATOM	2311	CA	PHE	B	38	9.207	28.190	19.003	1.00	41.86	C
[2364]	ATOM	2312	C	PHE	B	38	7.782	28.015	19.353	1.00	41.88	C
[2365]	ATOM	2313	O	PHE	B	38	7.433	28.119	20.484	1.00	41.83	O
[2366]	ATOM	2314	CB	PHE	B	38	9.812	26.838	18.796	1.00	41.82	C
[2367]	ATOM	2315	CG	PHE	B	38	10.119	26.106	20.074	1.00	42.59	C
[2368]	ATOM	2316	CD1	PHE	B	38	11.267	26.400	20.807	1.00	43.69	C
[2369]	ATOM	2317	CD2	PHE	B	38	9.272	25.090	20.534	1.00	43.07	C
[2370]	ATOM	2318	CE1	PHE	B	38	11.533	25.729	21.973	1.00	43.72	C
[2371]	ATOM	2319	CE2	PHE	B	38	9.560	24.387	21.702	1.00	43.20	C
[2372]	ATOM	2320	CZ	PHE	B	38	10.708	24.712	22.417	1.00	42.55	C
[2373]	ATOM	2321	N	THR	B	39	6.940	27.702	18.391	1.00	42.40	N
[2374]	ATOM	2322	CA	THR	B	39	5.495	27.661	18.639	1.00	42.30	C
[2375]	ATOM	2323	C	THR	B	39	5.010	26.339	18.123	1.00	42.65	C
[2376]	ATOM	2324	O	THR	B	39	5.416	25.945	17.037	1.00	43.22	O
[2377]	ATOM	2325	CB	THR	B	39	4.878	28.847	17.919	1.00	42.15	C
[2378]	ATOM	2326	OG1	THR	B	39	5.262	29.997	18.639	1.00	43.39	O
[2379]	ATOM	2327	CG2	THR	B	39	3.433	28.831	17.946	1.00	41.82	C
[2380]	ATOM	2328	N	VAL	B	40	4.156	25.659	18.890	1.00	43.42	N
[2381]	ATOM	2329	CA	VAL	B	40	3.659	24.295	18.543	1.00	44.19	C
[2382]	ATOM	2330	C	VAL	B	40	2.165	24.225	18.153	1.00	45.38	C
[2383]	ATOM	2331	O	VAL	B	40	1.318	24.773	18.850	1.00	45.30	O
[2384]	ATOM	2332	CB	VAL	B	40	3.924	23.282	19.691	1.00	43.72	C
[2385]	ATOM	2333	CG1	VAL	B	40	3.374	21.917	19.373	1.00	41.49	C
[2386]	ATOM	2334	CG2	VAL	B	40	5.415	23.209	19.969	1.00	42.49	C
[2387]	ATOM	2335	N	TYR	B	41	1.836	23.560	17.043	1.00	46.79	N
[2388]	ATOM	2336	CA	TYR	B	41	0.461	23.442	16.664	1.00	48.22	C
[2389]	ATOM	2337	C	TYR	B	41	0.071	22.022	16.460	1.00	50.29	C
[2390]	ATOM	2338	O	TYR	B	41	0.901	21.175	16.075	1.00	50.06	O
[2391]	ATOM	2339	CB	TYR	B	41	0.236	24.124	15.381	1.00	47.62	C
[2392]	ATOM	2340	CG	TYR	B	41	0.315	25.586	15.433	1.00	47.90	C
[2393]	ATOM	2341	CD1	TYR	B	41	1.526	26.231	15.464	1.00	46.64	C
[2394]	ATOM	2342	CD2	TYR	B	41	-0.843	26.361	15.370	1.00	50.03	C
[2395]	ATOM	2343	CE1	TYR	B	41	1.591	27.609	15.448	1.00	47.36	C
[2396]	ATOM	2344	CE2	TYR	B	41	-0.786	27.758	15.353	1.00	49.35	C
[2397]	ATOM	2345	CZ	TYR	B	41	0.441	28.358	15.387	1.00	48.75	C

[2398]	ATOM	2346	OH	TYR	B	41	0.524	29.696	15.340	1.00	48.94	O
[2399]	ATOM	2347	N	GLY	B	42	-1.219	21.780	16.682	1.00	52.67	N
[2400]	ATOM	2348	CA	GLY	B	42	-1.797	20.475	16.531	1.00	56.23	C
[2401]	ATOM	2349	C	GLY	B	42	-1.608	19.737	17.822	1.00	58.91	C
[2402]	ATOM	2350	O	GLY	B	42	-0.787	20.083	18.672	1.00	59.14	O
[2403]	ATOM	2351	N	THR	B	43	-2.380	18.702	18.004	1.00	61.57	N
[2404]	ATOM	2352	CA	THR	B	43	-2.243	17.936	19.204	1.00	64.27	C
[2405]	ATOM	2353	C	THR	B	43	-1.395	16.802	18.636	1.00	65.64	C
[2406]	ATOM	2354	O	THR	B	43	-1.336	16.677	17.378	1.00	66.82	O
[2407]	ATOM	2355	CB	THR	B	43	-3.633	17.521	19.747	1.00	64.67	C
[2408]	ATOM	2356	OG1	THR	B	43	-3.913	16.181	19.360	1.00	65.52	O
[2409]	ATOM	2357	CG2	THR	B	43	-4.769	18.432	19.204	1.00	64.01	C
[2410]	ATOM	2358	N	PRO	B	44	-0.705	15.993	19.503	1.00	66.50	N
[2411]	ATOM	2359	CA	PRO	B	44	0.396	15.302	18.758	1.00	65.63	C
[2412]	ATOM	2360	C	PRO	B	44	-0.181	14.231	17.884	1.00	63.68	C
[2413]	ATOM	2361	O	PRO	B	44	-1.415	14.142	17.742	1.00	64.05	O
[2414]	ATOM	2362	CB	PRO	B	44	1.323	14.695	19.858	1.00	66.70	C
[2415]	ATOM	2363	CG	PRO	B	44	0.771	15.260	21.208	1.00	67.92	C
[2416]	ATOM	2364	CD	PRO	B	44	-0.737	15.622	20.937	1.00	66.30	C
[2417]	ATOM	2365	N	LYS	B	45	0.728	13.480	17.277	1.00	60.38	N
[2418]	ATOM	2366	CA	LYS	B	45	0.422	12.235	16.674	1.00	58.43	C
[2419]	ATOM	2367	C	LYS	B	45	1.663	11.512	16.988	1.00	60.32	C
[2420]	ATOM	2368	O	LYS	B	45	2.683	11.772	16.388	1.00	60.70	O
[2421]	ATOM	2369	CB	LYS	B	45	0.239	12.466	15.176	1.00	56.17	C
[2422]	ATOM	2370	CG	LYS	B	45	-0.797	13.657	14.837	1.00	50.38	C
[2423]	ATOM	2371	CD	LYS	B	45	-2.277	13.145	15.025	1.00	47.54	C
[2424]	ATOM	2372	CE	LYS	B	45	-3.255	14.254	14.882	1.00	47.28	C
[2425]	ATOM	2373	NZ	LYS	B	45	-4.601	13.717	14.371	1.00	46.69	N
[2426]	ATOM	2374	N	PRO	B	46	1.595	10.609	17.959	1.00	63.20	N
[2427]	ATOM	2375	CA	PRO	B	46	2.861	10.039	18.475	1.00	64.20	C
[2428]	ATOM	2376	C	PRO	B	46	3.597	9.214	17.405	1.00	63.73	C
[2429]	ATOM	2377	O	PRO	B	46	4.806	9.040	17.513	1.00	64.24	O
[2430]	ATOM	2378	CB	PRO	B	46	2.414	9.137	19.668	1.00	65.57	C
[2431]	ATOM	2379	CG	PRO	B	46	0.896	9.333	19.835	1.00	65.78	C
[2432]	ATOM	2380	CD	PRO	B	46	0.388	10.008	18.562	1.00	63.83	C
[2433]	ATOM	2381	N	LYS	B	47	2.888	8.766	16.367	1.00	62.57	N

[2434]	ATOM	2382	CA	LYS	B	47	3.504	7.914	15.333	1.00	61.93	C
[2435]	ATOM	2383	C	LYS	B	47	3.815	8.585	13.918	1.00	59.35	C
[2436]	ATOM	2384	O	LYS	B	47	3.942	7.915	12.840	1.00	59.43	O
[2437]	ATOM	2385	CB	LYS	B	47	2.733	6.574	15.260	1.00	63.82	C
[2438]	ATOM	2386	CG	LYS	B	47	1.415	6.525	14.354	1.00	66.95	C
[2439]	ATOM	2387	CD	LYS	B	47	0.538	7.791	14.534	1.00	72.42	C
[2440]	ATOM	2388	CE	LYS	B	47	-0.583	7.957	13.485	1.00	73.08	C
[2441]	ATOM	2389	NZ	LYS	B	47	-1.768	8.657	14.143	1.00	74.08	N
[2442]	ATOM	2390	N	ARG	B	48	3.980	9.908	13.950	1.00	55.08	N
[2443]	ATOM	2391	CA	ARG	B	48	4.604	10.642	12.853	1.00	50.90	C
[2444]	ATOM	2392	C	ARG	B	48	5.713	11.556	13.344	1.00	48.75	C
[2445]	ATOM	2393	O	ARG	B	48	5.740	11.964	14.525	1.00	48.18	O
[2446]	ATOM	2394	CB	ARG	B	48	3.585	11.509	12.163	1.00	50.49	C
[2447]	ATOM	2395	CG	ARG	B	48	2.404	10.780	11.763	1.00	49.16	C
[2448]	ATOM	2396	CD	ARG	B	48	2.255	10.923	10.295	1.00	47.26	C
[2449]	ATOM	2397	NE	ARG	B	48	1.611	9.756	9.693	1.00	51.01	N
[2450]	ATOM	2398	CZ	ARG	B	48	0.878	9.799	8.562	1.00	53.24	C
[2451]	ATOM	2399	NH1	ARG	B	48	0.664	10.928	7.916	1.00	48.74	N
[2452]	ATOM	2400	NH2	ARG	B	48	0.344	8.694	8.054	1.00	52.52	N
[2453]	ATOM	2401	N	PRO	B	49	6.625	11.918	12.431	1.00	46.57	N
[2454]	ATOM	2402	CA	PRO	B	49	7.519	13.020	12.759	1.00	44.37	C
[2455]	ATOM	2403	C	PRO	B	49	6.782	14.360	13.020	1.00	42.39	C
[2456]	ATOM	2404	O	PRO	B	49	5.583	14.538	12.746	1.00	42.06	O
[2457]	ATOM	2405	CB	PRO	B	49	8.383	13.124	11.511	1.00	44.37	C
[2458]	ATOM	2406	CG	PRO	B	49	7.597	12.403	10.420	1.00	44.79	C
[2459]	ATOM	2407	CD	PRO	B	49	6.906	11.336	11.100	1.00	46.20	C
[2460]	ATOM	2408	N	ALA	B	50	7.493	15.299	13.596	1.00	40.42	N
[2461]	ATOM	2409	CA	ALA	B	50	6.979	16.657	13.675	1.00	38.95	C
[2462]	ATOM	2410	C	ALA	B	50	7.424	17.401	12.432	1.00	37.02	C
[2463]	ATOM	2411	O	ALA	B	50	8.474	17.133	11.908	1.00	36.65	O
[2464]	ATOM	2412	CB	ALA	B	50	7.520	17.356	14.949	1.00	39.28	C
[2465]	ATOM	2413	N	ILE	B	51	6.614	18.317	11.942	1.00	35.34	N
[2466]	ATOM	2414	CA	ILE	B	51	7.078	19.180	10.863	1.00	33.40	C
[2467]	ATOM	2415	C	ILE	B	51	7.685	20.400	11.504	1.00	32.14	C
[2468]	ATOM	2416	O	ILE	B	51	6.987	21.178	12.101	1.00	31.53	O
[2469]	ATOM	2417	CB	ILE	B	51	5.944	19.600	9.953	1.00	33.38	C

[2470]	ATOM	2418	CG1	ILE	B	51	5.228	18.346	9.415	1.00	33.46	C
[2471]	ATOM	2419	CG2	ILE	B	51	6.513	20.418	8.829	1.00	31.57	C
[2472]	ATOM	2420	CD1	ILE	B	51	4.226	18.551	8.299	1.00	30.39	C
[2473]	ATOM	2421	N	LEU	B	52	9.002	20.531	11.389	1.00	31.15	N
[2474]	ATOM	2422	CA	LEU	B	52	9.746	21.596	12.063	1.00	30.39	C
[2475]	ATOM	2423	C	LEU	B	52	10.197	22.636	11.031	1.00	29.48	C
[2476]	ATOM	2424	O	LEU	B	52	10.880	22.272	10.081	1.00	29.91	O
[2477]	ATOM	2425	CB	LEU	B	52	10.926	21.014	12.807	1.00	29.60	C
[2478]	ATOM	2426	CG	LEU	B	52	11.641	22.097	13.585	1.00	31.95	C
[2479]	ATOM	2427	CD1	LEU	B	52	12.298	21.596	14.853	1.00	31.97	C
[2480]	ATOM	2428	CD2	LEU	B	52	12.731	22.658	12.747	1.00	31.38	C
[2481]	ATOM	2429	N	THR	B	53	9.786	23.906	11.152	1.00	28.17	N
[2482]	ATOM	2430	CA	THR	B	53	10.164	24.858	10.099	1.00	27.17	C
[2483]	ATOM	2431	C	THR	B	53	11.219	25.807	10.623	1.00	27.04	C
[2484]	ATOM	2432	O	THR	B	53	11.315	26.031	11.819	1.00	28.17	O
[2485]	ATOM	2433	CB	THR	B	53	8.964	25.630	9.539	1.00	26.57	C
[2486]	ATOM	2434	OG1	THR	B	53	8.491	26.454	10.552	1.00	26.18	O
[2487]	ATOM	2435	CG2	THR	B	53	7.833	24.731	9.214	1.00	27.14	C
[2488]	ATOM	2436	N	TYR	B	54	12.013	26.359	9.746	1.00	25.34	N
[2489]	ATOM	2437	CA	TYR	B	54	13.044	27.303	10.187	1.00	25.90	C
[2490]	ATOM	2438	C	TYR	B	54	13.163	28.352	9.083	1.00	26.04	C
[2491]	ATOM	2439	O	TYR	B	54	13.361	27.962	7.930	1.00	26.85	O
[2492]	ATOM	2440	CB	TYR	B	54	14.457	26.610	10.400	1.00	26.25	C
[2493]	ATOM	2441	CG	TYR	B	54	15.337	27.302	11.435	1.00	25.88	C
[2494]	ATOM	2442	CD1	TYR	B	54	15.820	28.609	11.230	1.00	25.47	C
[2495]	ATOM	2443	CD2	TYR	B	54	15.626	26.695	12.639	1.00	23.83	C
[2496]	ATOM	2444	CE1	TYR	B	54	16.576	29.261	12.190	1.00	23.93	C
[2497]	ATOM	2445	CE2	TYR	B	54	16.397	27.360	13.609	1.00	23.50	C
[2498]	ATOM	2446	CZ	TYR	B	54	16.848	28.628	13.374	1.00	26.29	C
[2499]	ATOM	2447	OH	TYR	B	54	17.615	29.224	14.357	1.00	29.05	O
[2500]	ATOM	2448	N	HIS	B	55	13.076	29.641	9.425	1.00	24.39	N
[2501]	ATOM	2449	CA	HIS	B	55	12.833	30.683	8.468	1.00	23.08	C
[2502]	ATOM	2450	C	HIS	B	55	14.090	31.389	7.949	1.00	24.47	C
[2503]	ATOM	2451	O	HIS	B	55	15.182	31.244	8.487	1.00	23.19	O
[2504]	ATOM	2452	CB	HIS	B	55	11.968	31.693	9.121	1.00	22.38	C
[2505]	ATOM	2453	CG	HIS	B	55	12.631	32.387	10.272	1.00	23.02	C

[2506]	ATOM	2454	ND1	HIS	B	55	13.548	33.406	10.122	1.00	23.93	N
[2507]	ATOM	2455	CD2	HIS	B	55	12.511	32.212	11.602	1.00	22.11	C
[2508]	ATOM	2456	CE1	HIS	B	55	13.949	33.824	11.307	1.00	23.09	C
[2509]	ATOM	2457	NE2	HIS	B	55	13.351	33.102	12.221	1.00	23.80	N
[2510]	ATOM	2458	N	ASP	B	56	13.927	32.177	6.886	1.00	26.12	N
[2511]	ATOM	2459	CA	ASP	B	56	15.038	32.955	6.317	1.00	27.33	C
[2512]	ATOM	2460	C	ASP	B	56	15.371	34.189	7.141	1.00	27.21	C
[2513]	ATOM	2461	O	ASP	B	56	14.692	34.481	8.134	1.00	26.46	O
[2514]	ATOM	2462	CB	ASP	B	56	14.787	33.359	4.845	1.00	27.87	C
[2515]	ATOM	2463	CG	ASP	B	56	16.090	33.216	3.976	1.00	31.39	C
[2516]	ATOM	2464	OD1	ASP	B	56	17.213	33.188	4.597	1.00	30.91	O
[2517]	ATOM	2465	OD2	ASP	B	56	16.000	33.108	2.714	1.00	31.82	O
[2518]	ATOM	2466	N	VAL	B	57	16.441	34.854	6.711	1.00	27.76	N
[2519]	ATOM	2467	CA	VAL	B	57	16.940	36.099	7.275	1.00	28.00	C
[2520]	ATOM	2468	C	VAL	B	57	15.963	37.234	6.937	1.00	28.80	C
[2521]	ATOM	2469	O	VAL	B	57	15.595	37.460	5.769	1.00	29.22	O
[2522]	ATOM	2470	CB	VAL	B	57	18.268	36.527	6.561	1.00	27.94	C
[2523]	ATOM	2471	CG1	VAL	B	57	18.831	37.685	7.244	1.00	28.44	C
[2524]	ATOM	2472	CG2	VAL	B	57	19.275	35.481	6.621	1.00	25.93	C
[2525]	ATOM	2473	N	GLY	B	58	15.573	38.005	7.921	1.00	28.54	N
[2526]	ATOM	2474	CA	GLY	B	58	14.723	39.116	7.629	1.00	28.36	C
[2527]	ATOM	2475	C	GLY	B	58	13.379	38.809	8.222	1.00	29.52	C
[2528]	ATOM	2476	O	GLY	B	58	12.626	39.674	8.666	1.00	30.16	O
[2529]	ATOM	2477	N	LEU	B	59	13.092	37.540	8.296	1.00	28.98	N
[2530]	ATOM	2478	CA	LEU	B	59	11.748	37.088	8.534	1.00	28.54	C
[2531]	ATOM	2479	C	LEU	B	59	11.673	36.422	9.860	1.00	28.78	C
[2532]	ATOM	2480	O	LEU	B	59	12.661	36.246	10.526	1.00	28.84	O
[2533]	ATOM	2481	CB	LEU	B	59	11.403	36.016	7.454	1.00	27.58	C
[2534]	ATOM	2482	CG	LEU	B	59	11.639	36.541	6.044	1.00	25.63	C
[2535]	ATOM	2483	CD1	LEU	B	59	11.131	35.607	5.114	1.00	23.47	C
[2536]	ATOM	2484	CD2	LEU	B	59	10.803	37.792	5.876	1.00	23.12	C
[2537]	ATOM	2485	N	ASN	B	60	10.498	35.971	10.207	1.00	29.34	N
[2538]	ATOM	2486	CA	ASN	B	60	10.401	35.045	11.291	1.00	31.04	C
[2539]	ATOM	2487	C	ASN	B	60	9.292	34.073	10.863	1.00	31.57	C
[2540]	ATOM	2488	O	ASN	B	60	8.775	34.244	9.765	1.00	31.85	O
[2541]	ATOM	2489	CB	ASN	B	60	10.144	35.793	12.610	1.00	30.92	C

[2542]	ATOM	2490	CG	ASN	B	60	8.877	36.650	12.560	1.00	31.25	C
[2543]	ATOM	2491	OD1	ASN	B	60	8.174	36.674	11.564	1.00	32.55	O
[2544]	ATOM	2492	ND2	ASN	B	60	8.594	37.352	13.651	1.00	28.56	N
[2545]	ATOM	2493	N	TYR	B	61	8.950	33.081	11.684	1.00	32.39	N
[2546]	ATOM	2494	CA	TYR	B	61	7.843	32.181	11.333	1.00	33.70	C
[2547]	ATOM	2495	C	TYR	B	61	6.630	32.906	10.718	1.00	34.35	C
[2548]	ATOM	2496	O	TYR	B	61	6.091	32.558	9.642	1.00	33.00	O
[2549]	ATOM	2497	CB	TYR	B	61	7.350	31.361	12.513	1.00	34.32	C
[2550]	ATOM	2498	CG	TYR	B	61	5.984	30.835	12.242	1.00	36.73	C
[2551]	ATOM	2499	CD1	TYR	B	61	5.771	29.833	11.267	1.00	39.30	C
[2552]	ATOM	2500	CD2	TYR	B	61	4.894	31.331	12.928	1.00	38.41	C
[2553]	ATOM	2501	CE1	TYR	B	61	4.494	29.351	10.955	1.00	39.70	C
[2554]	ATOM	2502	CE2	TYR	B	61	3.599	30.856	12.657	1.00	41.10	C
[2555]	ATOM	2503	CZ	TYR	B	61	3.398	29.881	11.640	1.00	42.92	C
[2556]	ATOM	2504	OH	TYR	B	61	2.103	29.459	11.357	1.00	44.06	O
[2557]	ATOM	2505	N	LYS	B	62	6.211	33.932	11.423	1.00	35.37	N
[2558]	ATOM	2506	CA	LYS	B	62	5.001	34.615	11.011	1.00	36.55	C
[2559]	ATOM	2507	C	LYS	B	62	5.097	35.182	9.610	1.00	35.72	C
[2560]	ATOM	2508	O	LYS	B	62	4.180	35.015	8.841	1.00	36.11	O
[2561]	ATOM	2509	CB	LYS	B	62	4.681	35.716	11.995	1.00	37.72	C
[2562]	ATOM	2510	CG	LYS	B	62	3.499	36.516	11.669	1.00	42.36	C
[2563]	ATOM	2511	CD	LYS	B	62	2.546	36.473	12.885	1.00	51.65	C
[2564]	ATOM	2512	CE	LYS	B	62	1.428	37.601	12.820	1.00	52.83	C
[2565]	ATOM	2513	NZ	LYS	B	62	1.923	38.733	13.673	1.00	54.96	N
[2566]	ATOM	2514	N	SER	B	63	6.204	35.817	9.249	1.00	34.55	N
[2567]	ATOM	2515	CA	SER	B	63	6.299	36.371	7.912	1.00	33.38	C
[2568]	ATOM	2516	C	SER	B	63	6.870	35.446	6.894	1.00	32.92	C
[2569]	ATOM	2517	O	SER	B	63	6.821	35.776	5.715	1.00	33.14	O
[2570]	ATOM	2518	CB	SER	B	63	7.092	37.656	7.866	1.00	33.46	C
[2571]	ATOM	2519	OG	SER	B	63	8.404	37.470	8.387	1.00	33.99	O
[2572]	ATOM	2520	N	CYS	B	64	7.408	34.300	7.310	1.00	31.91	N
[2573]	ATOM	2521	CA	CYS	B	64	8.005	33.423	6.339	1.00	31.33	C
[2574]	ATOM	2522	C	CYS	B	64	7.117	32.257	6.031	1.00	32.20	C
[2575]	ATOM	2523	O	CYS	B	64	7.060	31.803	4.897	1.00	32.36	O
[2576]	ATOM	2524	CB	CYS	B	64	9.296	32.877	6.875	1.00	31.67	C
[2577]	ATOM	2525	SG	CYS	B	64	10.198	31.963	5.647	1.00	32.23	S

[2578]	ATOM	2526	N	PHE	B	65	6.437	31.721	7.039	1.00	32.46	N
[2579]	ATOM	2527	CA	PHE	B	65	5.799	30.477	6.825	1.00	33.09	C
[2580]	ATOM	2528	C	PHE	B	65	4.335	30.489	7.150	1.00	34.85	C
[2581]	ATOM	2529	O	PHE	B	65	3.637	29.500	6.859	1.00	35.44	O
[2582]	ATOM	2530	CB	PHE	B	65	6.451	29.416	7.673	1.00	32.64	C
[2583]	ATOM	2531	CG	PHE	B	65	7.724	28.858	7.107	1.00	33.37	C
[2584]	ATOM	2532	CD1	PHE	B	65	7.722	28.182	5.881	1.00	32.16	C
[2585]	ATOM	2533	CD2	PHE	B	65	8.920	28.952	7.838	1.00	33.77	C
[2586]	ATOM	2534	CE1	PHE	B	65	8.896	27.621	5.387	1.00	31.98	C
[2587]	ATOM	2535	CE2	PHE	B	65	10.092	28.407	7.342	1.00	33.02	C
[2588]	ATOM	2536	CZ	PHE	B	65	10.088	27.744	6.104	1.00	33.33	C
[2589]	ATOM	2537	N	GLN	B	66	3.826	31.543	7.785	1.00	36.05	N
[2590]	ATOM	2538	CA	GLN	B	66	2.410	31.493	8.236	1.00	36.34	C
[2591]	ATOM	2539	C	GLN	B	66	1.413	31.524	7.110	1.00	36.78	C
[2592]	ATOM	2540	O	GLN	B	66	0.431	30.764	7.170	1.00	37.92	O
[2593]	ATOM	2541	CB	GLN	B	66	2.060	32.555	9.224	1.00	36.35	C
[2594]	ATOM	2542	CG	GLN	B	66	0.622	32.606	9.614	1.00	36.88	C
[2595]	ATOM	2543	CD	GLN	B	66	0.382	33.736	10.642	1.00	39.07	C
[2596]	ATOM	2544	OE1	GLN	B	66	0.340	33.499	11.873	1.00	36.02	O
[2597]	ATOM	2545	NE2	GLN	B	66	0.323	34.995	10.141	1.00	38.82	N
[2598]	ATOM	2546	N	PRO	B	67	1.613	32.366	6.099	1.00	36.40	N
[2599]	ATOM	2547	CA	PRO	B	67	0.767	32.182	4.955	1.00	37.27	C
[2600]	ATOM	2548	C	PRO	B	67	0.738	30.704	4.470	1.00	38.66	C
[2601]	ATOM	2549	O	PRO	B	67	-0.373	30.134	4.390	1.00	38.75	O
[2602]	ATOM	2550	CB	PRO	B	67	1.404	33.068	3.901	1.00	36.73	C
[2603]	ATOM	2551	CG	PRO	B	67	1.978	34.187	4.693	1.00	36.80	C
[2604]	ATOM	2552	CD	PRO	B	67	2.525	33.498	5.926	1.00	37.24	C
[2605]	ATOM	2553	N	LEU	B	68	1.901	30.072	4.172	1.00	39.48	N
[2606]	ATOM	2554	CA	LEU	B	68	1.870	28.655	3.756	1.00	39.02	C
[2607]	ATOM	2555	C	LEU	B	68	1.048	27.816	4.761	1.00	39.35	C
[2608]	ATOM	2556	O	LEU	B	68	0.030	27.227	4.408	1.00	39.26	O
[2609]	ATOM	2557	CB	LEU	B	68	3.253	28.082	3.579	1.00	38.80	C
[2610]	ATOM	2558	CG	LEU	B	68	3.300	26.644	3.090	1.00	38.68	C
[2611]	ATOM	2559	CD1	LEU	B	68	2.881	26.618	1.670	1.00	40.81	C
[2612]	ATOM	2560	CD2	LEU	B	68	4.652	26.121	3.111	1.00	39.14	C
[2613]	ATOM	2561	N	PHE	B	69	1.430	27.804	6.032	1.00	38.74	N

[2614]	ATOM	2562	CA	PHE	B	69	0.737	26.913	6.951	1.00	38.51	C
[2615]	ATOM	2563	C	PHE	B	69	-0.727	27.231	7.227	1.00	39.98	C
[2616]	ATOM	2564	O	PHE	B	69	-1.450	26.441	7.847	1.00	41.08	O
[2617]	ATOM	2565	CB	PHE	B	69	1.556	26.610	8.178	1.00	37.22	C
[2618]	ATOM	2566	CG	PHE	B	69	2.681	25.689	7.895	1.00	36.18	C
[2619]	ATOM	2567	CD1	PHE	B	69	3.770	26.119	7.154	1.00	36.18	C
[2620]	ATOM	2568	CD2	PHE	B	69	2.656	24.367	8.340	1.00	35.63	C
[2621]	ATOM	2569	CE1	PHE	B	69	4.833	25.253	6.840	1.00	35.33	C
[2622]	ATOM	2570	CE2	PHE	B	69	3.712	23.477	8.046	1.00	35.30	C
[2623]	ATOM	2571	CZ	PHE	B	69	4.808	23.944	7.280	1.00	36.57	C
[2624]	ATOM	2572	N	GLN	B	70	-1.221	28.352	6.720	1.00	41.00	N
[2625]	ATOM	2573	CA	GLN	B	70	-2.697	28.678	6.912	1.00	41.81	C
[2626]	ATOM	2574	C	GLN	B	70	-3.490	28.599	5.598	1.00	42.85	C
[2627]	ATOM	2575	O	GLN	B	70	-4.725	28.753	5.607	1.00	43.57	O
[2628]	ATOM	2576	CB	GLN	B	70	-2.964	30.069	7.560	1.00	40.55	C
[2629]	ATOM	2577	CG	GLN	B	70	-2.767	30.075	9.013	1.00	39.71	C
[2630]	ATOM	2578	CD	GLN	B	70	-2.786	31.489	9.583	1.00	42.29	C
[2631]	ATOM	2579	OE1	GLN	B	70	-2.444	32.447	8.937	1.00	41.87	O
[2632]	ATOM	2580	NE2	GLN	B	70	-3.183	31.621	10.783	1.00	38.45	N
[2633]	ATOM	2581	N	PHE	B	71	-2.772	28.410	4.488	1.00	43.68	N
[2634]	ATOM	2582	CA	PHE	B	71	-3.386	28.001	3.248	1.00	45.31	C
[2635]	ATOM	2583	C	PHE	B	71	-4.211	26.764	3.515	1.00	45.85	C
[2636]	ATOM	2584	O	PHE	B	71	-3.752	25.785	4.144	1.00	46.09	O
[2637]	ATOM	2585	CB	PHE	B	71	-2.336	27.602	2.275	1.00	46.12	C
[2638]	ATOM	2586	CG	PHE	B	71	-2.814	27.510	0.887	1.00	49.52	C
[2639]	ATOM	2587	CD1	PHE	B	71	-3.545	28.563	0.310	1.00	52.61	C
[2640]	ATOM	2588	CD2	PHE	B	71	-2.474	26.404	0.108	1.00	51.59	C
[2641]	ATOM	2589	CE1	PHE	B	71	-3.942	28.505	-1.021	1.00	52.74	C
[2642]	ATOM	2590	CE2	PHE	B	71	-2.863	26.340	-1.215	1.00	52.96	C
[2643]	ATOM	2591	CZ	PHE	B	71	-3.599	27.405	-1.785	1.00	53.05	C
[2644]	ATOM	2592	N	GLU	B	72	-5.454	26.814	3.067	1.00	46.51	N
[2645]	ATOM	2593	CA	GLU	B	72	-6.417	25.786	3.436	1.00	46.26	C
[2646]	ATOM	2594	C	GLU	B	72	-5.966	24.361	2.984	1.00	44.89	C
[2647]	ATOM	2595	O	GLU	B	72	-5.993	23.398	3.780	1.00	43.13	O
[2648]	ATOM	2596	CB	GLU	B	72	-7.727	26.181	2.809	1.00	46.91	C
[2649]	ATOM	2597	CG	GLU	B	72	-8.582	25.008	2.444	1.00	51.89	C



[2650]	ATOM	2598	CD	GLU	B	72	-9.883	25.008	3.272	1.00	57.97	C
[2651]	ATOM	2599	OE1	GLU	B	72	-10.584	26.121	3.224	1.00	59.62	O
[2652]	ATOM	2600	OE2	GLU	B	72	-10.194	23.913	3.913	1.00	57.88	O
[2653]	ATOM	2601	N	ASP	B	73	-5.521	24.247	1.727	1.00	44.05	N
[2654]	ATOM	2602	CA	ASP	B	73	-4.933	22.967	1.342	1.00	44.84	C
[2655]	ATOM	2603	C	ASP	B	73	-3.816	22.422	2.263	1.00	43.95	C
[2656]	ATOM	2604	O	ASP	B	73	-3.744	21.235	2.458	1.00	44.14	O
[2657]	ATOM	2605	CB	ASP	B	73	-4.516	22.930	-0.138	1.00	45.02	C
[2658]	ATOM	2606	CG	ASP	B	73	-5.644	23.274	-1.056	1.00	47.58	C
[2659]	ATOM	2607	OD1	ASP	B	73	-6.857	22.922	-0.799	1.00	50.83	O
[2660]	ATOM	2608	OD2	ASP	B	73	-5.301	23.903	-2.065	1.00	49.54	O
[2661]	ATOM	2609	N	MET	B	74	-2.960	23.287	2.781	1.00	43.50	N
[2662]	ATOM	2610	CA	MET	B	74	-1.887	22.878	3.636	1.00	43.42	C
[2663]	ATOM	2611	C	MET	B	74	-2.488	22.469	4.994	1.00	43.97	C
[2664]	ATOM	2612	O	MET	B	74	-2.056	21.508	5.643	1.00	43.84	O
[2665]	ATOM	2613	CB	MET	B	74	-0.841	23.987	3.734	1.00	42.71	C
[2666]	ATOM	2614	CG	MET	B	74	0.334	23.661	4.557	1.00	42.39	C
[2667]	ATOM	2615	SD	MET	B	74	1.272	22.206	4.115	1.00	40.74	S
[2668]	ATOM	2616	CE	MET	B	74	2.448	22.892	3.045	1.00	41.84	C
[2669]	ATOM	2617	N	GLN	B	75	-3.541	23.159	5.404	1.00	44.78	N
[2670]	ATOM	2618	CA	GLN	B	75	-4.222	22.780	6.633	1.00	45.37	C
[2671]	ATOM	2619	C	GLN	B	75	-4.648	21.342	6.504	1.00	46.70	C
[2672]	ATOM	2620	O	GLN	B	75	-4.312	20.535	7.350	1.00	47.29	O
[2673]	ATOM	2621	CB	GLN	B	75	-5.414	23.704	6.922	1.00	45.47	C
[2674]	ATOM	2622	CG	GLN	B	75	-5.105	24.941	7.810	1.00	44.64	C
[2675]	ATOM	2623	CD	GLN	B	75	-4.541	24.527	9.214	1.00	46.76	C
[2676]	ATOM	2624	OE1	GLN	B	75	-3.401	24.924	9.616	1.00	45.29	O
[2677]	ATOM	2625	NE2	GLN	B	75	-5.313	23.668	9.942	1.00	46.20	N
[2678]	ATOM	2626	N	GLU	B	76	-5.353	21.038	5.420	1.00	47.95	N
[2679]	ATOM	2627	CA	GLU	B	76	-5.837	19.705	5.092	1.00	50.41	C
[2680]	ATOM	2628	C	GLU	B	76	-4.752	18.681	5.435	1.00	48.84	C
[2681]	ATOM	2629	O	GLU	B	76	-4.991	17.794	6.237	1.00	49.20	O
[2682]	ATOM	2630	CB	GLU	B	76	-6.253	19.656	3.587	1.00	50.47	C
[2683]	ATOM	2631	CG	GLU	B	76	-7.597	18.945	3.223	1.00	55.94	C
[2684]	ATOM	2632	CD	GLU	B	76	-8.575	19.803	2.275	1.00	61.04	C
[2685]	ATOM	2633	OE1	GLU	B	76	-8.597	19.547	1.022	1.00	64.77	O

[2686]	ATOM	2634	OE2	GLU	B	76	-9.326	20.709	2.805	1.00	65.08	O
[2687]	ATOM	2635	N	ILE	B	77	-3.560	18.852	4.869	1.00	48.08	N
[2688]	ATOM	2636	CA	ILE	B	77	-2.488	17.877	4.888	1.00	47.33	C
[2689]	ATOM	2637	C	ILE	B	77	-1.860	17.680	6.249	1.00	46.78	C
[2690]	ATOM	2638	O	ILE	B	77	-1.562	16.576	6.659	1.00	47.17	O
[2691]	ATOM	2639	CB	ILE	B	77	-1.387	18.323	3.944	1.00	47.14	C
[2692]	ATOM	2640	CG1	ILE	B	77	-1.846	18.130	2.516	1.00	48.40	C
[2693]	ATOM	2641	CG2	ILE	B	77	-0.079	17.563	4.214	1.00	46.85	C
[2694]	ATOM	2642	CD1	ILE	B	77	-0.846	18.568	1.520	1.00	50.20	C
[2695]	ATOM	2643	N	ILE	B	78	-1.625	18.771	6.932	1.00	45.99	N
[2696]	ATOM	2644	CA	ILE	B	78	-0.840	18.729	8.136	1.00	45.60	C
[2697]	ATOM	2645	C	ILE	B	78	-1.728	18.443	9.345	1.00	45.75	C
[2698]	ATOM	2646	O	ILE	B	78	-1.274	18.406	10.497	1.00	45.91	O
[2699]	ATOM	2647	CB	ILE	B	78	-0.085	20.066	8.406	1.00	45.66	C
[2700]	ATOM	2648	CG1	ILE	B	78	-1.068	21.207	8.417	1.00	44.55	C
[2701]	ATOM	2649	CG2	ILE	B	78	1.053	20.303	7.428	1.00	44.71	C
[2702]	ATOM	2650	CD1	ILE	B	78	-0.539	22.395	8.990	1.00	44.07	C
[2703]	ATOM	2651	N	GLN	B	79	-3.007	18.251	9.099	1.00	45.39	N
[2704]	ATOM	2652	CA	GLN	B	79	-3.895	17.794	10.145	1.00	44.76	C
[2705]	ATOM	2653	C	GLN	B	79	-3.299	16.669	10.940	1.00	43.22	C
[2706]	ATOM	2654	O	GLN	B	79	-3.657	16.458	12.080	1.00	43.70	O
[2707]	ATOM	2655	CB	GLN	B	79	-5.246	17.308	9.600	1.00	45.93	C
[2708]	ATOM	2656	CG	GLN	B	79	-6.353	17.783	10.470	1.00	49.23	C
[2709]	ATOM	2657	CD	GLN	B	79	-6.187	19.286	10.813	1.00	54.23	C
[2710]	ATOM	2658	OE1	GLN	B	79	-7.044	20.084	10.438	1.00	58.77	O
[2711]	ATOM	2659	NE2	GLN	B	79	-5.092	19.672	11.503	1.00	50.48	N
[2712]	ATOM	2660	N	ASN	B	80	-2.375	15.950	10.339	1.00	41.20	N
[2713]	ATOM	2661	CA	ASN	B	80	-1.915	14.726	10.898	1.00	40.12	C
[2714]	ATOM	2662	C	ASN	B	80	-0.531	14.748	11.417	1.00	39.81	C
[2715]	ATOM	2663	O	ASN	B	80	0.092	13.679	11.566	1.00	41.55	O
[2716]	ATOM	2664	CB	ASN	B	80	-2.030	13.649	9.854	1.00	40.27	C
[2717]	ATOM	2665	CG	ASN	B	80	-3.306	12.867	10.032	1.00	41.79	C
[2718]	ATOM	2666	OD1	ASN	B	80	-4.388	13.276	9.535	1.00	39.17	O
[2719]	ATOM	2667	ND2	ASN	B	80	-3.213	11.802	10.868	1.00	40.55	N
[2720]	ATOM	2668	N	PHE	B	81	-0.031	15.945	11.691	1.00	38.17	N
[2721]	ATOM	2669	CA	PHE	B	81	1.273	16.094	12.198	1.00	37.10	C

[2722]	ATOM	2670	C	PHE	B	81	1.182	17.058	13.341	1.00	37.56	C
[2723]	ATOM	2671	O	PHE	B	81	0.164	17.767	13.450	1.00	37.00	O
[2724]	ATOM	2672	CB	PHE	B	81	2.162	16.654	11.113	1.00	36.81	C
[2725]	ATOM	2673	CG	PHE	B	81	2.412	15.703	9.956	1.00	35.20	C
[2726]	ATOM	2674	CD1	PHE	B	81	3.555	14.923	9.922	1.00	31.84	C
[2727]	ATOM	2675	CD2	PHE	B	81	1.529	15.671	8.858	1.00	34.77	C
[2728]	ATOM	2676	CE1	PHE	B	81	3.789	14.105	8.876	1.00	34.73	C
[2729]	ATOM	2677	CE2	PHE	B	81	1.745	14.799	7.762	1.00	34.29	C
[2730]	ATOM	2678	CZ	PHE	B	81	2.869	14.008	7.768	1.00	34.31	C
[2731]	ATOM	2679	N	VAL	B	82	2.209	17.048	14.214	1.00	37.74	N
[2732]	ATOM	2680	CA	VAL	B	82	2.459	18.202	15.104	1.00	38.48	C
[2733]	ATOM	2681	C	VAL	B	82	3.369	19.105	14.327	1.00	36.95	C
[2734]	ATOM	2682	O	VAL	B	82	4.180	18.608	13.539	1.00	37.39	O
[2735]	ATOM	2683	CB	VAL	B	82	3.329	17.864	16.307	1.00	38.66	C
[2736]	ATOM	2684	CG1	VAL	B	82	2.865	18.637	17.469	1.00	39.03	C
[2737]	ATOM	2685	CG2	VAL	B	82	3.255	16.435	16.578	1.00	43.42	C
[2738]	ATOM	2686	N	ARG	B	83	3.284	20.393	14.577	1.00	35.38	N
[2739]	ATOM	2687	CA	ARG	B	83	4.158	21.336	13.914	1.00	34.19	C
[2740]	ATOM	2688	C	ARG	B	83	4.877	22.138	14.904	1.00	33.32	C
[2741]	ATOM	2689	O	ARG	B	83	4.300	22.574	15.862	1.00	33.20	O
[2742]	ATOM	2690	CB	ARG	B	83	3.372	22.278	12.999	1.00	34.42	C
[2743]	ATOM	2691	CG	ARG	B	83	2.670	21.574	11.865	1.00	33.18	C
[2744]	ATOM	2692	CD	ARG	B	83	1.450	20.812	12.305	1.00	28.31	C
[2745]	ATOM	2693	NE	ARG	B	83	0.421	21.811	12.374	1.00	31.35	N
[2746]	ATOM	2694	CZ	ARG	B	83	-0.844	21.642	12.703	1.00	28.17	C
[2747]	ATOM	2695	NH1	ARG	B	83	-1.310	20.492	13.040	1.00	26.44	N
[2748]	ATOM	2696	NH2	ARG	B	83	-1.624	22.676	12.681	1.00	26.00	N
[2749]	ATOM	2697	N	VAL	B	84	6.160	22.317	14.649	1.00	32.59	N
[2750]	ATOM	2698	CA	VAL	B	84	7.029	23.135	15.470	1.00	31.88	C
[2751]	ATOM	2699	C	VAL	B	84	7.639	24.188	14.602	1.00	30.95	C
[2752]	ATOM	2700	O	VAL	B	84	8.470	23.892	13.733	1.00	31.63	O
[2753]	ATOM	2701	CB	VAL	B	84	8.190	22.311	16.090	1.00	32.67	C
[2754]	ATOM	2702	CG1	VAL	B	84	8.914	23.089	17.156	1.00	30.38	C
[2755]	ATOM	2703	CG2	VAL	B	84	7.654	21.051	16.673	1.00	32.46	C
[2756]	ATOM	2704	N	HIS	B	85	7.243	25.426	14.853	1.00	29.92	N
[2757]	ATOM	2705	CA	HIS	B	85	7.743	26.579	14.084	1.00	29.63	C

[2758]	ATOM	2706	C	HIS	B	85	8.741	27.358	14.880	1.00	28.85	C
[2759]	ATOM	2707	O	HIS	B	85	8.378	27.941	15.837	1.00	29.72	O
[2760]	ATOM	2708	CB	HIS	B	85	6.563	27.450	13.670	1.00	28.59	C
[2761]	ATOM	2709	CG	HIS	B	85	5.521	26.701	12.894	1.00	28.93	C
[2762]	ATOM	2710	ND1	HIS	B	85	5.753	26.212	11.635	1.00	25.96	N
[2763]	ATOM	2711	CD2	HIS	B	85	4.250	26.346	13.204	1.00	27.41	C
[2764]	ATOM	2712	CE1	HIS	B	85	4.671	25.605	11.195	1.00	24.37	C
[2765]	ATOM	2713	NE2	HIS	B	85	3.742	25.671	12.129	1.00	25.10	N
[2766]	ATOM	2714	N	VAL	B	86	10.002	27.330	14.475	1.00	28.88	N
[2767]	ATOM	2715	CA	VAL	B	86	11.094	27.964	15.219	1.00	29.44	C
[2768]	ATOM	2716	C	VAL	B	86	11.254	29.386	14.782	1.00	30.70	C
[2769]	ATOM	2717	O	VAL	B	86	11.135	29.667	13.626	1.00	31.20	O
[2770]	ATOM	2718	CB	VAL	B	86	12.415	27.197	15.024	1.00	29.37	C
[2771]	ATOM	2719	CG1	VAL	B	86	13.570	27.846	15.684	1.00	26.68	C
[2772]	ATOM	2720	CG2	VAL	B	86	12.297	25.765	15.620	1.00	29.68	C
[2773]	ATOM	2721	N	ASP	B	87	11.442	30.306	15.728	1.00	32.45	N
[2774]	ATOM	2722	CA	ASP	B	87	11.979	31.640	15.411	1.00	33.47	C
[2775]	ATOM	2723	C	ASP	B	87	13.469	31.677	15.789	1.00	33.20	C
[2776]	ATOM	2724	O	ASP	B	87	13.849	31.391	16.945	1.00	33.33	O
[2777]	ATOM	2725	CB	ASP	B	87	11.239	32.732	16.175	1.00	33.60	C
[2778]	ATOM	2726	CG	ASP	B	87	9.795	32.900	15.746	1.00	37.32	C
[2779]	ATOM	2727	OD1	ASP	B	87	9.487	33.132	14.531	1.00	36.62	O
[2780]	ATOM	2728	OD2	ASP	B	87	8.968	32.849	16.687	1.00	41.20	O
[2781]	ATOM	2729	N	ALA	B	88	14.327	32.019	14.830	1.00	33.01	N
[2782]	ATOM	2730	CA	ALA	B	88	15.748	32.226	15.165	1.00	32.49	C
[2783]	ATOM	2731	C	ALA	B	88	15.825	33.226	16.346	1.00	32.20	C
[2784]	ATOM	2732	O	ALA	B	88	14.956	34.110	16.545	1.00	30.69	O
[2785]	ATOM	2733	CB	ALA	B	88	16.489	32.725	14.012	1.00	32.01	C
[2786]	ATOM	2734	N	PRO	B	89	16.834	33.058	17.174	1.00	32.35	N
[2787]	ATOM	2735	CA	PRO	B	89	17.010	33.926	18.323	1.00	32.74	C
[2788]	ATOM	2736	C	PRO	B	89	16.933	35.423	17.920	1.00	32.53	C
[2789]	ATOM	2737	O	PRO	B	89	17.518	35.827	16.929	1.00	32.35	O
[2790]	ATOM	2738	CB	PRO	B	89	18.433	33.578	18.784	1.00	33.06	C
[2791]	ATOM	2739	CG	PRO	B	89	18.699	32.214	18.356	1.00	32.60	C
[2792]	ATOM	2740	CD	PRO	B	89	17.901	32.052	17.077	1.00	32.94	C
[2793]	ATOM	2741	N	GLY	B	90	16.187	36.207	18.684	1.00	32.29	N

[2794]	ATOM	2742	CA	GLY	B	90	16.092	37.595	18.476	1.00	31.75	C
[2795]	ATOM	2743	C	GLY	B	90	15.168	37.901	17.362	1.00	32.70	C
[2796]	ATOM	2744	O	GLY	B	90	15.076	39.059	17.034	1.00	33.10	O
[2797]	ATOM	2745	N	MET	B	91	14.468	36.935	16.770	1.00	33.47	N
[2798]	ATOM	2746	CA	MET	B	91	13.619	37.283	15.623	1.00	34.96	C
[2799]	ATOM	2747	C	MET	B	91	12.148	37.164	15.909	1.00	36.86	C
[2800]	ATOM	2748	O	MET	B	91	11.354	37.566	15.072	1.00	37.24	O
[2801]	ATOM	2749	CB	MET	B	91	13.927	36.447	14.379	1.00	33.89	C
[2802]	ATOM	2750	CG	MET	B	91	15.337	36.254	14.097	1.00	32.49	C
[2803]	ATOM	2751	SD	MET	B	91	16.166	37.782	13.695	1.00	31.82	S
[2804]	ATOM	2752	CE	MET	B	91	17.796	37.434	14.280	1.00	30.15	C
[2805]	ATOM	2753	N	GLU	B	92	11.783	36.556	17.041	1.00	38.66	N
[2806]	ATOM	2754	CA	GLU	B	92	10.390	36.417	17.421	1.00	41.61	C
[2807]	ATOM	2755	C	GLU	B	92	9.674	37.761	17.510	1.00	44.08	C
[2808]	ATOM	2756	O	GLU	B	92	10.326	38.787	17.761	1.00	44.68	O
[2809]	ATOM	2757	CB	GLU	B	92	10.215	35.630	18.717	1.00	41.53	C
[2810]	ATOM	2758	CG	GLU	B	92	10.709	36.226	19.950	1.00	43.43	C
[2811]	ATOM	2759	CD	GLU	B	92	12.235	36.091	20.124	1.00	47.49	C
[2812]	ATOM	2760	OE1	GLU	B	92	12.913	35.378	19.387	1.00	50.79	O
[2813]	ATOM	2761	OE2	GLU	B	92	12.808	36.709	21.024	1.00	48.96	O
[2814]	ATOM	2762	N	GLU	B	93	8.349	37.774	17.258	1.00	47.09	N
[2815]	ATOM	2763	CA	GLU	B	93	7.505	38.948	17.512	1.00	49.23	C
[2816]	ATOM	2764	C	GLU	B	93	7.838	39.521	18.879	1.00	49.24	C
[2817]	ATOM	2765	O	GLU	B	93	7.909	38.781	19.892	1.00	48.65	O
[2818]	ATOM	2766	CB	GLU	B	93	6.040	38.581	17.402	1.00	50.64	C
[2819]	ATOM	2767	CG	GLU	B	93	5.548	38.525	15.902	1.00	57.33	C
[2820]	ATOM	2768	CD	GLU	B	93	5.886	39.847	15.098	1.00	62.28	C
[2821]	ATOM	2769	OE1	GLU	B	93	5.634	40.967	15.654	1.00	62.67	O
[2822]	ATOM	2770	OE2	GLU	B	93	6.410	39.747	13.937	1.00	56.89	O
[2823]	ATOM	2771	N	GLY	B	94	8.150	40.817	18.873	1.00	48.91	N
[2824]	ATOM	2772	CA	GLY	B	94	8.485	41.541	20.085	1.00	49.09	C
[2825]	ATOM	2773	C	GLY	B	94	9.818	41.277	20.764	1.00	49.42	C
[2826]	ATOM	2774	O	GLY	B	94	9.997	41.539	21.973	1.00	49.97	O
[2827]	ATOM	2775	N	ALA	B	95	10.800	40.794	20.014	1.00	49.41	N
[2828]	ATOM	2776	CA	ALA	B	95	12.053	40.372	20.691	1.00	48.29	C
[2829]	ATOM	2777	C	ALA	B	95	12.854	41.564	21.205	1.00	47.51	C

[2830]	ATOM	2778	O	ALA	B	95	12.900	42.615	20.535	1.00	46.34	O
[2831]	ATOM	2779	CB	ALA	B	95	12.901	39.533	19.772	1.00	47.76	C
[2832]	ATOM	2780	N	PRO	B	96	13.491	41.391	22.382	1.00	47.10	N
[2833]	ATOM	2781	CA	PRO	B	96	14.497	42.397	22.814	1.00	46.51	C
[2834]	ATOM	2782	C	PRO	B	96	15.699	42.457	21.886	1.00	45.77	C
[2835]	ATOM	2783	O	PRO	B	96	16.229	41.394	21.504	1.00	45.38	O
[2836]	ATOM	2784	CB	PRO	B	96	14.917	41.926	24.206	1.00	45.89	C
[2837]	ATOM	2785	CG	PRO	B	96	14.501	40.449	24.297	1.00	46.53	C
[2838]	ATOM	2786	CD	PRO	B	96	13.307	40.298	23.369	1.00	47.29	C
[2839]	ATOM	2787	N	VAL	B	97	16.089	43.690	21.520	1.00	45.26	N
[2840]	ATOM	2788	CA	VAL	B	97	17.293	43.988	20.732	1.00	44.51	C
[2841]	ATOM	2789	C	VAL	B	97	18.564	43.566	21.500	1.00	44.59	C
[2842]	ATOM	2790	O	VAL	B	97	18.786	44.009	22.611	1.00	45.45	O
[2843]	ATOM	2791	CB	VAL	B	97	17.340	45.508	20.442	1.00	44.51	C
[2844]	ATOM	2792	CG1	VAL	B	97	18.668	45.935	19.756	1.00	44.61	C
[2845]	ATOM	2793	CG2	VAL	B	97	16.190	45.900	19.576	1.00	43.68	C
[2846]	ATOM	2794	N	PHE	B	98	19.378	42.682	20.958	1.00	44.56	N
[2847]	ATOM	2795	CA	PHE	B	98	20.605	42.299	21.620	1.00	44.34	C
[2848]	ATOM	2796	C	PHE	B	98	21.469	43.518	21.779	1.00	44.48	C
[2849]	ATOM	2797	O	PHE	B	98	21.457	44.402	20.910	1.00	44.66	O
[2850]	ATOM	2798	CB	PHE	B	98	21.368	41.296	20.776	1.00	44.08	C
[2851]	ATOM	2799	CG	PHE	B	98	20.727	39.962	20.723	1.00	45.09	C
[2852]	ATOM	2800	CD1	PHE	B	98	20.470	39.277	21.889	1.00	44.45	C
[2853]	ATOM	2801	CD2	PHE	B	98	20.366	39.380	19.528	1.00	46.21	C
[2854]	ATOM	2802	CE1	PHE	B	98	19.887	38.033	21.872	1.00	42.92	C
[2855]	ATOM	2803	CE2	PHE	B	98	19.780	38.105	19.518	1.00	44.89	C
[2856]	ATOM	2804	CZ	PHE	B	98	19.546	37.447	20.678	1.00	42.09	C
[2857]	ATOM	2805	N	PRO	B	99	22.235	43.583	22.895	1.00	44.49	N
[2858]	ATOM	2806	CA	PRO	B	99	23.238	44.673	23.128	1.00	43.74	C
[2859]	ATOM	2807	C	PRO	B	99	24.319	44.810	22.042	1.00	42.51	C
[2860]	ATOM	2808	O	PRO	B	99	24.558	43.900	21.216	1.00	40.81	O
[2861]	ATOM	2809	CB	PRO	B	99	23.884	44.298	24.485	1.00	43.80	C
[2862]	ATOM	2810	CG	PRO	B	99	23.648	42.766	24.612	1.00	44.67	C
[2863]	ATOM	2811	CD	PRO	B	99	22.227	42.617	24.025	1.00	44.86	C
[2864]	ATOM	2812	N	LEU	B	100	24.921	45.988	22.051	1.00	42.04	N
[2865]	ATOM	2813	CA	LEU	B	100	26.049	46.291	21.197	1.00	42.26	C

[2866]	ATOM	2814	C	LEU	B	100	27.200	45.286	21.474	1.00	42.24	C
[2867]	ATOM	2815	O	LEU	B	100	27.461	44.957	22.671	1.00	42.27	O
[2868]	ATOM	2816	CB	LEU	B	100	26.489	47.719	21.456	1.00	41.89	C
[2869]	ATOM	2817	CG	LEU	B	100	27.021	48.273	20.130	1.00	44.82	C
[2870]	ATOM	2818	CD1	LEU	B	100	25.969	49.079	19.227	1.00	45.04	C
[2871]	ATOM	2819	CD2	LEU	B	100	28.380	49.099	20.347	1.00	45.57	C
[2872]	ATOM	2820	N	GLY	B	101	27.804	44.756	20.390	1.00	41.86	N
[2873]	ATOM	2821	CA	GLY	B	101	28.818	43.694	20.458	1.00	41.71	C
[2874]	ATOM	2822	C	GLY	B	101	28.348	42.323	20.918	1.00	42.32	C
[2875]	ATOM	2823	O	GLY	B	101	29.174	41.468	21.262	1.00	42.92	O
[2876]	ATOM	2824	N	TYR	B	102	27.032	42.104	20.943	1.00	42.16	N
[2877]	ATOM	2825	CA	TYR	B	102	26.474	40.759	21.101	1.00	42.01	C
[2878]	ATOM	2826	C	TYR	B	102	27.080	39.775	20.097	1.00	41.93	C
[2879]	ATOM	2827	O	TYR	B	102	27.291	40.095	18.925	1.00	42.33	O
[2880]	ATOM	2828	CB	TYR	B	102	24.954	40.741	20.932	1.00	42.10	C
[2881]	ATOM	2829	CG	TYR	B	102	24.379	39.404	21.337	1.00	43.00	C
[2882]	ATOM	2830	CD1	TYR	B	102	24.273	39.061	22.677	1.00	41.59	C
[2883]	ATOM	2831	CD2	TYR	B	102	24.005	38.441	20.386	1.00	45.30	C
[2884]	ATOM	2832	CE1	TYR	B	102	23.790	37.822	23.085	1.00	41.49	C
[2885]	ATOM	2833	CE2	TYR	B	102	23.513	37.170	20.801	1.00	44.48	C
[2886]	ATOM	2834	CZ	TYR	B	102	23.421	36.891	22.170	1.00	42.73	C
[2887]	ATOM	2835	OH	TYR	B	102	22.940	35.730	22.703	1.00	41.71	O
[2888]	ATOM	2836	N	GLN	B	103	27.364	38.575	20.554	1.00	40.60	N
[2889]	ATOM	2837	CA	GLN	B	103	27.872	37.589	19.659	1.00	40.00	C
[2890]	ATOM	2838	C	GLN	B	103	26.848	36.608	19.200	1.00	38.54	C
[2891]	ATOM	2839	O	GLN	B	103	26.511	35.647	19.891	1.00	37.18	O
[2892]	ATOM	2840	CB	GLN	B	103	28.849	36.741	20.355	1.00	40.92	C
[2893]	ATOM	2841	CG	GLN	B	103	29.726	37.408	21.274	1.00	44.73	C
[2894]	ATOM	2842	CD	GLN	B	103	31.173	36.990	21.101	1.00	49.95	C
[2895]	ATOM	2843	OE1	GLN	B	103	31.935	37.867	20.733	1.00	51.00	O
[2896]	ATOM	2844	NE2	GLN	B	103	31.567	35.653	21.314	1.00	49.28	N
[2897]	ATOM	2845	N	TYR	B	104	26.390	36.828	17.992	1.00	37.28	N
[2898]	ATOM	2846	CA	TYR	B	104	25.316	36.004	17.505	1.00	35.88	C
[2899]	ATOM	2847	C	TYR	B	104	25.864	34.643	17.127	1.00	35.23	C
[2900]	ATOM	2848	O	TYR	B	104	26.986	34.587	16.621	1.00	35.34	O
[2901]	ATOM	2849	CB	TYR	B	104	24.611	36.667	16.326	1.00	34.77	C

[2902]	ATOM	2850	CG	TYR	B	104	23.237	36.148	16.103	1.00	33.45	C
[2903]	ATOM	2851	CD1	TYR	B	104	22.194	36.568	16.941	1.00	29.90	C
[2904]	ATOM	2852	CD2	TYR	B	104	22.978	35.268	15.052	1.00	30.98	C
[2905]	ATOM	2853	CE1	TYR	B	104	20.950	36.155	16.728	1.00	31.52	C
[2906]	ATOM	2854	CE2	TYR	B	104	21.702	34.816	14.822	1.00	31.49	C
[2907]	ATOM	2855	CZ	TYR	B	104	20.669	35.249	15.656	1.00	31.92	C
[2908]	ATOM	2856	OH	TYR	B	104	19.388	34.793	15.521	1.00	29.91	O
[2909]	ATOM	2857	N	PRO	B	105	25.069	33.560	17.370	1.00	34.76	N
[2910]	ATOM	2858	CA	PRO	B	105	25.397	32.185	17.013	1.00	33.51	C
[2911]	ATOM	2859	C	PRO	B	105	25.611	32.077	15.573	1.00	33.42	C
[2912]	ATOM	2860	O	PRO	B	105	24.917	32.722	14.875	1.00	33.39	O
[2913]	ATOM	2861	CB	PRO	B	105	24.060	31.459	17.233	1.00	34.35	C
[2914]	ATOM	2862	CG	PRO	B	105	23.319	32.238	18.238	1.00	32.92	C
[2915]	ATOM	2863	CD	PRO	B	105	23.742	33.655	18.057	1.00	34.27	C
[2916]	ATOM	2864	N	SER	B	106	26.498	31.203	15.111	1.00	34.03	N
[2917]	ATOM	2865	CA	SER	B	106	26.724	30.989	13.673	1.00	33.82	C
[2918]	ATOM	2866	C	SER	B	106	25.666	30.042	13.228	1.00	33.58	C
[2919]	ATOM	2867	O	SER	B	106	24.921	29.546	14.063	1.00	33.82	O
[2920]	ATOM	2868	CB	SER	B	106	28.049	30.305	13.477	1.00	34.09	C
[2921]	ATOM	2869	OG	SER	B	106	28.140	29.206	14.377	1.00	37.04	O
[2922]	ATOM	2870	N	LEU	B	107	25.612	29.727	11.937	1.00	32.89	N
[2923]	ATOM	2871	CA	LEU	B	107	24.592	28.815	11.467	1.00	32.40	C
[2924]	ATOM	2872	C	LEU	B	107	24.757	27.437	12.154	1.00	33.12	C
[2925]	ATOM	2873	O	LEU	B	107	23.788	26.780	12.545	1.00	32.93	O
[2926]	ATOM	2874	CB	LEU	B	107	24.535	28.710	9.931	1.00	31.84	C
[2927]	ATOM	2875	CG	LEU	B	107	24.306	30.029	9.178	1.00	32.51	C
[2928]	ATOM	2876	CD1	LEU	B	107	24.127	29.776	7.716	1.00	32.46	C
[2929]	ATOM	2877	CD2	LEU	B	107	23.156	30.820	9.687	1.00	29.79	C
[2930]	ATOM	2878	N	ASP	B	108	25.989	26.979	12.308	1.00	34.16	N
[2931]	ATOM	2879	CA	ASP	B	108	26.248	25.720	12.952	1.00	34.72	C
[2932]	ATOM	2880	C	ASP	B	108	25.755	25.786	14.373	1.00	34.75	C
[2933]	ATOM	2881	O	ASP	B	108	25.121	24.842	14.877	1.00	34.63	O
[2934]	ATOM	2882	CB	ASP	B	108	27.724	25.444	12.926	1.00	34.94	C
[2935]	ATOM	2883	CG	ASP	B	108	28.205	24.995	11.551	1.00	39.31	C
[2936]	ATOM	2884	OD1	ASP	B	108	27.317	24.800	10.647	1.00	42.14	O
[2937]	ATOM	2885	OD2	ASP	B	108	29.442	24.793	11.391	1.00	42.18	O



[2938]	ATOM	2886	N	GLN	B	109	25.994	26.920	15.023	1.00	34.26	N
[2939]	ATOM	2887	CA	GLN	B	109	25.480	27.029	16.377	1.00	34.55	C
[2940]	ATOM	2888	C	GLN	B	109	23.940	27.037	16.437	1.00	34.86	C
[2941]	ATOM	2889	O	GLN	B	109	23.369	26.393	17.278	1.00	36.00	O
[2942]	ATOM	2890	CB	GLN	B	109	26.160	28.161	17.127	1.00	33.95	C
[2943]	ATOM	2891	CG	GLN	B	109	27.652	27.984	17.081	1.00	32.36	C
[2944]	ATOM	2892	CD	GLN	B	109	28.449	29.141	17.683	1.00	33.45	C
[2945]	ATOM	2893	OE1	GLN	B	109	28.121	30.304	17.477	1.00	33.58	O
[2946]	ATOM	2894	NE2	GLN	B	109	29.514	28.815	18.394	1.00	28.60	N
[2947]	ATOM	2895	N	LEU	B	110	23.283	27.706	15.507	1.00	35.18	N
[2948]	ATOM	2896	CA	LEU	B	110	21.818	27.624	15.422	1.00	35.56	C
[2949]	ATOM	2897	C	LEU	B	110	21.377	26.166	15.231	1.00	35.04	C
[2950]	ATOM	2898	O	LEU	B	110	20.500	25.713	15.890	1.00	35.89	O
[2951]	ATOM	2899	CB	LEU	B	110	21.236	28.581	14.324	1.00	35.55	C
[2952]	ATOM	2900	CG	LEU	B	110	21.590	30.060	14.611	1.00	37.58	C
[2953]	ATOM	2901	CD1	LEU	B	110	21.523	30.837	13.348	1.00	37.18	C
[2954]	ATOM	2902	CD2	LEU	B	110	20.760	30.711	15.732	1.00	35.67	C
[2955]	ATOM	2903	N	ALA	B	111	22.006	25.421	14.362	1.00	34.84	N
[2956]	ATOM	2904	CA	ALA	B	111	21.626	24.049	14.165	1.00	35.70	C
[2957]	ATOM	2905	C	ALA	B	111	21.795	23.246	15.437	1.00	36.52	C
[2958]	ATOM	2906	O	ALA	B	111	21.106	22.257	15.648	1.00	36.52	O
[2959]	ATOM	2907	CB	ALA	B	111	22.464	23.451	13.075	1.00	35.58	C
[2960]	ATOM	2908	N	ASP	B	112	22.698	23.686	16.293	1.00	37.27	N
[2961]	ATOM	2909	CA	ASP	B	112	22.980	22.960	17.528	1.00	38.74	C
[2962]	ATOM	2910	C	ASP	B	112	21.976	23.278	18.624	1.00	38.81	C
[2963]	ATOM	2911	O	ASP	B	112	21.996	22.641	19.674	1.00	38.57	O
[2964]	ATOM	2912	CB	ASP	B	112	24.359	23.351	18.083	1.00	39.33	C
[2965]	ATOM	2913	CG	ASP	B	112	25.501	22.527	17.547	1.00	42.09	C
[2966]	ATOM	2914	OD1	ASP	B	112	25.255	21.485	16.932	1.00	46.71	O
[2967]	ATOM	2915	OD2	ASP	B	112	26.668	22.932	17.764	1.00	44.56	O
[2968]	ATOM	2916	N	MET	B	113	21.157	24.304	18.433	1.00	38.74	N
[2969]	ATOM	2917	CA	MET	B	113	20.078	24.545	19.376	1.00	39.76	C
[2970]	ATOM	2918	C	MET	B	113	18.893	23.628	19.149	1.00	40.17	C
[2971]	ATOM	2919	O	MET	B	113	18.070	23.489	20.024	1.00	40.58	O
[2972]	ATOM	2920	CB	MET	B	113	19.560	25.955	19.274	1.00	39.54	C
[2973]	ATOM	2921	CG	MET	B	113	20.629	26.998	19.105	1.00	39.51	C

[2974]	ATOM	2922	SD	MET	B	113	19.842	28.557	19.363	1.00	41.93	S
[2975]	ATOM	2923	CE	MET	B	113	21.204	29.600	19.193	1.00	44.83	C
[2976]	ATOM	2924	N	ILE	B	114	18.798	23.016	17.979	1.00	40.58	N
[2977]	ATOM	2925	CA	ILE	B	114	17.650	22.193	17.679	1.00	40.90	C
[2978]	ATOM	2926	C	ILE	B	114	17.430	21.045	18.675	1.00	41.56	C
[2979]	ATOM	2927	O	ILE	B	114	16.322	20.940	19.226	1.00	42.00	O
[2980]	ATOM	2928	CB	ILE	B	114	17.663	21.751	16.276	1.00	40.41	C
[2981]	ATOM	2929	CG1	ILE	B	114	17.637	22.993	15.447	1.00	41.67	C
[2982]	ATOM	2930	CG2	ILE	B	114	16.493	20.948	16.021	1.00	39.99	C
[2983]	ATOM	2931	CD1	ILE	B	114	17.049	22.806	14.034	1.00	44.78	C
[2984]	ATOM	2932	N	PRO	B	115	18.465	20.224	18.961	1.00	41.72	N
[2985]	ATOM	2933	CA	PRO	B	115	18.185	19.162	19.908	1.00	42.06	C
[2986]	ATOM	2934	C	PRO	B	115	17.547	19.674	21.212	1.00	42.37	C
[2987]	ATOM	2935	O	PRO	B	115	16.692	19.034	21.778	1.00	42.74	O
[2988]	ATOM	2936	CB	PRO	B	115	19.573	18.571	20.156	1.00	42.12	C
[2989]	ATOM	2937	CG	PRO	B	115	20.298	18.798	18.844	1.00	41.17	C
[2990]	ATOM	2938	CD	PRO	B	115	19.872	20.185	18.498	1.00	41.65	C
[2991]	ATOM	2939	N	CYS	B	116	17.914	20.833	21.692	1.00	43.01	N
[2992]	ATOM	2940	CA	CYS	B	116	17.254	21.294	22.933	1.00	44.30	C
[2993]	ATOM	2941	C	CYS	B	116	15.788	21.541	22.790	1.00	43.88	C
[2994]	ATOM	2942	O	CYS	B	116	15.112	21.463	23.767	1.00	44.89	O
[2995]	ATOM	2943	CB	CYS	B	116	17.862	22.573	23.480	1.00	44.42	C
[2996]	ATOM	2944	SG	CYS	B	116	19.529	22.358	24.068	1.00	47.93	S
[2997]	ATOM	2945	N	VAL	B	117	15.331	21.924	21.605	1.00	42.93	N
[2998]	ATOM	2946	CA	VAL	B	117	13.931	22.137	21.339	1.00	41.48	C
[2999]	ATOM	2947	C	VAL	B	117	13.319	20.739	21.311	1.00	41.90	C
[3000]	ATOM	2948	O	VAL	B	117	12.306	20.462	21.979	1.00	41.27	O
[3001]	ATOM	2949	CB	VAL	B	117	13.743	22.900	19.967	1.00	41.41	C
[3002]	ATOM	2950	CG1	VAL	B	117	12.279	23.006	19.517	1.00	37.76	C
[3003]	ATOM	2951	CG2	VAL	B	117	14.448	24.232	20.026	1.00	39.06	C
[3004]	ATOM	2952	N	LEU	B	118	13.942	19.851	20.539	1.00	41.77	N
[3005]	ATOM	2953	CA	LEU	B	118	13.351	18.538	20.371	1.00	42.16	C
[3006]	ATOM	2954	C	LEU	B	118	13.183	17.828	21.720	1.00	43.09	C
[3007]	ATOM	2955	O	LEU	B	118	12.122	17.256	21.988	1.00	43.67	O
[3008]	ATOM	2956	CB	LEU	B	118	14.118	17.697	19.381	1.00	41.21	C
[3009]	ATOM	2957	CG	LEU	B	118	13.947	18.246	18.000	1.00	39.35	C

[3010]	ATOM	2958	CD1	LEU	B	118	14.560	17.332	17.097	1.00	38.36	C
[3011]	ATOM	2959	CD2	LEU	B	118	12.511	18.370	17.656	1.00	37.36	C
[3012]	ATOM	2960	N	GLN	B	119	14.221	17.921	22.561	1.00	43.19	N
[3013]	ATOM	2961	CA	GLN	B	119	14.244	17.275	23.830	1.00	42.43	C
[3014]	ATOM	2962	C	GLN	B	119	13.263	17.930	24.709	1.00	40.98	C
[3015]	ATOM	2963	O	GLN	B	119	12.636	17.292	25.462	1.00	43.08	O
[3016]	ATOM	2964	CB	GLN	B	119	15.627	17.291	24.453	1.00	43.15	C
[3017]	ATOM	2965	CG	GLN	B	119	16.357	15.946	24.137	1.00	46.90	C
[3018]	ATOM	2966	CD	GLN	B	119	17.888	15.978	24.207	1.00	48.35	C
[3019]	ATOM	2967	OE1	GLN	B	119	18.446	16.377	25.235	1.00	48.69	O
[3020]	ATOM	2968	NE2	GLN	B	119	18.564	15.502	23.138	1.00	45.50	N
[3021]	ATOM	2969	N	TYR	B	120	13.064	19.211	24.614	1.00	39.14	N
[3022]	ATOM	2970	CA	TYR	B	120	12.105	19.821	25.511	1.00	37.39	C
[3023]	ATOM	2971	C	TYR	B	120	10.717	19.286	25.169	1.00	37.68	C
[3024]	ATOM	2972	O	TYR	B	120	9.852	19.210	26.021	1.00	38.34	O
[3025]	ATOM	2973	CB	TYR	B	120	12.202	21.327	25.398	1.00	35.81	C
[3026]	ATOM	2974	CG	TYR	B	120	11.029	22.180	25.797	1.00	35.19	C
[3027]	ATOM	2975	CD1	TYR	B	120	9.898	22.199	25.153	1.00	34.74	C
[3028]	ATOM	2976	CD2	TYR	B	120	11.108	23.024	26.785	1.00	33.48	C
[3029]	ATOM	2977	CE1	TYR	B	120	8.845	23.047	25.544	1.00	36.51	C
[3030]	ATOM	2978	CE2	TYR	B	120	10.128	23.822	27.161	1.00	32.76	C
[3031]	ATOM	2979	CZ	TYR	B	120	8.980	23.862	26.569	1.00	36.61	C
[3032]	ATOM	2980	OH	TYR	B	120	7.977	24.754	27.030	1.00	37.40	O
[3033]	ATOM	2981	N	LEU	B	121	10.519	18.895	23.921	1.00	38.34	N
[3034]	ATOM	2982	CA	LEU	B	121	9.172	18.512	23.453	1.00	39.00	C
[3035]	ATOM	2983	C	LEU	B	121	8.980	17.015	23.507	1.00	40.20	C
[3036]	ATOM	2984	O	LEU	B	121	7.877	16.499	23.237	1.00	40.97	O
[3037]	ATOM	2985	CB	LEU	B	121	8.931	18.958	22.010	1.00	37.36	C
[3038]	ATOM	2986	CG	LEU	B	121	8.700	20.437	21.896	1.00	36.98	C
[3039]	ATOM	2987	CD1	LEU	B	121	8.786	20.726	20.452	1.00	37.03	C
[3040]	ATOM	2988	CD2	LEU	B	121	7.364	20.872	22.501	1.00	35.42	C
[3041]	ATOM	2989	N	ASN	B	122	10.078	16.315	23.761	1.00	41.40	N
[3042]	ATOM	2990	CA	ASN	B	122	10.108	14.895	23.531	1.00	43.02	C
[3043]	ATOM	2991	C	ASN	B	122	9.831	14.391	22.149	1.00	43.12	C
[3044]	ATOM	2992	O	ASN	B	122	9.357	13.283	21.999	1.00	43.36	O
[3045]	ATOM	2993	CB	ASN	B	122	9.091	14.239	24.430	1.00	43.76	C

[3046]	ATOM	2994	CG	ASN	B	122	9.678	13.919	25.748	1.00	46.37	C
[3047]	ATOM	2995	OD1	ASN	B	122	10.706	13.222	25.795	1.00	47.91	O
[3048]	ATOM	2996	ND2	ASN	B	122	9.108	14.483	26.846	1.00	46.22	N
[3049]	ATOM	2997	N	PHE	B	123	10.102	15.179	21.138	1.00	43.01	N
[3050]	ATOM	2998	CA	PHE	B	123	9.913	14.629	19.846	1.00	43.56	C
[3051]	ATOM	2999	C	PHE	B	123	11.201	14.020	19.503	1.00	43.48	C
[3052]	ATOM	3000	O	PHE	B	123	12.218	14.518	19.927	1.00	43.96	O
[3053]	ATOM	3001	CB	PHE	B	123	9.541	15.678	18.824	1.00	43.26	C
[3054]	ATOM	3002	CG	PHE	B	123	8.239	16.341	19.097	1.00	44.31	C
[3055]	ATOM	3003	CD1	PHE	B	123	7.275	15.697	19.847	1.00	41.41	C
[3056]	ATOM	3004	CD2	PHE	B	123	7.959	17.616	18.572	1.00	45.53	C
[3057]	ATOM	3005	CE1	PHE	B	123	6.043	16.307	20.126	1.00	41.63	C
[3058]	ATOM	3006	CE2	PHE	B	123	6.725	18.246	18.827	1.00	44.54	C
[3059]	ATOM	3007	CZ	PHE	B	123	5.760	17.563	19.608	1.00	42.64	C
[3060]	ATOM	3008	N	SER	B	124	11.179	12.955	18.727	1.00	43.24	N
[3061]	ATOM	3009	CA	SER	B	124	12.427	12.329	18.403	1.00	43.20	C
[3062]	ATOM	3010	C	SER	B	124	12.706	12.216	16.925	1.00	42.00	C
[3063]	ATOM	3011	O	SER	B	124	13.830	11.909	16.587	1.00	42.33	O
[3064]	ATOM	3012	CB	SER	B	124	12.511	10.973	19.056	1.00	43.89	C
[3065]	ATOM	3013	OG	SER	B	124	11.392	10.230	18.607	1.00	46.96	O
[3066]	ATOM	3014	N	THR	B	125	11.711	12.489	16.075	1.00	40.34	N
[3067]	ATOM	3015	CA	THR	B	125	11.915	12.675	14.606	1.00	38.87	C
[3068]	ATOM	3016	C	THR	B	125	11.113	13.843	13.945	1.00	37.34	C
[3069]	ATOM	3017	O	THR	B	125	10.006	14.177	14.356	1.00	37.53	O
[3070]	ATOM	3018	CB	THR	B	125	11.595	11.402	13.792	1.00	39.16	C
[3071]	ATOM	3019	OG1	THR	B	125	10.270	11.006	14.103	1.00	40.01	O
[3072]	ATOM	3020	CG2	THR	B	125	12.527	10.322	14.145	1.00	38.30	C
[3073]	ATOM	3021	N	ILE	B	126	11.674	14.440	12.904	1.00	35.58	N
[3074]	ATOM	3022	CA	ILE	B	126	11.106	15.615	12.283	1.00	33.89	C
[3075]	ATOM	3023	C	ILE	B	126	11.133	15.484	10.751	1.00	33.68	C
[3076]	ATOM	3024	O	ILE	B	126	11.893	14.671	10.189	1.00	34.18	O
[3077]	ATOM	3025	CB	ILE	B	126	11.919	16.859	12.650	1.00	34.19	C
[3078]	ATOM	3026	CG1	ILE	B	126	13.347	16.776	12.092	1.00	32.31	C
[3079]	ATOM	3027	CG2	ILE	B	126	11.874	17.131	14.180	1.00	32.83	C
[3080]	ATOM	3028	CD1	ILE	B	126	14.013	18.118	11.927	1.00	29.96	C
[3081]	ATOM	3029	N	ILE	B	127	10.283	16.256	10.075	1.00	32.07	N

[3082]	ATOM	3030	CA	ILE	B	127	10.429	16.578	8.666	0.80	29.87	C
[3083]	ATOM	3031	C	ILE	B	127	10.742	18.076	8.705	1.00	30.00	C
[3084]	ATOM	3032	O	ILE	B	127	9.939	18.897	9.205	1.00	29.84	O
[3085]	ATOM	3033	CB	ILE	B	127	9.180	16.349	7.914	0.80	29.05	C
[3086]	ATOM	3034	CG1	ILE	B	127	8.999	14.864	7.670	0.80	28.48	C
[3087]	ATOM	3035	CG2	ILE	B	127	9.279	17.002	6.623	0.80	27.49	C
[3088]	ATOM	3036	CD1	ILE	B	127	7.587	14.464	7.264	0.80	24.70	C
[3089]	ATOM	3037	N	GLY	B	128	11.951	18.431	8.264	1.00	30.23	N
[3090]	ATOM	3038	CA	GLY	B	128	12.425	19.853	8.273	1.00	29.90	C
[3091]	ATOM	3039	C	GLY	B	128	11.927	20.631	7.059	1.00	29.41	C
[3092]	ATOM	3040	O	GLY	B	128	11.927	20.050	5.952	1.00	29.77	O
[3093]	ATOM	3041	N	VAL	B	129	11.460	21.879	7.243	1.00	28.31	N
[3094]	ATOM	3042	CA	VAL	B	129	11.105	22.727	6.108	1.00	27.29	C
[3095]	ATOM	3043	C	VAL	B	129	11.758	24.022	6.431	1.00	27.99	C
[3096]	ATOM	3044	O	VAL	B	129	11.409	24.640	7.449	1.00	28.38	O
[3097]	ATOM	3045	CB	VAL	B	129	9.539	22.925	5.970	1.00	27.64	C
[3098]	ATOM	3046	CG1	VAL	B	129	9.143	23.951	4.928	1.00	22.97	C
[3099]	ATOM	3047	CG2	VAL	B	129	8.812	21.568	5.697	1.00	26.44	C
[3100]	ATOM	3048	N	GLY	B	130	12.738	24.423	5.617	1.00	28.23	N
[3101]	ATOM	3049	CA	GLY	B	130	13.444	25.722	5.783	1.00	28.65	C
[3102]	ATOM	3050	C	GLY	B	130	13.564	26.540	4.486	1.00	29.67	C
[3103]	ATOM	3051	O	GLY	B	130	13.429	26.026	3.349	1.00	31.05	O
[3104]	ATOM	3052	N	VAL	B	131	13.807	27.832	4.634	1.00	28.86	N
[3105]	ATOM	3053	CA	VAL	B	131	14.104	28.705	3.514	1.00	27.70	C
[3106]	ATOM	3054	C	VAL	B	131	15.413	29.418	3.832	1.00	28.20	C
[3107]	ATOM	3055	O	VAL	B	131	15.642	29.866	4.983	1.00	28.83	O
[3108]	ATOM	3056	CB	VAL	B	131	13.053	29.765	3.404	1.00	28.30	C
[3109]	ATOM	3057	CG1	VAL	B	131	13.421	30.852	2.286	1.00	25.83	C
[3110]	ATOM	3058	CG2	VAL	B	131	11.644	29.142	3.225	1.00	27.35	C
[3111]	ATOM	3059	N	GLY	B	132	16.300	29.504	2.843	1.00	27.41	N
[3112]	ATOM	3060	CA	GLY	B	132	17.523	30.280	2.981	1.00	26.30	C
[3113]	ATOM	3061	C	GLY	B	132	18.314	29.790	4.171	1.00	26.93	C
[3114]	ATOM	3062	O	GLY	B	132	18.469	28.582	4.419	1.00	27.11	O
[3115]	ATOM	3063	N	ALA	B	133	18.829	30.723	4.936	1.00	26.66	N
[3116]	ATOM	3064	CA	ALA	B	133	19.590	30.329	6.104	1.00	27.29	C
[3117]	ATOM	3065	C	ALA	B	133	18.913	29.115	6.780	1.00	28.02	C

[3118]	ATOM	3066	O	ALA B 133	19.602	28.173	7.266	1.00	28.87	O
[3119]	ATOM	3067	CB	ALA B 133	19.720	31.508	7.076	1.00	26.71	C
[3120]	ATOM	3068	N	GLY B 134	17.570	29.136	6.780	1.00	27.39	N
[3121]	ATOM	3069	CA	GLY B 134	16.799	28.135	7.488	1.00	26.78	C
[3122]	ATOM	3070	C	GLY B 134	17.035	26.795	6.887	1.00	26.52	C
[3123]	ATOM	3071	O	GLY B 134	17.229	25.839	7.623	1.00	26.27	O
[3124]	ATOM	3072	N	ALA B 135	17.015	26.722	5.559	1.00	26.63	N
[3125]	ATOM	3073	CA	ALA B 135	17.356	25.475	4.902	1.00	27.87	C
[3126]	ATOM	3074	C	ALA B 135	18.796	25.040	5.197	1.00	28.61	C
[3127]	ATOM	3075	O	ALA B 135	19.066	23.840	5.408	1.00	29.38	O
[3128]	ATOM	3076	CB	ALA B 135	17.174	25.566	3.426	1.00	28.57	C
[3129]	ATOM	3077	N	TYR B 136	19.734	25.971	5.217	1.00	27.74	N
[3130]	ATOM	3078	CA	TYR B 136	21.043	25.522	5.493	1.00	27.94	C
[3131]	ATOM	3079	C	TYR B 136	21.041	25.000	6.903	1.00	27.66	C
[3132]	ATOM	3080	O	TYR B 136	21.543	23.964	7.152	1.00	27.98	O
[3133]	ATOM	3081	CB	TYR B 136	22.038	26.655	5.331	1.00	29.31	C
[3134]	ATOM	3082	CG	TYR B 136	23.447	26.321	5.712	1.00	28.77	C
[3135]	ATOM	3083	CD1	TYR B 136	23.804	26.222	7.067	1.00	29.07	C
[3136]	ATOM	3084	CD2	TYR B 136	24.442	26.164	4.720	1.00	30.89	C
[3137]	ATOM	3085	CE1	TYR B 136	25.076	25.913	7.465	1.00	30.76	C
[3138]	ATOM	3086	CE2	TYR B 136	25.796	25.869	5.093	1.00	31.13	C
[3139]	ATOM	3087	CZ	TYR B 136	26.093	25.730	6.491	1.00	32.48	C
[3140]	ATOM	3088	OH	TYR B 136	27.381	25.423	6.969	1.00	33.31	O
[3141]	ATOM	3089	N	ILE B 137	20.464	25.706	7.834	1.00	27.33	N
[3142]	ATOM	3090	CA	ILE B 137	20.496	25.267	9.228	1.00	27.91	C
[3143]	ATOM	3091	C	ILE B 137	19.884	23.886	9.419	1.00	29.18	C
[3144]	ATOM	3092	O	ILE B 137	20.454	23.053	10.111	1.00	29.28	O
[3145]	ATOM	3093	CB	ILE B 137	19.776	26.291	10.160	1.00	27.78	C
[3146]	ATOM	3094	CG1	ILE B 137	20.496	27.614	10.179	1.00	27.27	C
[3147]	ATOM	3095	CG2	ILE B 137	19.610	25.710	11.556	1.00	26.30	C
[3148]	ATOM	3096	CD1	ILE B 137	19.881	28.673	10.965	1.00	26.95	C
[3149]	ATOM	3097	N	LEU B 138	18.711	23.649	8.839	1.00	30.17	N
[3150]	ATOM	3098	CA	LEU B 138	18.095	22.342	8.972	1.00	31.23	C
[3151]	ATOM	3099	C	LEU B 138	18.994	21.243	8.367	1.00	31.77	C
[3152]	ATOM	3100	O	LEU B 138	19.050	20.128	8.888	1.00	32.06	O
[3153]	ATOM	3101	CB	LEU B 138	16.696	22.326	8.358	1.00	30.64	C

[3154]	ATOM	3102	CG	LEU	B	138	15.725	23.127	9.179	1.00	32.13	C
[3155]	ATOM	3103	CD1	LEU	B	138	14.380	23.115	8.495	1.00	32.41	C
[3156]	ATOM	3104	CD2	LEU	B	138	15.607	22.501	10.593	1.00	32.32	C
[3157]	ATOM	3105	N	ALA	B	139	19.706	21.577	7.276	1.00	32.69	N
[3158]	ATOM	3106	CA	ALA	B	139	20.578	20.551	6.616	1.00	33.20	C
[3159]	ATOM	3107	C	ALA	B	139	21.802	20.250	7.503	1.00	32.99	C
[3160]	ATOM	3108	O	ALA	B	139	22.230	19.095	7.692	1.00	33.77	O
[3161]	ATOM	3109	CB	ALA	B	139	20.927	20.905	5.142	1.00	31.69	C
[3162]	ATOM	3110	N	ARG	B	140	22.318	21.274	8.140	1.00	32.88	N
[3163]	ATOM	3111	CA	ARG	B	140	23.429	21.029	9.027	1.00	33.30	C
[3164]	ATOM	3112	C	ARG	B	140	22.917	20.133	10.175	1.00	33.49	C
[3165]	ATOM	3113	O	ARG	B	140	23.492	19.117	10.542	1.00	33.53	O
[3166]	ATOM	3114	CB	ARG	B	140	24.043	22.366	9.469	1.00	32.89	C
[3167]	ATOM	3115	CG	ARG	B	140	24.984	22.285	10.743	1.00	33.39	C
[3168]	ATOM	3116	CD	ARG	B	140	26.252	21.494	10.578	1.00	31.00	C
[3169]	ATOM	3117	NE	ARG	B	140	27.020	22.178	9.548	1.00	34.24	N
[3170]	ATOM	3118	CZ	ARG	B	140	27.868	21.576	8.709	1.00	37.32	C
[3171]	ATOM	3119	NH1	ARG	B	140	28.025	20.239	8.823	1.00	34.79	N
[3172]	ATOM	3120	NH2	ARG	B	140	28.523	22.305	7.762	1.00	36.87	N
[3173]	ATOM	3121	N	TYR	B	141	21.772	20.486	10.705	1.00	34.19	N
[3174]	ATOM	3122	CA	TYR	B	141	21.118	19.632	11.705	1.00	34.28	C
[3175]	ATOM	3123	C	TYR	B	141	20.997	18.140	11.296	1.00	34.52	C
[3176]	ATOM	3124	O	TYR	B	141	21.274	17.239	12.118	1.00	33.76	O
[3177]	ATOM	3125	CB	TYR	B	141	19.723	20.153	12.006	1.00	34.23	C
[3178]	ATOM	3126	CG	TYR	B	141	19.092	19.247	12.959	1.00	35.13	C
[3179]	ATOM	3127	CD1	TYR	B	141	19.494	19.232	14.307	1.00	35.54	C
[3180]	ATOM	3128	CD2	TYR	B	141	18.149	18.339	12.526	1.00	36.17	C
[3181]	ATOM	3129	CE1	TYR	B	141	18.947	18.351	15.231	1.00	34.35	C
[3182]	ATOM	3130	CE2	TYR	B	141	17.608	17.440	13.411	1.00	36.34	C
[3183]	ATOM	3131	CZ	TYR	B	141	17.993	17.460	14.761	1.00	35.80	C
[3184]	ATOM	3132	OH	TYR	B	141	17.373	16.554	15.611	1.00	37.98	O
[3185]	ATOM	3133	N	ALA	B	142	20.523	17.901	10.064	1.00	34.45	N
[3186]	ATOM	3134	CA	ALA	B	142	20.374	16.568	9.519	1.00	34.72	C
[3187]	ATOM	3135	C	ALA	B	142	21.728	15.807	9.480	1.00	35.47	C
[3188]	ATOM	3136	O	ALA	B	142	21.776	14.591	9.819	1.00	35.35	O
[3189]	ATOM	3137	CB	ALA	B	142	19.727	16.636	8.118	1.00	34.60	C

[3190]	ATOM	3138	N	LEU	B	143	22.818	16.510	9.084	1.00	35.48	N
[3191]	ATOM	3139	CA	LEU	B	143	24.158	15.916	9.041	1.00	35.22	C
[3192]	ATOM	3140	C	LEU	B	143	24.624	15.478	10.400	1.00	35.56	C
[3193]	ATOM	3141	O	LEU	B	143	25.178	14.383	10.563	1.00	35.72	O
[3194]	ATOM	3142	CB	LEU	B	143	25.131	16.897	8.459	1.00	34.62	C
[3195]	ATOM	3143	CG	LEU	B	143	24.973	17.109	6.943	1.00	36.10	C
[3196]	ATOM	3144	CD1	LEU	B	143	26.161	17.895	6.293	1.00	33.30	C
[3197]	ATOM	3145	CD2	LEU	B	143	24.712	15.740	6.242	1.00	33.90	C
[3198]	ATOM	3146	N	ASN	B	144	24.370	16.329	11.388	1.00	35.69	N
[3199]	ATOM	3147	CA	ASN	B	144	24.631	15.968	12.782	1.00	36.73	C
[3200]	ATOM	3148	C	ASN	B	144	23.720	14.877	13.433	1.00	37.18	C
[3201]	ATOM	3149	O	ASN	B	144	24.139	14.203	14.381	1.00	37.86	O
[3202]	ATOM	3150	CB	ASN	B	144	24.601	17.228	13.676	1.00	37.01	C
[3203]	ATOM	3151	CG	ASN	B	144	25.688	18.265	13.319	1.00	37.04	C
[3204]	ATOM	3152	OD1	ASN	B	144	26.752	17.963	12.871	1.00	36.54	O
[3205]	ATOM	3153	ND2	ASN	B	144	25.399	19.473	13.542	1.00	33.20	N
[3206]	ATOM	3154	N	HIS	B	145	22.483	14.730	12.992	1.00	37.25	N
[3207]	ATOM	3155	CA	HIS	B	145	21.543	13.865	13.700	1.00	38.05	C
[3208]	ATOM	3156	C	HIS	B	145	20.634	13.162	12.713	1.00	39.56	C
[3209]	ATOM	3157	O	HIS	B	145	19.379	13.292	12.802	1.00	39.01	O
[3210]	ATOM	3158	CB	HIS	B	145	20.726	14.639	14.739	1.00	36.65	C
[3211]	ATOM	3159	CG	HIS	B	145	21.573	15.321	15.770	1.00	37.95	C
[3212]	ATOM	3160	ND1	HIS	B	145	22.261	14.631	16.752	1.00	38.60	N
[3213]	ATOM	3161	CD2	HIS	B	145	21.869	16.638	15.962	1.00	38.11	C
[3214]	ATOM	3162	CE1	HIS	B	145	22.935	15.495	17.504	1.00	37.28	C
[3215]	ATOM	3163	NE2	HIS	B	145	22.703	16.718	17.051	1.00	37.16	N
[3216]	ATOM	3164	N	PRO	B	146	21.251	12.362	11.806	1.00	41.07	N
[3217]	ATOM	3165	CA	PRO	B	146	20.553	11.911	10.572	1.00	41.93	C
[3218]	ATOM	3166	C	PRO	B	146	19.396	10.962	10.918	1.00	43.02	C
[3219]	ATOM	3167	O	PRO	B	146	18.412	10.867	10.169	1.00	44.21	O
[3220]	ATOM	3168	CB	PRO	B	146	21.647	11.235	9.746	1.00	41.14	C
[3221]	ATOM	3169	CG	PRO	B	146	22.641	10.795	10.780	1.00	41.19	C
[3222]	ATOM	3170	CD	PRO	B	146	22.605	11.790	11.926	1.00	41.10	C
[3223]	ATOM	3171	N	ASP	B	147	19.475	10.307	12.063	1.00	42.89	N
[3224]	ATOM	3172	CA	ASP	B	147	18.364	9.445	12.475	1.00	44.14	C
[3225]	ATOM	3173	C	ASP	B	147	17.257	10.195	13.221	1.00	43.28	C



[3226]	ATOM	3174	O	ASP B 147	16.230	9.566	13.628	1.00	43.01	O
[3227]	ATOM	3175	CB	ASP B 147	18.886	8.346	13.363	1.00	44.74	C
[3228]	ATOM	3176	CG	ASP B 147	20.025	8.865	14.247	1.00	50.52	C
[3229]	ATOM	3177	OD1	ASP B 147	19.750	9.753	15.173	1.00	51.63	O
[3230]	ATOM	3178	OD2	ASP B 147	21.217	8.441	13.970	1.00	54.45	O
[3231]	ATOM	3179	N	THR B 148	17.411	11.518	13.401	1.00	42.31	N
[3232]	ATOM	3180	CA	THR B 148	16.223	12.261	13.820	1.00	41.76	C
[3233]	ATOM	3181	C	THR B 148	15.474	12.856	12.622	1.00	41.79	C
[3234]	ATOM	3182	O	THR B 148	14.324	13.321	12.780	1.00	41.89	O
[3235]	ATOM	3183	CB	THR B 148	16.506	13.293	14.830	1.00	41.97	C
[3236]	ATOM	3184	OG1	THR B 148	17.374	14.243	14.236	1.00	43.00	O
[3237]	ATOM	3185	CG2	THR B 148	17.153	12.628	16.096	1.00	42.11	C
[3238]	ATOM	3186	N	VAL B 149	16.082	12.783	11.424	1.00	40.41	N
[3239]	ATOM	3187	CA	VAL B 149	15.507	13.467	10.304	1.00	39.58	C
[3240]	ATOM	3188	C	VAL B 149	14.879	12.526	9.308	1.00	39.98	C
[3241]	ATOM	3189	O	VAL B 149	15.571	11.707	8.725	1.00	40.65	O
[3242]	ATOM	3190	CB	VAL B 149	16.532	14.461	9.655	1.00	39.13	C
[3243]	ATOM	3191	CG1	VAL B 149	16.005	15.082	8.339	1.00	38.13	C
[3244]	ATOM	3192	CG2	VAL B 149	16.864	15.532	10.632	1.00	37.26	C
[3245]	ATOM	3193	N	GLU B 150	13.576	12.675	9.056	1.00	39.76	N
[3246]	ATOM	3194	CA	GLU B 150	12.879	11.786	8.117	1.00	39.71	C
[3247]	ATOM	3195	C	GLU B 150	12.871	12.351	6.751	1.00	38.26	C
[3248]	ATOM	3196	O	GLU B 150	12.693	11.649	5.774	1.00	38.92	O
[3249]	ATOM	3197	CB	GLU B 150	11.444	11.453	8.585	1.00	39.18	C
[3250]	ATOM	3198	CG	GLU B 150	11.467	10.443	9.718	1.00	41.63	C
[3251]	ATOM	3199	CD	GLU B 150	10.108	9.844	10.091	1.00	44.24	C
[3252]	ATOM	3200	OE1	GLU B 150	9.231	9.496	9.227	1.00	44.43	O
[3253]	ATOM	3201	OE2	GLU B 150	9.964	9.676	11.311	1.00	46.84	O
[3254]	ATOM	3202	N	GLY B 151	13.053	13.652	6.676	1.00	37.90	N
[3255]	ATOM	3203	CA	GLY B 151	12.947	14.329	5.357	1.00	36.11	C
[3256]	ATOM	3204	C	GLY B 151	13.125	15.828	5.430	1.00	34.40	C
[3257]	ATOM	3205	O	GLY B 151	12.870	16.451	6.458	1.00	34.88	O
[3258]	ATOM	3206	N	LEU B 152	13.570	16.399	4.333	1.00	32.33	N
[3259]	ATOM	3207	CA	LEU B 152	13.891	17.811	4.296	1.00	30.58	C
[3260]	ATOM	3208	C	LEU B 152	13.297	18.466	3.051	1.00	29.85	C
[3261]	ATOM	3209	O	LEU B 152	13.518	17.992	1.949	1.00	29.73	O

[3262]	ATOM	3210	CB	LEU	B	152	15.392	18.015	4.311	1.00	29.67	C
[3263]	ATOM	3211	CG	LEU	B	152	16.025	17.628	5.614	1.00	27.94	C
[3264]	ATOM	3212	CD1	LEU	B	152	17.468	17.772	5.357	1.00	28.83	C
[3265]	ATOM	3213	CD2	LEU	B	152	15.609	18.536	6.678	1.00	26.44	C
[3266]	ATOM	3214	N	VAL	B	153	12.509	19.526	3.241	1.00	28.91	N
[3267]	ATOM	3215	CA	VAL	B	153	12.158	20.423	2.167	1.00	27.40	C
[3268]	ATOM	3216	C	VAL	B	153	13.080	21.604	2.393	1.00	28.73	C
[3269]	ATOM	3217	O	VAL	B	153	12.988	22.339	3.401	1.00	29.39	O
[3270]	ATOM	3218	CB	VAL	B	153	10.731	20.865	2.245	1.00	26.91	C
[3271]	ATOM	3219	CG1	VAL	B	153	10.480	21.873	1.155	1.00	24.32	C
[3272]	ATOM	3220	CG2	VAL	B	153	9.792	19.666	2.115	1.00	23.36	C
[3273]	ATOM	3221	N	LEU	B	154	14.001	21.778	1.460	1.00	29.68	N
[3274]	ATOM	3222	CA	LEU	B	154	15.019	22.834	1.526	1.00	29.48	C
[3275]	ATOM	3223	C	LEU	B	154	14.834	23.836	0.404	1.00	30.20	C
[3276]	ATOM	3224	O	LEU	B	154	15.235	23.573	-0.717	1.00	30.12	O
[3277]	ATOM	3225	CB	LEU	B	154	16.355	22.193	1.356	1.00	29.35	C
[3278]	ATOM	3226	CG	LEU	B	154	16.711	21.047	2.300	1.00	30.04	C
[3279]	ATOM	3227	CD1	LEU	B	154	18.041	20.446	1.796	1.00	28.14	C
[3280]	ATOM	3228	CD2	LEU	B	154	16.833	21.606	3.750	1.00	28.16	C
[3281]	ATOM	3229	N	ILE	B	155	14.190	24.971	0.726	1.00	30.50	N
[3282]	ATOM	3230	CA	ILE	B	155	13.912	26.033	-0.244	1.00	30.06	C
[3283]	ATOM	3231	C	ILE	B	155	15.078	27.029	-0.243	1.00	31.20	C
[3284]	ATOM	3232	O	ILE	B	155	15.428	27.481	0.851	1.00	32.00	O
[3285]	ATOM	3233	CB	ILE	B	155	12.638	26.791	0.152	1.00	29.99	C
[3286]	ATOM	3234	CG1	ILE	B	155	11.486	25.777	0.253	1.00	29.30	C
[3287]	ATOM	3235	CG2	ILE	B	155	12.304	27.920	-0.871	1.00	28.11	C
[3288]	ATOM	3236	CD1	ILE	B	155	10.245	26.240	1.111	1.00	26.49	C
[3289]	ATOM	3237	N	ASN	B	156	15.630	27.386	-1.436	1.00	31.52	N
[3290]	ATOM	3238	CA	ASN	B	156	16.782	28.326	-1.631	1.00	30.97	C
[3291]	ATOM	3239	C	ASN	B	156	18.038	28.002	-0.832	1.00	30.81	C
[3292]	ATOM	3240	O	ASN	B	156	18.703	28.911	-0.310	1.00	31.05	O
[3293]	ATOM	3241	CB	ASN	B	156	16.471	29.792	-1.316	1.00	31.29	C
[3294]	ATOM	3242	CG	ASN	B	156	15.146	30.245	-1.826	1.00	32.27	C
[3295]	ATOM	3243	OD1	ASN	B	156	14.623	31.183	-1.406	1.00	30.56	O
[3296]	ATOM	3244	ND2	ASN	B	156	14.642	29.618	-2.745	1.00	31.17	N
[3297]	ATOM	3245	N	ILE	B	157	18.360	26.731	-0.728	1.00	30.85	N

[3298]	ATOM	3246	CA	ILE B 157	19.554	26.329	-0.038	1.00	31.04	C
[3299]	ATOM	3247	C	ILE B 157	20.809	26.680	-0.859	1.00	32.80	C
[3300]	ATOM	3248	O	ILE B 157	20.832	26.517	-2.089	1.00	33.94	O
[3301]	ATOM	3249	CB	ILE B 157	19.515	24.847	0.375	1.00	30.42	C
[3302]	ATOM	3250	CG1	ILE B 157	20.789	24.510	1.098	1.00	31.09	C
[3303]	ATOM	3251	CG2	ILE B 157	19.404	23.899	-0.795	1.00	26.33	C
[3304]	ATOM	3252	CD1	ILE B 157	20.602	23.521	2.217	1.00	33.72	C
[3305]	ATOM	3253	N	ASP B 158	21.842	27.186	-0.192	1.00	33.74	N
[3306]	ATOM	3254	CA	ASP B 158	23.118	27.456	-0.814	1.00	34.28	C
[3307]	ATOM	3255	C	ASP B 158	24.129	26.839	0.097	1.00	34.41	C
[3308]	ATOM	3256	O	ASP B 158	24.479	27.440	1.113	1.00	34.28	O
[3309]	ATOM	3257	CB	ASP B 158	23.372	28.952	-0.869	1.00	34.22	C
[3310]	ATOM	3258	CG	ASP B 158	24.682	29.304	-1.633	1.00	37.63	C
[3311]	ATOM	3259	OD1	ASP B 158	25.742	28.560	-1.477	1.00	38.96	O
[3312]	ATOM	3260	OD2	ASP B 158	24.645	30.323	-2.398	1.00	37.13	O
[3313]	ATOM	3261	N	PRO B 159	24.611	25.639	-0.245	1.00	35.34	N
[3314]	ATOM	3262	CA	PRO B 159	25.359	24.784	0.740	1.00	35.68	C
[3315]	ATOM	3263	C	PRO B 159	26.885	25.033	0.752	1.00	36.36	C
[3316]	ATOM	3264	O	PRO B 159	27.659	24.286	1.420	1.00	37.26	O
[3317]	ATOM	3265	CB	PRO B 159	25.055	23.348	0.285	1.00	35.09	C
[3318]	ATOM	3266	CG	PRO B 159	24.914	23.510	-1.254	1.00	35.26	C
[3319]	ATOM	3267	CD	PRO B 159	24.448	24.974	-1.554	1.00	35.54	C
[3320]	ATOM	3268	N	ASN B 160	27.331	26.073	0.049	1.00	36.25	N
[3321]	ATOM	3269	CA	ASN B 160	28.774	26.359	0.059	1.00	36.78	C
[3322]	ATOM	3270	C	ASN B 160	29.070	27.655	0.748	1.00	36.92	C
[3323]	ATOM	3271	O	ASN B 160	28.232	28.587	0.646	1.00	36.75	O
[3324]	ATOM	3272	CB	ASN B 160	29.363	26.366	-1.368	1.00	36.76	C
[3325]	ATOM	3273	CG	ASN B 160	29.122	25.044	-2.080	1.00	37.49	C
[3326]	ATOM	3274	OD1	ASN B 160	29.118	24.997	-3.298	1.00	41.67	O
[3327]	ATOM	3275	ND2	ASN B 160	28.846	23.962	-1.310	1.00	37.85	N
[3328]	ATOM	3276	N	ALA B 161	30.240	27.738	1.426	1.00	36.90	N
[3329]	ATOM	3277	CA	ALA B 161	30.683	29.052	1.876	1.00	37.32	C
[3330]	ATOM	3278	C	ALA B 161	30.619	30.064	0.670	1.00	38.29	C
[3331]	ATOM	3279	O	ALA B 161	30.662	29.647	-0.520	1.00	37.91	O
[3332]	ATOM	3280	CB	ALA B 161	32.063	28.957	2.441	1.00	36.21	C
[3333]	ATOM	3281	N	LYS B 162	30.451	31.355	0.959	1.00	39.57	N

[3334]	ATOM	3282	CA	LYS	B	162	30.690	32.397	-0.059	1.00	41.25	C
[3335]	ATOM	3283	C	LYS	B	162	32.103	32.353	-0.620	1.00	41.74	C
[3336]	ATOM	3284	O	LYS	B	162	33.051	32.510	0.153	1.00	41.90	O
[3337]	ATOM	3285	CB	LYS	B	162	30.608	33.764	0.607	1.00	41.49	C
[3338]	ATOM	3286	CG	LYS	B	162	29.266	34.459	0.562	1.00	43.38	C
[3339]	ATOM	3287	CD	LYS	B	162	29.382	36.011	0.867	1.00	42.88	C
[3340]	ATOM	3288	CE	LYS	B	162	28.120	36.764	0.405	1.00	41.80	C
[3341]	ATOM	3289	NZ	LYS	B	162	27.867	36.498	-1.018	1.00	40.49	N
[3342]	ATOM	3290	N	GLY	B	163	32.263	32.223	-1.935	1.00	42.57	N
[3343]	ATOM	3291	CA	GLY	B	163	33.604	32.266	-2.531	1.00	44.20	C
[3344]	ATOM	3292	C	GLY	B	163	34.227	33.647	-2.370	1.00	45.65	C
[3345]	ATOM	3293	O	GLY	B	163	33.555	34.571	-1.909	1.00	45.53	O
[3346]	ATOM	3294	N	TRP	B	164	35.488	33.827	-2.775	1.00	46.94	N
[3347]	ATOM	3295	CA	TRP	B	164	36.095	35.161	-2.720	1.00	47.43	C
[3348]	ATOM	3296	C	TRP	B	164	35.439	36.046	-3.746	1.00	48.31	C
[3349]	ATOM	3297	O	TRP	B	164	35.179	37.197	-3.432	1.00	48.69	O
[3350]	ATOM	3298	CB	TRP	B	164	37.626	35.165	-2.864	1.00	47.62	C
[3351]	ATOM	3299	CG	TRP	B	164	38.185	34.321	-4.003	1.00	47.88	C
[3352]	ATOM	3300	CD1	TRP	B	164	38.480	32.977	-3.980	1.00	46.52	C
[3353]	ATOM	3301	CD2	TRP	B	164	38.495	34.769	-5.298	1.00	45.95	C
[3354]	ATOM	3302	NE1	TRP	B	164	38.925	32.589	-5.184	1.00	44.65	N
[3355]	ATOM	3303	CE2	TRP	B	164	38.937	33.664	-6.022	1.00	44.58	C
[3356]	ATOM	3304	CE3	TRP	B	164	38.401	35.995	-5.931	1.00	46.87	C
[3357]	ATOM	3305	CZ2	TRP	B	164	39.327	33.745	-7.338	1.00	46.73	C
[3358]	ATOM	3306	CZ3	TRP	B	164	38.765	36.074	-7.237	1.00	47.90	C
[3359]	ATOM	3307	CH2	TRP	B	164	39.227	34.953	-7.939	1.00	47.71	C
[3360]	ATOM	3308	N	MET	B	165	35.100	35.516	-4.925	1.00	49.36	N
[3361]	ATOM	3309	CA	MET	B	165	34.480	36.335	-5.951	1.00	51.18	C
[3362]	ATOM	3310	C	MET	B	165	33.183	36.922	-5.480	1.00	50.44	C
[3363]	ATOM	3311	O	MET	B	165	32.951	38.108	-5.688	1.00	50.74	O
[3364]	ATOM	3312	CB	MET	B	165	34.216	35.524	-7.181	1.00	51.07	C
[3365]	ATOM	3313	CG	MET	B	165	35.413	35.436	-8.067	1.00	54.41	C
[3366]	ATOM	3314	SD	MET	B	165	34.850	34.950	-9.691	1.00	58.86	S
[3367]	ATOM	3315	CE	MET	B	165	34.560	36.566	-10.568	1.00	59.21	C
[3368]	ATOM	3316	N	ASP	B	166	32.344	36.100	-4.851	1.00	49.93	N
[3369]	ATOM	3317	CA	ASP	B	166	31.064	36.566	-4.307	1.00	49.32	C

[3370]	ATOM	3318	C	ASP	B	166	31.207	37.628	-3.204	1.00	47.70	C
[3371]	ATOM	3319	O	ASP	B	166	30.431	38.605	-3.150	1.00	46.65	O
[3372]	ATOM	3320	CB	ASP	B	166	30.310	35.402	-3.664	1.00	50.94	C
[3373]	ATOM	3321	CG	ASP	B	166	29.786	34.369	-4.682	1.00	54.84	C
[3374]	ATOM	3322	OD1	ASP	B	166	29.414	34.776	-5.814	1.00	57.20	O
[3375]	ATOM	3323	OD2	ASP	B	166	29.738	33.146	-4.287	1.00	58.74	O
[3376]	ATOM	3324	N	TRP	B	167	32.152	37.371	-2.297	1.00	45.54	N
[3377]	ATOM	3325	CA	TRP	B	167	32.468	38.282	-1.223	1.00	43.80	C
[3378]	ATOM	3326	C	TRP	B	167	32.878	39.617	-1.763	1.00	43.29	C
[3379]	ATOM	3327	O	TRP	B	167	32.371	40.613	-1.279	1.00	43.53	O
[3380]	ATOM	3328	CB	TRP	B	167	33.605	37.739	-0.384	1.00	43.20	C
[3381]	ATOM	3329	CG	TRP	B	167	33.157	37.014	0.830	1.00	42.67	C
[3382]	ATOM	3330	CD1	TRP	B	167	33.431	35.725	1.151	1.00	41.54	C
[3383]	ATOM	3331	CD2	TRP	B	167	32.363	37.525	1.900	1.00	41.86	C
[3384]	ATOM	3332	NE1	TRP	B	167	32.850	35.383	2.343	1.00	39.09	N
[3385]	ATOM	3333	CE2	TRP	B	167	32.200	36.482	2.836	1.00	40.93	C
[3386]	ATOM	3334	CE3	TRP	B	167	31.769	38.765	2.166	1.00	42.53	C
[3387]	ATOM	3335	CZ2	TRP	B	167	31.485	36.654	4.052	1.00	40.48	C
[3388]	ATOM	3336	CZ3	TRP	B	167	31.026	38.929	3.367	1.00	40.84	C
[3389]	ATOM	3337	CH2	TRP	B	167	30.897	37.876	4.291	1.00	40.84	C
[3390]	ATOM	3338	N	ALA	B	168	33.779	39.642	-2.761	1.00	42.15	N
[3391]	ATOM	3339	CA	ALA	B	168	34.123	40.883	-3.469	1.00	40.45	C
[3392]	ATOM	3340	C	ALA	B	168	32.930	41.551	-4.026	1.00	39.85	C
[3393]	ATOM	3341	O	ALA	B	168	32.734	42.678	-3.764	1.00	40.53	O
[3394]	ATOM	3342	CB	ALA	B	168	35.065	40.628	-4.513	1.00	40.52	C
[3395]	ATOM	3343	N	ALA	B	169	32.095	40.839	-4.755	1.00	39.47	N
[3396]	ATOM	3344	CA	ALA	B	169	30.854	41.425	-5.344	1.00	39.08	C
[3397]	ATOM	3345	C	ALA	B	169	29.941	42.010	-4.283	1.00	38.86	C
[3398]	ATOM	3346	O	ALA	B	169	29.400	43.073	-4.481	1.00	38.99	O
[3399]	ATOM	3347	CB	ALA	B	169	30.101	40.368	-6.180	1.00	38.71	C
[3400]	ATOM	3348	N	HIS	B	170	29.782	41.274	-3.161	1.00	38.70	N
[3401]	ATOM	3349	CA	HIS	B	170	28.885	41.587	-2.032	1.00	36.87	C
[3402]	ATOM	3350	C	HIS	B	170	29.273	42.948	-1.397	1.00	37.13	C
[3403]	ATOM	3351	O	HIS	B	170	28.447	43.847	-1.266	1.00	36.88	O
[3404]	ATOM	3352	CB	HIS	B	170	28.950	40.437	-1.033	1.00	36.32	C
[3405]	ATOM	3353	CG	HIS	B	170	28.154	40.646	0.232	1.00	35.53	C

[3406]	ATOM	3354	ND1	HIS	B	170	28.651	41.332	1.336	1.00	36.75	N
[3407]	ATOM	3355	CD2	HIS	B	170	26.912	40.231	0.589	1.00	35.46	C
[3408]	ATOM	3356	CE1	HIS	B	170	27.756	41.353	2.305	1.00	35.45	C
[3409]	ATOM	3357	NE2	HIS	B	170	26.694	40.680	1.882	1.00	37.61	N
[3410]	ATOM	3358	N	LYS	B	171	30.550	43.109	-1.051	1.00	37.23	N
[3411]	ATOM	3359	CA	LYS	B	171	31.058	44.321	-0.420	1.00	37.34	C
[3412]	ATOM	3360	C	LYS	B	171	30.933	45.496	-1.364	1.00	37.55	C
[3413]	ATOM	3361	O	LYS	B	171	30.567	46.602	-0.924	1.00	38.29	O
[3414]	ATOM	3362	CB	LYS	B	171	32.517	44.139	0.003	1.00	37.45	C
[3415]	ATOM	3363	CG	LYS	B	171	32.752	42.834	0.662	1.00	39.21	C
[3416]	ATOM	3364	CD	LYS	B	171	34.108	42.654	1.278	1.00	41.97	C
[3417]	ATOM	3365	CE	LYS	B	171	33.792	42.227	2.695	1.00	44.84	C
[3418]	ATOM	3366	NZ	LYS	B	171	34.989	41.755	3.414	1.00	45.74	N
[3419]	ATOM	3367	N	LEU	B	172	31.238	45.248	-2.652	1.00	37.14	N
[3420]	ATOM	3368	CA	LEU	B	172	31.019	46.187	-3.767	1.00	37.13	C
[3421]	ATOM	3369	C	LEU	B	172	29.598	46.711	-3.713	1.00	37.64	C
[3422]	ATOM	3370	O	LEU	B	172	29.425	47.879	-3.384	1.00	38.55	O
[3423]	ATOM	3371	CB	LEU	B	172	31.305	45.498	-5.083	1.00	37.22	C
[3424]	ATOM	3372	CG	LEU	B	172	32.063	46.246	-6.193	1.00	38.29	C
[3425]	ATOM	3373	CD1	LEU	B	172	31.182	46.532	-7.392	1.00	37.29	C
[3426]	ATOM	3374	CD2	LEU	B	172	32.489	47.597	-5.703	1.00	37.85	C
[3427]	ATOM	3375	N	THR	B	173	28.589	45.841	-3.889	1.00	38.06	N
[3428]	ATOM	3376	CA	THR	B	173	27.163	46.217	-3.679	1.00	38.81	C
[3429]	ATOM	3377	C	THR	B	173	26.875	46.968	-2.369	1.00	39.14	C
[3430]	ATOM	3378	O	THR	B	173	26.180	47.992	-2.347	1.00	39.48	O
[3431]	ATOM	3379	CB	THR	B	173	26.233	44.996	-3.758	1.00	39.15	C
[3432]	ATOM	3380	OG1	THR	B	173	26.672	44.131	-4.817	1.00	42.21	O
[3433]	ATOM	3381	CG2	THR	B	173	24.739	45.414	-4.014	1.00	37.81	C
[3434]	ATOM	3382	N	GLY	B	174	27.428	46.450	-1.276	1.00	38.97	N
[3435]	ATOM	3383	CA	GLY	B	174	27.282	47.064	0.023	1.00	39.36	C
[3436]	ATOM	3384	C	GLY	B	174	27.600	48.541	0.121	1.00	40.20	C
[3437]	ATOM	3385	O	GLY	B	174	27.167	49.208	1.035	1.00	40.08	O
[3438]	ATOM	3386	N	LEU	B	175	28.394	49.066	-0.803	1.00	41.04	N
[3439]	ATOM	3387	CA	LEU	B	175	28.801	50.481	-0.743	1.00	40.75	C
[3440]	ATOM	3388	C	LEU	B	175	27.647	51.372	-1.220	1.00	40.75	C
[3441]	ATOM	3389	O	LEU	B	175	27.679	52.599	-1.118	1.00	41.08	O

[3442]	ATOM	3390	CB	LEU	B	175	30.070	50.724	-1.576	1.00	39.99	C
[3443]	ATOM	3391	CG	LEU	B	175	31.405	50.151	-1.106	1.00	39.47	C
[3444]	ATOM	3392	CD1	LEU	B	175	32.523	50.225	-2.172	1.00	37.43	C
[3445]	ATOM	3393	CD2	LEU	B	175	31.919	50.784	0.143	1.00	37.59	C
[3446]	ATOM	3394	N	THR	B	176	26.609	50.740	-1.726	1.00	40.57	N
[3447]	ATOM	3395	CA	THR	B	176	25.535	51.502	-2.420	1.00	41.12	C
[3448]	ATOM	3396	C	THR	B	176	24.124	50.999	-2.006	1.00	41.88	C
[3449]	ATOM	3397	O	THR	B	176	23.157	51.695	-2.220	1.00	43.00	O
[3450]	ATOM	3398	CB	THR	B	176	25.785	51.409	-3.960	1.00	41.22	C
[3451]	ATOM	3399	OG1	THR	B	176	26.474	52.588	-4.368	1.00	42.05	O
[3452]	ATOM	3400	CG2	THR	B	176	24.498	51.126	-4.809	1.00	39.83	C
[3453]	ATOM	3401	N	SER	B	177	24.022	49.796	-1.428	1.00	40.90	N
[3454]	ATOM	3402	CA	SER	B	177	22.799	49.347	-0.911	1.00	39.72	C
[3455]	ATOM	3403	C	SER	B	177	22.791	49.447	0.601	1.00	39.23	C
[3456]	ATOM	3404	O	SER	B	177	23.780	49.160	1.239	1.00	39.00	O
[3457]	ATOM	3405	CB	SER	B	177	22.616	47.924	-1.396	1.00	40.71	C
[3458]	ATOM	3406	OG	SER	B	177	21.789	47.922	-2.560	1.00	41.48	O
[3459]	ATOM	3407	N	SER	B	178	21.682	49.885	1.188	1.00	38.58	N
[3460]	ATOM	3408	CA	SER	B	178	21.490	49.684	2.628	1.00	38.54	C
[3461]	ATOM	3409	C	SER	B	178	21.406	48.192	2.988	1.00	38.79	C
[3462]	ATOM	3410	O	SER	B	178	21.157	47.313	2.159	1.00	38.69	O
[3463]	ATOM	3411	CB	SER	B	178	20.211	50.356	3.148	1.00	38.64	C
[3464]	ATOM	3412	OG	SER	B	178	19.007	49.718	2.675	1.00	39.61	O
[3465]	ATOM	3413	N	ILE	B	179	21.550	47.915	4.260	1.00	38.46	N
[3466]	ATOM	3414	CA	ILE	B	179	21.410	46.550	4.689	1.00	38.09	C
[3467]	ATOM	3415	C	ILE	B	179	19.986	45.901	4.413	1.00	36.90	C
[3468]	ATOM	3416	O	ILE	B	179	19.869	44.784	3.857	1.00	36.91	O
[3469]	ATOM	3417	CB	ILE	B	179	21.956	46.444	6.084	1.00	38.22	C
[3470]	ATOM	3418	CG1	ILE	B	179	23.464	46.382	5.908	1.00	36.98	C
[3471]	ATOM	3419	CG2	ILE	B	179	21.371	45.264	6.761	1.00	38.67	C
[3472]	ATOM	3420	CD1	ILE	B	179	24.250	46.699	7.109	1.00	38.99	C
[3473]	ATOM	3421	N	PRO	B	180	18.908	46.617	4.756	1.00	35.33	N
[3474]	ATOM	3422	CA	PRO	B	180	17.600	46.132	4.303	1.00	34.21	C
[3475]	ATOM	3423	C	PRO	B	180	17.582	45.828	2.816	1.00	34.90	C
[3476]	ATOM	3424	O	PRO	B	180	17.169	44.696	2.411	1.00	36.20	O
[3477]	ATOM	3425	CB	PRO	B	180	16.699	47.304	4.552	1.00	33.19	C

[3478]	ATOM	3426	CG	PRO	B	180	17.366	48.014	5.724	1.00	33.89	C
[3479]	ATOM	3427	CD	PRO	B	180	18.817	47.840	5.575	1.00	34.31	C
[3480]	ATOM	3428	N	GLU	B	181	18.035	46.779	1.986	1.00	33.99	N
[3481]	ATOM	3429	CA	GLU	B	181	18.076	46.499	0.543	1.00	32.73	C
[3482]	ATOM	3430	C	GLU	B	181	18.879	45.232	0.348	1.00	31.90	C
[3483]	ATOM	3431	O	GLU	B	181	18.477	44.337	-0.346	1.00	32.78	O
[3484]	ATOM	3432	CB	GLU	B	181	18.657	47.687	-0.229	1.00	33.03	C
[3485]	ATOM	3433	CG	GLU	B	181	17.711	48.463	-1.182	1.00	35.48	C
[3486]	ATOM	3434	CD	GLU	B	181	16.252	48.558	-0.678	1.00	43.24	C
[3487]	ATOM	3435	OE1	GLU	B	181	15.131	48.405	-1.265	1.00	42.80	O
[3488]	ATOM	3436	OE2	GLU	B	181	16.171	48.830	0.456	1.00	43.24	O
[3489]	ATOM	3437	N	MET	B	182	19.979	45.073	1.027	1.00	31.42	N
[3490]	ATOM	3438	CA	MET	B	182	20.735	43.853	0.781	1.00	32.09	C
[3491]	ATOM	3439	C	MET	B	182	20.035	42.546	1.142	1.00	32.41	C
[3492]	ATOM	3440	O	MET	B	182	20.108	41.579	0.345	1.00	32.83	O
[3493]	ATOM	3441	CB	MET	B	182	22.051	43.940	1.480	1.00	32.54	C
[3494]	ATOM	3442	CG	MET	B	182	22.776	45.078	0.961	1.00	34.51	C
[3495]	ATOM	3443	SD	MET	B	182	24.432	44.816	0.554	1.00	40.86	S
[3496]	ATOM	3444	CE	MET	B	182	24.251	43.992	-0.960	1.00	35.63	C
[3497]	ATOM	3445	N	ILE	B	183	19.386	42.523	2.327	1.00	31.67	N
[3498]	ATOM	3446	CA	ILE	B	183	18.615	41.394	2.776	1.00	29.63	C
[3499]	ATOM	3447	C	ILE	B	183	17.467	41.148	1.798	1.00	30.46	C
[3500]	ATOM	3448	O	ILE	B	183	17.260	39.985	1.359	1.00	29.90	O
[3501]	ATOM	3449	CB	ILE	B	183	18.147	41.600	4.220	1.00	29.59	C
[3502]	ATOM	3450	CG1	ILE	B	183	19.324	41.407	5.212	1.00	28.87	C
[3503]	ATOM	3451	CG2	ILE	B	183	16.984	40.650	4.601	1.00	27.54	C
[3504]	ATOM	3452	CD1	ILE	B	183	19.113	42.163	6.507	1.00	23.21	C
[3505]	ATOM	3453	N	LEU	B	184	16.727	42.200	1.416	1.00	30.12	N
[3506]	ATOM	3454	CA	LEU	B	184	15.733	41.992	0.355	1.00	30.66	C
[3507]	ATOM	3455	C	LEU	B	184	16.306	41.366	-0.888	1.00	31.40	C
[3508]	ATOM	3456	O	LEU	B	184	15.652	40.560	-1.515	1.00	31.65	O
[3509]	ATOM	3457	CB	LEU	B	184	15.010	43.247	-0.019	1.00	30.96	C
[3510]	ATOM	3458	CG	LEU	B	184	14.051	43.617	1.156	1.00	33.32	C
[3511]	ATOM	3459	CD1	LEU	B	184	14.039	45.131	1.581	1.00	34.68	C
[3512]	ATOM	3460	CD2	LEU	B	184	12.662	43.164	0.869	1.00	27.62	C
[3513]	ATOM	3461	N	GLY	B	185	17.544	41.696	-1.254	1.00	31.62	N



[3514]	ATOM	3462	CA	GLY	B	185	18.140	41.032	-2.419	1.00	32.53	C
[3515]	ATOM	3463	C	GLY	B	185	18.498	39.545	-2.272	1.00	33.28	C
[3516]	ATOM	3464	O	GLY	B	185	18.874	38.858	-3.223	1.00	33.68	O
[3517]	ATOM	3465	N	HIS	B	186	18.405	39.063	-1.047	1.00	33.54	N
[3518]	ATOM	3466	CA	HIS	B	186	18.741	37.701	-0.729	1.00	32.90	C
[3519]	ATOM	3467	C	HIS	B	186	17.411	36.958	-0.806	1.00	33.19	C
[3520]	ATOM	3468	O	HIS	B	186	17.394	35.792	-1.250	1.00	33.89	O
[3521]	ATOM	3469	CB	HIS	B	186	19.368	37.634	0.672	1.00	32.68	C
[3522]	ATOM	3470	CG	HIS	B	186	19.162	36.336	1.360	1.00	31.45	C
[3523]	ATOM	3471	ND1	HIS	B	186	20.014	35.265	1.156	1.00	33.61	N
[3524]	ATOM	3472	CD2	HIS	B	186	18.204	35.920	2.224	1.00	28.03	C
[3525]	ATOM	3473	CE1	HIS	B	186	19.594	34.251	1.897	1.00	29.37	C
[3526]	ATOM	3474	NE2	HIS	B	186	18.505	34.630	2.561	1.00	26.73	N
[3527]	ATOM	3475	N	LEU	B	187	16.315	37.635	-0.433	1.00	32.95	N
[3528]	ATOM	3476	CA	LEU	B	187	14.984	37.036	-0.354	1.00	33.15	C
[3529]	ATOM	3477	C	LEU	B	187	14.249	37.074	-1.707	1.00	35.39	C
[3530]	ATOM	3478	O	LEU	B	187	13.562	36.122	-2.111	1.00	36.42	O
[3531]	ATOM	3479	CB	LEU	B	187	14.153	37.835	0.622	1.00	32.23	C
[3532]	ATOM	3480	CG	LEU	B	187	14.527	37.777	2.097	1.00	31.19	C
[3533]	ATOM	3481	CD1	LEU	B	187	13.610	38.684	2.879	1.00	27.14	C
[3534]	ATOM	3482	CD2	LEU	B	187	14.586	36.269	2.718	1.00	28.41	C
[3535]	ATOM	3483	N	PHE	B	188	14.348	38.197	-2.417	1.00	36.75	N
[3536]	ATOM	3484	CA	PHE	B	188	13.606	38.371	-3.672	1.00	37.43	C
[3537]	ATOM	3485	C	PHE	B	188	14.536	38.678	-4.842	1.00	39.18	C
[3538]	ATOM	3486	O	PHE	B	188	15.659	39.128	-4.605	1.00	40.25	O
[3539]	ATOM	3487	CB	PHE	B	188	12.630	39.501	-3.527	1.00	35.84	C
[3540]	ATOM	3488	CG	PHE	B	188	11.632	39.276	-2.485	1.00	34.53	C
[3541]	ATOM	3489	CD1	PHE	B	188	10.563	38.416	-2.728	1.00	31.84	C
[3542]	ATOM	3490	CD2	PHE	B	188	11.746	39.929	-1.243	1.00	32.57	C
[3543]	ATOM	3491	CE1	PHE	B	188	9.560	38.227	-1.747	1.00	30.75	C
[3544]	ATOM	3492	CE2	PHE	B	188	10.767	39.764	-0.214	1.00	30.63	C
[3545]	ATOM	3493	CZ	PHE	B	188	9.664	38.928	-0.468	1.00	31.33	C
[3546]	ATOM	3494	N	SER	B	189	14.096	38.403	-6.073	1.00	40.57	N
[3547]	ATOM	3495	CA	SER	B	189	14.908	38.686	-7.237	1.00	42.36	C
[3548]	ATOM	3496	C	SER	B	189	14.848	40.181	-7.520	1.00	43.09	C
[3549]	ATOM	3497	O	SER	B	189	13.918	40.894	-7.061	1.00	43.64	O

[3550]	ATOM	3498	CB	SER B 189	14.413	37.894	-8.456	1.00	42.69	C
[3551]	ATOM	3499	OG	SER B 189	13.226	38.479	-9.000	1.00	44.61	O
[3552]	ATOM	3500	N	GLN B 190	15.816	40.641	-8.305	1.00	44.29	N
[3553]	ATOM	3501	CA	GLN B 190	15.920	42.063	-8.678	1.00	45.44	C
[3554]	ATOM	3502	C	GLN B 190	14.737	42.502	-9.523	1.00	46.06	C
[3555]	ATOM	3503	O	GLN B 190	14.194	43.548	-9.259	1.00	46.66	O
[3556]	ATOM	3504	CB	GLN B 190	17.244	42.330	-9.394	1.00	45.07	C
[3557]	ATOM	3505	CG	GLN B 190	18.061	43.521	-8.815	1.00	46.75	C
[3558]	ATOM	3506	CD	GLN B 190	18.423	43.373	-7.318	1.00	47.63	C
[3559]	ATOM	3507	OE1	GLN B 190	19.261	42.570	-6.956	1.00	48.45	O
[3560]	ATOM	3508	NE2	GLN B 190	17.779	44.173	-6.454	1.00	47.84	N
[3561]	ATOM	3509	N	GLU B 191	14.334	41.687	-10.504	1.00	47.35	N
[3562]	ATOM	3510	CA	GLU B 191	13.084	41.862	-11.236	1.00	48.74	C
[3563]	ATOM	3511	C	GLU B 191	11.936	42.159	-10.248	1.00	49.28	C
[3564]	ATOM	3512	O	GLU B 191	11.226	43.161	-10.395	1.00	49.21	O
[3565]	ATOM	3513	CB	GLU B 191	12.799	40.586	-12.058	1.00	48.39	C
[3566]	ATOM	3514	CG	GLU B 191	11.476	40.579	-12.960	1.00	51.13	C
[3567]	ATOM	3515	CD	GLU B 191	11.354	39.317	-13.996	1.00	53.80	C
[3568]	ATOM	3516	OE1	GLU B 191	12.304	39.083	-14.834	1.00	56.38	O
[3569]	ATOM	3517	OE2	GLU B 191	10.308	38.568	-13.983	1.00	55.28	O
[3570]	ATOM	3518	N	GLU B 192	11.777	41.318	-9.228	1.00	50.08	N
[3571]	ATOM	3519	CA	GLU B 192	10.675	41.465	-8.340	1.00	51.57	C
[3572]	ATOM	3520	C	GLU B 192	10.782	42.772	-7.545	1.00	52.75	C
[3573]	ATOM	3521	O	GLU B 192	9.731	43.374	-7.101	1.00	53.16	O
[3574]	ATOM	3522	CB	GLU B 192	10.719	40.388	-7.291	1.00	52.43	C
[3575]	ATOM	3523	CG	GLU B 192	10.661	38.931	-7.701	1.00	54.26	C
[3576]	ATOM	3524	CD	GLU B 192	10.420	38.053	-6.471	1.00	55.81	C
[3577]	ATOM	3525	OE1	GLU B 192	11.408	37.478	-5.990	1.00	54.69	O
[3578]	ATOM	3526	OE2	GLU B 192	9.263	37.998	-5.970	1.00	56.85	O
[3579]	ATOM	3527	N	LEU B 193	12.027	43.183	-7.297	1.00	52.36	N
[3580]	ATOM	3528	CA	LEU B 193	12.237	44.427	-6.581	1.00	52.70	C
[3581]	ATOM	3529	C	LEU B 193	11.792	45.699	-7.290	1.00	53.41	C
[3582]	ATOM	3530	O	LEU B 193	11.093	46.527	-6.679	1.00	54.10	O
[3583]	ATOM	3531	CB	LEU B 193	13.656	44.549	-6.066	1.00	52.48	C
[3584]	ATOM	3532	CG	LEU B 193	13.875	43.550	-4.914	1.00	51.01	C
[3585]	ATOM	3533	CD1	LEU B 193	15.362	43.390	-4.630	1.00	48.72	C

[3586]	ATOM	3534	CD2	LEU	B	193	13.046	43.755	-3.582	1.00	47.99	C
[3587]	ATOM	3535	N	SER	B	194	12.167	45.880	-8.552	1.00	53.93	N
[3588]	ATOM	3536	CA	SER	B	194	11.552	46.961	-9.405	1.00	54.76	C
[3589]	ATOM	3537	C	SER	B	194	10.040	46.757	-9.577	1.00	54.37	C
[3590]	ATOM	3538	O	SER	B	194	9.261	47.686	-9.347	1.00	54.09	O
[3591]	ATOM	3539	CB	SER	B	194	12.145	47.038	-10.834	1.00	55.01	C
[3592]	ATOM	3540	OG	SER	B	194	13.223	46.124	-11.060	1.00	56.40	O
[3593]	ATOM	3541	N	GLY	B	195	9.666	45.533	-9.983	1.00	54.06	N
[3594]	ATOM	3542	CA	GLY	B	195	8.282	45.139	-10.169	1.00	53.90	C
[3595]	ATOM	3543	C	GLY	B	195	7.446	45.853	-9.113	1.00	54.10	C
[3596]	ATOM	3544	O	GLY	B	195	6.335	46.372	-9.394	1.00	54.49	O
[3597]	ATOM	3545	N	ASN	B	196	7.992	45.907	-7.895	1.00	53.62	N
[3598]	ATOM	3546	CA	ASN	B	196	7.318	46.579	-6.785	1.00	53.49	C
[3599]	ATOM	3547	C	ASN	B	196	5.834	46.174	-6.459	1.00	53.98	C
[3600]	ATOM	3548	O	ASN	B	196	5.004	47.042	-6.113	1.00	52.89	O
[3601]	ATOM	3549	CB	ASN	B	196	7.468	48.105	-6.897	1.00	52.69	C
[3602]	ATOM	3550	CG	ASN	B	196	7.662	48.765	-5.504	1.00	52.97	C
[3603]	ATOM	3551	OD1	ASN	B	196	8.280	48.144	-4.572	1.00	54.46	O
[3604]	ATOM	3552	ND2	ASN	B	196	7.150	50.024	-5.348	1.00	47.13	N
[3605]	ATOM	3553	N	SER	B	197	5.547	44.857	-6.520	1.00	55.03	N
[3606]	ATOM	3554	CA	SER	B	197	4.203	44.322	-6.191	1.00	56.61	C
[3607]	ATOM	3555	C	SER	B	197	3.736	44.690	-4.773	1.00	56.81	C
[3608]	ATOM	3556	O	SER	B	197	4.430	45.398	-4.063	1.00	57.36	O
[3609]	ATOM	3557	CB	SER	B	197	4.133	42.805	-6.425	1.00	56.54	C
[3610]	ATOM	3558	OG	SER	B	197	4.629	42.116	-5.294	1.00	59.24	O
[3611]	ATOM	3559	N	GLU	B	198	2.556	44.248	-4.372	1.00	57.43	N
[3612]	ATOM	3560	CA	GLU	B	198	2.055	44.689	-3.081	1.00	58.78	C
[3613]	ATOM	3561	C	GLU	B	198	2.855	43.984	-1.990	1.00	57.52	C
[3614]	ATOM	3562	O	GLU	B	198	3.139	44.526	-0.872	1.00	57.11	O
[3615]	ATOM	3563	CB	GLU	B	198	0.586	44.355	-2.927	1.00	59.84	C
[3616]	ATOM	3564	CG	GLU	B	198	-0.118	45.321	-1.967	1.00	66.13	C
[3617]	ATOM	3565	CD	GLU	B	198	-1.319	46.010	-2.645	1.00	74.32	C
[3618]	ATOM	3566	OE1	GLU	B	198	-1.991	45.376	-3.546	1.00	74.90	O
[3619]	ATOM	3567	OE2	GLU	B	198	-1.575	47.191	-2.261	1.00	76.00	O
[3620]	ATOM	3568	N	LEU	B	199	3.249	42.769	-2.364	1.00	55.71	N
[3621]	ATOM	3569	CA	LEU	B	199	3.982	41.919	-1.478	1.00	53.54	C

[3622]	ATOM	3570	C	LEU	B	199	5.350	42.551	-1.226	1.00	52.15	C
[3623]	ATOM	3571	O	LEU	B	199	5.777	42.788	-0.060	1.00	51.44	O
[3624]	ATOM	3572	CB	LEU	B	199	4.103	40.553	-2.134	1.00	53.58	C
[3625]	ATOM	3573	CG	LEU	B	199	4.536	39.395	-1.225	1.00	53.58	C
[3626]	ATOM	3574	CD1	LEU	B	199	3.389	38.894	-0.380	1.00	53.77	C
[3627]	ATOM	3575	CD2	LEU	B	199	5.098	38.275	-2.063	1.00	52.89	C
[3628]	ATOM	3576	N	ILE	B	200	6.017	42.841	-2.339	1.00	49.49	N
[3629]	ATOM	3577	CA	ILE	B	200	7.315	43.423	-2.251	1.00	47.45	C
[3630]	ATOM	3578	C	ILE	B	200	7.264	44.657	-1.393	1.00	46.54	C
[3631]	ATOM	3579	O	ILE	B	200	8.197	44.904	-0.651	1.00	46.76	O
[3632]	ATOM	3580	CB	ILE	B	200	7.896	43.753	-3.614	1.00	47.59	C
[3633]	ATOM	3581	CG1	ILE	B	200	8.056	42.449	-4.439	1.00	48.78	C
[3634]	ATOM	3582	CG2	ILE	B	200	9.250	44.478	-3.479	1.00	45.55	C
[3635]	ATOM	3583	CD1	ILE	B	200	9.012	41.357	-3.812	1.00	46.84	C
[3636]	ATOM	3584	N	GLN	B	201	6.179	45.414	-1.449	1.00	45.10	N
[3637]	ATOM	3585	CA	GLN	B	201	6.130	46.632	-0.671	1.00	44.46	C
[3638]	ATOM	3586	C	GLN	B	201	6.044	46.268	0.775	1.00	43.22	C
[3639]	ATOM	3587	O	GLN	B	201	6.661	46.881	1.635	1.00	43.05	O
[3640]	ATOM	3588	CB	GLN	B	201	4.930	47.507	-1.069	1.00	44.47	C
[3641]	ATOM	3589	CG	GLN	B	201	5.231	48.516	-2.238	1.00	45.30	C
[3642]	ATOM	3590	CD	GLN	B	201	3.949	48.906	-2.994	1.00	45.92	C
[3643]	ATOM	3591	OE1	GLN	B	201	3.820	48.574	-4.206	1.00	44.03	O
[3644]	ATOM	3592	NE2	GLN	B	201	2.964	49.558	-2.260	1.00	41.41	N
[3645]	ATOM	3593	N	LYS	B	202	5.262	45.239	1.035	1.00	43.24	N
[3646]	ATOM	3594	CA	LYS	B	202	4.977	44.831	2.421	1.00	42.86	C
[3647]	ATOM	3595	C	LYS	B	202	6.281	44.420	3.171	1.00	41.89	C
[3648]	ATOM	3596	O	LYS	B	202	6.640	44.922	4.246	1.00	41.24	O
[3649]	ATOM	3597	CB	LYS	B	202	3.972	43.670	2.356	1.00	42.22	C
[3650]	ATOM	3598	CG	LYS	B	202	3.274	43.487	3.686	1.00	43.44	C
[3651]	ATOM	3599	CD	LYS	B	202	2.577	42.127	3.771	1.00	44.25	C
[3652]	ATOM	3600	CE	LYS	B	202	1.988	41.932	5.176	1.00	41.80	C
[3653]	ATOM	3601	NZ	LYS	B	202	1.898	40.494	5.249	1.00	41.57	N
[3654]	ATOM	3602	N	TYR	B	203	6.975	43.514	2.500	1.00	40.98	N
[3655]	ATOM	3603	CA	TYR	B	203	8.241	43.023	2.923	1.00	39.92	C
[3656]	ATOM	3604	C	TYR	B	203	9.361	44.066	3.003	1.00	39.90	C
[3657]	ATOM	3605	O	TYR	B	203	10.088	44.078	4.009	1.00	40.49	O

[3658]	ATOM	3606	CB	TYR	B	203	8.591	41.773	2.115	1.00	39.38	C
[3659]	ATOM	3607	CG	TYR	B	203	7.796	40.586	2.656	1.00	37.78	C
[3660]	ATOM	3608	CD1	TYR	B	203	6.436	40.439	2.343	1.00	37.45	C
[3661]	ATOM	3609	CD2	TYR	B	203	8.359	39.691	3.532	1.00	35.42	C
[3662]	ATOM	3610	CE1	TYR	B	203	5.669	39.395	2.830	1.00	35.41	C
[3663]	ATOM	3611	CE2	TYR	B	203	7.607	38.654	4.059	1.00	35.09	C
[3664]	ATOM	3612	CZ	TYR	B	203	6.244	38.506	3.684	1.00	35.38	C
[3665]	ATOM	3613	OH	TYR	B	203	5.464	37.491	4.169	1.00	33.76	O
[3666]	ATOM	3614	N	ARG	B	204	9.503	44.953	2.015	1.00	38.74	N
[3667]	ATOM	3615	CA	ARG	B	204	10.463	46.096	2.144	1.00	38.08	C
[3668]	ATOM	3616	C	ARG	B	204	10.172	46.845	3.476	1.00	38.10	C
[3669]	ATOM	3617	O	ARG	B	204	11.094	47.381	4.182	1.00	37.15	O
[3670]	ATOM	3618	CB	ARG	B	204	10.393	47.040	0.919	1.00	37.84	C
[3671]	ATOM	3619	CG	ARG	B	204	10.878	48.426	1.153	1.00	37.54	C
[3672]	ATOM	3620	CD	ARG	B	204	11.730	48.990	0.032	1.00	37.53	C
[3673]	ATOM	3621	NE	ARG	B	204	11.203	48.715	-1.304	1.00	40.30	N
[3674]	ATOM	3622	CZ	ARG	B	204	11.905	48.077	-2.246	1.00	42.62	C
[3675]	ATOM	3623	NH1	ARG	B	204	13.094	47.683	-1.926	1.00	37.88	N
[3676]	ATOM	3624	NH2	ARG	B	204	11.472	47.810	-3.496	1.00	40.92	N
[3677]	ATOM	3625	N	ASN	B	205	8.900	46.831	3.853	1.00	37.37	N
[3678]	ATOM	3626	CA	ASN	B	205	8.531	47.574	5.007	1.00	38.04	C
[3679]	ATOM	3627	C	ASN	B	205	8.740	46.785	6.333	1.00	38.08	C
[3680]	ATOM	3628	O	ASN	B	205	9.154	47.359	7.351	1.00	37.85	O
[3681]	ATOM	3629	CB	ASN	B	205	7.096	48.030	4.839	1.00	38.58	C
[3682]	ATOM	3630	CG	ASN	B	205	6.578	48.783	6.080	1.00	42.70	C
[3683]	ATOM	3631	OD1	ASN	B	205	6.372	48.221	7.201	1.00	42.97	O
[3684]	ATOM	3632	ND2	ASN	B	205	6.373	50.077	5.889	1.00	42.20	N
[3685]	ATOM	3633	N	ILE	B	206	8.442	45.478	6.331	1.00	38.06	N
[3686]	ATOM	3634	CA	ILE	B	206	8.685	44.635	7.500	1.00	37.47	C
[3687]	ATOM	3635	C	ILE	B	206	10.149	44.734	7.825	1.00	38.34	C
[3688]	ATOM	3636	O	ILE	B	206	10.494	44.888	8.998	1.00	39.76	O
[3689]	ATOM	3637	CB	ILE	B	206	8.341	43.178	7.201	1.00	37.63	C
[3690]	ATOM	3638	CG1	ILE	B	206	6.824	42.970	7.346	1.00	36.97	C
[3691]	ATOM	3639	CG2	ILE	B	206	9.174	42.204	8.066	1.00	36.50	C
[3692]	ATOM	3640	CD1	ILE	B	206	6.298	41.705	6.641	1.00	35.21	C
[3693]	ATOM	3641	N	ILE	B	207	11.001	44.694	6.786	1.00	37.65	N

[3694]	ATOM	3642	CA	ILE B 207	12.436	44.580	6.982	1.00	36.58	C
[3695]	ATOM	3643	C	ILE B 207	13.001	45.934	7.332	1.00	37.23	C
[3696]	ATOM	3644	O	ILE B 207	13.639	46.090	8.370	1.00	37.33	O
[3697]	ATOM	3645	CB	ILE B 207	13.125	43.870	5.803	1.00	36.36	C
[3698]	ATOM	3646	CG1	ILE B 207	12.723	42.375	5.814	1.00	35.22	C
[3699]	ATOM	3647	CG2	ILE B 207	14.593	43.981	5.964	1.00	34.59	C
[3700]	ATOM	3648	CD1	ILE B 207	13.284	41.589	4.769	1.00	32.74	C
[3701]	ATOM	3649	N	THR B 208	12.700	46.936	6.507	1.00	37.20	N
[3702]	ATOM	3650	CA	THR B 208	13.313	48.255	6.680	1.00	36.20	C
[3703]	ATOM	3651	C	THR B 208	12.942	48.919	8.005	1.00	36.26	C
[3704]	ATOM	3652	O	THR B 208	13.749	49.590	8.654	1.00	35.67	O
[3705]	ATOM	3653	CB	THR B 208	12.970	49.178	5.540	1.00	36.38	C
[3706]	ATOM	3654	OG1	THR B 208	13.458	48.646	4.283	1.00	35.15	O
[3707]	ATOM	3655	CG2	THR B 208	13.612	50.476	5.795	1.00	34.37	C
[3708]	ATOM	3656	N	HIS B 209	11.734	48.680	8.465	1.00	36.76	N
[3709]	ATOM	3657	CA	HIS B 209	11.358	49.283	9.760	1.00	37.86	C
[3710]	ATOM	3658	C	HIS B 209	11.283	48.311	10.905	1.00	38.17	C
[3711]	ATOM	3659	O	HIS B 209	10.752	48.661	11.934	1.00	38.36	O
[3712]	ATOM	3660	CB	HIS B 209	10.065	50.089	9.655	1.00	37.41	C
[3713]	ATOM	3661	CG	HIS B 209	10.053	51.021	8.487	1.00	40.08	C
[3714]	ATOM	3662	ND1	HIS B 209	10.589	52.274	8.541	1.00	41.76	N
[3715]	ATOM	3663	CD2	HIS B 209	9.617	50.868	7.215	1.00	40.64	C
[3716]	ATOM	3664	CE1	HIS B 209	10.468	52.876	7.366	1.00	41.63	C
[3717]	ATOM	3665	NE2	HIS B 209	9.884	52.040	6.537	1.00	42.75	N
[3718]	ATOM	3666	N	ALA B 210	11.807	47.093	10.725	1.00	38.92	N
[3719]	ATOM	3667	CA	ALA B 210	11.852	46.080	11.795	1.00	39.28	C
[3720]	ATOM	3668	C	ALA B 210	12.439	46.643	13.052	1.00	39.51	C
[3721]	ATOM	3669	O	ALA B 210	13.576	47.072	13.025	1.00	40.74	O
[3722]	ATOM	3670	CB	ALA B 210	12.674	44.902	11.368	1.00	39.18	C
[3723]	ATOM	3671	N	PRO B 211	11.677	46.688	14.166	1.00	39.53	N
[3724]	ATOM	3672	CA	PRO B 211	12.230	47.151	15.481	1.00	38.69	C
[3725]	ATOM	3673	C	PRO B 211	13.466	46.369	15.892	1.00	38.02	C
[3726]	ATOM	3674	O	PRO B 211	14.337	46.910	16.573	1.00	38.31	O
[3727]	ATOM	3675	CB	PRO B 211	11.126	46.826	16.471	1.00	38.42	C
[3728]	ATOM	3676	CG	PRO B 211	10.145	45.970	15.710	1.00	39.57	C
[3729]	ATOM	3677	CD	PRO B 211	10.256	46.350	14.283	1.00	39.22	C

[3730]	ATOM	3678	N	ASN B 212	13.531	45.105	15.443	1.00	36.33	N
[3731]	ATOM	3679	CA	ASN B 212	14.653	44.186	15.726	1.00	34.48	C
[3732]	ATOM	3680	C	ASN B 212	15.686	44.140	14.563	1.00	33.86	C
[3733]	ATOM	3681	O	ASN B 212	16.484	43.226	14.459	1.00	32.61	O
[3734]	ATOM	3682	CB	ASN B 212	14.161	42.765	16.130	1.00	33.47	C
[3735]	ATOM	3683	CG	ASN B 212	13.670	41.997	14.974	1.00	32.98	C
[3736]	ATOM	3684	OD1	ASN B 212	13.186	42.576	14.105	1.00	34.51	O
[3737]	ATOM	3685	ND2	ASN B 212	13.813	40.710	14.938	1.00	34.96	N
[3738]	ATOM	3686	N	LEU B 213	15.693	45.170	13.725	1.00	33.97	N
[3739]	ATOM	3687	CA	LEU B 213	16.591	45.179	12.596	1.00	34.60	C
[3740]	ATOM	3688	C	LEU B 213	18.051	44.837	12.972	1.00	35.23	C
[3741]	ATOM	3689	O	LEU B 213	18.754	44.128	12.225	1.00	36.11	O
[3742]	ATOM	3690	CB	LEU B 213	16.515	46.509	11.879	1.00	33.71	C
[3743]	ATOM	3691	CG	LEU B 213	17.516	46.545	10.759	1.00	34.88	C
[3744]	ATOM	3692	CD1	LEU B 213	17.092	45.705	9.528	1.00	36.14	C
[3745]	ATOM	3693	CD2	LEU B 213	17.532	47.914	10.406	1.00	35.24	C
[3746]	ATOM	3694	N	ASP B 214	18.522	45.310	14.127	1.00	35.50	N
[3747]	ATOM	3695	CA	ASP B 214	19.896	44.997	14.468	1.00	35.70	C
[3748]	ATOM	3696	C	ASP B 214	20.010	43.507	14.761	1.00	34.90	C
[3749]	ATOM	3697	O	ASP B 214	21.054	42.922	14.479	1.00	36.18	O
[3750]	ATOM	3698	CB	ASP B 214	20.442	45.833	15.617	1.00	37.02	C
[3751]	ATOM	3699	CG	ASP B 214	20.390	47.336	15.362	1.00	39.86	C
[3752]	ATOM	3700	OD1	ASP B 214	20.199	48.002	16.396	1.00	44.71	O
[3753]	ATOM	3701	OD2	ASP B 214	20.562	47.855	14.219	1.00	43.44	O
[3754]	ATOM	3702	N	ASN B 215	18.973	42.855	15.275	1.00	32.67	N
[3755]	ATOM	3703	CA	ASN B 215	19.099	41.423	15.456	1.00	31.57	C
[3756]	ATOM	3704	C	ASN B 215	19.197	40.808	14.082	1.00	32.05	C
[3757]	ATOM	3705	O	ASN B 215	20.040	39.961	13.797	1.00	32.94	O
[3758]	ATOM	3706	CB	ASN B 215	17.940	40.816	16.208	1.00	30.99	C
[3759]	ATOM	3707	CG	ASN B 215	17.802	41.337	17.638	1.00	31.41	C
[3760]	ATOM	3708	OD1	ASN B 215	17.161	40.768	18.424	1.00	32.71	O
[3761]	ATOM	3709	ND2	ASN B 215	18.389	42.414	17.945	1.00	30.10	N
[3762]	ATOM	3710	N	ILE B 216	18.389	41.298	13.162	1.00	31.78	N
[3763]	ATOM	3711	CA	ILE B 216	18.298	40.676	11.854	1.00	31.14	C
[3764]	ATOM	3712	C	ILE B 216	19.640	40.749	11.152	1.00	32.02	C
[3765]	ATOM	3713	O	ILE B 216	20.096	39.802	10.505	1.00	31.61	O

[3766]	ATOM	3714	CB	ILE	B	216	17.264	41.374	11.061	1.00	30.44	C
[3767]	ATOM	3715	CG1	ILE	B	216	15.911	40.905	11.563	1.00	29.72	C
[3768]	ATOM	3716	CG2	ILE	B	216	17.417	41.025	9.692	1.00	30.33	C
[3769]	ATOM	3717	CD1	ILE	B	216	14.805	41.411	10.859	1.00	28.43	C
[3770]	ATOM	3718	N	GLU	B	217	20.279	41.898	11.309	1.00	33.05	N
[3771]	ATOM	3719	CA	GLU	B	217	21.588	42.089	10.769	1.00	34.01	C
[3772]	ATOM	3720	C	GLU	B	217	22.637	41.086	11.288	1.00	33.60	C
[3773]	ATOM	3721	O	GLU	B	217	23.538	40.712	10.520	1.00	34.33	O
[3774]	ATOM	3722	CB	GLU	B	217	22.053	43.488	11.032	1.00	34.06	C
[3775]	ATOM	3723	CG	GLU	B	217	23.159	43.791	10.072	1.00	38.46	C
[3776]	ATOM	3724	CD	GLU	B	217	23.811	45.119	10.308	1.00	43.34	C
[3777]	ATOM	3725	OE1	GLU	B	217	23.115	46.017	10.850	1.00	45.06	O
[3778]	ATOM	3726	OE2	GLU	B	217	25.005	45.246	9.914	1.00	42.17	O
[3779]	ATOM	3727	N	ASN	B	218	22.520	40.619	12.538	1.00	32.48	N
[3780]	ATOM	3728	CA	ASN	B	218	23.484	39.620	13.015	1.00	31.84	C
[3781]	ATOM	3729	C	ASN	B	218	23.312	38.325	12.274	1.00	31.50	C
[3782]	ATOM	3730	O	ASN	B	218	24.274	37.652	11.954	1.00	31.55	O
[3783]	ATOM	3731	CB	ASN	B	218	23.267	39.343	14.469	1.00	32.40	C
[3784]	ATOM	3732	CG	ASN	B	218	23.794	40.443	15.352	1.00	33.49	C
[3785]	ATOM	3733	OD1	ASN	B	218	24.009	41.510	14.940	1.00	32.23	O
[3786]	ATOM	3734	ND2	ASN	B	218	23.999	40.157	16.580	1.00	33.35	N
[3787]	ATOM	3735	N	TYR	B	219	22.070	38.001	11.970	1.00	30.68	N
[3788]	ATOM	3736	CA	TYR	B	219	21.720	36.708	11.443	1.00	29.94	C
[3789]	ATOM	3737	C	TYR	B	219	22.158	36.734	10.034	1.00	30.09	C
[3790]	ATOM	3738	O	TYR	B	219	22.589	35.726	9.478	1.00	30.24	O
[3791]	ATOM	3739	CB	TYR	B	219	20.209	36.449	11.632	1.00	29.42	C
[3792]	ATOM	3740	CG	TYR	B	219	19.581	35.194	11.115	1.00	27.97	C
[3793]	ATOM	3741	CD1	TYR	B	219	20.304	34.046	10.901	1.00	26.95	C
[3794]	ATOM	3742	CD2	TYR	B	219	18.236	35.157	10.856	1.00	28.24	C
[3795]	ATOM	3743	CE1	TYR	B	219	19.688	32.880	10.401	1.00	27.00	C
[3796]	ATOM	3744	CE2	TYR	B	219	17.606	33.990	10.323	1.00	27.49	C
[3797]	ATOM	3745	CZ	TYR	B	219	18.338	32.872	10.118	1.00	27.23	C
[3798]	ATOM	3746	OH	TYR	B	219	17.708	31.766	9.652	1.00	26.78	O
[3799]	ATOM	3747	N	TRP	B	220	22.140	37.908	9.461	1.00	29.98	N
[3800]	ATOM	3748	CA	TRP	B	220	22.488	38.028	8.084	1.00	30.00	C
[3801]	ATOM	3749	C	TRP	B	220	23.976	37.789	8.032	1.00	29.89	C



[3802]	ATOM	3750	O	TRP	B	220	24.460	37.104	7.125	1.00	29.25	O
[3803]	ATOM	3751	CB	TRP	B	220	22.083	39.426	7.656	1.00	31.37	C
[3804]	ATOM	3752	CG	TRP	B	220	22.635	40.039	6.365	1.00	31.88	C
[3805]	ATOM	3753	CD1	TRP	B	220	23.273	41.248	6.245	1.00	30.49	C
[3806]	ATOM	3754	CD2	TRP	B	220	22.534	39.500	5.040	1.00	33.47	C
[3807]	ATOM	3755	NE1	TRP	B	220	23.586	41.480	4.923	1.00	32.62	N
[3808]	ATOM	3756	CE2	TRP	B	220	23.147	40.422	4.167	1.00	33.35	C
[3809]	ATOM	3757	CE3	TRP	B	220	21.988	38.324	4.512	1.00	34.15	C
[3810]	ATOM	3758	CZ2	TRP	B	220	23.229	40.209	2.806	1.00	33.75	C
[3811]	ATOM	3759	CZ3	TRP	B	220	22.052	38.104	3.137	1.00	32.86	C
[3812]	ATOM	3760	CH2	TRP	B	220	22.698	39.032	2.303	1.00	34.23	C
[3813]	ATOM	3761	N	ASN	B	221	24.695	38.299	9.037	1.00	29.20	N
[3814]	ATOM	3762	CA	ASN	B	221	26.131	38.024	9.144	1.00	30.18	C
[3815]	ATOM	3763	C	ASN	B	221	26.415	36.588	9.266	1.00	30.97	C
[3816]	ATOM	3764	O	ASN	B	221	27.150	36.038	8.442	1.00	31.54	O
[3817]	ATOM	3765	CB	ASN	B	221	26.744	38.734	10.324	1.00	30.38	C
[3818]	ATOM	3766	CG	ASN	B	221	26.793	40.202	10.111	1.00	32.79	C
[3819]	ATOM	3767	OD1	ASN	B	221	26.737	40.652	9.036	1.00	36.15	O
[3820]	ATOM	3768	ND2	ASN	B	221	26.854	40.925	11.097	1.00	29.64	N
[3821]	ATOM	3769	N	SER	B	222	25.809	35.973	10.289	1.00	31.19	N
[3822]	ATOM	3770	CA	SER	B	222	25.882	34.543	10.379	1.00	31.48	C
[3823]	ATOM	3771	C	SER	B	222	25.673	33.913	9.032	1.00	31.97	C
[3824]	ATOM	3772	O	SER	B	222	26.507	33.125	8.605	1.00	32.87	O
[3825]	ATOM	3773	CB	SER	B	222	24.898	33.969	11.327	1.00	31.36	C
[3826]	ATOM	3774	OG	SER	B	222	25.398	34.080	12.633	1.00	33.14	O
[3827]	ATOM	3775	N	TYR	B	223	24.620	34.283	8.331	1.00	31.61	N
[3828]	ATOM	3776	CA	TYR	B	223	24.391	33.617	7.073	1.00	31.74	C
[3829]	ATOM	3777	C	TYR	B	223	25.519	33.790	6.088	1.00	32.19	C
[3830]	ATOM	3778	O	TYR	B	223	25.941	32.824	5.466	1.00	32.38	O
[3831]	ATOM	3779	CB	TYR	B	223	23.073	34.012	6.466	1.00	31.26	C
[3832]	ATOM	3780	CG	TYR	B	223	22.935	33.488	5.102	1.00	32.02	C
[3833]	ATOM	3781	CD1	TYR	B	223	22.599	32.130	4.874	1.00	32.35	C
[3834]	ATOM	3782	CD2	TYR	B	223	23.171	34.314	3.988	1.00	33.05	C
[3835]	ATOM	3783	CE1	TYR	B	223	22.481	31.613	3.550	1.00	31.54	C
[3836]	ATOM	3784	CE2	TYR	B	223	23.030	33.809	2.652	1.00	32.92	C
[3837]	ATOM	3785	CZ	TYR	B	223	22.705	32.470	2.443	1.00	33.48	C

[3838]	ATOM	3786	OH	TYR	B	223	22.593	32.030	1.123	1.00	34.46	O
[3839]	ATOM	3787	N	ASN	B	224	26.044	35.010	5.938	1.00	33.25	N
[3840]	ATOM	3788	CA	ASN	B	224	27.104	35.235	4.904	1.00	33.02	C
[3841]	ATOM	3789	C	ASN	B	224	28.386	34.492	5.304	1.00	33.83	C
[3842]	ATOM	3790	O	ASN	B	224	29.140	34.058	4.452	1.00	33.91	O
[3843]	ATOM	3791	CB	ASN	B	224	27.370	36.718	4.710	1.00	32.59	C
[3844]	ATOM	3792	CG	ASN	B	224	26.121	37.494	4.131	1.00	33.29	C
[3845]	ATOM	3793	OD1	ASN	B	224	25.479	37.026	3.141	1.00	34.93	O
[3846]	ATOM	3794	ND2	ASN	B	224	25.795	38.687	4.733	1.00	27.13	N
[3847]	ATOM	3795	N	ASN	B	225	28.589	34.268	6.607	1.00	34.37	N
[3848]	ATOM	3796	CA	ASN	B	225	29.812	33.662	7.067	1.00	35.04	C
[3849]	ATOM	3797	C	ASN	B	225	29.779	32.163	7.220	1.00	35.83	C
[3850]	ATOM	3798	O	ASN	B	225	30.628	31.578	7.848	1.00	35.66	O
[3851]	ATOM	3799	CB	ASN	B	225	30.191	34.262	8.370	1.00	35.05	C
[3852]	ATOM	3800	CG	ASN	B	225	30.748	35.650	8.215	1.00	37.90	C
[3853]	ATOM	3801	OD1	ASN	B	225	31.917	35.804	7.850	1.00	42.15	O
[3854]	ATOM	3802	ND2	ASN	B	225	29.909	36.685	8.483	1.00	38.83	N
[3855]	ATOM	3803	N	ARG	B	226	28.794	31.529	6.619	1.00	36.95	N
[3856]	ATOM	3804	CA	ARG	B	226	28.604	30.112	6.804	1.00	37.78	C
[3857]	ATOM	3805	C	ARG	B	226	29.711	29.347	6.154	1.00	38.81	C
[3858]	ATOM	3806	O	ARG	B	226	30.271	29.829	5.203	1.00	39.45	O
[3859]	ATOM	3807	CB	ARG	B	226	27.280	29.724	6.130	1.00	37.84	C
[3860]	ATOM	3808	CG	ARG	B	226	27.214	30.009	4.647	1.00	33.67	C
[3861]	ATOM	3809	CD	ARG	B	226	25.860	29.499	4.199	1.00	33.34	C
[3862]	ATOM	3810	NE	ARG	B	226	25.737	29.555	2.760	1.00	29.52	N
[3863]	ATOM	3811	CZ	ARG	B	226	25.897	30.678	2.062	1.00	28.06	C
[3864]	ATOM	3812	NH1	ARG	B	226	26.166	31.833	2.651	1.00	24.51	N
[3865]	ATOM	3813	NH2	ARG	B	226	25.779	30.651	0.753	1.00	30.80	N
[3866]	ATOM	3814	N	ARG	B	227	29.963	28.127	6.593	1.00	40.04	N
[3867]	ATOM	3815	CA	ARG	B	227	30.910	27.249	5.858	1.00	41.60	C
[3868]	ATOM	3816	C	ARG	B	227	30.331	26.186	4.995	1.00	42.44	C
[3869]	ATOM	3817	O	ARG	B	227	29.160	25.939	5.000	1.00	42.64	O
[3870]	ATOM	3818	CB	ARG	B	227	31.938	26.596	6.753	1.00	41.64	C
[3871]	ATOM	3819	CG	ARG	B	227	31.553	26.493	8.136	1.00	42.84	C
[3872]	ATOM	3820	CD	ARG	B	227	32.669	26.259	9.088	1.00	46.56	C
[3873]	ATOM	3821	NE	ARG	B	227	32.284	25.084	9.887	1.00	52.46	N

[3874]	ATOM	3822	CZ	ARG	B	227	31.827	23.904	9.401	1.00	52.60	C
[3875]	ATOM	3823	NH1	ARG	B	227	31.707	23.707	8.067	1.00	54.15	N
[3876]	ATOM	3824	NH2	ARG	B	227	31.505	22.899	10.250	1.00	47.29	N
[3877]	ATOM	3825	N	ASP	B	228	31.201	25.569	4.217	1.00	44.90	N
[3878]	ATOM	3826	CA	ASP	B	228	30.836	24.439	3.350	1.00	47.08	C
[3879]	ATOM	3827	C	ASP	B	228	30.144	23.289	4.105	1.00	47.46	C
[3880]	ATOM	3828	O	ASP	B	228	30.568	22.915	5.223	1.00	46.77	O
[3881]	ATOM	3829	CB	ASP	B	228	32.085	23.889	2.641	1.00	47.65	C
[3882]	ATOM	3830	CG	ASP	B	228	32.429	24.671	1.408	1.00	51.84	C
[3883]	ATOM	3831	OD1	ASP	B	228	31.494	24.990	0.596	1.00	56.68	O
[3884]	ATOM	3832	OD2	ASP	B	228	33.639	24.973	1.261	1.00	55.40	O
[3885]	ATOM	3833	N	LEU	B	229	29.063	22.783	3.486	1.00	48.21	N
[3886]	ATOM	3834	CA	LEU	B	229	28.360	21.582	3.916	1.00	48.41	C
[3887]	ATOM	3835	C	LEU	B	229	29.016	20.384	3.271	1.00	49.97	C
[3888]	ATOM	3836	O	LEU	B	229	28.997	19.286	3.837	1.00	50.28	O
[3889]	ATOM	3837	CB	LEU	B	229	26.896	21.636	3.510	1.00	47.79	C
[3890]	ATOM	3838	CG	LEU	B	229	25.878	22.351	4.421	1.00	46.52	C
[3891]	ATOM	3839	CD1	LEU	B	229	24.488	22.224	3.911	1.00	42.60	C
[3892]	ATOM	3840	CD2	LEU	B	229	25.916	21.858	5.873	1.00	45.31	C
[3893]	ATOM	3841	N	ASN	B	230	29.638	20.587	2.101	1.00	51.43	N
[3894]	ATOM	3842	CA	ASN	B	230	30.410	19.492	1.445	1.00	52.91	C
[3895]	ATOM	3843	C	ASN	B	230	29.639	18.210	1.140	1.00	54.74	C
[3896]	ATOM	3844	O	ASN	B	230	30.166	17.073	1.357	1.00	54.63	O
[3897]	ATOM	3845	CB	ASN	B	230	31.606	19.067	2.295	1.00	51.91	C
[3898]	ATOM	3846	CG	ASN	B	230	32.646	20.120	2.365	1.00	51.03	C
[3899]	ATOM	3847	OD1	ASN	B	230	33.179	20.629	1.311	1.00	51.35	O
[3900]	ATOM	3848	ND2	ASN	B	230	33.003	20.452	3.610	1.00	48.52	N
[3901]	ATOM	3849	N	PHE	B	231	28.397	18.368	0.677	1.00	57.48	N
[3902]	ATOM	3850	CA	PHE	B	231	27.715	17.228	0.083	1.00	59.71	C
[3903]	ATOM	3851	C	PHE	B	231	28.581	16.689	-1.043	1.00	62.00	C
[3904]	ATOM	3852	O	PHE	B	231	28.927	17.419	-2.010	1.00	62.60	O
[3905]	ATOM	3853	CB	PHE	B	231	26.378	17.631	-0.464	1.00	59.12	C
[3906]	ATOM	3854	CG	PHE	B	231	25.478	18.152	0.563	1.00	58.86	C
[3907]	ATOM	3855	CD1	PHE	B	231	25.429	17.546	1.824	1.00	58.26	C
[3908]	ATOM	3856	CD2	PHE	B	231	24.670	19.271	0.303	1.00	58.61	C
[3909]	ATOM	3857	CE1	PHE	B	231	24.577	18.046	2.820	1.00	58.21	C

[3910]	ATOM	3858	CE2	PHE	B	231	23.812	19.778	1.298	1.00	57.19	C
[3911]	ATOM	3859	CZ	PHE	B	231	23.763	19.159	2.541	1.00	57.23	C
[3912]	ATOM	3860	N	GLU	B	232	28.966	15.429	-0.867	1.00	63.73	N
[3913]	ATOM	3861	CA	GLU	B	232	29.684	14.694	-1.879	1.00	66.12	C
[3914]	ATOM	3862	C	GLU	B	232	28.699	13.586	-2.287	1.00	65.82	C
[3915]	ATOM	3863	O	GLU	B	232	28.219	12.848	-1.418	1.00	66.32	O
[3916]	ATOM	3864	CB	GLU	B	232	30.953	14.103	-1.237	1.00	66.29	C
[3917]	ATOM	3865	CG	GLU	B	232	32.115	13.773	-2.193	1.00	69.54	C
[3918]	ATOM	3866	CD	GLU	B	232	32.986	12.573	-1.729	1.00	70.57	C
[3919]	ATOM	3867	OE1	GLU	B	232	32.902	12.122	-0.555	1.00	72.42	O
[3920]	ATOM	3868	OE2	GLU	B	232	33.772	12.076	-2.570	1.00	72.52	O
[3921]	ATOM	3869	N	ARG	B	233	28.344	13.467	-3.567	1.00	65.53	N
[3922]	ATOM	3870	CA	ARG	B	233	27.498	12.321	-3.951	1.00	65.22	C
[3923]	ATOM	3871	C	ARG	B	233	28.337	11.043	-4.080	1.00	66.41	C
[3924]	ATOM	3872	O	ARG	B	233	29.452	11.134	-4.593	1.00	66.20	O
[3925]	ATOM	3873	CB	ARG	B	233	26.870	12.537	-5.322	1.00	64.24	C
[3926]	ATOM	3874	CG	ARG	B	233	26.323	11.220	-5.880	1.00	61.87	C
[3927]	ATOM	3875	CD	ARG	B	233	25.811	11.382	-7.269	1.00	59.07	C
[3928]	ATOM	3876	NE	ARG	B	233	25.110	12.659	-7.399	1.00	59.70	N
[3929]	ATOM	3877	CZ	ARG	B	233	24.357	13.021	-8.456	1.00	61.48	C
[3930]	ATOM	3878	NH1	ARG	B	233	24.200	12.196	-9.500	1.00	62.52	N
[3931]	ATOM	3879	NH2	ARG	B	233	23.729	14.219	-8.481	1.00	60.31	N
[3932]	ATOM	3880	N	GLY	B	234	27.938	9.852	-3.610	1.00	67.85	N
[3933]	ATOM	3881	CA	GLY	B	234	27.680	9.403	-2.275	1.00	69.40	C
[3934]	ATOM	3882	C	GLY	B	234	29.033	9.155	-1.620	1.00	70.82	C
[3935]	ATOM	3883	O	GLY	B	234	29.627	8.059	-1.663	1.00	71.13	O
[3936]	ATOM	3884	N	GLY	B	235	29.528	10.229	-1.026	1.00	71.65	N
[3937]	ATOM	3885	CA	GLY	B	235	30.623	10.143	-0.071	1.00	72.07	C
[3938]	ATOM	3886	C	GLY	B	235	30.068	9.951	1.339	1.00	72.26	C
[3939]	ATOM	3887	O	GLY	B	235	28.918	9.570	1.509	1.00	72.15	O
[3940]	ATOM	3888	N	ASP	B	236	30.891	10.213	2.349	1.00	72.61	N
[3941]	ATOM	3889	CA	ASP	B	236	30.474	10.117	3.761	1.00	73.18	C
[3942]	ATOM	3890	C	ASP	B	236	29.518	11.219	4.187	1.00	71.80	C
[3943]	ATOM	3891	O	ASP	B	236	28.681	11.023	5.076	1.00	71.62	O
[3944]	ATOM	3892	CB	ASP	B	236	31.710	10.202	4.676	1.00	74.56	C
[3945]	ATOM	3893	CG	ASP	B	236	32.454	8.875	4.781	1.00	78.37	C

[3946]	ATOM	3894	OD1	ASP	B	236	31.744	7.847	4.909	1.00	82.04	O
[3947]	ATOM	3895	OD2	ASP	B	236	33.720	8.848	4.733	1.00	81.67	O
[3948]	ATOM	3896	N	ILE	B	237	29.692	12.389	3.568	1.00	69.88	N
[3949]	ATOM	3897	CA	ILE	B	237	28.916	13.580	3.913	1.00	67.41	C
[3950]	ATOM	3898	C	ILE	B	237	27.787	13.720	2.891	1.00	64.98	C
[3951]	ATOM	3899	O	ILE	B	237	27.924	14.362	1.820	1.00	64.97	O
[3952]	ATOM	3900	CB	ILE	B	237	29.823	14.887	4.136	1.00	67.89	C
[3953]	ATOM	3901	CG1	ILE	B	237	31.081	14.525	4.993	1.00	68.45	C
[3954]	ATOM	3902	CG2	ILE	B	237	29.001	15.993	4.764	1.00	66.90	C
[3955]	ATOM	3903	CD1	ILE	B	237	32.108	15.651	5.325	1.00	66.59	C
[3956]	ATOM	3904	N	THR	B	238	26.700	13.037	3.226	1.00	61.54	N
[3957]	ATOM	3905	CA	THR	B	238	25.428	13.257	2.560	1.00	59.41	C
[3958]	ATOM	3906	C	THR	B	238	24.300	13.246	3.589	1.00	56.05	C
[3959]	ATOM	3907	O	THR	B	238	24.535	12.963	4.797	1.00	55.35	O
[3960]	ATOM	3908	CB	THR	B	238	25.063	12.168	1.461	1.00	60.50	C
[3961]	ATOM	3909	OG1	THR	B	238	25.524	10.869	1.878	1.00	60.34	O
[3962]	ATOM	3910	CG2	THR	B	238	25.597	12.563	0.048	1.00	62.67	C
[3963]	ATOM	3911	N	LEU	B	239	23.109	13.586	3.070	1.00	51.22	N
[3964]	ATOM	3912	CA	LEU	B	239	21.823	13.369	3.702	1.00	47.82	C
[3965]	ATOM	3913	C	LEU	B	239	21.326	11.944	3.355	1.00	48.66	C
[3966]	ATOM	3914	O	LEU	B	239	21.389	11.503	2.202	1.00	49.08	O
[3967]	ATOM	3915	CB	LEU	B	239	20.821	14.423	3.241	1.00	45.15	C
[3968]	ATOM	3916	CG	LEU	B	239	21.294	15.870	3.482	1.00	40.43	C
[3969]	ATOM	3917	CD1	LEU	B	239	20.571	16.957	2.664	1.00	35.96	C
[3970]	ATOM	3918	CD2	LEU	B	239	21.246	16.182	4.959	1.00	38.92	C
[3971]	ATOM	3919	N	ARG	B	240	20.860	11.218	4.370	1.00	49.49	N
[3972]	ATOM	3920	CA	ARG	B	240	20.401	9.844	4.168	1.00	49.93	C
[3973]	ATOM	3921	C	ARG	B	240	18.850	9.700	4.116	1.00	49.43	C
[3974]	ATOM	3922	O	ARG	B	240	18.297	8.586	4.166	1.00	50.52	O
[3975]	ATOM	3923	CB	ARG	B	240	21.017	8.960	5.254	1.00	50.24	C
[3976]	ATOM	3924	CG	ARG	B	240	22.475	8.652	4.954	1.00	50.84	C
[3977]	ATOM	3925	CD	ARG	B	240	23.233	8.313	6.280	1.00	54.26	C
[3978]	ATOM	3926	NE	ARG	B	240	24.576	8.943	6.312	1.00	55.95	N
[3979]	ATOM	3927	CZ	ARG	B	240	25.619	8.577	5.533	1.00	55.19	C
[3980]	ATOM	3928	NH1	ARG	B	240	25.510	7.542	4.663	1.00	54.56	N
[3981]	ATOM	3929	NH2	ARG	B	240	26.789	9.237	5.634	1.00	52.44	N

[3982]	ATOM	3930	N	CYS B 241	18.164	10.836	4.034	1.00	47.82	N
[3983]	ATOM	3931	CA	CYS B 241	16.704	10.864	3.993	1.00	46.38	C
[3984]	ATOM	3932	C	CYS B 241	16.221	11.539	2.698	1.00	45.78	C
[3985]	ATOM	3933	O	CYS B 241	16.980	12.235	2.004	1.00	46.12	O
[3986]	ATOM	3934	CB	CYS B 241	16.170	11.569	5.221	1.00	46.08	C
[3987]	ATOM	3935	SG	CYS B 241	16.677	13.273	5.238	1.00	44.89	S
[3988]	ATOM	3936	N	PRO B 242	14.977	11.281	2.313	1.00	44.72	N
[3989]	ATOM	3937	CA	PRO B 242	14.482	11.968	1.103	1.00	43.78	C
[3990]	ATOM	3938	C	PRO B 242	14.504	13.497	1.299	1.00	43.00	C
[3991]	ATOM	3939	O	PRO B 242	14.496	13.952	2.450	1.00	43.08	O
[3992]	ATOM	3940	CB	PRO B 242	13.071	11.448	0.944	1.00	43.33	C
[3993]	ATOM	3941	CG	PRO B 242	12.737	10.741	2.226	1.00	43.82	C
[3994]	ATOM	3942	CD	PRO B 242	14.001	10.357	2.894	1.00	44.06	C
[3995]	ATOM	3943	N	VAL B 243	14.578	14.258	0.211	1.00	41.31	N
[3996]	ATOM	3944	CA	VAL B 243	14.842	15.673	0.265	1.00	39.38	C
[3997]	ATOM	3945	C	VAL B 243	14.207	16.196	-0.937	1.00	39.16	C
[3998]	ATOM	3946	O	VAL B 243	14.410	15.687	-2.013	1.00	39.82	O
[3999]	ATOM	3947	CB	VAL B 243	16.308	16.004	0.114	1.00	39.09	C
[4000]	ATOM	3948	CG1	VAL B 243	16.482	17.422	-0.289	1.00	39.26	C
[4001]	ATOM	3949	CG2	VAL B 243	17.029	15.798	1.396	1.00	38.63	C
[4002]	ATOM	3950	N	MET B 244	13.416	17.230	-0.778	1.00	39.15	N
[4003]	ATOM	3951	CA	MET B 244	12.885	17.921	-1.917	1.00	38.87	C
[4004]	ATOM	3952	C	MET B 244	13.505	19.327	-1.904	1.00	38.30	C
[4005]	ATOM	3953	O	MET B 244	13.380	20.031	-0.901	1.00	38.17	O
[4006]	ATOM	3954	CB	MET B 244	11.373	17.931	-1.886	1.00	38.65	C
[4007]	ATOM	3955	CG	MET B 244	10.845	18.960	-2.770	1.00	39.53	C
[4008]	ATOM	3956	SD	MET B 244	9.080	18.694	-2.963	1.00	39.57	S
[4009]	ATOM	3957	CE	MET B 244	8.364	20.017	-1.931	1.00	37.49	C
[4010]	ATOM	3958	N	LEU B 245	14.233	19.670	-2.988	1.00	37.71	N
[4011]	ATOM	3959	CA	LEU B 245	14.846	21.005	-3.232	1.00	36.46	C
[4012]	ATOM	3960	C	LEU B 245	13.868	21.847	-4.002	1.00	36.17	C
[4013]	ATOM	3961	O	LEU B 245	13.192	21.330	-4.859	1.00	36.91	O
[4014]	ATOM	3962	CB	LEU B 245	16.162	20.909	-4.019	1.00	36.05	C
[4015]	ATOM	3963	CG	LEU B 245	17.346	20.232	-3.268	1.00	34.83	C
[4016]	ATOM	3964	CD1	LEU B 245	18.617	19.924	-4.105	1.00	32.73	C
[4017]	ATOM	3965	CD2	LEU B 245	17.716	20.964	-2.021	1.00	30.40	C

[4018]	ATOM	3966	N	VAL B 246	13.755	23.124	-3.663	1.00	35.58	N
[4019]	ATOM	3967	CA	VAL B 246	12.780	24.035	-4.240	1.00	35.24	C
[4020]	ATOM	3968	C	VAL B 246	13.473	25.376	-4.464	1.00	36.40	C
[4021]	ATOM	3969	O	VAL B 246	14.384	25.745	-3.667	1.00	36.68	O
[4022]	ATOM	3970	CB	VAL B 246	11.640	24.257	-3.248	1.00	35.00	C
[4023]	ATOM	3971	CG1	VAL B 246	10.688	25.328	-3.716	1.00	32.47	C
[4024]	ATOM	3972	CG2	VAL B 246	10.953	23.008	-2.999	1.00	34.15	C
[4025]	ATOM	3973	N	VAL B 247	13.053	26.100	-5.506	1.00	37.24	N
[4026]	ATOM	3974	CA	VAL B 247	13.722	27.347	-5.916	1.00	38.78	C
[4027]	ATOM	3975	C	VAL B 247	12.943	27.950	-7.057	1.00	40.79	C
[4028]	ATOM	3976	O	VAL B 247	12.393	27.210	-7.858	1.00	41.48	O
[4029]	ATOM	3977	CB	VAL B 247	15.270	27.160	-6.303	1.00	38.79	C
[4030]	ATOM	3978	CG1	VAL B 247	15.469	26.643	-7.709	1.00	37.66	C
[4031]	ATOM	3979	CG2	VAL B 247	16.051	28.471	-6.155	1.00	37.12	C
[4032]	ATOM	3980	N	GLY B 248	12.857	29.279	-7.144	1.00	42.73	N
[4033]	ATOM	3981	CA	GLY B 248	12.127	29.915	-8.271	1.00	44.82	C
[4034]	ATOM	3982	C	GLY B 248	13.027	30.013	-9.501	1.00	46.88	C
[4035]	ATOM	3983	O	GLY B 248	14.272	30.027	-9.364	1.00	46.27	O
[4036]	ATOM	3984	N	ASP B 249	12.438	30.084	-10.715	1.00	49.57	N
[4037]	ATOM	3985	CA	ASP B 249	13.309	30.240	-11.937	1.00	49.97	C
[4038]	ATOM	3986	C	ASP B 249	13.848	31.669	-12.052	1.00	49.73	C
[4039]	ATOM	3987	O	ASP B 249	13.199	32.699	-11.719	1.00	48.89	O
[4040]	ATOM	3988	CB	ASP B 249	12.688	29.700	-13.242	1.00	50.77	C
[4041]	ATOM	3989	CG	ASP B 249	13.654	29.766	-14.460	1.00	52.86	C
[4042]	ATOM	3990	OD1	ASP B 249	14.745	29.067	-14.492	1.00	55.35	O
[4043]	ATOM	3991	OD2	ASP B 249	13.281	30.542	-15.410	1.00	57.61	O
[4044]	ATOM	3992	N	GLN B 250	15.097	31.697	-12.451	1.00	49.96	N
[4045]	ATOM	3993	CA	GLN B 250	15.830	32.945	-12.524	1.00	51.17	C
[4046]	ATOM	3994	C	GLN B 250	15.792	33.704	-11.163	1.00	49.92	C
[4047]	ATOM	3995	O	GLN B 250	15.687	34.924	-11.117	1.00	50.82	O
[4048]	ATOM	3996	CB	GLN B 250	15.417	33.771	-13.807	1.00	52.39	C
[4049]	ATOM	3997	CG	GLN B 250	15.496	32.988	-15.275	1.00	55.36	C
[4050]	ATOM	3998	CD	GLN B 250	16.683	31.910	-15.489	1.00	60.08	C
[4051]	ATOM	3999	OE1	GLN B 250	17.857	32.155	-15.158	1.00	60.39	O
[4052]	ATOM	4000	NE2	GLN B 250	16.340	30.749	-16.074	1.00	59.45	N
[4053]	ATOM	4001	N	ALA B 251	15.872	32.958	-10.054	1.00	48.20	N

[4054]	ATOM	4002	CA	ALA B 251	15.876	33.571	-8.709	1.00	46.07	C
[4055]	ATOM	4003	C	ALA B 251	17.272	33.541	-8.081	1.00	44.86	C
[4056]	ATOM	4004	O	ALA B 251	18.125	32.688	-8.462	1.00	45.28	O
[4057]	ATOM	4005	CB	ALA B 251	14.902	32.904	-7.804	1.00	46.12	C
[4058]	ATOM	4006	N	PRO B 252	17.530	34.453	-7.112	1.00	42.38	N
[4059]	ATOM	4007	CA	PRO B 252	18.935	34.625	-6.762	1.00	40.69	C
[4060]	ATOM	4008	C	PRO B 252	19.653	33.311	-6.379	1.00	40.18	C
[4061]	ATOM	4009	O	PRO B 252	20.860	33.120	-6.629	1.00	39.22	O
[4062]	ATOM	4010	CB	PRO B 252	18.883	35.601	-5.602	1.00	40.18	C
[4063]	ATOM	4011	CG	PRO B 252	17.590	36.354	-5.752	1.00	40.63	C
[4064]	ATOM	4012	CD	PRO B 252	16.637	35.367	-6.363	1.00	42.33	C
[4065]	ATOM	4013	N	HIS B 253	18.929	32.370	-5.793	1.00	40.64	N
[4066]	ATOM	4014	CA	HIS B 253	19.623	31.139	-5.404	1.00	40.02	C
[4067]	ATOM	4015	C	HIS B 253	19.511	29.979	-6.395	1.00	41.25	C
[4068]	ATOM	4016	O	HIS B 253	19.961	28.867	-6.048	1.00	41.42	O
[4069]	ATOM	4017	CB	HIS B 253	19.251	30.740	-3.979	1.00	38.77	C
[4070]	ATOM	4018	CG	HIS B 253	19.388	31.866	-3.015	1.00	35.93	C
[4071]	ATOM	4019	ND1	HIS B 253	20.622	32.257	-2.516	1.00	30.25	N
[4072]	ATOM	4020	CD2	HIS B 253	18.471	32.754	-2.527	1.00	33.18	C
[4073]	ATOM	4021	CE1	HIS B 253	20.451	33.292	-1.700	1.00	30.64	C
[4074]	ATOM	4022	NE2	HIS B 253	19.158	33.624	-1.699	1.00	29.21	N
[4075]	ATOM	4023	N	GLU B 254	18.992	30.227	-7.622	1.00	42.43	N
[4076]	ATOM	4024	CA	GLU B 254	18.807	29.112	-8.615	1.00	43.82	C
[4077]	ATOM	4025	C	GLU B 254	20.074	28.284	-8.828	1.00	42.42	C
[4078]	ATOM	4026	O	GLU B 254	20.049	27.057	-8.771	1.00	41.49	O
[4079]	ATOM	4027	CB	GLU B 254	18.161	29.570	-9.943	1.00	43.24	C
[4080]	ATOM	4028	CG	GLU B 254	18.029	28.452	-10.961	1.00	45.21	C
[4081]	ATOM	4029	CD	GLU B 254	17.526	28.951	-12.306	1.00	49.63	C
[4082]	ATOM	4030	OE1	GLU B 254	17.153	30.152	-12.376	1.00	56.07	O
[4083]	ATOM	4031	OE2	GLU B 254	17.476	28.188	-13.309	1.00	54.54	O
[4084]	ATOM	4032	N	ASP B 255	21.175	28.974	-9.014	1.00	43.61	N
[4085]	ATOM	4033	CA	ASP B 255	22.406	28.282	-9.330	1.00	45.80	C
[4086]	ATOM	4034	C	ASP B 255	22.874	27.486	-8.144	1.00	46.36	C
[4087]	ATOM	4035	O	ASP B 255	23.332	26.345	-8.326	1.00	47.25	O
[4088]	ATOM	4036	CB	ASP B 255	23.538	29.214	-9.808	1.00	46.45	C
[4089]	ATOM	4037	CG	ASP B 255	23.261	29.836	-11.210	1.00	49.74	C



[4090]	ATOM	4038	OD1	ASP	B	255	22.157	29.593	-11.812	1.00	49.13	O
[4091]	ATOM	4039	OD2	ASP	B	255	24.175	30.586	-11.707	1.00	53.19	O
[4092]	ATOM	4040	N	ALA	B	256	22.792	28.043	-6.930	1.00	46.00	N
[4093]	ATOM	4041	CA	ALA	B	256	23.243	27.239	-5.789	1.00	44.77	C
[4094]	ATOM	4042	C	ALA	B	256	22.369	25.994	-5.637	1.00	44.58	C
[4095]	ATOM	4043	O	ALA	B	256	22.906	24.890	-5.464	1.00	45.10	O
[4096]	ATOM	4044	CB	ALA	B	256	23.316	28.030	-4.503	1.00	44.42	C
[4097]	ATOM	4045	N	VAL	B	257	21.047	26.141	-5.752	1.00	43.71	N
[4098]	ATOM	4046	CA	VAL	B	257	20.163	24.986	-5.595	1.00	42.99	C
[4099]	ATOM	4047	C	VAL	B	257	20.449	23.924	-6.642	1.00	44.02	C
[4100]	ATOM	4048	O	VAL	B	257	20.675	22.753	-6.256	1.00	43.95	O
[4101]	ATOM	4049	CB	VAL	B	257	18.625	25.358	-5.449	1.00	42.80	C
[4102]	ATOM	4050	CG1	VAL	B	257	17.741	24.086	-5.387	1.00	39.02	C
[4103]	ATOM	4051	CG2	VAL	B	257	18.394	26.261	-4.185	1.00	39.43	C
[4104]	ATOM	4052	N	VAL	B	258	20.463	24.322	-7.939	1.00	45.17	N
[4105]	ATOM	4053	CA	VAL	B	258	20.917	23.391	-9.057	1.00	45.52	C
[4106]	ATOM	4054	C	VAL	B	258	22.208	22.615	-8.714	1.00	46.27	C
[4107]	ATOM	4055	O	VAL	B	258	22.237	21.406	-8.791	1.00	46.91	O
[4108]	ATOM	4056	CB	VAL	B	258	21.063	24.059	-10.434	1.00	44.68	C
[4109]	ATOM	4057	CG1	VAL	B	258	21.909	23.200	-11.304	1.00	43.15	C
[4110]	ATOM	4058	CG2	VAL	B	258	19.668	24.328	-11.105	1.00	45.57	C
[4111]	ATOM	4059	N	GLU	B	259	23.245	23.315	-8.295	1.00	47.44	N
[4112]	ATOM	4060	CA	GLU	B	259	24.518	22.687	-7.924	1.00	49.39	C
[4113]	ATOM	4061	C	GLU	B	259	24.369	21.643	-6.785	1.00	49.12	C
[4114]	ATOM	4062	O	GLU	B	259	24.846	20.482	-6.906	1.00	50.44	O
[4115]	ATOM	4063	CB	GLU	B	259	25.571	23.754	-7.547	1.00	50.05	C
[4116]	ATOM	4064	CG	GLU	B	259	26.544	23.257	-6.497	1.00	55.42	C
[4117]	ATOM	4065	CD	GLU	B	259	27.972	23.405	-6.947	1.00	61.11	C
[4118]	ATOM	4066	OE1	GLU	B	259	28.375	24.568	-7.196	1.00	63.39	O
[4119]	ATOM	4067	OE2	GLU	B	259	28.678	22.362	-7.066	1.00	62.86	O
[4120]	ATOM	4068	N	CYS	B	260	23.747	22.067	-5.677	1.00	47.60	N
[4121]	ATOM	4069	CA	CYS	B	260	23.278	21.131	-4.638	1.00	46.23	C
[4122]	ATOM	4070	C	CYS	B	260	22.552	19.843	-5.178	1.00	45.53	C
[4123]	ATOM	4071	O	CYS	B	260	22.939	18.726	-4.807	1.00	45.37	O
[4124]	ATOM	4072	CB	CYS	B	260	22.380	21.837	-3.591	1.00	46.05	C
[4125]	ATOM	4073	SG	CYS	B	260	22.442	20.987	-1.960	1.00	44.61	S

[4126]	ATOM	4074	N	ASN B 261	21.516	19.977	-6.020	1.00	43.94	N
[4127]	ATOM	4075	CA	ASN B 261	20.910	18.782	-6.596	1.00	43.31	C
[4128]	ATOM	4076	C	ASN B 261	21.949	17.757	-7.110	1.00	44.56	C
[4129]	ATOM	4077	O	ASN B 261	21.838	16.542	-6.861	1.00	44.59	O
[4130]	ATOM	4078	CB	ASN B 261	20.002	19.139	-7.748	1.00	42.13	C
[4131]	ATOM	4079	CG	ASN B 261	19.130	17.952	-8.176	1.00	40.61	C
[4132]	ATOM	4080	OD1	ASN B 261	18.986	16.982	-7.434	1.00	39.47	O
[4133]	ATOM	4081	ND2	ASN B 261	18.518	18.034	-9.367	1.00	38.90	N
[4134]	ATOM	4082	N	SER B 262	22.964	18.276	-7.808	1.00	45.95	N
[4135]	ATOM	4083	CA	SER B 262	24.055	17.479	-8.384	1.00	46.87	C
[4136]	ATOM	4084	C	SER B 262	24.922	16.809	-7.314	1.00	47.16	C
[4137]	ATOM	4085	O	SER B 262	25.667	15.873	-7.608	1.00	48.38	O
[4138]	ATOM	4086	CB	SER B 262	24.957	18.407	-9.203	1.00	47.07	C
[4139]	ATOM	4087	OG	SER B 262	25.921	18.974	-8.317	1.00	46.23	O
[4140]	ATOM	4088	N	LYS B 263	24.878	17.295	-6.086	1.00	46.99	N
[4141]	ATOM	4089	CA	LYS B 263	25.671	16.657	-5.041	1.00	47.16	C
[4142]	ATOM	4090	C	LYS B 263	24.958	15.636	-4.189	1.00	48.48	C
[4143]	ATOM	4091	O	LYS B 263	25.589	14.996	-3.336	1.00	49.29	O
[4144]	ATOM	4092	CB	LYS B 263	26.336	17.702	-4.127	1.00	46.14	C
[4145]	ATOM	4093	CG	LYS B 263	27.825	17.778	-4.439	1.00	44.02	C
[4146]	ATOM	4094	CD	LYS B 263	28.550	19.046	-4.884	1.00	40.91	C
[4147]	ATOM	4095	CE	LYS B 263	29.678	18.659	-5.938	1.00	41.03	C
[4148]	ATOM	4096	NZ	LYS B 263	29.771	19.888	-6.868	1.00	40.20	N
[4149]	ATOM	4097	N	LEU B 264	23.654	15.487	-4.375	1.00	50.32	N
[4150]	ATOM	4098	CA	LEU B 264	22.886	14.658	-3.446	1.00	52.28	C
[4151]	ATOM	4099	C	LEU B 264	22.360	13.425	-4.166	1.00	54.46	C
[4152]	ATOM	4100	O	LEU B 264	22.164	13.433	-5.397	1.00	55.56	O
[4153]	ATOM	4101	CB	LEU B 264	21.735	15.452	-2.787	1.00	52.07	C
[4154]	ATOM	4102	CG	LEU B 264	22.018	16.618	-1.825	1.00	51.35	C
[4155]	ATOM	4103	CD1	LEU B 264	20.843	17.534	-1.762	1.00	50.59	C
[4156]	ATOM	4104	CD2	LEU B 264	22.419	16.166	-0.423	1.00	50.09	C
[4157]	ATOM	4105	N	ASP B 265	22.118	12.378	-3.389	1.00	56.03	N
[4158]	ATOM	4106	CA	ASP B 265	21.582	11.108	-3.874	1.00	57.23	C
[4159]	ATOM	4107	C	ASP B 265	20.257	11.185	-4.707	1.00	57.36	C
[4160]	ATOM	4108	O	ASP B 265	19.169	11.360	-4.126	1.00	57.37	O
[4161]	ATOM	4109	CB	ASP B 265	21.411	10.198	-2.650	1.00	58.07	C

[4162]	ATOM	4110	CG	ASP	B	265	20.928	8.784	-2.998	1.00	60.00	C
[4163]	ATOM	4111	OD1	ASP	B	265	20.599	8.456	-4.176	1.00	60.02	O
[4164]	ATOM	4112	OD2	ASP	B	265	20.832	7.998	-2.029	1.00	61.86	O
[4165]	ATOM	4113	N	PRO	B	266	20.347	11.003	-6.071	1.00	57.20	N
[4166]	ATOM	4114	CA	PRO	B	266	19.193	11.236	-6.995	1.00	56.63	C
[4167]	ATOM	4115	C	PRO	B	266	17.974	10.367	-6.678	1.00	55.90	C
[4168]	ATOM	4116	O	PRO	B	266	16.855	10.728	-7.085	1.00	55.40	O
[4169]	ATOM	4117	CB	PRO	B	266	19.736	10.870	-8.382	1.00	56.47	C
[4170]	ATOM	4118	CG	PRO	B	266	21.202	10.656	-8.216	1.00	56.56	C
[4171]	ATOM	4119	CD	PRO	B	266	21.561	10.550	-6.791	1.00	56.93	C
[4172]	ATOM	4120	N	THR	B	267	18.209	9.245	-5.975	1.00	55.30	N
[4173]	ATOM	4121	CA	THR	B	267	17.144	8.256	-5.633	1.00	55.32	C
[4174]	ATOM	4122	C	THR	B	267	16.206	8.852	-4.603	1.00	54.18	C
[4175]	ATOM	4123	O	THR	B	267	15.030	8.562	-4.565	1.00	54.51	O
[4176]	ATOM	4124	CB	THR	B	267	17.688	6.832	-5.065	1.00	55.92	C
[4177]	ATOM	4125	OG1	THR	B	267	18.662	7.013	-4.022	1.00	55.75	O
[4178]	ATOM	4126	CG2	THR	B	267	18.318	5.958	-6.174	1.00	55.64	C
[4179]	ATOM	4127	N	GLN	B	268	16.755	9.716	-3.764	1.00	53.18	N
[4180]	ATOM	4128	CA	GLN	B	268	16.031	10.235	-2.645	1.00	51.56	C
[4181]	ATOM	4129	C	GLN	B	268	15.943	11.735	-2.720	1.00	51.68	C
[4182]	ATOM	4130	O	GLN	B	268	15.781	12.393	-1.676	1.00	52.66	O
[4183]	ATOM	4131	CB	GLN	B	268	16.762	9.860	-1.364	1.00	50.82	C
[4184]	ATOM	4132	CG	GLN	B	268	16.310	8.502	-0.759	1.00	49.18	C
[4185]	ATOM	4133	CD	GLN	B	268	17.039	8.275	0.559	1.00	50.82	C
[4186]	ATOM	4134	OE1	GLN	B	268	18.176	8.508	0.609	1.00	52.45	O
[4187]	ATOM	4135	NE2	GLN	B	268	16.392	7.904	1.615	1.00	48.16	N
[4188]	ATOM	4136	N	THR	B	269	16.076	12.304	-3.913	1.00	50.62	N
[4189]	ATOM	4137	CA	THR	B	269	16.078	13.728	-3.989	1.00	49.91	C
[4190]	ATOM	4138	C	THR	B	269	15.276	14.106	-5.184	1.00	50.09	C
[4191]	ATOM	4139	O	THR	B	269	15.669	13.817	-6.316	1.00	50.98	O
[4192]	ATOM	4140	CB	THR	B	269	17.513	14.282	-4.083	1.00	49.55	C
[4193]	ATOM	4141	OG1	THR	B	269	18.253	13.948	-2.889	1.00	50.69	O
[4194]	ATOM	4142	CG2	THR	B	269	17.471	15.788	-4.215	1.00	48.75	C
[4195]	ATOM	4143	N	SER	B	270	14.142	14.733	-4.964	1.00	49.44	N
[4196]	ATOM	4144	CA	SER	B	270	13.523	15.379	-6.075	1.00	49.46	C
[4197]	ATOM	4145	C	SER	B	270	13.818	16.891	-5.993	1.00	49.12	C

[4198]	ATOM	4146	O	SER B 270	14.366	17.360	-4.978	1.00	48.87	O
[4199]	ATOM	4147	CB	SER B 270	12.070	15.075	-6.042	1.00	49.87	C
[4200]	ATOM	4148	OG	SER B 270	11.655	15.196	-4.718	1.00	52.58	O
[4201]	ATOM	4149	N	PHE B 271	13.445	17.637	-7.054	1.00	48.42	N
[4202]	ATOM	4150	CA	PHE B 271	13.889	19.006	-7.296	1.00	47.45	C
[4203]	ATOM	4151	C	PHE B 271	12.744	19.705	-7.946	1.00	46.43	C
[4204]	ATOM	4152	O	PHE B 271	12.440	19.433	-9.089	1.00	46.15	O
[4205]	ATOM	4153	CB	PHE B 271	15.188	18.992	-8.185	1.00	48.41	C
[4206]	ATOM	4154	CG	PHE B 271	15.704	20.367	-8.609	1.00	49.71	C
[4207]	ATOM	4155	CD1	PHE B 271	15.443	21.515	-7.843	1.00	52.54	C
[4208]	ATOM	4156	CD2	PHE B 271	16.427	20.516	-9.762	1.00	51.78	C
[4209]	ATOM	4157	CE1	PHE B 271	15.889	22.813	-8.246	1.00	51.95	C
[4210]	ATOM	4158	CE2	PHE B 271	16.893	21.786	-10.161	1.00	53.69	C
[4211]	ATOM	4159	CZ	PHE B 271	16.619	22.943	-9.391	1.00	51.75	C
[4212]	ATOM	4160	N	LEU B 272	12.099	20.592	-7.198	1.00	45.79	N
[4213]	ATOM	4161	CA	LEU B 272	10.996	21.361	-7.704	1.00	45.48	C
[4214]	ATOM	4162	C	LEU B 272	11.455	22.747	-8.064	1.00	45.82	C
[4215]	ATOM	4163	O	LEU B 272	11.636	23.573	-7.189	1.00	46.68	O
[4216]	ATOM	4164	CB	LEU B 272	9.928	21.452	-6.657	1.00	44.82	C
[4217]	ATOM	4165	CG	LEU B 272	8.703	22.260	-7.115	1.00	46.25	C
[4218]	ATOM	4166	CD1	LEU B 272	7.918	21.485	-8.144	1.00	47.98	C
[4219]	ATOM	4167	CD2	LEU B 272	7.819	22.598	-5.934	1.00	42.92	C
[4220]	ATOM	4168	N	LYS B 273	11.674	23.005	-9.346	1.00	46.08	N
[4221]	ATOM	4169	CA	LYS B 273	12.028	24.373	-9.795	1.00	46.10	C
[4222]	ATOM	4170	C	LYS B 273	10.818	25.090	-10.389	1.00	46.75	C
[4223]	ATOM	4171	O	LYS B 273	10.388	24.785	-11.494	1.00	45.75	O
[4224]	ATOM	4172	CB	LYS B 273	13.197	24.379	-10.792	1.00	45.62	C
[4225]	ATOM	4173	CG	LYS B 273	13.451	25.773	-11.435	1.00	44.64	C
[4226]	ATOM	4174	CD	LYS B 273	14.153	25.622	-12.785	1.00	44.90	C
[4227]	ATOM	4175	CE	LYS B 273	15.668	25.690	-12.577	1.00	45.13	C
[4228]	ATOM	4176	NZ	LYS B 273	16.497	24.726	-13.471	1.00	49.04	N
[4229]	ATOM	4177	N	MET B 274	10.273	26.038	-9.654	1.00	48.57	N
[4230]	ATOM	4178	CA	MET B 274	9.032	26.596	-10.071	1.00	51.38	C
[4231]	ATOM	4179	C	MET B 274	9.193	27.792	-10.967	1.00	53.17	C
[4232]	ATOM	4180	O	MET B 274	9.980	28.749	-10.702	1.00	53.19	O
[4233]	ATOM	4181	CB	MET B 274	8.207	26.947	-8.872	1.00	51.44	C

[4234]	ATOM	4182	CG	MET B 274	8.035	25.748	-7.947	1.00	52.90	C
[4235]	ATOM	4183	SD	MET B 274	7.411	26.163	-6.318	1.00	54.19	S
[4236]	ATOM	4184	CE	MET B 274	5.774	26.722	-6.680	1.00	57.97	C
[4237]	ATOM	4185	N	ALA B 275	8.453	27.725	-12.066	1.00	55.30	N
[4238]	ATOM	4186	CA	ALA B 275	8.329	28.878	-12.928	1.00	56.82	C
[4239]	ATOM	4187	C	ALA B 275	7.476	29.921	-12.107	1.00	57.46	C
[4240]	ATOM	4188	O	ALA B 275	6.659	29.509	-11.223	1.00	57.30	O
[4241]	ATOM	4189	CB	ALA B 275	7.662	28.430	-14.264	1.00	56.57	C
[4242]	ATOM	4190	N	ASP B 276	7.727	31.225	-12.316	1.00	57.65	N
[4243]	ATOM	4191	CA	ASP B 276	6.844	32.339	-11.829	1.00	58.41	C
[4244]	ATOM	4192	C	ASP B 276	6.725	32.556	-10.348	1.00	57.57	C
[4245]	ATOM	4193	O	ASP B 276	5.718	33.093	-9.885	1.00	57.62	O
[4246]	ATOM	4194	CB	ASP B 276	5.412	32.189	-12.378	1.00	59.43	C
[4247]	ATOM	4195	CG	ASP B 276	5.367	32.353	-13.864	1.00	63.00	C
[4248]	ATOM	4196	OD1	ASP B 276	5.481	33.539	-14.335	1.00	66.11	O
[4249]	ATOM	4197	OD2	ASP B 276	5.268	31.289	-14.535	1.00	65.65	O
[4250]	ATOM	4198	N	SER B 277	7.728	32.131	-9.596	1.00	56.28	N
[4251]	ATOM	4199	CA	SER B 277	7.592	32.091	-8.138	1.00	54.17	C
[4252]	ATOM	4200	C	SER B 277	8.470	33.100	-7.428	1.00	52.61	C
[4253]	ATOM	4201	O	SER B 277	8.166	33.480	-6.325	1.00	53.53	O
[4254]	ATOM	4202	CB	SER B 277	7.864	30.667	-7.626	1.00	54.23	C
[4255]	ATOM	4203	OG	SER B 277	9.208	30.271	-7.858	1.00	55.20	O
[4256]	ATOM	4204	N	GLY B 278	9.547	33.554	-8.069	1.00	50.49	N
[4257]	ATOM	4205	CA	GLY B 278	10.509	34.465	-7.475	1.00	47.19	C
[4258]	ATOM	4206	C	GLY B 278	11.297	33.765	-6.342	1.00	45.74	C
[4259]	ATOM	4207	O	GLY B 278	11.359	32.526	-6.256	1.00	45.07	O
[4260]	ATOM	4208	N	GLY B 279	11.873	34.583	-5.452	1.00	43.79	N
[4261]	ATOM	4209	CA	GLY B 279	12.758	34.139	-4.392	1.00	40.10	C
[4262]	ATOM	4210	C	GLY B 279	11.991	33.472	-3.250	1.00	38.48	C
[4263]	ATOM	4211	O	GLY B 279	12.591	32.615	-2.562	1.00	38.11	O
[4264]	ATOM	4212	N	GLN B 280	10.701	33.842	-3.057	1.00	35.11	N
[4265]	ATOM	4213	CA	GLN B 280	9.906	33.270	-2.019	1.00	32.97	C
[4266]	ATOM	4214	C	GLN B 280	8.715	32.489	-2.617	1.00	32.93	C
[4267]	ATOM	4215	O	GLN B 280	7.525	32.899	-2.477	1.00	33.02	O
[4268]	ATOM	4216	CB	GLN B 280	9.462	34.307	-0.955	1.00	32.47	C
[4269]	ATOM	4217	CG	GLN B 280	10.619	35.094	-0.342	1.00	29.96	C

[4270]	ATOM	4218	CD	GLN	B	280	11.457	34.254	0.553	1.00	30.12	C
[4271]	ATOM	4219	OE1	GLN	B	280	12.644	34.050	0.283	1.00	30.19	O
[4272]	ATOM	4220	NE2	GLN	B	280	10.834	33.707	1.640	1.00	27.92	N
[4273]	ATOM	4221	N	PRO	B	281	9.006	31.299	-3.178	1.00	31.94	N
[4274]	ATOM	4222	CA	PRO	B	281	8.007	30.490	-3.761	1.00	31.62	C
[4275]	ATOM	4223	C	PRO	B	281	7.044	30.153	-2.692	1.00	33.25	C
[4276]	ATOM	4224	O	PRO	B	281	5.909	29.869	-3.029	1.00	35.60	O
[4277]	ATOM	4225	CB	PRO	B	281	8.708	29.201	-4.048	1.00	30.98	C
[4278]	ATOM	4226	CG	PRO	B	281	10.061	29.448	-3.976	1.00	31.33	C
[4279]	ATOM	4227	CD	PRO	B	281	10.303	30.614	-3.152	1.00	32.06	C
[4280]	ATOM	4228	N	GLN	B	282	7.421	30.131	-1.409	1.00	32.85	N
[4281]	ATOM	4229	CA	GLN	B	282	6.399	29.794	-0.421	1.00	32.84	C
[4282]	ATOM	4230	C	GLN	B	282	5.451	30.939	-0.185	1.00	34.09	C
[4283]	ATOM	4231	O	GLN	B	282	4.391	30.755	0.420	1.00	34.59	O
[4284]	ATOM	4232	CB	GLN	B	282	6.974	29.267	0.892	1.00	32.17	C
[4285]	ATOM	4233	CG	GLN	B	282	7.434	30.288	1.950	1.00	31.39	C
[4286]	ATOM	4234	CD	GLN	B	282	8.658	31.051	1.459	1.00	32.40	C
[4287]	ATOM	4235	OE1	GLN	B	282	8.976	30.964	0.387	1.00	32.33	O
[4288]	ATOM	4236	NE2	GLN	B	282	9.308	31.745	2.230	1.00	28.82	N
[4289]	ATOM	4237	N	LEU	B	283	5.810	32.130	-0.655	1.00	34.50	N
[4290]	ATOM	4238	CA	LEU	B	283	4.884	33.208	-0.439	1.00	35.80	C
[4291]	ATOM	4239	C	LEU	B	283	4.087	33.477	-1.665	1.00	36.61	C
[4292]	ATOM	4240	O	LEU	B	283	2.989	33.992	-1.553	1.00	36.78	O
[4293]	ATOM	4241	CB	LEU	B	283	5.535	34.480	0.032	1.00	35.50	C
[4294]	ATOM	4242	CG	LEU	B	283	6.035	34.371	1.462	1.00	35.84	C
[4295]	ATOM	4243	CD1	LEU	B	283	7.269	35.269	1.435	1.00	37.00	C
[4296]	ATOM	4244	CD2	LEU	B	283	5.045	34.908	2.394	1.00	36.62	C
[4297]	ATOM	4245	N	THR	B	284	4.622	33.154	-2.829	1.00	37.25	N
[4298]	ATOM	4246	CA	THR	B	284	3.926	33.521	-4.052	1.00	38.56	C
[4299]	ATOM	4247	C	THR	B	284	3.225	32.250	-4.611	1.00	40.24	C
[4300]	ATOM	4248	O	THR	B	284	2.162	32.351	-5.213	1.00	41.79	O
[4301]	ATOM	4249	CB	THR	B	284	4.885	34.045	-5.136	1.00	38.44	C
[4302]	ATOM	4250	OG1	THR	B	284	5.876	33.029	-5.373	1.00	38.10	O
[4303]	ATOM	4251	CG2	THR	B	284	5.565	35.335	-4.750	1.00	37.53	C
[4304]	ATOM	4252	N	GLN	B	285	3.786	31.061	-4.434	1.00	40.13	N
[4305]	ATOM	4253	CA	GLN	B	285	3.071	29.875	-4.905	1.00	40.16	C

[4306]	ATOM	4254	C	GLN	B	285	2.597	28.903	-3.836	1.00	39.63	C
[4307]	ATOM	4255	O	GLN	B	285	2.916	27.714	-3.929	1.00	38.40	O
[4308]	ATOM	4256	CB	GLN	B	285	3.888	29.060	-5.918	1.00	40.42	C
[4309]	ATOM	4257	CG	GLN	B	285	4.435	29.785	-7.148	1.00	43.49	C
[4310]	ATOM	4258	CD	GLN	B	285	3.460	30.365	-8.111	1.00	47.25	C
[4311]	ATOM	4259	OE1	GLN	B	285	2.383	30.625	-7.739	1.00	47.88	O
[4312]	ATOM	4260	NE2	GLN	B	285	3.866	30.652	-9.328	1.00	46.17	N
[4313]	ATOM	4261	N	PRO	B	286	1.816	29.375	-2.851	1.00	39.95	N
[4314]	ATOM	4262	CA	PRO	B	286	1.458	28.439	-1.781	1.00	40.70	C
[4315]	ATOM	4263	C	PRO	B	286	0.872	27.143	-2.343	1.00	41.21	C
[4316]	ATOM	4264	O	PRO	B	286	1.291	26.045	-1.961	1.00	41.69	O
[4317]	ATOM	4265	CB	PRO	B	286	0.420	29.205	-0.956	1.00	40.61	C
[4318]	ATOM	4266	CG	PRO	B	286	0.085	30.457	-1.719	1.00	40.27	C
[4319]	ATOM	4267	CD	PRO	B	286	1.233	30.711	-2.651	1.00	40.21	C
[4320]	ATOM	4268	N	GLY	B	287	-0.011	27.323	-3.330	1.00	41.81	N
[4321]	ATOM	4269	CA	GLY	B	287	-0.797	26.252	-3.981	1.00	41.11	C
[4322]	ATOM	4270	C	GLY	B	287	0.049	25.127	-4.456	1.00	40.81	C
[4323]	ATOM	4271	O	GLY	B	287	-0.079	24.024	-4.005	1.00	41.78	O
[4324]	ATOM	4272	N	LYS	B	288	0.953	25.423	-5.353	1.00	40.87	N
[4325]	ATOM	4273	CA	LYS	B	288	1.797	24.411	-5.915	1.00	41.53	C
[4326]	ATOM	4274	C	LYS	B	288	2.701	23.792	-4.887	1.00	40.33	C
[4327]	ATOM	4275	O	LYS	B	288	2.966	22.570	-4.940	1.00	40.48	O
[4328]	ATOM	4276	CB	LYS	B	288	2.679	25.037	-6.998	1.00	42.16	C
[4329]	ATOM	4277	CG	LYS	B	288	2.671	24.397	-8.443	1.00	44.48	C
[4330]	ATOM	4278	CD	LYS	B	288	3.931	24.893	-9.277	1.00	46.67	C
[4331]	ATOM	4279	CE	LYS	B	288	3.675	25.029	-10.818	1.00	49.32	C
[4332]	ATOM	4280	NZ	LYS	B	288	2.932	23.830	-11.383	1.00	51.27	N
[4333]	ATOM	4281	N	LEU	B	289	3.233	24.635	-3.984	1.00	38.89	N
[4334]	ATOM	4282	CA	LEU	B	289	4.263	24.171	-3.002	1.00	37.20	C
[4335]	ATOM	4283	C	LEU	B	289	3.588	23.137	-2.100	1.00	36.42	C
[4336]	ATOM	4284	O	LEU	B	289	4.171	22.096	-1.795	1.00	35.65	O
[4337]	ATOM	4285	CB	LEU	B	289	4.864	25.322	-2.192	1.00	36.32	C
[4338]	ATOM	4286	CG	LEU	B	289	5.921	24.922	-1.163	1.00	35.55	C
[4339]	ATOM	4287	CD1	LEU	B	289	6.906	23.937	-1.671	1.00	32.13	C
[4340]	ATOM	4288	CD2	LEU	B	289	6.649	26.093	-0.594	1.00	33.53	C
[4341]	ATOM	4289	N	THR	B	290	2.327	23.425	-1.759	1.00	35.50	N

[4342]	ATOM	4290	CA	THR	B	290	1.510	22.537	-0.974	1.00	35.49	C
[4343]	ATOM	4291	C	THR	B	290	1.323	21.189	-1.593	1.00	35.62	C
[4344]	ATOM	4292	O	THR	B	290	1.494	20.131	-0.957	1.00	35.32	O
[4345]	ATOM	4293	CB	THR	B	290	0.178	23.157	-0.711	1.00	35.30	C
[4346]	ATOM	4294	OG1	THR	B	290	0.420	24.305	0.112	1.00	37.51	O
[4347]	ATOM	4295	CG2	THR	B	290	-0.763	22.170	0.071	1.00	34.90	C
[4348]	ATOM	4296	N	GLU	B	291	1.002	21.246	-2.859	1.00	35.82	N
[4349]	ATOM	4297	CA	GLU	B	291	0.822	20.041	-3.600	1.00	36.58	C
[4350]	ATOM	4298	C	GLU	B	291	2.093	19.279	-3.771	1.00	35.08	C
[4351]	ATOM	4299	O	GLU	B	291	2.051	18.120	-3.757	1.00	35.17	O
[4352]	ATOM	4300	CB	GLU	B	291	0.188	20.347	-4.928	1.00	37.20	C
[4353]	ATOM	4301	CG	GLU	B	291	-1.227	19.951	-5.064	1.00	40.68	C
[4354]	ATOM	4302	CD	GLU	B	291	-1.512	19.788	-6.544	1.00	47.80	C
[4355]	ATOM	4303	OE1	GLU	B	291	-1.970	20.809	-7.187	1.00	49.12	O
[4356]	ATOM	4304	OE2	GLU	B	291	-1.176	18.652	-7.058	1.00	48.02	O
[4357]	ATOM	4305	N	ALA	B	292	3.220	19.924	-3.923	1.00	35.19	N
[4358]	ATOM	4306	CA	ALA	B	292	4.495	19.210	-3.958	1.00	35.28	C
[4359]	ATOM	4307	C	ALA	B	292	4.791	18.562	-2.609	1.00	36.24	C
[4360]	ATOM	4308	O	ALA	B	292	5.453	17.523	-2.514	1.00	36.34	O
[4361]	ATOM	4309	CB	ALA	B	292	5.563	20.159	-4.269	1.00	35.44	C
[4362]	ATOM	4310	N	PHE	B	293	4.291	19.184	-1.539	1.00	36.61	N
[4363]	ATOM	4311	CA	PHE	B	293	4.564	18.652	-0.221	1.00	35.84	C
[4364]	ATOM	4312	C	PHE	B	293	3.755	17.372	-0.095	1.00	35.51	C
[4365]	ATOM	4313	O	PHE	B	293	4.241	16.358	0.343	1.00	35.30	O
[4366]	ATOM	4314	CB	PHE	B	293	4.199	19.678	0.841	1.00	35.40	C
[4367]	ATOM	4315	CG	PHE	B	293	4.701	19.326	2.175	1.00	33.69	C
[4368]	ATOM	4316	CD1	PHE	B	293	6.003	19.043	2.350	1.00	31.19	C
[4369]	ATOM	4317	CD2	PHE	B	293	3.836	19.260	3.266	1.00	34.68	C
[4370]	ATOM	4318	CE1	PHE	B	293	6.430	18.690	3.568	1.00	33.04	C
[4371]	ATOM	4319	CE2	PHE	B	293	4.269	18.920	4.471	1.00	31.42	C
[4372]	ATOM	4320	CZ	PHE	B	293	5.542	18.642	4.626	1.00	31.97	C
[4373]	ATOM	4321	N	LYS	B	294	2.512	17.425	-0.540	1.00	35.56	N
[4374]	ATOM	4322	CA	LYS	B	294	1.650	16.220	-0.584	1.00	35.75	C
[4375]	ATOM	4323	C	LYS	B	294	2.347	15.039	-1.282	1.00	35.76	C
[4376]	ATOM	4324	O	LYS	B	294	2.333	13.902	-0.754	1.00	35.82	O
[4377]	ATOM	4325	CB	LYS	B	294	0.333	16.537	-1.284	1.00	35.50	C



[4378]	ATOM	4326	CG	LYS	B	294	-0.634	15.431	-1.472	1.00	35.85	C
[4379]	ATOM	4327	CD	LYS	B	294	-1.862	16.031	-2.170	1.00	38.23	C
[4380]	ATOM	4328	CE	LYS	B	294	-2.936	15.002	-2.651	1.00	40.87	C
[4381]	ATOM	4329	NZ	LYS	B	294	-4.232	15.103	-1.849	1.00	41.78	N
[4382]	ATOM	4330	N	TYR	B	295	2.985	15.301	-2.427	1.00	34.99	N
[4383]	ATOM	4331	CA	TYR	B	295	3.587	14.199	-3.099	1.00	35.95	C
[4384]	ATOM	4332	C	TYR	B	295	4.879	13.808	-2.482	1.00	36.71	C
[4385]	ATOM	4333	O	TYR	B	295	5.242	12.639	-2.548	1.00	38.45	O
[4386]	ATOM	4334	CB	TYR	B	295	3.778	14.398	-4.584	1.00	36.11	C
[4387]	ATOM	4335	CG	TYR	B	295	2.495	14.790	-5.248	1.00	36.54	C
[4388]	ATOM	4336	CD1	TYR	B	295	1.353	14.004	-5.082	1.00	39.04	C
[4389]	ATOM	4337	CD2	TYR	B	295	2.403	15.946	-6.017	1.00	34.42	C
[4390]	ATOM	4338	CE1	TYR	B	295	0.141	14.365	-5.629	1.00	38.06	C
[4391]	ATOM	4339	CE2	TYR	B	295	1.182	16.335	-6.576	1.00	35.09	C
[4392]	ATOM	4340	CZ	TYR	B	295	0.065	15.521	-6.370	1.00	36.69	C
[4393]	ATOM	4341	OH	TYR	B	295	-1.141	15.843	-6.920	1.00	38.61	O
[4394]	ATOM	4342	N	PHE	B	296	5.580	14.744	-1.861	1.00	36.36	N
[4395]	ATOM	4343	CA	PHE	B	296	6.823	14.405	-1.172	1.00	34.96	C
[4396]	ATOM	4344	C	PHE	B	296	6.480	13.495	-0.021	1.00	35.84	C
[4397]	ATOM	4345	O	PHE	B	296	7.185	12.518	0.212	1.00	36.27	O
[4398]	ATOM	4346	CB	PHE	B	296	7.477	15.693	-0.711	1.00	34.72	C
[4399]	ATOM	4347	CG	PHE	B	296	8.693	15.514	0.045	1.00	30.71	C
[4400]	ATOM	4348	CD1	PHE	B	296	9.814	15.010	-0.556	1.00	28.53	C
[4401]	ATOM	4349	CD2	PHE	B	296	8.737	15.903	1.365	1.00	28.62	C
[4402]	ATOM	4350	CE1	PHE	B	296	11.009	14.806	0.202	1.00	30.91	C
[4403]	ATOM	4351	CE2	PHE	B	296	9.896	15.751	2.135	1.00	30.09	C
[4404]	ATOM	4352	CZ	PHE	B	296	11.051	15.201	1.567	1.00	32.54	C
[4405]	ATOM	4353	N	LEU	B	297	5.374	13.801	0.680	1.00	36.26	N
[4406]	ATOM	4354	CA	LEU	B	297	4.958	13.031	1.864	1.00	36.40	C
[4407]	ATOM	4355	C	LEU	B	297	4.652	11.615	1.407	1.00	36.97	C
[4408]	ATOM	4356	O	LEU	B	297	5.250	10.633	1.932	1.00	36.44	O
[4409]	ATOM	4357	CB	LEU	B	297	3.748	13.657	2.522	1.00	35.89	C
[4410]	ATOM	4358	CG	LEU	B	297	4.067	14.881	3.325	1.00	36.33	C
[4411]	ATOM	4359	CD1	LEU	B	297	2.782	15.554	3.803	1.00	37.37	C
[4412]	ATOM	4360	CD2	LEU	B	297	4.882	14.464	4.472	1.00	34.73	C
[4413]	ATOM	4361	N	GLN	B	298	3.775	11.531	0.384	1.00	37.35	N

[4414]	ATOM	4362	CA	GLN	B	298	3.423	10.248	-0.219	1.00	37.34	C
[4415]	ATOM	4363	C	GLN	B	298	4.656	9.540	-0.607	1.00	37.57	C
[4416]	ATOM	4364	O	GLN	B	298	4.767	8.390	-0.379	1.00	37.86	O
[4417]	ATOM	4365	CB	GLN	B	298	2.581	10.423	-1.440	1.00	36.32	C
[4418]	ATOM	4366	CG	GLN	B	298	1.211	10.712	-1.069	1.00	36.22	C
[4419]	ATOM	4367	CD	GLN	B	298	0.281	10.948	-2.223	1.00	36.58	C
[4420]	ATOM	4368	OE1	GLN	B	298	-0.796	11.495	-2.022	1.00	37.87	O
[4421]	ATOM	4369	NE2	GLN	B	298	0.673	10.550	-3.454	1.00	35.27	N
[4422]	ATOM	4370	N	GLY	B	299	5.596	10.249	-1.171	1.00	38.14	N
[4423]	ATOM	4371	CA	GLY	B	299	6.873	9.693	-1.488	1.00	40.13	C
[4424]	ATOM	4372	C	GLY	B	299	7.581	8.961	-0.382	1.00	41.46	C
[4425]	ATOM	4373	O	GLY	B	299	8.199	7.977	-0.666	1.00	41.48	O
[4426]	ATOM	4374	N	MET	B	300	7.541	9.426	0.872	1.00	43.66	N
[4427]	ATOM	4375	CA	MET	B	300	8.180	8.666	1.924	1.00	45.82	C
[4428]	ATOM	4376	C	MET	B	300	7.207	7.639	2.533	1.00	46.35	C
[4429]	ATOM	4377	O	MET	B	300	7.522	7.030	3.552	1.00	47.50	O
[4430]	ATOM	4378	CB	MET	B	300	8.850	9.545	2.955	1.00	45.18	C
[4431]	ATOM	4379	CG	MET	B	300	8.121	10.838	3.272	1.00	48.57	C
[4432]	ATOM	4380	SD	MET	B	300	9.119	12.227	4.021	1.00	51.25	S
[4433]	ATOM	4381	CE	MET	B	300	9.197	11.734	5.715	1.00	52.85	C
[4434]	ATOM	4382	N	GLY	B	301	6.057	7.414	1.895	1.00	46.81	N
[4435]	ATOM	4383	CA	GLY	B	301	5.089	6.463	2.367	1.00	47.31	C
[4436]	ATOM	4384	C	GLY	B	301	4.102	6.957	3.390	1.00	47.84	C
[4437]	ATOM	4385	O	GLY	B	301	3.549	6.150	4.089	1.00	47.47	O
[4438]	ATOM	4386	N	TYR	B	302	3.870	8.252	3.469	1.00	48.80	N
[4439]	ATOM	4387	CA	TYR	B	302	2.819	8.728	4.321	1.00	50.45	C
[4440]	ATOM	4388	C	TYR	B	302	1.621	9.078	3.506	1.00	51.65	C
[4441]	ATOM	4389	O	TYR	B	302	1.733	9.786	2.544	1.00	52.17	O
[4442]	ATOM	4390	CB	TYR	B	302	3.284	9.930	5.097	1.00	49.56	C
[4443]	ATOM	4391	CG	TYR	B	302	4.237	9.567	6.170	1.00	49.30	C
[4444]	ATOM	4392	CD1	TYR	B	302	3.856	8.733	7.225	1.00	48.55	C
[4445]	ATOM	4393	CD2	TYR	B	302	5.521	10.058	6.161	1.00	47.99	C
[4446]	ATOM	4394	CE1	TYR	B	302	4.736	8.417	8.234	1.00	48.54	C
[4447]	ATOM	4395	CE2	TYR	B	302	6.402	9.763	7.161	1.00	48.37	C
[4448]	ATOM	4396	CZ	TYR	B	302	6.015	8.943	8.202	1.00	48.70	C
[4449]	ATOM	4397	OH	TYR	B	302	6.934	8.653	9.198	1.00	49.02	O

[4450]	ATOM	4398	N	MET B 303	0.475	8.583	3.909	1.00	53.62	N
[4451]	ATOM	4399	CA	MET B 303	-0.753	8.893	3.233	1.00	56.12	C
[4452]	ATOM	4400	C	MET B 303	-0.953	10.397	3.379	1.00	56.98	C
[4453]	ATOM	4401	O	MET B 303	-0.939	10.907	4.475	1.00	57.26	O
[4454]	ATOM	4402	CB	MET B 303	-1.929	8.025	3.772	1.00	56.06	C
[4455]	ATOM	4403	CG	MET B 303	-1.802	6.539	3.414	1.00	58.30	C
[4456]	ATOM	4404	SD	MET B 303	-2.517	6.137	1.829	1.00	62.48	S
[4457]	ATOM	4405	CE	MET B 303	-2.224	7.631	0.740	1.00	64.08	C
[4458]	ATOM	4406	N	ALA B 304	-1.077	11.110	2.261	1.00	58.31	N
[4459]	ATOM	4407	CA	ALA B 304	-1.234	12.546	2.325	1.00	59.06	C
[4460]	ATOM	4408	C	ALA B 304	-2.471	13.096	1.593	1.00	59.58	C
[4461]	ATOM	4409	O	ALA B 304	-3.259	13.861	2.175	1.00	60.00	O
[4462]	ATOM	4410	CB	ALA B 304	0.037	13.224	1.906	1.00	59.03	C
[4463]	ATOM	4411	OXT	ALA B 304	-2.738	12.773	0.443	1.00	59.98	O
[4464]	TER	4412		ALA B 304						
[4465]	ATOM	4413	N	ALA C 24	38.160	-0.035	12.602	1.00	62.39	N
[4466]	ATOM	4414	CA	ALA C 24	38.602	-1.065	13.620	1.00	61.78	C
[4467]	ATOM	4415	C	ALA C 24	40.159	-1.395	13.707	1.00	61.26	C
[4468]	ATOM	4416	O	ALA C 24	40.590	-2.572	13.613	1.00	61.31	O
[4469]	ATOM	4417	CB	ALA C 24	37.716	-2.386	13.465	1.00	63.03	C
[4470]	ATOM	4418	N	LYS C 25	40.987	-0.363	13.917	1.00	58.82	N
[4471]	ATOM	4419	CA	LYS C 25	42.470	-0.551	13.974	1.00	56.85	C
[4472]	ATOM	4420	C	LYS C 25	43.084	-0.921	15.380	1.00	54.92	C
[4473]	ATOM	4421	O	LYS C 25	43.158	-0.035	16.293	1.00	54.13	O
[4474]	ATOM	4422	CB	LYS C 25	43.246	0.658	13.299	1.00	56.89	C
[4475]	ATOM	4423	CG	LYS C 25	43.434	0.589	11.703	1.00	58.08	C
[4476]	ATOM	4424	CD	LYS C 25	44.906	0.542	10.996	1.00	58.25	C
[4477]	ATOM	4425	CE	LYS C 25	46.225	0.586	11.883	1.00	58.91	C
[4478]	ATOM	4426	NZ	LYS C 25	46.528	-0.701	12.660	1.00	58.75	N
[4479]	ATOM	4427	N	THR C 26	43.539	-2.190	15.516	1.00	51.82	N
[4480]	ATOM	4428	CA	THR C 26	44.413	-2.620	16.668	1.00	50.49	C
[4481]	ATOM	4429	C	THR C 26	45.879	-2.030	16.756	1.00	48.69	C
[4482]	ATOM	4430	O	THR C 26	46.656	-2.009	15.787	1.00	50.13	O
[4483]	ATOM	4431	CB	THR C 26	44.502	-4.164	16.745	1.00	49.63	C
[4484]	ATOM	4432	OG1	THR C 26	43.216	-4.664	17.099	1.00	51.14	O
[4485]	ATOM	4433	CG2	THR C 26	45.513	-4.628	17.808	1.00	49.26	C

[4486]	ATOM	4434	N	HIS	C	27	46.291	-1.571	17.915	1.00	46.43	N
[4487]	ATOM	4435	CA	HIS	C	27	47.655	-1.081	18.052	1.00	44.91	C
[4488]	ATOM	4436	C	HIS	C	27	48.261	-1.680	19.324	1.00	45.07	C
[4489]	ATOM	4437	O	HIS	C	27	47.584	-2.334	20.150	1.00	44.79	O
[4490]	ATOM	4438	CB	HIS	C	27	47.690	0.472	18.090	1.00	43.57	C
[4491]	ATOM	4439	CG	HIS	C	27	47.130	1.132	16.854	1.00	43.56	C
[4492]	ATOM	4440	ND1	HIS	C	27	46.908	2.497	16.762	1.00	43.63	N
[4493]	ATOM	4441	CD2	HIS	C	27	46.732	0.626	15.654	1.00	42.11	C
[4494]	ATOM	4442	CE1	HIS	C	27	46.412	2.803	15.558	1.00	40.97	C
[4495]	ATOM	4443	NE2	HIS	C	27	46.305	1.686	14.862	1.00	42.47	N
[4496]	ATOM	4444	N	SER	C	28	49.551	-1.442	19.491	1.00	45.50	N
[4497]	ATOM	4445	CA	SER	C	28	50.220	-1.892	20.671	1.00	45.21	C
[4498]	ATOM	4446	C	SER	C	28	51.294	-0.842	21.001	1.00	45.23	C
[4499]	ATOM	4447	O	SER	C	28	51.835	-0.269	20.104	1.00	46.33	O
[4500]	ATOM	4448	CB	SER	C	28	50.783	-3.212	20.340	1.00	44.06	C
[4501]	ATOM	4449	OG	SER	C	28	51.673	-3.478	21.341	1.00	46.86	O
[4502]	ATOM	4450	N	VAL	C	29	51.508	-0.473	22.256	1.00	45.49	N
[4503]	ATOM	4451	CA	VAL	C	29	52.645	0.414	22.594	1.00	45.88	C
[4504]	ATOM	4452	C	VAL	C	29	53.520	-0.075	23.764	1.00	45.94	C
[4505]	ATOM	4453	O	VAL	C	29	53.100	-0.893	24.635	1.00	46.07	O
[4506]	ATOM	4454	CB	VAL	C	29	52.324	1.941	22.884	1.00	45.50	C
[4507]	ATOM	4455	CG1	VAL	C	29	51.861	2.634	21.687	1.00	46.77	C
[4508]	ATOM	4456	CG2	VAL	C	29	51.378	2.134	24.023	1.00	45.79	C
[4509]	ATOM	4457	N	GLU	C	30	54.709	0.500	23.796	1.00	44.96	N
[4510]	ATOM	4458	CA	GLU	C	30	55.564	0.129	24.786	1.00	44.81	C
[4511]	ATOM	4459	C	GLU	C	30	55.683	1.166	25.780	1.00	44.25	C
[4512]	ATOM	4460	O	GLU	C	30	55.592	2.370	25.446	1.00	43.84	O
[4513]	ATOM	4461	CB	GLU	C	30	56.876	-0.241	24.249	1.00	45.22	C
[4514]	ATOM	4462	CG	GLU	C	30	56.909	-1.616	24.648	1.00	48.97	C
[4515]	ATOM	4463	CD	GLU	C	30	57.477	-2.514	23.687	1.00	54.29	C
[4516]	ATOM	4464	OE1	GLU	C	30	58.365	-2.066	22.904	1.00	54.94	O
[4517]	ATOM	4465	OE2	GLU	C	30	57.054	-3.689	23.796	1.00	54.05	O
[4518]	ATOM	4466	N	THR	C	31	55.844	0.683	27.020	1.00	43.45	N
[4519]	ATOM	4467	CA	THR	C	31	55.815	1.532	28.156	1.00	42.85	C
[4520]	ATOM	4468	C	THR	C	31	56.844	0.931	29.114	1.00	43.69	C
[4521]	ATOM	4469	O	THR	C	31	57.253	-0.277	28.962	1.00	42.63	O

[4522]	ATOM	4470	CB	THR	C	31	54.397	1.458	28.870	1.00	42.96	C
[4523]	ATOM	4471	OG1	THR	C	31	54.207	0.144	29.455	1.00	42.86	O
[4524]	ATOM	4472	CG2	THR	C	31	53.262	1.769	27.932	1.00	40.15	C
[4525]	ATOM	4473	N	PRO	C	32	57.199	1.745	30.154	1.00	43.81	N
[4526]	ATOM	4474	CA	PRO	C	32	58.134	1.256	31.152	1.00	43.87	C
[4527]	ATOM	4475	C	PRO	C	32	57.666	-0.040	31.790	1.00	45.02	C
[4528]	ATOM	4476	O	PRO	C	32	58.493	-0.712	32.397	1.00	45.81	O
[4529]	ATOM	4477	CB	PRO	C	32	58.176	2.355	32.181	1.00	43.38	C
[4530]	ATOM	4478	CG	PRO	C	32	57.644	3.670	31.409	1.00	45.30	C
[4531]	ATOM	4479	CD	PRO	C	32	56.690	3.124	30.401	1.00	43.67	C
[4532]	ATOM	4480	N	TYR	C	33	56.381	-0.418	31.642	1.00	45.71	N
[4533]	ATOM	4481	CA	TYR	C	33	55.864	-1.571	32.374	1.00	45.99	C
[4534]	ATOM	4482	C	TYR	C	33	55.354	-2.645	31.460	1.00	46.26	C
[4535]	ATOM	4483	O	TYR	C	33	54.541	-3.476	31.839	1.00	46.78	O
[4536]	ATOM	4484	CB	TYR	C	33	54.850	-1.194	33.449	1.00	45.61	C
[4537]	ATOM	4485	CG	TYR	C	33	55.219	0.072	34.220	1.00	46.25	C
[4538]	ATOM	4486	CD1	TYR	C	33	55.993	0.017	35.419	1.00	45.57	C
[4539]	ATOM	4487	CD2	TYR	C	33	54.816	1.330	33.740	1.00	44.61	C
[4540]	ATOM	4488	CE1	TYR	C	33	56.331	1.175	36.089	1.00	44.35	C
[4541]	ATOM	4489	CE2	TYR	C	33	55.157	2.473	34.384	1.00	44.48	C
[4542]	ATOM	4490	CZ	TYR	C	33	55.907	2.412	35.544	1.00	46.51	C
[4543]	ATOM	4491	OH	TYR	C	33	56.169	3.641	36.142	1.00	48.20	O
[4544]	ATOM	4492	N	GLY	C	34	55.927	-2.715	30.282	1.00	46.21	N
[4545]	ATOM	4493	CA	GLY	C	34	55.544	-3.772	29.380	1.00	45.96	C
[4546]	ATOM	4494	C	GLY	C	34	54.610	-3.109	28.393	1.00	46.79	C
[4547]	ATOM	4495	O	GLY	C	34	54.452	-1.828	28.342	1.00	47.64	O
[4548]	ATOM	4496	N	SER	C	35	53.962	-3.923	27.585	1.00	45.89	N
[4549]	ATOM	4497	CA	SER	C	35	53.230	-3.296	26.508	1.00	45.37	C
[4550]	ATOM	4498	C	SER	C	35	51.707	-3.435	26.644	1.00	44.71	C
[4551]	ATOM	4499	O	SER	C	35	51.212	-4.408	27.236	1.00	44.37	O
[4552]	ATOM	4500	CB	SER	C	35	53.734	-3.770	25.157	1.00	45.37	C
[4553]	ATOM	4501	OG	SER	C	35	53.177	-5.022	24.839	1.00	46.52	O
[4554]	ATOM	4502	N	VAL	C	36	50.992	-2.447	26.095	1.00	43.11	N
[4555]	ATOM	4503	CA	VAL	C	36	49.576	-2.355	26.293	1.00	41.78	C
[4556]	ATOM	4504	C	VAL	C	36	48.981	-2.279	24.906	1.00	41.95	C
[4557]	ATOM	4505	O	VAL	C	36	49.465	-1.557	24.068	1.00	41.63	O

[4558]	ATOM	4506	CB	VAL	C	36	49.203	-1.113	27.176	1.00	41.47	C
[4559]	ATOM	4507	CG1	VAL	C	36	49.641	0.100	26.543	1.00	40.84	C
[4560]	ATOM	4508	CG2	VAL	C	36	47.698	-0.987	27.398	1.00	40.27	C
[4561]	ATOM	4509	N	THR	C	37	47.911	-3.030	24.695	1.00	42.08	N
[4562]	ATOM	4510	CA	THR	C	37	47.184	-3.101	23.448	1.00	42.54	C
[4563]	ATOM	4511	C	THR	C	37	45.899	-2.251	23.511	1.00	42.47	C
[4564]	ATOM	4512	O	THR	C	37	45.262	-2.227	24.550	1.00	43.31	O
[4565]	ATOM	4513	CB	THR	C	37	46.808	-4.569	23.255	1.00	42.97	C
[4566]	ATOM	4514	OG1	THR	C	37	47.983	-5.311	22.913	1.00	43.86	O
[4567]	ATOM	4515	CG2	THR	C	37	45.749	-4.785	22.165	1.00	44.48	C
[4568]	ATOM	4516	N	PHE	C	38	45.523	-1.549	22.434	1.00	42.14	N
[4569]	ATOM	4517	CA	PHE	C	38	44.259	-0.834	22.392	1.00	41.90	C
[4570]	ATOM	4518	C	PHE	C	38	43.732	-0.767	20.997	1.00	42.16	C
[4571]	ATOM	4519	O	PHE	C	38	44.479	-0.918	20.087	1.00	41.91	O
[4572]	ATOM	4520	CB	PHE	C	38	44.422	0.576	22.875	1.00	41.93	C
[4573]	ATOM	4521	CG	PHE	C	38	45.615	1.248	22.331	1.00	42.66	C
[4574]	ATOM	4522	CD1	PHE	C	38	46.849	1.120	22.957	1.00	44.34	C
[4575]	ATOM	4523	CD2	PHE	C	38	45.522	2.042	21.225	1.00	43.31	C
[4576]	ATOM	4524	CE1	PHE	C	38	48.003	1.792	22.461	1.00	44.44	C
[4577]	ATOM	4525	CE2	PHE	C	38	46.656	2.697	20.729	1.00	43.73	C
[4578]	ATOM	4526	CZ	PHE	C	38	47.903	2.566	21.352	1.00	43.00	C
[4579]	ATOM	4527	N	THR	C	39	42.440	-0.484	20.841	1.00	42.41	N
[4580]	ATOM	4528	CA	THR	C	39	41.769	-0.577	19.574	1.00	42.14	C
[4581]	ATOM	4529	C	THR	C	39	41.016	0.703	19.389	1.00	42.80	C
[4582]	ATOM	4530	O	THR	C	39	40.282	1.097	20.277	1.00	43.52	O
[4583]	ATOM	4531	CB	THR	C	39	40.845	-1.745	19.664	1.00	42.07	C
[4584]	ATOM	4532	OG1	THR	C	39	41.655	-2.899	19.692	1.00	42.83	O
[4585]	ATOM	4533	CG2	THR	C	39	39.937	-1.864	18.484	1.00	41.84	C
[4586]	ATOM	4534	N	VAL	C	40	41.222	1.376	18.253	1.00	43.95	N
[4587]	ATOM	4535	CA	VAL	C	40	40.608	2.716	17.929	1.00	44.37	C
[4588]	ATOM	4536	C	VAL	C	40	39.433	2.655	16.902	1.00	45.25	C
[4589]	ATOM	4537	O	VAL	C	40	39.513	1.911	15.899	1.00	45.01	O
[4590]	ATOM	4538	CB	VAL	C	40	41.706	3.701	17.386	1.00	44.17	C
[4591]	ATOM	4539	CG1	VAL	C	40	41.087	4.989	16.843	1.00	42.07	C
[4592]	ATOM	4540	CG2	VAL	C	40	42.791	3.980	18.448	1.00	42.68	C
[4593]	ATOM	4541	N	TYR	C	41	38.356	3.394	17.172	1.00	46.36	N

[4594]	ATOM	4542	CA	TYR	C	41	37.200	3.396	16.293	1.00	48.23	C
[4595]	ATOM	4543	C	TYR	C	41	36.817	4.776	15.945	1.00	50.63	C
[4596]	ATOM	4544	O	TYR	C	41	36.908	5.706	16.769	1.00	50.48	O
[4597]	ATOM	4545	CB	TYR	C	41	35.974	2.800	16.934	1.00	47.60	C
[4598]	ATOM	4546	CG	TYR	C	41	36.045	1.312	17.085	1.00	47.98	C
[4599]	ATOM	4547	CD1	TYR	C	41	36.742	0.739	18.131	1.00	46.62	C
[4600]	ATOM	4548	CD2	TYR	C	41	35.407	0.469	16.189	1.00	49.88	C
[4601]	ATOM	4549	CE1	TYR	C	41	36.822	-0.588	18.277	1.00	47.15	C
[4602]	ATOM	4550	CE2	TYR	C	41	35.465	-0.917	16.345	1.00	49.10	C
[4603]	ATOM	4551	CZ	TYR	C	41	36.171	-1.421	17.403	1.00	48.67	C
[4604]	ATOM	4552	OH	TYR	C	41	36.245	-2.764	17.596	1.00	48.89	O
[4605]	ATOM	4553	N	GLY	C	42	36.314	4.916	14.720	1.00	53.27	N
[4606]	ATOM	4554	CA	GLY	C	42	35.812	6.204	14.279	1.00	56.57	C
[4607]	ATOM	4555	C	GLY	C	42	37.001	6.952	13.744	1.00	59.09	C
[4608]	ATOM	4556	O	GLY	C	42	38.184	6.635	14.005	1.00	58.87	O
[4609]	ATOM	4557	N	THR	C	43	36.714	7.924	12.917	1.00	61.79	N
[4610]	ATOM	4558	CA	THR	C	43	37.845	8.583	12.282	1.00	64.60	C
[4611]	ATOM	4559	C	THR	C	43	37.852	9.775	13.207	1.00	65.58	C
[4612]	ATOM	4560	O	THR	C	43	36.878	9.941	13.973	1.00	66.55	O
[4613]	ATOM	4561	CB	THR	C	43	37.602	8.845	10.760	1.00	64.88	C
[4614]	ATOM	4562	OG1	THR	C	43	37.205	10.208	10.584	1.00	65.86	O
[4615]	ATOM	4563	CG2	THR	C	43	36.496	7.810	10.138	1.00	64.41	C
[4616]	ATOM	4564	N	PRO	C	44	38.933	10.577	13.213	1.00	66.49	N
[4617]	ATOM	4565	CA	PRO	C	44	38.921	11.479	14.418	1.00	65.54	C
[4618]	ATOM	4566	C	PRO	C	44	37.639	12.307	14.402	1.00	63.92	C
[4619]	ATOM	4567	O	PRO	C	44	36.870	12.293	13.400	1.00	64.32	O
[4620]	ATOM	4568	CB	PRO	C	44	40.243	12.234	14.393	1.00	66.29	C
[4621]	ATOM	4569	CG	PRO	C	44	41.103	11.378	13.381	1.00	68.04	C
[4622]	ATOM	4570	CD	PRO	C	44	40.097	10.804	12.339	1.00	66.59	C
[4623]	ATOM	4571	N	LYS	C	45	37.400	13.127	15.407	1.00	60.81	N
[4624]	ATOM	4572	CA	LYS	C	45	37.287	14.569	15.289	1.00	58.76	C
[4625]	ATOM	4573	C	LYS	C	45	38.243	15.400	16.077	1.00	60.56	C
[4626]	ATOM	4574	O	LYS	C	45	38.244	15.343	17.307	1.00	60.68	O
[4627]	ATOM	4575	CB	LYS	C	45	35.845	14.817	15.764	1.00	55.88	C
[4628]	ATOM	4576	CG	LYS	C	45	34.979	13.560	15.385	1.00	50.76	C
[4629]	ATOM	4577	CD	LYS	C	45	34.211	13.812	13.975	1.00	48.27	C

[4630]	ATOM	4578	CE	LYS	C	45	33.169	12.585	13.750	1.00	48.05	C
[4631]	ATOM	4579	NZ	LYS	C	45	32.076	12.747	12.590	1.00	47.13	N
[4632]	ATOM	4580	N	PRO	C	46	39.004	16.256	15.371	1.00	63.38	N
[4633]	ATOM	4581	CA	PRO	C	46	40.174	16.889	16.033	1.00	64.12	C
[4634]	ATOM	4582	C	PRO	C	46	39.732	17.840	17.151	1.00	63.70	C
[4635]	ATOM	4583	O	PRO	C	46	40.517	18.101	18.037	1.00	64.00	O
[4636]	ATOM	4584	CB	PRO	C	46	40.890	17.662	14.894	1.00	65.20	C
[4637]	ATOM	4585	CG	PRO	C	46	40.137	17.247	13.548	1.00	65.85	C
[4638]	ATOM	4586	CD	PRO	C	46	38.763	16.769	13.994	1.00	64.11	C
[4639]	ATOM	4587	N	LYS	C	47	38.481	18.313	17.133	1.00	62.83	N
[4640]	ATOM	4588	CA	LYS	C	47	38.001	19.257	18.202	1.00	62.20	C
[4641]	ATOM	4589	C	LYS	C	47	37.105	18.642	19.367	1.00	59.42	C
[4642]	ATOM	4590	O	LYS	C	47	36.325	19.331	20.046	1.00	59.85	O
[4643]	ATOM	4591	CB	LYS	C	47	37.461	20.608	17.598	1.00	63.63	C
[4644]	ATOM	4592	CG	LYS	C	47	35.969	20.644	16.948	1.00	67.24	C
[4645]	ATOM	4593	CD	LYS	C	47	35.515	19.253	16.263	1.00	72.67	C
[4646]	ATOM	4594	CE	LYS	C	47	33.948	19.171	15.979	1.00	73.05	C
[4647]	ATOM	4595	NZ	LYS	C	47	33.721	18.515	14.611	1.00	74.72	N
[4648]	ATOM	4596	N	ARG	C	48	37.256	17.341	19.586	1.00	55.10	N
[4649]	ATOM	4597	CA	ARG	C	48	36.579	16.664	20.659	1.00	51.04	C
[4650]	ATOM	4598	C	ARG	C	48	37.623	15.780	21.330	1.00	49.16	C
[4651]	ATOM	4599	O	ARG	C	48	38.574	15.320	20.679	1.00	48.70	O
[4652]	ATOM	4600	CB	ARG	C	48	35.422	15.796	20.146	1.00	50.52	C
[4653]	ATOM	4601	CG	ARG	C	48	34.432	16.532	19.302	1.00	48.83	C
[4654]	ATOM	4602	CD	ARG	C	48	33.103	16.382	19.841	1.00	47.29	C
[4655]	ATOM	4603	NE	ARG	C	48	32.312	17.599	19.710	1.00	51.14	N
[4656]	ATOM	4604	CZ	ARG	C	48	30.960	17.614	19.677	1.00	53.86	C
[4657]	ATOM	4605	NH1	ARG	C	48	30.281	16.419	19.735	1.00	49.86	N
[4658]	ATOM	4606	NH2	ARG	C	48	30.281	18.809	19.590	1.00	51.86	N
[4659]	ATOM	4607	N	PRO	C	49	37.478	15.552	22.651	1.00	46.92	N
[4660]	ATOM	4608	CA	PRO	C	49	38.259	14.530	23.316	1.00	44.50	C
[4661]	ATOM	4609	C	PRO	C	49	37.916	13.181	22.747	1.00	42.27	C
[4662]	ATOM	4610	O	PRO	C	49	36.875	13.036	22.111	1.00	42.48	O
[4663]	ATOM	4611	CB	PRO	C	49	37.738	14.590	24.743	1.00	44.50	C
[4664]	ATOM	4612	CG	PRO	C	49	36.326	15.098	24.586	1.00	45.54	C
[4665]	ATOM	4613	CD	PRO	C	49	36.568	16.219	23.594	1.00	46.75	C



[4666]	ATOM	4614	N	ALA	C	50	38.778	12.204	22.988	1.00	40.17	N
[4667]	ATOM	4615	CA	ALA	C	50	38.536	10.863	22.546	1.00	38.63	C
[4668]	ATOM	4616	C	ALA	C	50	37.845	10.196	23.696	1.00	37.22	C
[4669]	ATOM	4617	O	ALA	C	50	38.108	10.583	24.839	1.00	37.42	O
[4670]	ATOM	4618	CB	ALA	C	50	39.843	10.190	22.224	1.00	39.11	C
[4671]	ATOM	4619	N	ILE	C	51	36.968	9.229	23.423	1.00	34.96	N
[4672]	ATOM	4620	CA	ILE	C	51	36.343	8.511	24.508	1.00	33.26	C
[4673]	ATOM	4621	C	ILE	C	51	37.190	7.339	24.762	1.00	32.37	C
[4674]	ATOM	4622	O	ILE	C	51	37.264	6.507	23.867	1.00	32.43	O
[4675]	ATOM	4623	CB	ILE	C	51	34.937	8.055	24.173	1.00	33.17	C
[4676]	ATOM	4624	CG1	ILE	C	51	34.118	9.297	23.906	1.00	33.05	C
[4677]	ATOM	4625	CG2	ILE	C	51	34.330	7.290	25.368	1.00	31.52	C
[4678]	ATOM	4626	CD1	ILE	C	51	32.726	9.016	23.750	1.00	30.89	C
[4679]	ATOM	4627	N	LEU	C	52	37.842	7.272	25.937	1.00	31.17	N
[4680]	ATOM	4628	CA	LEU	C	52	38.762	6.154	26.253	1.00	30.43	C
[4681]	ATOM	4629	C	LEU	C	52	38.189	5.229	27.309	1.00	29.50	C
[4682]	ATOM	4630	O	LEU	C	52	37.787	5.691	28.413	1.00	30.44	O
[4683]	ATOM	4631	CB	LEU	C	52	40.105	6.711	26.710	1.00	30.29	C
[4684]	ATOM	4632	CG	LEU	C	52	41.174	5.648	26.846	1.00	31.65	C
[4685]	ATOM	4633	CD1	LEU	C	52	42.523	6.269	26.638	1.00	31.88	C
[4686]	ATOM	4634	CD2	LEU	C	52	41.137	5.117	28.205	1.00	31.13	C
[4687]	ATOM	4635	N	THR	C	53	38.153	3.936	27.038	1.00	27.93	N
[4688]	ATOM	4636	CA	THR	C	53	37.549	3.029	28.009	1.00	27.17	C
[4689]	ATOM	4637	C	THR	C	53	38.620	2.130	28.603	1.00	27.60	C
[4690]	ATOM	4638	O	THR	C	53	39.593	1.735	27.882	1.00	28.21	O
[4691]	ATOM	4639	CB	THR	C	53	36.399	2.163	27.422	1.00	26.39	C
[4692]	ATOM	4640	OG1	THR	C	53	36.925	1.231	26.493	1.00	26.09	O
[4693]	ATOM	4641	CG2	THR	C	53	35.512	2.938	26.659	1.00	26.82	C
[4694]	ATOM	4642	N	TYR	C	54	38.461	1.824	29.902	1.00	25.95	N
[4695]	ATOM	4643	CA	TYR	C	54	39.323	0.860	30.574	1.00	25.87	C
[4696]	ATOM	4644	C	TYR	C	54	38.454	-0.147	31.427	1.00	26.36	C
[4697]	ATOM	4645	O	TYR	C	54	37.610	0.310	32.180	1.00	27.14	O
[4698]	ATOM	4646	CB	TYR	C	54	40.317	1.598	31.412	1.00	25.85	C
[4699]	ATOM	4647	CG	TYR	C	54	41.603	0.895	31.608	1.00	25.56	C
[4700]	ATOM	4648	CD1	TYR	C	54	41.684	-0.337	32.283	1.00	24.75	C
[4701]	ATOM	4649	CD2	TYR	C	54	42.767	1.466	31.135	1.00	24.10	C

[4702]	ATOM	4650	CE1	TYR	C	54	42.888	-0.992	32.480	1.00	23.49	C
[4703]	ATOM	4651	CE2	TYR	C	54	44.019	0.815	31.309	1.00	23.43	C
[4704]	ATOM	4652	CZ	TYR	C	54	44.058	-0.398	31.982	1.00	26.25	C
[4705]	ATOM	4653	OH	TYR	C	54	45.276	-1.016	32.109	1.00	28.75	O
[4706]	ATOM	4654	N	HIS	C	55	38.672	-1.482	31.281	1.00	24.62	N
[4707]	ATOM	4655	CA	HIS	C	55	37.784	-2.509	31.696	1.00	23.28	C
[4708]	ATOM	4656	C	HIS	C	55	38.143	-3.110	33.082	1.00	24.87	C
[4709]	ATOM	4657	O	HIS	C	55	39.293	-2.956	33.591	1.00	22.65	O
[4710]	ATOM	4658	CB	HIS	C	55	37.806	-3.637	30.680	1.00	22.57	C
[4711]	ATOM	4659	CG	HIS	C	55	39.126	-4.305	30.567	1.00	22.57	C
[4712]	ATOM	4660	ND1	HIS	C	55	39.584	-5.208	31.470	1.00	24.08	N
[4713]	ATOM	4661	CD2	HIS	C	55	40.140	-4.152	29.696	1.00	23.01	C
[4714]	ATOM	4662	CE1	HIS	C	55	40.796	-5.623	31.158	1.00	23.16	C
[4715]	ATOM	4663	NE2	HIS	C	55	41.176	-4.968	30.095	1.00	24.01	N
[4716]	ATOM	4664	N	ASP	C	56	37.154	-3.844	33.658	1.00	25.79	N
[4717]	ATOM	4665	CA	ASP	C	56	37.317	-4.475	34.919	1.00	26.68	C
[4718]	ATOM	4666	C	ASP	C	56	38.143	-5.747	34.841	1.00	26.81	C
[4719]	ATOM	4667	O	ASP	C	56	38.368	-6.265	33.801	1.00	26.40	O
[4720]	ATOM	4668	CB	ASP	C	56	35.962	-4.748	35.523	1.00	27.43	C
[4721]	ATOM	4669	CG	ASP	C	56	35.956	-4.579	37.057	1.00	30.74	C
[4722]	ATOM	4670	OD1	ASP	C	56	37.033	-4.719	37.682	1.00	30.49	O
[4723]	ATOM	4671	OD2	ASP	C	56	34.864	-4.356	37.652	1.00	31.76	O
[4724]	ATOM	4672	N	VAL	C	57	38.559	-6.247	35.998	1.00	27.98	N
[4725]	ATOM	4673	CA	VAL	C	57	39.317	-7.464	36.184	1.00	27.94	C
[4726]	ATOM	4674	C	VAL	C	57	38.468	-8.634	35.744	1.00	28.48	C
[4727]	ATOM	4675	O	VAL	C	57	37.342	-8.772	36.198	1.00	28.44	O
[4728]	ATOM	4676	CB	VAL	C	57	39.593	-7.666	37.703	1.00	28.03	C
[4729]	ATOM	4677	CG1	VAL	C	57	40.264	-8.945	37.959	1.00	27.82	C
[4730]	ATOM	4678	CG2	VAL	C	57	40.385	-6.572	38.254	1.00	25.04	C
[4731]	ATOM	4679	N	GLY	C	58	39.038	-9.485	34.888	1.00	28.55	N
[4732]	ATOM	4680	CA	GLY	C	58	38.423	-10.709	34.489	1.00	28.30	C
[4733]	ATOM	4681	C	GLY	C	58	37.981	-10.514	33.063	1.00	29.46	C
[4734]	ATOM	4682	O	GLY	C	58	37.759	-11.491	32.325	1.00	29.94	O
[4735]	ATOM	4683	N	LEU	C	59	37.870	-9.248	32.658	1.00	28.69	N
[4736]	ATOM	4684	CA	LEU	C	59	37.298	-8.923	31.380	1.00	27.91	C
[4737]	ATOM	4685	C	LEU	C	59	38.368	-8.326	30.502	1.00	28.77	C

[4738]	ATOM	4686	O	LEU	C	59	39.522	-8.074	30.929	1.00	28.67	O
[4739]	ATOM	4687	CB	LEU	C	59	36.201	-7.906	31.610	1.00	26.62	C
[4740]	ATOM	4688	CG	LEU	C	59	35.132	-8.342	32.612	1.00	25.55	C
[4741]	ATOM	4689	CD1	LEU	C	59	34.095	-7.296	32.684	1.00	23.13	C
[4742]	ATOM	4690	CD2	LEU	C	59	34.456	-9.757	32.402	1.00	21.88	C
[4743]	ATOM	4691	N	ASN	C	60	37.979	-8.007	29.289	1.00	29.40	N
[4744]	ATOM	4692	CA	ASN	C	60	38.733	-7.132	28.477	1.00	30.18	C
[4745]	ATOM	4693	C	ASN	C	60	37.704	-6.289	27.762	1.00	31.18	C
[4746]	ATOM	4694	O	ASN	C	60	36.510	-6.507	27.967	1.00	31.67	O
[4747]	ATOM	4695	CB	ASN	C	60	39.619	-7.960	27.556	1.00	30.45	C
[4748]	ATOM	4696	CG	ASN	C	60	38.855	-8.968	26.735	1.00	31.13	C
[4749]	ATOM	4697	OD1	ASN	C	60	37.607	-8.936	26.631	1.00	32.83	O
[4750]	ATOM	4698	ND2	ASN	C	60	39.586	-9.851	26.111	1.00	28.42	N
[4751]	ATOM	4699	N	TYR	C	61	38.144	-5.328	26.939	1.00	32.70	N
[4752]	ATOM	4700	CA	TYR	C	61	37.247	-4.478	26.147	1.00	33.55	C
[4753]	ATOM	4701	C	TYR	C	61	36.052	-5.302	25.596	1.00	34.33	C
[4754]	ATOM	4702	O	TYR	C	61	34.863	-4.994	25.802	1.00	33.22	O
[4755]	ATOM	4703	CB	TYR	C	61	37.971	-3.734	25.008	1.00	34.10	C
[4756]	ATOM	4704	CG	TYR	C	61	36.952	-3.291	23.967	1.00	36.95	C
[4757]	ATOM	4705	CD1	TYR	C	61	35.977	-2.342	24.289	1.00	39.50	C
[4758]	ATOM	4706	CD2	TYR	C	61	36.897	-3.883	22.683	1.00	38.72	C
[4759]	ATOM	4707	CE1	TYR	C	61	35.003	-1.960	23.387	1.00	40.12	C
[4760]	ATOM	4708	CE2	TYR	C	61	35.909	-3.546	21.790	1.00	41.32	C
[4761]	ATOM	4709	CZ	TYR	C	61	34.960	-2.569	22.153	1.00	43.01	C
[4762]	ATOM	4710	OH	TYR	C	61	33.958	-2.195	21.294	1.00	44.31	O
[4763]	ATOM	4711	N	LYS	C	62	36.382	-6.374	24.901	1.00	35.24	N
[4764]	ATOM	4712	CA	LYS	C	62	35.384	-7.085	24.210	1.00	36.08	C
[4765]	ATOM	4713	C	LYS	C	62	34.306	-7.574	25.135	1.00	35.43	C
[4766]	ATOM	4714	O	LYS	C	62	33.145	-7.442	24.819	1.00	36.03	O
[4767]	ATOM	4715	CB	LYS	C	62	36.036	-8.210	23.487	1.00	37.99	C
[4768]	ATOM	4716	CG	LYS	C	62	35.053	-9.064	22.733	1.00	42.78	C
[4769]	ATOM	4717	CD	LYS	C	62	35.645	-9.266	21.224	1.00	52.07	C
[4770]	ATOM	4718	CE	LYS	C	62	34.902	-10.557	20.493	1.00	52.46	C
[4771]	ATOM	4719	NZ	LYS	C	62	36.029	-11.592	20.416	1.00	55.11	N
[4772]	ATOM	4720	N	SER	C	63	34.651	-8.141	26.285	1.00	34.66	N
[4773]	ATOM	4721	CA	SER	C	63	33.570	-8.640	27.123	1.00	33.42	C

[4774]	ATOM	4722	C	SER	C	63	33.051	-7.611	28.127	1.00	32.79	C
[4775]	ATOM	4723	O	SER	C	63	32.109	-7.902	28.818	1.00	32.95	O
[4776]	ATOM	4724	CB	SER	C	63	33.975	-9.896	27.852	1.00	32.84	C
[4777]	ATOM	4725	OG	SER	C	63	35.056	-9.573	28.656	1.00	33.59	O
[4778]	ATOM	4726	N	CYS	C	64	33.664	-6.437	28.242	1.00	31.77	N
[4779]	ATOM	4727	CA	CYS	C	64	33.222	-5.508	29.244	1.00	31.41	C
[4780]	ATOM	4728	C	CYS	C	64	32.478	-4.367	28.628	1.00	31.70	C
[4781]	ATOM	4729	O	CYS	C	64	31.583	-3.875	29.217	1.00	31.91	O
[4782]	ATOM	4730	CB	CYS	C	64	34.425	-4.960	30.007	1.00	31.78	C
[4783]	ATOM	4731	SG	CYS	C	64	34.068	-3.711	31.306	1.00	31.42	S
[4784]	ATOM	4732	N	PHE	C	65	32.882	-3.922	27.460	1.00	31.89	N
[4785]	ATOM	4733	CA	PHE	C	65	32.378	-2.709	26.926	1.00	33.09	C
[4786]	ATOM	4734	C	PHE	C	65	31.823	-2.813	25.528	1.00	34.90	C
[4787]	ATOM	4735	O	PHE	C	65	31.181	-1.857	25.068	1.00	35.59	O
[4788]	ATOM	4736	CB	PHE	C	65	33.473	-1.688	26.835	1.00	32.59	C
[4789]	ATOM	4737	CG	PHE	C	65	33.735	-0.982	28.086	1.00	33.05	C
[4790]	ATOM	4738	CD1	PHE	C	65	32.776	-0.163	28.646	1.00	32.36	C
[4791]	ATOM	4739	CD2	PHE	C	65	34.968	-1.108	28.711	1.00	34.14	C
[4792]	ATOM	4740	CE1	PHE	C	65	33.034	0.507	29.819	1.00	32.56	C
[4793]	ATOM	4741	CE2	PHE	C	65	35.268	-0.389	29.898	1.00	33.29	C
[4794]	ATOM	4742	CZ	PHE	C	65	34.317	0.409	30.444	1.00	33.66	C
[4795]	ATOM	4743	N	GLN	C	66	32.077	-3.918	24.815	1.00	36.03	N
[4796]	ATOM	4744	CA	GLN	C	66	31.611	-4.028	23.429	1.00	36.43	C
[4797]	ATOM	4745	C	GLN	C	66	30.093	-4.062	23.313	1.00	36.62	C
[4798]	ATOM	4746	O	GLN	C	66	29.535	-3.402	22.453	1.00	37.14	O
[4799]	ATOM	4747	CB	GLN	C	66	32.154	-5.258	22.775	1.00	36.59	C
[4800]	ATOM	4748	CG	GLN	C	66	31.656	-5.444	21.321	1.00	37.77	C
[4801]	ATOM	4749	CD	GLN	C	66	32.480	-6.481	20.610	1.00	39.21	C
[4802]	ATOM	4750	OE1	GLN	C	66	33.418	-6.139	19.849	1.00	36.02	O
[4803]	ATOM	4751	NE2	GLN	C	66	32.212	-7.769	20.941	1.00	38.77	N
[4804]	ATOM	4752	N	PRO	C	67	29.427	-4.845	24.151	1.00	36.42	N
[4805]	ATOM	4753	CA	PRO	C	67	27.988	-4.687	24.024	1.00	37.31	C
[4806]	ATOM	4754	C	PRO	C	67	27.560	-3.198	24.146	1.00	38.28	C
[4807]	ATOM	4755	O	PRO	C	67	26.853	-2.661	23.290	1.00	38.43	O
[4808]	ATOM	4756	CB	PRO	C	67	27.425	-5.570	25.155	1.00	36.61	C
[4809]	ATOM	4757	CG	PRO	C	67	28.454	-6.668	25.313	1.00	36.69	C

[4810]	ATOM	4758	CD	PRO	C	67	29.806	-5.904	25.102	1.00	36.73	C
[4811]	ATOM	4759	N	LEU	C	68	28.023	-2.524	25.171	1.00	38.94	N
[4812]	ATOM	4760	CA	LEU	C	68	27.647	-1.150	25.284	1.00	39.20	C
[4813]	ATOM	4761	C	LEU	C	68	28.016	-0.406	23.995	1.00	39.59	C
[4814]	ATOM	4762	O	LEU	C	68	27.127	0.227	23.421	1.00	40.00	O
[4815]	ATOM	4763	CB	LEU	C	68	28.277	-0.499	26.508	1.00	38.90	C
[4816]	ATOM	4764	CG	LEU	C	68	27.847	0.921	26.663	1.00	38.92	C
[4817]	ATOM	4765	CD1	LEU	C	68	26.383	0.951	26.977	1.00	40.78	C
[4818]	ATOM	4766	CD2	LEU	C	68	28.668	1.503	27.753	1.00	39.34	C
[4819]	ATOM	4767	N	PHE	C	69	29.262	-0.472	23.514	1.00	38.17	N
[4820]	ATOM	4768	CA	PHE	C	69	29.578	0.359	22.359	1.00	38.38	C
[4821]	ATOM	4769	C	PHE	C	69	28.918	-0.036	21.040	1.00	39.96	C
[4822]	ATOM	4770	O	PHE	C	69	28.996	0.695	20.043	1.00	41.11	O
[4823]	ATOM	4771	CB	PHE	C	69	31.074	0.718	22.222	1.00	37.25	C
[4824]	ATOM	4772	CG	PHE	C	69	31.507	1.749	23.234	1.00	36.60	C
[4825]	ATOM	4773	CD1	PHE	C	69	31.588	1.414	24.594	1.00	36.73	C
[4826]	ATOM	4774	CD2	PHE	C	69	31.697	3.065	22.871	1.00	35.48	C
[4827]	ATOM	4775	CE1	PHE	C	69	31.875	2.369	25.561	1.00	35.90	C
[4828]	ATOM	4776	CE2	PHE	C	69	32.001	4.024	23.813	1.00	35.61	C
[4829]	ATOM	4777	CZ	PHE	C	69	32.081	3.682	25.186	1.00	36.88	C
[4830]	ATOM	4778	N	GLN	C	70	28.235	-1.166	21.008	1.00	40.68	N
[4831]	ATOM	4779	CA	GLN	C	70	27.595	-1.537	19.770	1.00	41.36	C
[4832]	ATOM	4780	C	GLN	C	70	26.097	-1.461	19.852	1.00	43.00	C
[4833]	ATOM	4781	O	GLN	C	70	25.428	-1.690	18.840	1.00	43.83	O
[4834]	ATOM	4782	CB	GLN	C	70	27.968	-2.921	19.353	1.00	40.58	C
[4835]	ATOM	4783	CG	GLN	C	70	29.279	-2.983	18.640	1.00	39.71	C
[4836]	ATOM	4784	CD	GLN	C	70	29.759	-4.434	18.424	1.00	41.99	C
[4837]	ATOM	4785	OE1	GLN	C	70	30.694	-4.631	17.846	1.00	41.03	O
[4838]	ATOM	4786	NE2	GLN	C	70	29.108	-5.395	18.903	1.00	38.24	N
[4839]	ATOM	4787	N	PHE	C	71	25.567	-1.184	21.043	1.00	43.88	N
[4840]	ATOM	4788	CA	PHE	C	71	24.175	-0.818	21.210	1.00	45.13	C
[4841]	ATOM	4789	C	PHE	C	71	23.879	0.329	20.277	1.00	45.80	C
[4842]	ATOM	4790	O	PHE	C	71	24.602	1.357	20.241	1.00	45.76	O
[4843]	ATOM	4791	CB	PHE	C	71	23.975	-0.352	22.628	1.00	46.07	C
[4844]	ATOM	4792	CG	PHE	C	71	22.560	-0.191	23.026	1.00	49.34	C
[4845]	ATOM	4793	CD1	PHE	C	71	21.671	-1.274	22.928	1.00	52.98	C

[4846]	ATOM	4794	CD2	PHE	C	71	22.110	1.000	23.564	1.00	51.18	C
[4847]	ATOM	4795	CE1	PHE	C	71	20.328	-1.151	23.334	1.00	52.96	C
[4848]	ATOM	4796	CE2	PHE	C	71	20.779	1.139	23.954	1.00	52.92	C
[4849]	ATOM	4797	CZ	PHE	C	71	19.876	0.054	23.839	1.00	53.05	C
[4850]	ATOM	4798	N	GLU	C	72	22.819	0.166	19.495	1.00	46.31	N
[4851]	ATOM	4799	CA	GLU	C	72	22.518	1.177	18.475	1.00	46.06	C
[4852]	ATOM	4800	C	GLU	C	72	22.411	2.627	19.015	1.00	44.75	C
[4853]	ATOM	4801	O	GLU	C	72	22.932	3.565	18.418	1.00	43.56	O
[4854]	ATOM	4802	CB	GLU	C	72	21.271	0.756	17.721	1.00	46.54	C
[4855]	ATOM	4803	CG	GLU	C	72	20.445	1.923	17.248	1.00	51.67	C
[4856]	ATOM	4804	CD	GLU	C	72	20.118	1.846	15.745	1.00	57.78	C
[4857]	ATOM	4805	OE1	GLU	C	72	19.518	0.772	15.398	1.00	59.82	O
[4858]	ATOM	4806	OE2	GLU	C	72	20.433	2.829	14.944	1.00	56.90	O
[4859]	ATOM	4807	N	ASP	C	73	21.759	2.820	20.143	1.00	43.58	N
[4860]	ATOM	4808	CA	ASP	C	73	21.680	4.159	20.659	1.00	44.47	C
[4861]	ATOM	4809	C	ASP	C	73	23.031	4.799	21.003	1.00	44.10	C
[4862]	ATOM	4810	O	ASP	C	73	23.240	6.029	20.869	1.00	43.87	O
[4863]	ATOM	4811	CB	ASP	C	73	20.766	4.199	21.867	1.00	44.91	C
[4864]	ATOM	4812	CG	ASP	C	73	19.382	3.796	21.525	1.00	47.52	C
[4865]	ATOM	4813	OD1	ASP	C	73	18.979	3.893	20.303	1.00	50.72	O
[4866]	ATOM	4814	OD2	ASP	C	73	18.722	3.373	22.481	1.00	49.18	O
[4867]	ATOM	4815	N	MET	C	74	23.945	3.948	21.455	1.00	43.81	N
[4868]	ATOM	4816	CA	MET	C	74	25.245	4.399	21.815	1.00	43.25	C
[4869]	ATOM	4817	C	MET	C	74	25.946	4.770	20.538	1.00	43.77	C
[4870]	ATOM	4818	O	MET	C	74	26.562	5.833	20.498	1.00	43.99	O
[4871]	ATOM	4819	CB	MET	C	74	25.952	3.343	22.647	1.00	42.72	C
[4872]	ATOM	4820	CG	MET	C	74	27.286	3.715	23.143	1.00	42.85	C
[4873]	ATOM	4821	SD	MET	C	74	27.390	5.248	24.066	1.00	41.43	S
[4874]	ATOM	4822	CE	MET	C	74	27.256	4.573	25.681	1.00	41.79	C
[4875]	ATOM	4823	N	GLN	C	75	25.794	3.957	19.488	1.00	44.22	N
[4876]	ATOM	4824	CA	GLN	C	75	26.401	4.255	18.204	1.00	45.05	C
[4877]	ATOM	4825	C	GLN	C	75	26.035	5.671	17.766	1.00	46.54	C
[4878]	ATOM	4826	O	GLN	C	75	26.888	6.495	17.427	1.00	46.96	O
[4879]	ATOM	4827	CB	GLN	C	75	25.950	3.257	17.160	1.00	45.29	C
[4880]	ATOM	4828	CG	GLN	C	75	26.882	2.100	16.914	1.00	45.02	C
[4881]	ATOM	4829	CD	GLN	C	75	28.337	2.541	16.640	1.00	46.73	C

[4882]	ATOM	4830	OE1	GLN	C	75	29.237	2.378	17.522	1.00	45.27	O
[4883]	ATOM	4831	NE2	GLN	C	75	28.587	3.067	15.418	1.00	45.70	N
[4884]	ATOM	4832	N	GLU	C	76	24.744	5.955	17.823	1.00	48.02	N
[4885]	ATOM	4833	CA	GLU	C	76	24.166	7.239	17.444	1.00	49.41	C
[4886]	ATOM	4834	C	GLU	C	76	24.948	8.399	18.050	1.00	48.67	C
[4887]	ATOM	4835	O	GLU	C	76	25.304	9.317	17.341	1.00	48.84	O
[4888]	ATOM	4836	CB	GLU	C	76	22.728	7.276	17.997	1.00	50.54	C
[4889]	ATOM	4837	CG	GLU	C	76	21.613	7.926	17.179	1.00	55.54	C
[4890]	ATOM	4838	CD	GLU	C	76	20.364	6.973	17.062	1.00	63.26	C
[4891]	ATOM	4839	OE1	GLU	C	76	19.261	7.259	17.672	1.00	64.98	O
[4892]	ATOM	4840	OE2	GLU	C	76	20.514	5.911	16.370	1.00	65.42	O
[4893]	ATOM	4841	N	ILE	C	77	25.175	8.343	19.363	1.00	47.87	N
[4894]	ATOM	4842	CA	ILE	C	77	25.805	9.404	20.139	1.00	47.39	C
[4895]	ATOM	4843	C	ILE	C	77	27.322	9.577	19.903	1.00	47.24	C
[4896]	ATOM	4844	O	ILE	C	77	27.843	10.715	19.858	1.00	47.18	O
[4897]	ATOM	4845	CB	ILE	C	77	25.673	9.057	21.621	1.00	47.69	C
[4898]	ATOM	4846	CG1	ILE	C	77	24.292	9.330	22.128	1.00	48.53	C
[4899]	ATOM	4847	CG2	ILE	C	77	26.666	9.805	22.503	1.00	46.99	C
[4900]	ATOM	4848	CD1	ILE	C	77	24.173	8.797	23.529	1.00	49.93	C
[4901]	ATOM	4849	N	ILE	C	78	28.030	8.443	19.797	1.00	46.59	N
[4902]	ATOM	4850	CA	ILE	C	78	29.488	8.476	19.740	1.00	45.78	C
[4903]	ATOM	4851	C	ILE	C	78	29.922	8.628	18.325	1.00	45.77	C
[4904]	ATOM	4852	O	ILE	C	78	31.162	8.567	18.070	1.00	45.86	O
[4905]	ATOM	4853	CB	ILE	C	78	30.169	7.218	20.303	1.00	45.87	C
[4906]	ATOM	4854	CG1	ILE	C	78	29.645	5.986	19.593	1.00	44.77	C
[4907]	ATOM	4855	CG2	ILE	C	78	29.992	7.130	21.820	1.00	44.86	C
[4908]	ATOM	4856	CD1	ILE	C	78	30.483	4.842	19.850	1.00	44.78	C
[4909]	ATOM	4857	N	GLN	C	79	28.932	8.848	17.417	1.00	45.26	N
[4910]	ATOM	4858	CA	GLN	C	79	29.240	9.159	15.989	1.00	44.85	C
[4911]	ATOM	4859	C	GLN	C	79	30.487	10.029	15.792	1.00	43.35	C
[4912]	ATOM	4860	O	GLN	C	79	31.138	9.992	14.763	1.00	43.42	O
[4913]	ATOM	4861	CB	GLN	C	79	28.060	9.455	15.078	1.00	45.95	C
[4914]	ATOM	4862	CG	GLN	C	79	28.263	8.761	13.700	1.00	49.25	C
[4915]	ATOM	4863	CD	GLN	C	79	28.700	7.215	13.847	1.00	54.53	C
[4916]	ATOM	4864	OE1	GLN	C	79	27.946	6.306	13.434	1.00	58.62	O
[4917]	ATOM	4865	NE2	GLN	C	79	29.898	6.947	14.424	1.00	50.21	N

[4918]	ATOM	4866	N	ASN	C	80	30.828	10.833	16.789	1.00	41.66	N
[4919]	ATOM	4867	CA	ASN	C	80	31.128	12.224	16.717	1.00	40.45	C
[4920]	ATOM	4868	C	ASN	C	80	32.469	12.349	17.467	1.00	39.84	C
[4921]	ATOM	4869	O	ASN	C	80	33.059	13.434	17.588	1.00	40.78	O
[4922]	ATOM	4870	CB	ASN	C	80	30.108	13.203	17.212	1.00	40.34	C
[4923]	ATOM	4871	CG	ASN	C	80	29.868	14.168	16.083	1.00	42.23	C
[4924]	ATOM	4872	OD1	ASN	C	80	29.540	13.655	14.983	1.00	41.14	O
[4925]	ATOM	4873	ND2	ASN	C	80	30.268	15.449	16.210	1.00	40.21	N
[4926]	ATOM	4874	N	PHE	C	81	32.939	11.192	17.937	1.00	38.25	N
[4927]	ATOM	4875	CA	PHE	C	81	34.092	11.133	18.743	1.00	37.47	C
[4928]	ATOM	4876	C	PHE	C	81	34.933	10.018	18.186	1.00	37.45	C
[4929]	ATOM	4877	O	PHE	C	81	34.350	9.110	17.575	1.00	37.01	O
[4930]	ATOM	4878	CB	PHE	C	81	33.645	10.713	20.126	1.00	37.09	C
[4931]	ATOM	4879	CG	PHE	C	81	32.857	11.712	20.855	1.00	35.14	C
[4932]	ATOM	4880	CD1	PHE	C	81	33.496	12.585	21.728	1.00	33.06	C
[4933]	ATOM	4881	CD2	PHE	C	81	31.495	11.692	20.798	1.00	33.93	C
[4934]	ATOM	4882	CE1	PHE	C	81	32.746	13.458	22.515	1.00	34.86	C
[4935]	ATOM	4883	CE2	PHE	C	81	30.752	12.555	21.542	1.00	33.86	C
[4936]	ATOM	4884	CZ	PHE	C	81	31.348	13.447	22.401	1.00	33.95	C
[4937]	ATOM	4885	N	VAL	C	82	36.259	10.069	18.445	1.00	37.57	N
[4938]	ATOM	4886	CA	VAL	C	82	37.135	8.895	18.303	1.00	38.23	C
[4939]	ATOM	4887	C	VAL	C	82	36.995	8.125	19.614	1.00	37.23	C
[4940]	ATOM	4888	O	VAL	C	82	36.837	8.749	20.682	1.00	37.29	O
[4941]	ATOM	4889	CB	VAL	C	82	38.598	9.250	18.309	1.00	38.51	C
[4942]	ATOM	4890	CG1	VAL	C	82	39.383	8.380	17.406	1.00	39.05	C
[4943]	ATOM	4891	CG2	VAL	C	82	38.768	10.657	17.970	1.00	43.61	C
[4944]	ATOM	4892	N	ARG	C	83	37.112	6.792	19.535	1.00	36.02	N
[4945]	ATOM	4893	CA	ARG	C	83	37.041	5.898	20.692	1.00	34.60	C
[4946]	ATOM	4894	C	ARG	C	83	38.341	5.153	20.776	1.00	34.40	C
[4947]	ATOM	4895	O	ARG	C	83	38.857	4.727	19.713	1.00	34.93	O
[4948]	ATOM	4896	CB	ARG	C	83	35.916	4.892	20.529	1.00	34.40	C
[4949]	ATOM	4897	CG	ARG	C	83	34.530	5.523	20.740	1.00	33.64	C
[4950]	ATOM	4898	CD	ARG	C	83	33.993	6.189	19.509	1.00	29.52	C
[4951]	ATOM	4899	NE	ARG	C	83	33.445	5.164	18.631	1.00	32.34	N
[4952]	ATOM	4900	CZ	ARG	C	83	33.136	5.357	17.341	1.00	29.17	C
[4953]	ATOM	4901	NH1	ARG	C	83	33.265	6.537	16.783	1.00	26.79	N



[4954]	ATOM	4902	NH2	ARG	C	83	32.677	4.349	16.634	1.00	26.63	N
[4955]	ATOM	4903	N	VAL	C	84	38.880	4.991	22.002	1.00	33.16	N
[4956]	ATOM	4904	CA	VAL	C	84	40.106	4.210	22.221	1.00	32.00	C
[4957]	ATOM	4905	C	VAL	C	84	39.733	3.186	23.290	1.00	30.94	C
[4958]	ATOM	4906	O	VAL	C	84	39.422	3.549	24.363	1.00	32.11	O
[4959]	ATOM	4907	CB	VAL	C	84	41.278	5.140	22.710	1.00	32.86	C
[4960]	ATOM	4908	CG1	VAL	C	84	42.645	4.454	22.670	1.00	31.22	C
[4961]	ATOM	4909	CG2	VAL	C	84	41.379	6.329	21.867	1.00	32.64	C
[4962]	ATOM	4910	N	HIS	C	85	39.744	1.908	22.993	1.00	29.81	N
[4963]	ATOM	4911	CA	HIS	C	85	39.340	0.901	23.946	1.00	29.47	C
[4964]	ATOM	4912	C	HIS	C	85	40.547	0.105	24.371	1.00	29.74	C
[4965]	ATOM	4913	O	HIS	C	85	41.071	-0.620	23.541	1.00	30.59	O
[4966]	ATOM	4914	CB	HIS	C	85	38.366	-0.031	23.300	1.00	28.26	C
[4967]	ATOM	4915	CG	HIS	C	85	37.093	0.641	22.906	1.00	29.28	C
[4968]	ATOM	4916	ND1	HIS	C	85	36.229	1.209	23.827	1.00	25.85	N
[4969]	ATOM	4917	CD2	HIS	C	85	36.566	0.900	21.680	1.00	28.25	C
[4970]	ATOM	4918	CE1	HIS	C	85	35.213	1.758	23.182	1.00	24.73	C
[4971]	ATOM	4919	NE2	HIS	C	85	35.403	1.608	21.877	1.00	26.13	N
[4972]	ATOM	4920	N	VAL	C	86	40.996	0.270	25.632	1.00	29.54	N
[4973]	ATOM	4921	CA	VAL	C	86	42.296	-0.192	26.099	1.00	29.64	C
[4974]	ATOM	4922	C	VAL	C	86	42.060	-1.574	26.620	1.00	30.95	C
[4975]	ATOM	4923	O	VAL	C	86	40.999	-1.836	27.126	1.00	32.13	O
[4976]	ATOM	4924	CB	VAL	C	86	42.878	0.717	27.207	1.00	29.35	C
[4977]	ATOM	4925	CG1	VAL	C	86	44.043	0.146	27.763	1.00	26.91	C
[4978]	ATOM	4926	CG2	VAL	C	86	43.265	2.022	26.684	1.00	29.27	C
[4979]	ATOM	4927	N	ASP	C	87	43.013	-2.489	26.436	1.00	32.63	N
[4980]	ATOM	4928	CA	ASP	C	87	42.990	-3.808	27.099	1.00	33.88	C
[4981]	ATOM	4929	C	ASP	C	87	44.166	-3.810	28.129	1.00	33.66	C
[4982]	ATOM	4930	O	ASP	C	87	45.310	-3.465	27.818	1.00	34.02	O
[4983]	ATOM	4931	CB	ASP	C	87	43.159	-4.986	26.108	1.00	33.87	C
[4984]	ATOM	4932	CG	ASP	C	87	41.911	-5.246	25.227	1.00	37.55	C
[4985]	ATOM	4933	OD1	ASP	C	87	40.772	-5.358	25.755	1.00	37.00	O
[4986]	ATOM	4934	OD2	ASP	C	87	42.104	-5.348	23.967	1.00	41.58	O
[4987]	ATOM	4935	N	ALA	C	88	43.895	-4.205	29.356	1.00	32.98	N
[4988]	ATOM	4936	CA	ALA	C	88	44.950	-4.193	30.291	1.00	32.54	C
[4989]	ATOM	4937	C	ALA	C	88	45.945	-5.239	29.781	1.00	32.29	C

[4990]	ATOM	4938	O	ALA	C	88	45.527	-6.244	29.184	1.00	30.48	O
[4991]	ATOM	4939	CB	ALA	C	88	44.424	-4.543	31.669	1.00	32.50	C
[4992]	ATOM	4940	N	PRO	C	89	47.260	-5.019	30.067	1.00	32.30	N
[4993]	ATOM	4941	CA	PRO	C	89	48.327	-5.873	29.604	1.00	32.49	C
[4994]	ATOM	4942	C	PRO	C	89	47.960	-7.286	29.941	1.00	32.76	C
[4995]	ATOM	4943	O	PRO	C	89	47.490	-7.519	31.088	1.00	32.80	O
[4996]	ATOM	4944	CB	PRO	C	89	49.480	-5.490	30.516	1.00	32.52	C
[4997]	ATOM	4945	CG	PRO	C	89	49.231	-4.139	30.857	1.00	32.67	C
[4998]	ATOM	4946	CD	PRO	C	89	47.775	-3.981	30.980	1.00	32.42	C
[4999]	ATOM	4947	N	GLY	C	90	48.162	-8.209	28.986	1.00	32.10	N
[5000]	ATOM	4948	CA	GLY	C	90	47.876	-9.625	29.203	1.00	31.62	C
[5001]	ATOM	4949	C	GLY	C	90	46.405	-9.964	29.088	1.00	32.94	C
[5002]	ATOM	4950	O	GLY	C	90	46.013	-11.156	29.196	1.00	32.51	O
[5003]	ATOM	4951	N	MET	C	91	45.555	-8.948	28.884	1.00	33.74	N
[5004]	ATOM	4952	CA	MET	C	91	44.091	-9.243	28.840	1.00	35.50	C
[5005]	ATOM	4953	C	MET	C	91	43.464	-9.311	27.444	1.00	37.05	C
[5006]	ATOM	4954	O	MET	C	91	42.313	-9.735	27.332	1.00	37.24	O
[5007]	ATOM	4955	CB	MET	C	91	43.258	-8.277	29.702	1.00	34.09	C
[5008]	ATOM	4956	CG	MET	C	91	43.841	-7.970	30.993	1.00	32.54	C
[5009]	ATOM	4957	SD	MET	C	91	43.974	-9.482	31.909	1.00	32.49	S
[5010]	ATOM	4958	CE	MET	C	91	45.477	-9.141	32.887	1.00	30.04	C
[5011]	ATOM	4959	N	GLU	C	92	44.203	-8.863	26.426	1.00	38.77	N
[5012]	ATOM	4960	CA	GLU	C	92	43.681	-8.809	25.078	1.00	41.94	C
[5013]	ATOM	4961	C	GLU	C	92	43.352	-10.188	24.508	1.00	44.00	C
[5014]	ATOM	4962	O	GLU	C	92	43.871	-11.204	24.976	1.00	44.72	O
[5015]	ATOM	4963	CB	GLU	C	92	44.632	-8.047	24.166	1.00	42.01	C
[5016]	ATOM	4964	CG	GLU	C	92	45.960	-8.731	23.926	1.00	44.42	C
[5017]	ATOM	4965	CD	GLU	C	92	47.058	-8.345	24.948	1.00	48.01	C
[5018]	ATOM	4966	OE1	GLU	C	92	46.882	-7.351	25.703	1.00	50.86	O
[5019]	ATOM	4967	OE2	GLU	C	92	48.101	-9.047	24.976	1.00	48.97	O
[5020]	ATOM	4968	N	GLU	C	93	42.456	-10.233	23.529	1.00	46.81	N
[5021]	ATOM	4969	CA	GLU	C	93	42.130	-11.508	22.902	1.00	49.56	C
[5022]	ATOM	4970	C	GLU	C	93	43.412	-12.184	22.439	1.00	49.13	C
[5023]	ATOM	4971	O	GLU	C	93	44.206	-11.549	21.746	1.00	49.00	O
[5024]	ATOM	4972	CB	GLU	C	93	41.164	-11.287	21.726	1.00	50.78	C
[5025]	ATOM	4973	CG	GLU	C	93	39.684	-11.246	22.168	1.00	57.39	C

[5026]	ATOM	4974	CD	GLU	C	93	39.237	-12.518	22.981	1.00	62.44	C
[5027]	ATOM	4975	OE1	GLU	C	93	39.589	-13.665	22.500	1.00	62.76	O
[5028]	ATOM	4976	OE2	GLU	C	93	38.575	-12.354	24.076	1.00	56.60	O
[5029]	ATOM	4977	N	GLY	C	94	43.625	-13.427	22.846	1.00	48.65	N
[5030]	ATOM	4978	CA	GLY	C	94	44.802	-14.182	22.424	1.00	49.06	C
[5031]	ATOM	4979	C	GLY	C	94	46.134	-13.802	23.091	1.00	49.56	C
[5032]	ATOM	4980	O	GLY	C	94	47.203	-14.004	22.524	1.00	50.34	O
[5033]	ATOM	4981	N	ALA	C	95	46.118	-13.230	24.289	1.00	49.22	N
[5034]	ATOM	4982	CA	ALA	C	95	47.379	-12.752	24.856	1.00	47.99	C
[5035]	ATOM	4983	C	ALA	C	95	48.287	-13.891	25.369	1.00	47.48	C
[5036]	ATOM	4984	O	ALA	C	95	47.819	-14.915	25.883	1.00	46.58	O
[5037]	ATOM	4985	CB	ALA	C	95	47.096	-11.772	25.923	1.00	47.60	C
[5038]	ATOM	4986	N	PRO	C	96	49.613	-13.735	25.211	1.00	47.28	N
[5039]	ATOM	4987	CA	PRO	C	96	50.520	-14.726	25.848	1.00	46.59	C
[5040]	ATOM	4988	C	PRO	C	96	50.435	-14.631	27.363	1.00	45.56	C
[5041]	ATOM	4989	O	PRO	C	96	50.319	-13.544	27.922	1.00	45.06	O
[5042]	ATOM	4990	CB	PRO	C	96	51.900	-14.323	25.354	1.00	45.57	C
[5043]	ATOM	4991	CG	PRO	C	96	51.796	-12.869	25.000	1.00	46.34	C
[5044]	ATOM	4992	CD	PRO	C	96	50.365	-12.687	24.495	1.00	47.50	C
[5045]	ATOM	4993	N	VAL	C	97	50.438	-15.796	27.985	1.00	45.07	N
[5046]	ATOM	4994	CA	VAL	C	97	50.421	-15.964	29.447	1.00	44.57	C
[5047]	ATOM	4995	C	VAL	C	97	51.761	-15.538	30.041	1.00	44.63	C
[5048]	ATOM	4996	O	VAL	C	97	52.779	-16.063	29.651	1.00	44.84	O
[5049]	ATOM	4997	CB	VAL	C	97	50.153	-17.418	29.821	1.00	43.93	C
[5050]	ATOM	4998	CG1	VAL	C	97	50.421	-17.635	31.248	1.00	44.20	C
[5051]	ATOM	4999	CG2	VAL	C	97	48.722	-17.768	29.532	1.00	43.15	C
[5052]	ATOM	5000	N	PHE	C	98	51.759	-14.564	30.957	1.00	44.80	N
[5053]	ATOM	5001	CA	PHE	C	98	52.989	-14.104	31.578	1.00	44.54	C
[5054]	ATOM	5002	C	PHE	C	98	53.675	-15.276	32.268	1.00	44.62	C
[5055]	ATOM	5003	O	PHE	C	98	52.984	-16.154	32.769	1.00	44.47	O
[5056]	ATOM	5004	CB	PHE	C	98	52.696	-13.020	32.571	1.00	43.90	C
[5057]	ATOM	5005	CG	PHE	C	98	52.344	-11.753	31.935	1.00	45.39	C
[5058]	ATOM	5006	CD1	PHE	C	98	53.172	-11.192	30.927	1.00	44.69	C
[5059]	ATOM	5007	CD2	PHE	C	98	51.180	-11.076	32.308	1.00	46.55	C
[5060]	ATOM	5008	CE1	PHE	C	98	52.851	-9.978	30.316	1.00	42.43	C
[5061]	ATOM	5009	CE2	PHE	C	98	50.879	-9.869	31.697	1.00	44.98	C

[5062]	ATOM	5010	CZ	PHE	C	98	51.746	-9.336	30.694	1.00	42.06	C
[5063]	ATOM	5011	N	PRO	C	99	55.031	-15.334	32.232	1.00	44.20	N
[5064]	ATOM	5012	CA	PRO	C	99	55.763	-16.392	32.942	1.00	43.42	C
[5065]	ATOM	5013	C	PRO	C	99	55.593	-16.344	34.450	1.00	42.16	C
[5066]	ATOM	5014	O	PRO	C	99	55.249	-15.345	35.021	1.00	40.67	O
[5067]	ATOM	5015	CB	PRO	C	99	57.201	-16.082	32.608	1.00	43.80	C
[5068]	ATOM	5016	CG	PRO	C	99	57.168	-14.574	32.191	1.00	44.56	C
[5069]	ATOM	5017	CD	PRO	C	99	55.923	-14.461	31.461	1.00	44.14	C
[5070]	ATOM	5018	N	LEU	C	100	55.852	-17.459	35.077	1.00	41.82	N
[5071]	ATOM	5019	CA	LEU	C	100	55.941	-17.511	36.509	1.00	41.87	C
[5072]	ATOM	5020	C	LEU	C	100	56.935	-16.444	37.030	1.00	42.03	C
[5073]	ATOM	5021	O	LEU	C	100	58.023	-16.190	36.422	1.00	41.19	O
[5074]	ATOM	5022	CB	LEU	C	100	56.382	-18.898	36.953	1.00	41.73	C
[5075]	ATOM	5023	CG	LEU	C	100	55.684	-19.289	38.270	1.00	44.60	C
[5076]	ATOM	5024	CD1	LEU	C	100	54.382	-20.260	37.973	1.00	45.73	C
[5077]	ATOM	5025	CD2	LEU	C	100	56.640	-19.893	39.333	1.00	44.19	C
[5078]	ATOM	5026	N	GLY	C	101	56.537	-15.827	38.154	1.00	41.94	N
[5079]	ATOM	5027	CA	GLY	C	101	57.255	-14.718	38.788	1.00	41.41	C
[5080]	ATOM	5028	C	GLY	C	101	57.231	-13.370	38.085	1.00	41.91	C
[5081]	ATOM	5029	O	GLY	C	101	57.834	-12.421	38.548	1.00	42.38	O
[5082]	ATOM	5030	N	TYR	C	102	56.543	-13.263	36.959	1.00	42.10	N
[5083]	ATOM	5031	CA	TYR	C	102	56.138	-11.957	36.403	1.00	41.87	C
[5084]	ATOM	5032	C	TYR	C	102	55.567	-10.923	37.418	1.00	41.71	C
[5085]	ATOM	5033	O	TYR	C	102	54.710	-11.186	38.275	1.00	41.82	O
[5086]	ATOM	5034	CB	TYR	C	102	55.139	-12.124	35.270	1.00	41.89	C
[5087]	ATOM	5035	CG	TYR	C	102	55.044	-10.894	34.440	1.00	42.94	C
[5088]	ATOM	5036	CD1	TYR	C	102	55.909	-10.690	33.387	1.00	41.82	C
[5089]	ATOM	5037	CD2	TYR	C	102	54.085	-9.931	34.686	1.00	45.26	C
[5090]	ATOM	5038	CE1	TYR	C	102	55.850	-9.551	32.617	1.00	41.59	C
[5091]	ATOM	5039	CE2	TYR	C	102	54.036	-8.772	33.912	1.00	44.92	C
[5092]	ATOM	5040	CZ	TYR	C	102	54.931	-8.594	32.895	1.00	42.60	C
[5093]	ATOM	5041	OH	TYR	C	102	54.857	-7.459	32.165	1.00	42.02	O
[5094]	ATOM	5042	N	GLN	C	103	56.051	-9.716	37.250	1.00	40.72	N
[5095]	ATOM	5043	CA	GLN	C	103	55.694	-8.586	38.045	1.00	39.88	C
[5096]	ATOM	5044	C	GLN	C	103	54.666	-7.746	37.330	1.00	38.59	C
[5097]	ATOM	5045	O	GLN	C	103	55.022	-6.807	36.586	1.00	37.28	O

[5098]	ATOM	5046	CB	GLN	C	103	56.862	-7.644	38.059	1.00	40.57	C
[5099]	ATOM	5047	CG	GLN	C	103	58.218	-8.145	38.405	1.00	44.54	C
[5100]	ATOM	5048	CD	GLN	C	103	58.691	-7.730	39.794	1.00	49.45	C
[5101]	ATOM	5049	OE1	GLN	C	103	58.983	-8.609	40.642	1.00	50.37	O
[5102]	ATOM	5050	NE2	GLN	C	103	58.722	-6.390	40.063	1.00	48.77	N
[5103]	ATOM	5051	N	TYR	C	104	53.398	-8.057	37.539	1.00	37.08	N
[5104]	ATOM	5052	CA	TYR	C	104	52.374	-7.314	36.893	1.00	35.63	C
[5105]	ATOM	5053	C	TYR	C	104	52.387	-5.896	37.464	1.00	35.10	C
[5106]	ATOM	5054	O	TYR	C	104	52.685	-5.742	38.614	1.00	35.47	O
[5107]	ATOM	5055	CB	TYR	C	104	51.042	-8.001	37.130	1.00	34.83	C
[5108]	ATOM	5056	CG	TYR	C	104	49.994	-7.563	36.121	1.00	33.87	C
[5109]	ATOM	5057	CD1	TYR	C	104	50.046	-8.044	34.815	1.00	30.43	C
[5110]	ATOM	5058	CD2	TYR	C	104	48.964	-6.659	36.457	1.00	31.63	C
[5111]	ATOM	5059	CE1	TYR	C	104	49.141	-7.669	33.893	1.00	31.04	C
[5112]	ATOM	5060	CE2	TYR	C	104	48.012	-6.288	35.512	1.00	31.09	C
[5113]	ATOM	5061	CZ	TYR	C	104	48.129	-6.794	34.250	1.00	31.86	C
[5114]	ATOM	5062	OH	TYR	C	104	47.246	-6.469	33.279	1.00	30.84	O
[5115]	ATOM	5063	N	PRO	C	105	52.108	-4.859	36.637	1.00	34.68	N
[5116]	ATOM	5064	CA	PRO	C	105	52.027	-3.485	37.077	1.00	33.46	C
[5117]	ATOM	5065	C	PRO	C	105	50.942	-3.350	38.124	1.00	33.74	C
[5118]	ATOM	5066	O	PRO	C	105	49.993	-4.129	38.118	1.00	33.40	O
[5119]	ATOM	5067	CB	PRO	C	105	51.576	-2.761	35.827	1.00	33.64	C
[5120]	ATOM	5068	CG	PRO	C	105	51.830	-3.612	34.738	1.00	32.37	C
[5121]	ATOM	5069	CD	PRO	C	105	51.892	-4.974	35.178	1.00	34.19	C
[5122]	ATOM	5070	N	SER	C	106	51.090	-2.373	39.015	1.00	34.19	N
[5123]	ATOM	5071	CA	SER	C	106	50.084	-1.985	39.983	1.00	34.15	C
[5124]	ATOM	5072	C	SER	C	106	49.104	-1.072	39.262	1.00	33.74	C
[5125]	ATOM	5073	O	SER	C	106	49.403	-0.617	38.153	1.00	33.37	O
[5126]	ATOM	5074	CB	SER	C	106	50.755	-1.193	41.081	1.00	34.29	C
[5127]	ATOM	5075	OG	SER	C	106	51.589	-0.232	40.464	1.00	36.83	O
[5128]	ATOM	5076	N	LEU	C	107	47.953	-0.807	39.887	1.00	33.09	N
[5129]	ATOM	5077	CA	LEU	C	107	46.961	0.058	39.277	1.00	32.63	C
[5130]	ATOM	5078	C	LEU	C	107	47.578	1.410	38.980	1.00	32.88	C
[5131]	ATOM	5079	O	LEU	C	107	47.268	1.984	37.988	1.00	32.90	O
[5132]	ATOM	5080	CB	LEU	C	107	45.691	0.187	40.149	1.00	32.37	C
[5133]	ATOM	5081	CG	LEU	C	107	44.914	-1.091	40.511	1.00	32.40	C

[5134]	ATOM	5082	CD1	LEU	C	107	43.654	-0.768	41.223	1.00	32.19	C
[5135]	ATOM	5083	CD2	LEU	C	107	44.619	-1.871	39.293	1.00	29.95	C
[5136]	ATOM	5084	N	ASP	C	108	48.489	1.903	39.828	1.00	34.39	N
[5137]	ATOM	5085	CA	ASP	C	108	49.192	3.171	39.589	1.00	34.85	C
[5138]	ATOM	5086	C	ASP	C	108	49.987	3.073	38.290	1.00	34.59	C
[5139]	ATOM	5087	O	ASP	C	108	49.913	3.909	37.425	1.00	34.89	O
[5140]	ATOM	5088	CB	ASP	C	108	50.028	3.536	40.797	1.00	34.47	C
[5141]	ATOM	5089	CG	ASP	C	108	49.182	4.187	41.900	1.00	39.20	C
[5142]	ATOM	5090	OD1	ASP	C	108	48.019	4.455	41.623	1.00	42.33	O
[5143]	ATOM	5091	OD2	ASP	C	108	49.627	4.469	43.051	1.00	42.74	O
[5144]	ATOM	5092	N	GLN	C	109	50.681	1.983	38.118	1.00	34.24	N
[5145]	ATOM	5093	CA	GLN	C	109	51.539	1.834	37.005	1.00	34.04	C
[5146]	ATOM	5094	C	GLN	C	109	50.710	1.632	35.766	1.00	34.92	C
[5147]	ATOM	5095	O	GLN	C	109	51.077	2.106	34.704	1.00	36.33	O
[5148]	ATOM	5096	CB	GLN	C	109	52.461	0.655	37.257	1.00	33.88	C
[5149]	ATOM	5097	CG	GLN	C	109	53.298	0.857	38.525	1.00	32.40	C
[5150]	ATOM	5098	CD	GLN	C	109	54.397	-0.235	38.756	1.00	34.10	C
[5151]	ATOM	5099	OE1	GLN	C	109	54.119	-1.454	38.677	1.00	33.67	O
[5152]	ATOM	5100	NE2	GLN	C	109	55.644	0.211	39.077	1.00	29.07	N
[5153]	ATOM	5101	N	LEU	C	110	49.573	0.955	35.863	1.00	35.54	N
[5154]	ATOM	5102	CA	LEU	C	110	48.616	0.922	34.730	1.00	35.35	C
[5155]	ATOM	5103	C	LEU	C	110	48.149	2.294	34.351	1.00	34.52	C
[5156]	ATOM	5104	O	LEU	C	110	47.896	2.549	33.242	1.00	35.41	O
[5157]	ATOM	5105	CB	LEU	C	110	47.422	-0.011	35.030	1.00	35.47	C
[5158]	ATOM	5106	CG	LEU	C	110	47.846	-1.498	35.240	1.00	37.38	C
[5159]	ATOM	5107	CD1	LEU	C	110	46.761	-2.290	35.921	1.00	37.16	C
[5160]	ATOM	5108	CD2	LEU	C	110	48.312	-2.255	33.988	1.00	35.89	C
[5161]	ATOM	5109	N	ALA	C	111	48.028	3.178	35.287	1.00	34.27	N
[5162]	ATOM	5110	CA	ALA	C	111	47.502	4.431	34.975	1.00	35.63	C
[5163]	ATOM	5111	C	ALA	C	111	48.598	5.273	34.315	1.00	36.65	C
[5164]	ATOM	5112	O	ALA	C	111	48.341	6.215	33.536	1.00	36.73	O
[5165]	ATOM	5113	CB	ALA	C	111	47.012	5.056	36.242	1.00	35.55	C
[5166]	ATOM	5114	N	ASP	C	112	49.832	4.942	34.661	1.00	37.41	N
[5167]	ATOM	5115	CA	ASP	C	112	51.000	5.549	34.035	1.00	38.84	C
[5168]	ATOM	5116	C	ASP	C	112	51.255	5.124	32.607	1.00	38.73	C
[5169]	ATOM	5117	O	ASP	C	112	51.999	5.762	31.963	1.00	38.34	O

[5170]	ATOM	5118	CB	ASP	C	112	52.263	5.274	34.823	1.00	39.25	C
[5171]	ATOM	5119	CG	ASP	C	112	52.387	6.181	35.988	1.00	42.67	C
[5172]	ATOM	5120	OD1	ASP	C	112	51.641	7.213	35.949	1.00	47.05	O
[5173]	ATOM	5121	OD2	ASP	C	112	53.181	5.855	36.936	1.00	45.24	O
[5174]	ATOM	5122	N	MET	C	113	50.669	4.038	32.137	1.00	38.93	N
[5175]	ATOM	5123	CA	MET	C	113	50.792	3.671	30.746	1.00	39.75	C
[5176]	ATOM	5124	C	MET	C	113	49.883	4.477	29.810	1.00	40.80	C
[5177]	ATOM	5125	O	MET	C	113	49.972	4.321	28.556	1.00	41.39	O
[5178]	ATOM	5126	CB	MET	C	113	50.468	2.222	30.523	1.00	38.92	C
[5179]	ATOM	5127	CG	MET	C	113	51.004	1.338	31.494	1.00	38.78	C
[5180]	ATOM	5128	SD	MET	C	113	50.802	-0.251	30.707	1.00	40.96	S
[5181]	ATOM	5129	CE	MET	C	113	51.248	-1.315	32.054	1.00	44.13	C
[5182]	ATOM	5130	N	ILE	C	114	48.979	5.284	30.361	1.00	40.90	N
[5183]	ATOM	5131	CA	ILE	C	114	48.052	5.933	29.481	1.00	40.81	C
[5184]	ATOM	5132	C	ILE	C	114	48.738	7.000	28.677	1.00	41.09	C
[5185]	ATOM	5133	O	ILE	C	114	48.578	6.996	27.494	1.00	41.44	O
[5186]	ATOM	5134	CB	ILE	C	114	46.793	6.331	30.193	1.00	40.85	C
[5187]	ATOM	5135	CG1	ILE	C	114	46.108	5.047	30.620	1.00	41.88	C
[5188]	ATOM	5136	CG2	ILE	C	114	45.842	7.119	29.312	1.00	40.00	C
[5189]	ATOM	5137	CD1	ILE	C	114	44.699	5.310	31.077	1.00	44.97	C
[5190]	ATOM	5138	N	PRO	C	115	49.528	7.901	29.296	1.00	41.79	N
[5191]	ATOM	5139	CA	PRO	C	115	50.188	8.878	28.423	1.00	42.39	C
[5192]	ATOM	5140	C	PRO	C	115	50.862	8.203	27.186	1.00	42.81	C
[5193]	ATOM	5141	O	PRO	C	115	50.814	8.755	26.068	1.00	42.94	O
[5194]	ATOM	5142	CB	PRO	C	115	51.209	9.562	29.350	1.00	41.48	C
[5195]	ATOM	5143	CG	PRO	C	115	50.660	9.466	30.661	1.00	40.71	C
[5196]	ATOM	5144	CD	PRO	C	115	49.878	8.163	30.706	1.00	41.80	C
[5197]	ATOM	5145	N	CYS	C	116	51.417	7.006	27.341	1.00	43.13	N
[5198]	ATOM	5146	CA	CYS	C	116	52.031	6.346	26.170	1.00	44.39	C
[5199]	ATOM	5147	C	CYS	C	116	51.099	6.015	25.030	1.00	44.30	C
[5200]	ATOM	5148	O	CYS	C	116	51.564	5.960	23.867	1.00	45.36	O
[5201]	ATOM	5149	CB	CYS	C	116	52.749	5.062	26.523	1.00	44.26	C
[5202]	ATOM	5150	SG	CYS	C	116	54.106	5.438	27.549	1.00	48.53	S
[5203]	ATOM	5151	N	VAL	C	117	49.834	5.726	25.372	1.00	43.15	N
[5204]	ATOM	5152	CA	VAL	C	117	48.768	5.491	24.417	1.00	41.60	C
[5205]	ATOM	5153	C	VAL	C	117	48.350	6.803	23.795	1.00	42.17	C

[5206]	ATOM	5154	O	VAL	C	117	48.171	6.896	22.576	1.00	42.09	O
[5207]	ATOM	5155	CB	VAL	C	117	47.543	4.853	25.109	1.00	41.37	C
[5208]	ATOM	5156	CG1	VAL	C	117	46.407	4.687	24.147	1.00	38.85	C
[5209]	ATOM	5157	CG2	VAL	C	117	47.910	3.498	25.587	1.00	39.62	C
[5210]	ATOM	5158	N	LEU	C	118	48.165	7.811	24.631	1.00	42.02	N
[5211]	ATOM	5159	CA	LEU	C	118	47.709	9.070	24.132	1.00	42.09	C
[5212]	ATOM	5160	C	LEU	C	118	48.757	9.695	23.237	1.00	43.21	C
[5213]	ATOM	5161	O	LEU	C	118	48.432	10.221	22.145	1.00	44.23	O
[5214]	ATOM	5162	CB	LEU	C	118	47.325	10.001	25.266	1.00	41.63	C
[5215]	ATOM	5163	CG	LEU	C	118	46.030	9.560	25.949	1.00	39.80	C
[5216]	ATOM	5164	CD1	LEU	C	118	45.561	10.593	26.871	1.00	38.53	C
[5217]	ATOM	5165	CD2	LEU	C	118	44.975	9.334	24.899	1.00	37.51	C
[5218]	ATOM	5166	N	GLN	C	119	50.024	9.631	23.662	1.00	43.45	N
[5219]	ATOM	5167	CA	GLN	C	119	51.115	10.196	22.838	1.00	42.88	C
[5220]	ATOM	5168	C	GLN	C	119	51.182	9.477	21.498	1.00	41.30	C
[5221]	ATOM	5169	O	GLN	C	119	51.382	10.060	20.452	1.00	43.30	O
[5222]	ATOM	5170	CB	GLN	C	119	52.461	10.202	23.573	1.00	42.92	C
[5223]	ATOM	5171	CG	GLN	C	119	52.625	11.556	24.302	1.00	46.76	C
[5224]	ATOM	5172	CD	GLN	C	119	53.383	11.477	25.668	1.00	48.22	C
[5225]	ATOM	5173	OE1	GLN	C	119	54.406	10.798	25.795	1.00	48.13	O
[5226]	ATOM	5174	NE2	GLN	C	119	52.860	12.181	26.677	1.00	45.23	N
[5227]	ATOM	5175	N	TYR	C	120	50.956	8.204	21.499	1.00	38.98	N
[5228]	ATOM	5176	CA	TYR	C	120	51.165	7.528	20.290	1.00	37.28	C
[5229]	ATOM	5177	C	TYR	C	120	50.065	7.861	19.341	1.00	37.71	C
[5230]	ATOM	5178	O	TYR	C	120	50.219	7.733	18.154	1.00	39.10	O
[5231]	ATOM	5179	CB	TYR	C	120	51.196	6.058	20.600	1.00	36.57	C
[5232]	ATOM	5180	CG	TYR	C	120	50.908	5.162	19.469	1.00	35.82	C
[5233]	ATOM	5181	CD1	TYR	C	120	49.687	5.007	18.998	1.00	35.10	C
[5234]	ATOM	5182	CD2	TYR	C	120	51.861	4.474	18.858	1.00	34.00	C
[5235]	ATOM	5183	CE1	TYR	C	120	49.417	4.139	17.861	1.00	37.45	C
[5236]	ATOM	5184	CE2	TYR	C	120	51.603	3.624	17.747	1.00	33.68	C
[5237]	ATOM	5185	CZ	TYR	C	120	50.386	3.442	17.243	1.00	37.27	C
[5238]	ATOM	5186	OH	TYR	C	120	50.076	2.515	16.208	1.00	38.13	O
[5239]	ATOM	5187	N	LEU	C	121	48.926	8.295	19.820	1.00	38.42	N
[5240]	ATOM	5188	CA	LEU	C	121	47.839	8.558	18.871	1.00	38.90	C
[5241]	ATOM	5189	C	LEU	C	121	47.672	10.017	18.634	1.00	40.12	C



[5242]	ATOM	5190	O	LEU	C	121	46.788	10.437	17.881	1.00	40.85	O
[5243]	ATOM	5191	CB	LEU	C	121	46.535	8.105	19.461	1.00	38.07	C
[5244]	ATOM	5192	CG	LEU	C	121	46.369	6.615	19.597	1.00	37.24	C
[5245]	ATOM	5193	CD1	LEU	C	121	45.234	6.496	20.519	1.00	37.91	C
[5246]	ATOM	5194	CD2	LEU	C	121	46.025	6.003	18.293	1.00	35.57	C
[5247]	ATOM	5195	N	ASN	C	122	48.464	10.782	19.370	1.00	41.70	N
[5248]	ATOM	5196	CA	ASN	C	122	48.353	12.226	19.399	1.00	43.35	C
[5249]	ATOM	5197	C	ASN	C	122	47.052	12.749	19.843	1.00	43.63	C
[5250]	ATOM	5198	O	ASN	C	122	46.626	13.788	19.312	1.00	44.44	O
[5251]	ATOM	5199	CB	ASN	C	122	48.566	12.801	18.009	1.00	44.03	C
[5252]	ATOM	5200	CG	ASN	C	122	50.043	13.008	17.715	1.00	46.71	C
[5253]	ATOM	5201	OD1	ASN	C	122	50.787	13.750	18.480	1.00	47.24	O
[5254]	ATOM	5202	ND2	ASN	C	122	50.505	12.344	16.615	1.00	45.73	N
[5255]	ATOM	5203	N	PHE	C	123	46.388	12.076	20.769	1.00	43.27	N
[5256]	ATOM	5204	CA	PHE	C	123	45.252	12.752	21.367	1.00	43.78	C
[5257]	ATOM	5205	C	PHE	C	123	45.732	13.496	22.586	1.00	43.96	C
[5258]	ATOM	5206	O	PHE	C	123	46.723	13.101	23.238	1.00	44.48	O
[5259]	ATOM	5207	CB	PHE	C	123	44.128	11.810	21.700	1.00	43.46	C
[5260]	ATOM	5208	CG	PHE	C	123	43.659	11.017	20.522	1.00	44.92	C
[5261]	ATOM	5209	CD1	PHE	C	123	43.770	11.547	19.227	1.00	40.99	C
[5262]	ATOM	5210	CD2	PHE	C	123	43.128	9.691	20.706	1.00	45.86	C
[5263]	ATOM	5211	CE1	PHE	C	123	43.330	10.827	18.133	1.00	41.44	C
[5264]	ATOM	5212	CE2	PHE	C	123	42.666	8.943	19.578	1.00	44.93	C
[5265]	ATOM	5213	CZ	PHE	C	123	42.759	9.522	18.288	1.00	42.68	C
[5266]	ATOM	5214	N	SER	C	124	45.058	14.584	22.913	1.00	43.68	N
[5267]	ATOM	5215	CA	SER	C	124	45.528	15.326	24.051	1.00	43.49	C
[5268]	ATOM	5216	C	SER	C	124	44.444	15.460	25.130	1.00	42.50	C
[5269]	ATOM	5217	O	SER	C	124	44.730	15.857	26.265	1.00	42.53	O
[5270]	ATOM	5218	CB	SER	C	124	46.036	16.695	23.607	1.00	43.95	C
[5271]	ATOM	5219	OG	SER	C	124	45.015	17.335	22.880	1.00	46.23	O
[5272]	ATOM	5220	N	THR	C	125	43.204	15.141	24.784	1.00	40.77	N
[5273]	ATOM	5221	CA	THR	C	125	42.146	15.072	25.792	1.00	38.90	C
[5274]	ATOM	5222	C	THR	C	125	41.221	13.837	25.621	1.00	37.10	C
[5275]	ATOM	5223	O	THR	C	125	40.972	13.390	24.530	1.00	36.95	O
[5276]	ATOM	5224	CB	THR	C	125	41.327	16.360	25.770	1.00	39.45	C
[5277]	ATOM	5225	OG1	THR	C	125	40.903	16.614	24.434	1.00	40.47	O

[5278]	ATOM	5226	CG2	THR	C	125	42.134	17.532	26.245	1.00	38.72	C
[5279]	ATOM	5227	N	ILE	C	126	40.747	13.282	26.723	1.00	35.60	N
[5280]	ATOM	5228	CA	ILE	C	126	39.860	12.107	26.728	1.00	34.03	C
[5281]	ATOM	5229	C	ILE	C	126	38.621	12.331	27.607	1.00	33.45	C
[5282]	ATOM	5230	O	ILE	C	126	38.639	13.179	28.512	1.00	34.38	O
[5283]	ATOM	5231	CB	ILE	C	126	40.597	10.878	27.293	1.00	34.30	C
[5284]	ATOM	5232	CG1	ILE	C	126	40.890	11.088	28.787	1.00	32.30	C
[5285]	ATOM	5233	CG2	ILE	C	126	41.882	10.553	26.463	1.00	32.64	C
[5286]	ATOM	5234	CD1	ILE	C	126	41.271	9.852	29.515	1.00	29.42	C
[5287]	ATOM	5235	N	ILE	C	127	37.555	11.585	27.370	1.00	31.65	N
[5288]	ATOM	5236	CA	ILE	C	127	36.503	11.452	28.356	0.80	29.74	C
[5289]	ATOM	5237	C	ILE	C	127	36.709	10.037	28.708	1.00	29.47	C
[5290]	ATOM	5238	O	ILE	C	127	36.696	9.226	27.818	1.00	29.78	O
[5291]	ATOM	5239	CB	ILE	C	127	35.114	11.665	27.766	0.80	29.11	C
[5292]	ATOM	5240	CG1	ILE	C	127	34.867	13.148	27.629	0.80	27.71	C
[5293]	ATOM	5241	CG2	ILE	C	127	34.078	11.174	28.718	0.80	27.48	C
[5294]	ATOM	5242	CD1	ILE	C	127	33.853	13.494	26.684	0.80	24.50	C
[5295]	ATOM	5243	N	GLY	C	128	36.972	9.711	29.971	1.00	29.68	N
[5296]	ATOM	5244	CA	GLY	C	128	37.253	8.281	30.345	1.00	29.31	C
[5297]	ATOM	5245	C	GLY	C	128	36.034	7.506	30.779	1.00	28.58	C
[5298]	ATOM	5246	O	GLY	C	128	35.178	8.029	31.497	1.00	28.79	O
[5299]	ATOM	5247	N	VAL	C	129	35.917	6.259	30.361	1.00	28.13	N
[5300]	ATOM	5248	CA	VAL	C	129	34.842	5.430	30.935	1.00	27.35	C
[5301]	ATOM	5249	C	VAL	C	129	35.537	4.192	31.475	1.00	27.65	C
[5302]	ATOM	5250	O	VAL	C	129	36.256	3.602	30.762	1.00	28.51	O
[5303]	ATOM	5251	CB	VAL	C	129	33.779	5.098	29.885	1.00	27.16	C
[5304]	ATOM	5252	CG1	VAL	C	129	32.756	4.216	30.416	1.00	23.36	C
[5305]	ATOM	5253	CG2	VAL	C	129	33.094	6.372	29.372	1.00	26.81	C
[5306]	ATOM	5254	N	GLY	C	130	35.383	3.838	32.729	1.00	27.33	N
[5307]	ATOM	5255	CA	GLY	C	130	35.906	2.613	33.188	1.00	28.24	C
[5308]	ATOM	5256	C	GLY	C	130	34.968	1.877	34.129	1.00	29.50	C
[5309]	ATOM	5257	O	GLY	C	130	33.974	2.458	34.559	1.00	30.75	O
[5310]	ATOM	5258	N	VAL	C	131	35.284	0.615	34.452	1.00	28.28	N
[5311]	ATOM	5259	CA	VAL	C	131	34.522	-0.193	35.352	1.00	27.69	C
[5312]	ATOM	5260	C	VAL	C	131	35.510	-0.815	36.346	1.00	28.16	C
[5313]	ATOM	5261	O	VAL	C	131	36.535	-1.374	35.927	1.00	28.61	O

[5314]	ATOM	5262	CB	VAL	C	131	33.773	-1.403	34.577	1.00	28.41	C
[5315]	ATOM	5263	CG1	VAL	C	131	33.099	-2.384	35.541	1.00	24.82	C
[5316]	ATOM	5264	CG2	VAL	C	131	32.802	-0.915	33.471	1.00	27.02	C
[5317]	ATOM	5265	N	GLY	C	132	35.223	-0.756	37.650	1.00	27.08	N
[5318]	ATOM	5266	CA	GLY	C	132	35.978	-1.519	38.627	1.00	25.87	C
[5319]	ATOM	5267	C	GLY	C	132	37.385	-1.034	38.666	1.00	26.58	C
[5320]	ATOM	5268	O	GLY	C	132	37.627	0.135	38.835	1.00	27.16	O
[5321]	ATOM	5269	N	ALA	C	133	38.338	-1.919	38.508	1.00	26.35	N
[5322]	ATOM	5270	CA	ALA	C	133	39.731	-1.489	38.463	1.00	27.04	C
[5323]	ATOM	5271	C	ALA	C	133	39.925	-0.419	37.395	1.00	27.76	C
[5324]	ATOM	5272	O	ALA	C	133	40.731	0.502	37.569	1.00	28.82	O
[5325]	ATOM	5273	CB	ALA	C	133	40.655	-2.641	38.200	1.00	26.52	C
[5326]	ATOM	5274	N	GLY	C	134	39.149	-0.524	36.311	1.00	27.34	N
[5327]	ATOM	5275	CA	GLY	C	134	39.224	0.375	35.162	1.00	26.38	C
[5328]	ATOM	5276	C	GLY	C	134	38.907	1.735	35.662	1.00	26.52	C
[5329]	ATOM	5277	O	GLY	C	134	39.655	2.684	35.390	1.00	26.45	O
[5330]	ATOM	5278	N	ALA	C	135	37.823	1.814	36.437	1.00	26.67	N
[5331]	ATOM	5279	CA	ALA	C	135	37.373	3.079	36.970	1.00	28.07	C
[5332]	ATOM	5280	C	ALA	C	135	38.469	3.700	37.905	1.00	28.77	C
[5333]	ATOM	5281	O	ALA	C	135	38.764	4.900	37.823	1.00	29.35	O
[5334]	ATOM	5282	CB	ALA	C	135	36.041	2.939	37.683	1.00	27.98	C
[5335]	ATOM	5283	N	TYR	C	136	39.070	2.890	38.770	1.00	28.01	N
[5336]	ATOM	5284	CA	TYR	C	136	40.073	3.405	39.629	1.00	28.01	C
[5337]	ATOM	5285	C	TYR	C	136	41.259	3.900	38.796	1.00	27.92	C
[5338]	ATOM	5286	O	TYR	C	136	41.725	4.978	39.036	1.00	27.24	O
[5339]	ATOM	5287	CB	TYR	C	136	40.498	2.341	40.578	1.00	28.65	C
[5340]	ATOM	5288	CG	TYR	C	136	41.633	2.765	41.475	1.00	28.89	C
[5341]	ATOM	5289	CD1	TYR	C	136	42.950	2.760	41.003	1.00	29.44	C
[5342]	ATOM	5290	CD2	TYR	C	136	41.413	3.098	42.818	1.00	30.76	C
[5343]	ATOM	5291	CE1	TYR	C	136	44.035	3.126	41.826	1.00	30.99	C
[5344]	ATOM	5292	CE2	TYR	C	136	42.479	3.477	43.669	1.00	31.21	C
[5345]	ATOM	5293	CZ	TYR	C	136	43.809	3.486	43.164	1.00	32.59	C
[5346]	ATOM	5294	OH	TYR	C	136	44.917	3.811	43.948	1.00	32.90	O
[5347]	ATOM	5295	N	ILE	C	137	41.709	3.116	37.813	1.00	27.67	N
[5348]	ATOM	5296	CA	ILE	C	137	42.823	3.480	36.957	1.00	28.14	C
[5349]	ATOM	5297	C	ILE	C	137	42.598	4.850	36.237	1.00	29.76	C

[5350]	ATOM	5298	O	ILE	C	137	43.437	5.771	36.296	1.00	29.67	O
[5351]	ATOM	5299	CB	ILE	C	137	43.006	2.394	35.937	1.00	28.05	C
[5352]	ATOM	5300	CG1	ILE	C	137	43.495	1.153	36.662	1.00	27.65	C
[5353]	ATOM	5301	CG2	ILE	C	137	43.996	2.814	34.871	1.00	26.30	C
[5354]	ATOM	5302	CD1	ILE	C	137	43.688	-0.067	35.814	1.00	26.82	C
[5355]	ATOM	5303	N	LEU	C	138	41.429	5.013	35.607	1.00	30.93	N
[5356]	ATOM	5304	CA	LEU	C	138	41.080	6.266	34.934	1.00	30.95	C
[5357]	ATOM	5305	C	LEU	C	138	41.016	7.408	35.894	1.00	31.51	C
[5358]	ATOM	5306	O	LEU	C	138	41.338	8.494	35.535	1.00	32.53	O
[5359]	ATOM	5307	CB	LEU	C	138	39.771	6.117	34.165	1.00	30.72	C
[5360]	ATOM	5308	CG	LEU	C	138	39.865	5.211	32.923	1.00	31.54	C
[5361]	ATOM	5309	CD1	LEU	C	138	38.629	5.076	32.188	1.00	32.07	C
[5362]	ATOM	5310	CD2	LEU	C	138	40.906	5.746	31.956	1.00	32.24	C
[5363]	ATOM	5311	N	ALA	C	139	40.635	7.174	37.136	1.00	32.50	N
[5364]	ATOM	5312	CA	ALA	C	139	40.609	8.262	38.158	1.00	32.93	C
[5365]	ATOM	5313	C	ALA	C	139	42.030	8.620	38.620	1.00	33.01	C
[5366]	ATOM	5314	O	ALA	C	139	42.388	9.794	38.778	1.00	33.60	O
[5367]	ATOM	5315	CB	ALA	C	139	39.706	7.928	39.357	1.00	31.87	C
[5368]	ATOM	5316	N	ARG	C	140	42.860	7.617	38.801	1.00	32.97	N
[5369]	ATOM	5317	CA	ARG	C	140	44.221	7.905	39.137	1.00	33.25	C
[5370]	ATOM	5318	C	ARG	C	140	44.849	8.686	37.939	1.00	33.85	C
[5371]	ATOM	5319	O	ARG	C	140	45.433	9.757	38.141	1.00	33.56	O
[5372]	ATOM	5320	CB	ARG	C	140	44.958	6.614	39.516	1.00	32.55	C
[5373]	ATOM	5321	CG	ARG	C	140	46.454	6.685	39.516	1.00	32.42	C
[5374]	ATOM	5322	CD	ARG	C	140	47.010	7.513	40.634	1.00	31.10	C
[5375]	ATOM	5323	NE	ARG	C	140	46.818	6.922	41.947	1.00	33.21	N
[5376]	ATOM	5324	CZ	ARG	C	140	46.645	7.649	43.038	1.00	36.87	C
[5377]	ATOM	5325	NH1	ARG	C	140	46.668	9.002	42.953	1.00	34.68	N
[5378]	ATOM	5326	NH2	ARG	C	140	46.416	7.032	44.199	1.00	36.65	N
[5379]	ATOM	5327	N	TYR	C	141	44.671	8.193	36.711	1.00	33.72	N
[5380]	ATOM	5328	CA	TYR	C	141	45.115	8.940	35.574	1.00	33.80	C
[5381]	ATOM	5329	C	TYR	C	141	44.657	10.417	35.622	1.00	33.94	C
[5382]	ATOM	5330	O	TYR	C	141	45.440	11.331	35.526	1.00	33.29	O
[5383]	ATOM	5331	CB	TYR	C	141	44.657	8.252	34.309	1.00	33.96	C
[5384]	ATOM	5332	CG	TYR	C	141	45.011	9.078	33.165	1.00	34.79	C
[5385]	ATOM	5333	CD1	TYR	C	141	46.305	9.051	32.672	1.00	35.60	C

[5386]	ATOM	5334	CD2	TYR	C	141	44.113	9.967	32.620	1.00	35.78	C
[5387]	ATOM	5335	CE1	TYR	C	141	46.691	9.870	31.609	1.00	34.73	C
[5388]	ATOM	5336	CE2	TYR	C	141	44.490	10.776	31.575	1.00	36.30	C
[5389]	ATOM	5337	CZ	TYR	C	141	45.789	10.722	31.082	1.00	35.14	C
[5390]	ATOM	5338	OH	TYR	C	141	46.165	11.514	30.075	1.00	36.78	O
[5391]	ATOM	5339	N	ALA	C	142	43.373	10.645	35.820	1.00	34.36	N
[5392]	ATOM	5340	CA	ALA	C	142	42.840	12.014	35.980	1.00	34.84	C
[5393]	ATOM	5341	C	ALA	C	142	43.580	12.924	37.009	1.00	35.10	C
[5394]	ATOM	5342	O	ALA	C	142	43.797	14.097	36.740	1.00	34.98	O
[5395]	ATOM	5343	CB	ALA	C	142	41.278	11.984	36.210	1.00	34.04	C
[5396]	ATOM	5344	N	LEU	C	143	43.950	12.377	38.166	1.00	35.03	N
[5397]	ATOM	5345	CA	LEU	C	143	44.647	13.157	39.200	1.00	35.43	C
[5398]	ATOM	5346	C	LEU	C	143	46.048	13.545	38.762	1.00	35.63	C
[5399]	ATOM	5347	O	LEU	C	143	46.539	14.598	39.156	1.00	35.93	O
[5400]	ATOM	5348	CB	LEU	C	143	44.722	12.417	40.569	1.00	34.94	C
[5401]	ATOM	5349	CG	LEU	C	143	43.451	12.204	41.369	1.00	35.49	C
[5402]	ATOM	5350	CD1	LEU	C	143	43.759	11.486	42.624	1.00	33.31	C
[5403]	ATOM	5351	CD2	LEU	C	143	42.713	13.505	41.617	1.00	33.45	C
[5404]	ATOM	5352	N	ASN	C	144	46.669	12.677	37.977	1.00	35.71	N
[5405]	ATOM	5353	CA	ASN	C	144	47.981	12.911	37.440	1.00	36.58	C
[5406]	ATOM	5354	C	ASN	C	144	48.013	13.871	36.257	1.00	37.39	C
[5407]	ATOM	5355	O	ASN	C	144	49.010	14.544	36.028	1.00	38.05	O
[5408]	ATOM	5356	CB	ASN	C	144	48.622	11.602	37.019	1.00	36.37	C
[5409]	ATOM	5357	CG	ASN	C	144	48.903	10.670	38.225	1.00	36.89	C
[5410]	ATOM	5358	OD1	ASN	C	144	49.090	11.075	39.361	1.00	35.97	O
[5411]	ATOM	5359	ND2	ASN	C	144	48.952	9.425	37.957	1.00	33.17	N
[5412]	ATOM	5360	N	HIS	C	145	46.928	13.958	35.508	1.00	37.51	N
[5413]	ATOM	5361	CA	HIS	C	145	46.960	14.695	34.250	1.00	37.95	C
[5414]	ATOM	5362	C	HIS	C	145	45.581	15.361	34.084	1.00	39.38	C
[5415]	ATOM	5363	O	HIS	C	145	44.802	15.086	33.140	1.00	38.19	O
[5416]	ATOM	5364	CB	HIS	C	145	47.307	13.733	33.113	1.00	37.03	C
[5417]	ATOM	5365	CG	HIS	C	145	48.641	13.050	33.270	1.00	38.10	C
[5418]	ATOM	5366	ND1	HIS	C	145	49.846	13.739	33.282	1.00	39.51	N
[5419]	ATOM	5367	CD2	HIS	C	145	48.973	11.735	33.381	1.00	38.01	C
[5420]	ATOM	5368	CE1	HIS	C	145	50.859	12.878	33.418	1.00	38.09	C
[5421]	ATOM	5369	NE2	HIS	C	145	50.357	11.652	33.482	1.00	37.47	N

[5422]	ATOM	5370	N	PRO	C	146	45.245	16.226	35.055	1.00	41.03	N
[5423]	ATOM	5371	CA	PRO	C	146	43.860	16.716	35.108	1.00	42.00	C
[5424]	ATOM	5372	C	PRO	C	146	43.438	17.528	33.907	1.00	42.93	C
[5425]	ATOM	5373	O	PRO	C	146	42.249	17.570	33.611	1.00	44.41	O
[5426]	ATOM	5374	CB	PRO	C	146	43.823	17.561	36.378	1.00	41.18	C
[5427]	ATOM	5375	CG	PRO	C	146	45.201	17.888	36.645	1.00	40.67	C
[5428]	ATOM	5376	CD	PRO	C	146	46.049	16.763	36.157	1.00	40.68	C
[5429]	ATOM	5377	N	ASP	C	147	44.368	18.155	33.211	1.00	42.89	N
[5430]	ATOM	5378	CA	ASP	C	147	43.996	18.889	32.010	1.00	43.92	C
[5431]	ATOM	5379	C	ASP	C	147	43.901	18.009	30.774	1.00	42.97	C
[5432]	ATOM	5380	O	ASP	C	147	43.458	18.479	29.751	1.00	43.54	O
[5433]	ATOM	5381	CB	ASP	C	147	45.011	19.979	31.745	1.00	44.73	C
[5434]	ATOM	5382	CG	ASP	C	147	46.361	19.577	32.214	1.00	49.86	C
[5435]	ATOM	5383	OD1	ASP	C	147	47.001	18.724	31.500	1.00	50.77	O
[5436]	ATOM	5384	OD2	ASP	C	147	46.705	20.058	33.352	1.00	53.92	O
[5437]	ATOM	5385	N	THR	C	148	44.302	16.761	30.816	1.00	41.77	N
[5438]	ATOM	5386	CA	THR	C	148	43.979	15.909	29.704	1.00	41.57	C
[5439]	ATOM	5387	C	THR	C	148	42.591	15.240	29.820	1.00	41.70	C
[5440]	ATOM	5388	O	THR	C	148	42.155	14.510	28.923	1.00	42.05	O
[5441]	ATOM	5389	CB	THR	C	148	45.071	14.881	29.458	1.00	42.26	C
[5442]	ATOM	5390	OG1	THR	C	148	45.097	13.908	30.514	1.00	42.92	O
[5443]	ATOM	5391	CG2	THR	C	148	46.470	15.606	29.318	1.00	41.99	C
[5444]	ATOM	5392	N	VAL	C	149	41.897	15.496	30.928	1.00	40.75	N
[5445]	ATOM	5393	CA	VAL	C	149	40.668	14.807	31.221	1.00	39.90	C
[5446]	ATOM	5394	C	VAL	C	149	39.424	15.721	31.238	1.00	40.41	C
[5447]	ATOM	5395	O	VAL	C	149	39.212	16.561	32.146	1.00	40.69	O
[5448]	ATOM	5396	CB	VAL	C	149	40.767	13.972	32.509	1.00	39.15	C
[5449]	ATOM	5397	CG1	VAL	C	149	39.397	13.350	32.759	1.00	38.44	C
[5450]	ATOM	5398	CG2	VAL	C	149	41.756	12.867	32.296	1.00	37.41	C
[5451]	ATOM	5399	N	GLU	C	150	38.558	15.556	30.257	1.00	39.92	N
[5452]	ATOM	5400	CA	GLU	C	150	37.365	16.406	30.274	1.00	39.36	C
[5453]	ATOM	5401	C	GLU	C	150	36.191	15.782	30.979	1.00	38.29	C
[5454]	ATOM	5402	O	GLU	C	150	35.195	16.421	31.211	1.00	39.17	O
[5455]	ATOM	5403	CB	GLU	C	150	36.943	16.786	28.878	1.00	39.54	C
[5456]	ATOM	5404	CG	GLU	C	150	37.921	17.698	28.146	1.00	41.77	C
[5457]	ATOM	5405	CD	GLU	C	150	37.462	17.952	26.715	1.00	45.12	C

[5458]	ATOM	5406	OE1	GLU	C	150	36.208	18.167	26.479	1.00	44.43	O
[5459]	ATOM	5407	OE2	GLU	C	150	38.373	17.912	25.848	1.00	46.94	O
[5460]	ATOM	5408	N	GLY	C	151	36.283	14.524	31.344	1.00	37.78	N
[5461]	ATOM	5409	CA	GLY	C	151	35.130	13.899	31.996	1.00	35.64	C
[5462]	ATOM	5410	C	GLY	C	151	35.387	12.434	32.262	1.00	34.12	C
[5463]	ATOM	5411	O	GLY	C	151	36.141	11.759	31.508	1.00	33.94	O
[5464]	ATOM	5412	N	LEU	C	152	34.797	11.968	33.368	1.00	32.18	N
[5465]	ATOM	5413	CA	LEU	C	152	34.906	10.588	33.765	1.00	29.92	C
[5466]	ATOM	5414	C	LEU	C	152	33.556	10.012	34.042	1.00	29.38	C
[5467]	ATOM	5415	O	LEU	C	152	32.753	10.598	34.763	1.00	28.96	O
[5468]	ATOM	5416	CB	LEU	C	152	35.730	10.496	34.991	1.00	29.45	C
[5469]	ATOM	5417	CG	LEU	C	152	37.176	10.849	34.776	1.00	27.95	C
[5470]	ATOM	5418	CD1	LEU	C	152	37.868	10.971	36.141	1.00	28.38	C
[5471]	ATOM	5419	CD2	LEU	C	152	37.850	9.861	33.830	1.00	26.12	C
[5472]	ATOM	5420	N	VAL	C	153	33.288	8.878	33.407	1.00	28.54	N
[5473]	ATOM	5421	CA	VAL	C	153	32.172	8.023	33.811	1.00	27.26	C
[5474]	ATOM	5422	C	VAL	C	153	32.800	6.899	34.576	1.00	28.50	C
[5475]	ATOM	5423	O	VAL	C	153	33.522	6.045	33.986	1.00	29.32	O
[5476]	ATOM	5424	CB	VAL	C	153	31.422	7.458	32.635	1.00	26.83	C
[5477]	ATOM	5425	CG1	VAL	C	153	30.359	6.479	33.133	1.00	24.12	C
[5478]	ATOM	5426	CG2	VAL	C	153	30.835	8.601	31.793	1.00	22.78	C
[5479]	ATOM	5427	N	LEU	C	154	32.587	6.904	35.880	1.00	28.66	N
[5480]	ATOM	5428	CA	LEU	C	154	33.217	5.898	36.701	1.00	29.15	C
[5481]	ATOM	5429	C	LEU	C	154	32.265	4.869	37.304	1.00	29.93	C
[5482]	ATOM	5430	O	LEU	C	154	31.653	5.129	38.358	1.00	30.57	O
[5483]	ATOM	5431	CB	LEU	C	154	33.964	6.560	37.814	1.00	28.74	C
[5484]	ATOM	5432	CG	LEU	C	154	35.022	7.587	37.553	1.00	29.86	C
[5485]	ATOM	5433	CD1	LEU	C	154	35.254	8.230	38.945	1.00	28.67	C
[5486]	ATOM	5434	CD2	LEU	C	154	36.288	6.988	36.997	1.00	27.69	C
[5487]	ATOM	5435	N	ILE	C	155	32.168	3.702	36.675	1.00	29.89	N
[5488]	ATOM	5436	CA	ILE	C	155	31.285	2.620	37.126	1.00	29.91	C
[5489]	ATOM	5437	C	ILE	C	155	31.968	1.728	38.192	1.00	30.45	C
[5490]	ATOM	5438	O	ILE	C	155	33.049	1.215	37.967	1.00	30.93	O
[5491]	ATOM	5439	CB	ILE	C	155	30.816	1.776	35.917	1.00	29.53	C
[5492]	ATOM	5440	CG1	ILE	C	155	30.139	2.680	34.919	1.00	28.23	C
[5493]	ATOM	5441	CG2	ILE	C	155	29.814	0.753	36.363	1.00	28.75	C

[5494]	ATOM	5442	CD1	ILE	C	155	30.312	2.351	33.506	1.00	24.93	C
[5495]	ATOM	5443	N	ASN	C	156	31.307	1.533	39.330	1.00	30.85	N
[5496]	ATOM	5444	CA	ASN	C	156	31.765	0.684	40.456	1.00	30.90	C
[5497]	ATOM	5445	C	ASN	C	156	33.113	1.042	41.062	1.00	30.90	C
[5498]	ATOM	5446	O	ASN	C	156	33.838	0.152	41.545	1.00	30.75	O
[5499]	ATOM	5447	CB	ASN	C	156	31.833	-0.835	40.153	1.00	31.43	C
[5500]	ATOM	5448	CG	ASN	C	156	30.648	-1.370	39.414	1.00	31.63	C
[5501]	ATOM	5449	OD1	ASN	C	156	29.554	-1.004	39.575	1.00	30.55	O
[5502]	ATOM	5450	ND2	ASN	C	156	30.891	-2.284	38.659	1.00	30.18	N
[5503]	ATOM	5451	N	ILE	C	157	33.452	2.330	41.063	1.00	31.24	N
[5504]	ATOM	5452	CA	ILE	C	157	34.703	2.762	41.638	1.00	30.96	C
[5505]	ATOM	5453	C	ILE	C	157	34.724	2.539	43.146	1.00	32.60	C
[5506]	ATOM	5454	O	ILE	C	157	33.762	2.833	43.833	1.00	33.10	O
[5507]	ATOM	5455	CB	ILE	C	157	34.961	4.192	41.302	1.00	30.29	C
[5508]	ATOM	5456	CG1	ILE	C	157	36.388	4.522	41.771	1.00	30.92	C
[5509]	ATOM	5457	CG2	ILE	C	157	33.846	5.026	41.847	1.00	26.18	C
[5510]	ATOM	5458	CD1	ILE	C	157	37.168	5.502	40.912	1.00	33.08	C
[5511]	ATOM	5459	N	ASP	C	158	35.826	1.986	43.632	1.00	33.65	N
[5512]	ATOM	5460	CA	ASP	C	158	36.107	1.901	45.048	1.00	34.26	C
[5513]	ATOM	5461	C	ASP	C	158	37.439	2.600	45.272	1.00	34.50	C
[5514]	ATOM	5462	O	ASP	C	158	38.481	2.044	44.999	1.00	34.14	O
[5515]	ATOM	5463	CB	ASP	C	158	36.222	0.434	45.486	1.00	34.42	C
[5516]	ATOM	5464	CG	ASP	C	158	36.295	0.261	47.034	1.00	37.24	C
[5517]	ATOM	5465	OD1	ASP	C	158	36.975	1.065	47.767	1.00	38.38	O
[5518]	ATOM	5466	OD2	ASP	C	158	35.656	-0.704	47.496	1.00	36.32	O
[5519]	ATOM	5467	N	PRO	C	159	37.416	3.851	45.736	1.00	35.43	N
[5520]	ATOM	5468	CA	PRO	C	159	38.626	4.648	45.754	1.00	35.36	C
[5521]	ATOM	5469	C	PRO	C	159	39.486	4.466	46.962	1.00	36.02	C
[5522]	ATOM	5470	O	PRO	C	159	40.517	5.150	47.083	1.00	37.22	O
[5523]	ATOM	5471	CB	PRO	C	159	38.069	6.032	45.763	1.00	35.02	C
[5524]	ATOM	5472	CG	PRO	C	159	36.918	5.901	46.556	1.00	34.80	C
[5525]	ATOM	5473	CD	PRO	C	159	36.260	4.649	46.149	1.00	35.07	C
[5526]	ATOM	5474	N	ASN	C	160	39.138	3.545	47.853	1.00	36.15	N
[5527]	ATOM	5475	CA	ASN	C	160	39.954	3.351	49.094	1.00	36.39	C
[5528]	ATOM	5476	C	ASN	C	160	40.700	2.059	49.133	1.00	36.04	C
[5529]	ATOM	5477	O	ASN	C	160	40.178	1.089	48.700	1.00	35.87	O



[5530]	ATOM	5478	CB	ASN	C	160	39.086	3.498	50.357	1.00	36.43	C
[5531]	ATOM	5479	CG	ASN	C	160	38.328	4.846	50.395	1.00	37.28	C
[5532]	ATOM	5480	OD1	ASN	C	160	37.521	5.124	51.253	1.00	41.58	O
[5533]	ATOM	5481	ND2	ASN	C	160	38.597	5.680	49.426	1.00	38.84	N
[5534]	ATOM	5482	N	ALA	C	161	41.912	2.047	49.666	1.00	36.48	N
[5535]	ATOM	5483	CA	ALA	C	161	42.619	0.784	49.868	1.00	36.99	C
[5536]	ATOM	5484	C	ALA	C	161	41.697	-0.143	50.672	1.00	38.30	C
[5537]	ATOM	5485	O	ALA	C	161	40.765	0.319	51.377	1.00	37.69	O
[5538]	ATOM	5486	CB	ALA	C	161	43.886	0.986	50.551	1.00	35.21	C
[5539]	ATOM	5487	N	LYS	C	162	41.915	-1.451	50.527	1.00	39.65	N
[5540]	ATOM	5488	CA	LYS	C	162	41.219	-2.432	51.377	1.00	41.37	C
[5541]	ATOM	5489	C	LYS	C	162	41.586	-2.166	52.841	1.00	42.01	C
[5542]	ATOM	5490	O	LYS	C	162	42.758	-2.318	53.232	1.00	41.48	O
[5543]	ATOM	5491	CB	LYS	C	162	41.619	-3.873	51.039	1.00	41.36	C
[5544]	ATOM	5492	CG	LYS	C	162	40.743	-4.593	50.037	1.00	43.12	C
[5545]	ATOM	5493	CD	LYS	C	162	41.099	-6.100	49.966	1.00	42.41	C
[5546]	ATOM	5494	CE	LYS	C	162	40.137	-6.811	49.066	1.00	41.59	C
[5547]	ATOM	5495	NZ	LYS	C	162	38.730	-6.437	49.462	1.00	40.96	N
[5548]	ATOM	5496	N	GLY	C	163	40.573	-1.789	53.646	1.00	43.24	N
[5549]	ATOM	5497	CA	GLY	C	163	40.657	-1.876	55.120	1.00	44.30	C
[5550]	ATOM	5498	C	GLY	C	163	41.122	-3.230	55.675	1.00	45.75	C
[5551]	ATOM	5499	O	GLY	C	163	41.260	-4.243	54.949	1.00	45.91	O
[5552]	ATOM	5500	N	TRP	C	164	41.386	-3.289	56.977	1.00	47.15	N
[5553]	ATOM	5501	CA	TRP	C	164	41.877	-4.579	57.536	1.00	48.07	C
[5554]	ATOM	5502	C	TRP	C	164	40.686	-5.499	57.756	1.00	48.20	C
[5555]	ATOM	5503	O	TRP	C	164	40.807	-6.697	57.649	1.00	48.54	O
[5556]	ATOM	5504	CB	TRP	C	164	42.738	-4.383	58.807	1.00	48.04	C
[5557]	ATOM	5505	CG	TRP	C	164	42.020	-3.417	59.729	1.00	48.27	C
[5558]	ATOM	5506	CD1	TRP	C	164	42.159	-2.033	59.787	1.00	46.74	C
[5559]	ATOM	5507	CD2	TRP	C	164	40.980	-3.754	60.662	1.00	46.41	C
[5560]	ATOM	5508	NE1	TRP	C	164	41.294	-1.523	60.745	1.00	44.65	N
[5561]	ATOM	5509	CE2	TRP	C	164	40.536	-2.540	61.264	1.00	44.76	C
[5562]	ATOM	5510	CE3	TRP	C	164	40.396	-4.971	61.069	1.00	47.46	C
[5563]	ATOM	5511	CZ2	TRP	C	164	39.521	-2.505	62.247	1.00	46.66	C
[5564]	ATOM	5512	CZ3	TRP	C	164	39.331	-4.936	62.036	1.00	48.28	C
[5565]	ATOM	5513	CH2	TRP	C	164	38.921	-3.703	62.614	1.00	47.89	C

[5566]	ATOM	5514	N	MET	C	165	39.523	-4.931	58.020	1.00	49.21	N
[5567]	ATOM	5515	CA	MET	C	165	38.288	-5.745	58.061	1.00	51.31	C
[5568]	ATOM	5516	C	MET	C	165	37.941	-6.461	56.754	1.00	50.67	C
[5569]	ATOM	5517	O	MET	C	165	37.581	-7.665	56.758	1.00	50.79	O
[5570]	ATOM	5518	CB	MET	C	165	37.116	-4.893	58.328	1.00	50.54	C
[5571]	ATOM	5519	CG	MET	C	165	36.845	-4.650	59.753	1.00	54.87	C
[5572]	ATOM	5520	SD	MET	C	165	34.962	-4.262	59.671	1.00	59.11	S
[5573]	ATOM	5521	CE	MET	C	165	34.305	-5.784	60.469	1.00	58.95	C
[5574]	ATOM	5522	N	ASP	C	166	38.026	-5.693	55.653	1.00	49.96	N
[5575]	ATOM	5523	CA	ASP	C	166	37.943	-6.200	54.301	1.00	48.98	C
[5576]	ATOM	5524	C	ASP	C	166	38.928	-7.312	53.920	1.00	47.59	C
[5577]	ATOM	5525	O	ASP	C	166	38.524	-8.293	53.213	1.00	46.81	O
[5578]	ATOM	5526	CB	ASP	C	166	38.191	-5.055	53.372	1.00	50.38	C
[5579]	ATOM	5527	CG	ASP	C	166	37.103	-3.981	53.449	1.00	54.88	C
[5580]	ATOM	5528	OD1	ASP	C	166	35.927	-4.303	53.831	1.00	58.12	O
[5581]	ATOM	5529	OD2	ASP	C	166	37.421	-2.803	53.090	1.00	58.20	O
[5582]	ATOM	5530	N	TRP	C	167	40.191	-7.142	54.361	1.00	45.00	N
[5583]	ATOM	5531	CA	TRP	C	167	41.253	-8.041	54.021	1.00	43.56	C
[5584]	ATOM	5532	C	TRP	C	167	41.029	-9.355	54.732	1.00	43.58	C
[5585]	ATOM	5533	O	TRP	C	167	41.272	-10.477	54.179	1.00	44.06	O
[5586]	ATOM	5534	CB	TRP	C	167	42.562	-7.479	54.470	1.00	42.90	C
[5587]	ATOM	5535	CG	TRP	C	167	43.385	-6.837	53.345	1.00	43.37	C
[5588]	ATOM	5536	CD1	TRP	C	167	43.941	-5.535	53.325	1.00	41.30	C
[5589]	ATOM	5537	CD2	TRP	C	167	43.743	-7.429	52.090	1.00	41.94	C
[5590]	ATOM	5538	NE1	TRP	C	167	44.607	-5.343	52.168	1.00	38.81	N
[5591]	ATOM	5539	CE2	TRP	C	167	44.513	-6.480	51.388	1.00	40.94	C
[5592]	ATOM	5540	CE3	TRP	C	167	43.503	-8.666	51.501	1.00	42.50	C
[5593]	ATOM	5541	CZ2	TRP	C	167	45.042	-6.749	50.122	1.00	39.93	C
[5594]	ATOM	5542	CZ3	TRP	C	167	44.045	-8.925	50.238	1.00	40.79	C
[5595]	ATOM	5543	CH2	TRP	C	167	44.791	-7.966	49.573	1.00	40.84	C
[5596]	ATOM	5544	N	ALA	C	168	40.540	-9.224	55.960	1.00	42.26	N
[5597]	ATOM	5545	CA	ALA	C	168	40.206	-10.351	56.764	1.00	40.74	C
[5598]	ATOM	5546	C	ALA	C	168	39.000	-11.061	56.125	1.00	40.44	C
[5599]	ATOM	5547	O	ALA	C	168	38.982	-12.287	55.981	1.00	41.30	O
[5600]	ATOM	5548	CB	ALA	C	168	39.851	-9.869	58.098	1.00	40.64	C
[5601]	ATOM	5549	N	ALA	C	169	37.988	-10.311	55.725	1.00	39.22	N

[5602]	ATOM	5550	CA	ALA	C	169	36.848	-10.934	55.076	1.00	39.04	C
[5603]	ATOM	5551	C	ALA	C	169	37.163	-11.556	53.732	1.00	39.09	C
[5604]	ATOM	5552	O	ALA	C	169	36.566	-12.580	53.330	1.00	39.69	O
[5605]	ATOM	5553	CB	ALA	C	169	35.772	-9.957	54.887	1.00	38.85	C
[5606]	ATOM	5554	N	HIS	C	170	38.081	-10.919	53.022	1.00	38.08	N
[5607]	ATOM	5555	CA	HIS	C	170	38.564	-11.426	51.757	1.00	36.89	C
[5608]	ATOM	5556	C	HIS	C	170	39.278	-12.778	51.899	1.00	37.10	C
[5609]	ATOM	5557	O	HIS	C	170	38.928	-13.720	51.186	1.00	37.17	O
[5610]	ATOM	5558	CB	HIS	C	170	39.473	-10.356	51.169	1.00	36.35	C
[5611]	ATOM	5559	CG	HIS	C	170	40.047	-10.692	49.837	1.00	35.35	C
[5612]	ATOM	5560	ND1	HIS	C	170	41.229	-11.393	49.692	1.00	36.75	N
[5613]	ATOM	5561	CD2	HIS	C	170	39.618	-10.412	48.585	1.00	35.38	C
[5614]	ATOM	5562	CE1	HIS	C	170	41.507	-11.530	48.405	1.00	35.41	C
[5615]	ATOM	5563	NE2	HIS	C	170	40.543	-10.944	47.714	1.00	36.96	N
[5616]	ATOM	5564	N	LYS	C	171	40.208	-12.874	52.863	1.00	37.00	N
[5617]	ATOM	5565	CA	LYS	C	171	41.007	-14.083	53.103	1.00	37.62	C
[5618]	ATOM	5566	C	LYS	C	171	40.177	-15.276	53.525	1.00	37.36	C
[5619]	ATOM	5567	O	LYS	C	171	40.413	-16.436	53.096	1.00	38.05	O
[5620]	ATOM	5568	CB	LYS	C	171	42.122	-13.810	54.108	1.00	37.25	C
[5621]	ATOM	5569	CG	LYS	C	171	42.737	-12.436	53.918	1.00	39.33	C
[5622]	ATOM	5570	CD	LYS	C	171	44.211	-12.244	54.358	1.00	41.82	C
[5623]	ATOM	5571	CE	LYS	C	171	45.154	-12.275	53.091	1.00	44.87	C
[5624]	ATOM	5572	NZ	LYS	C	171	46.473	-11.807	53.552	1.00	46.06	N
[5625]	ATOM	5573	N	LEU	C	172	39.184	-14.935	54.315	1.00	36.69	N
[5626]	ATOM	5574	CA	LEU	C	172	38.206	-15.854	54.851	1.00	37.44	C
[5627]	ATOM	5575	C	LEU	C	172	37.458	-16.532	53.721	1.00	37.89	C
[5628]	ATOM	5576	O	LEU	C	172	37.620	-17.763	53.489	1.00	39.14	O
[5629]	ATOM	5577	CB	LEU	C	172	37.187	-15.098	55.720	1.00	37.47	C
[5630]	ATOM	5578	CG	LEU	C	172	36.580	-15.752	57.009	1.00	38.47	C
[5631]	ATOM	5579	CD1	LEU	C	172	35.164	-16.037	56.938	1.00	36.58	C
[5632]	ATOM	5580	CD2	LEU	C	172	37.142	-17.080	57.313	1.00	38.29	C
[5633]	ATOM	5581	N	THR	C	173	36.677	-15.730	52.989	1.00	38.34	N
[5634]	ATOM	5582	CA	THR	C	173	36.101	-16.137	51.666	1.00	38.99	C
[5635]	ATOM	5583	C	THR	C	173	37.060	-16.955	50.823	1.00	39.05	C
[5636]	ATOM	5584	O	THR	C	173	36.729	-18.061	50.358	1.00	39.64	O
[5637]	ATOM	5585	CB	THR	C	173	35.632	-14.952	50.819	1.00	38.91	C

[5638]	ATOM	5586	OG1	THR	C	173	34.896	-14.053	51.640	1.00	41.71	O
[5639]	ATOM	5587	CG2	THR	C	173	34.677	-15.411	49.738	1.00	38.02	C
[5640]	ATOM	5588	N	GLY	C	174	38.253	-16.423	50.678	1.00	38.39	N
[5641]	ATOM	5589	CA	GLY	C	174	39.294	-17.121	49.959	1.00	39.82	C
[5642]	ATOM	5590	C	GLY	C	174	39.572	-18.591	50.227	1.00	40.42	C
[5643]	ATOM	5591	O	GLY	C	174	40.171	-19.281	49.380	1.00	40.39	O
[5644]	ATOM	5592	N	LEU	C	175	39.126	-19.078	51.383	1.00	40.75	N
[5645]	ATOM	5593	CA	LEU	C	175	39.415	-20.448	51.782	1.00	40.65	C
[5646]	ATOM	5594	C	LEU	C	175	38.314	-21.363	51.266	1.00	40.63	C
[5647]	ATOM	5595	O	LEU	C	175	38.325	-22.569	51.459	1.00	41.18	O
[5648]	ATOM	5596	CB	LEU	C	175	39.465	-20.491	53.305	1.00	40.50	C
[5649]	ATOM	5597	CG	LEU	C	175	40.618	-19.792	54.061	1.00	39.32	C
[5650]	ATOM	5598	CD1	LEU	C	175	40.252	-19.635	55.499	1.00	36.83	C
[5651]	ATOM	5599	CD2	LEU	C	175	42.035	-20.494	53.893	1.00	37.84	C
[5652]	ATOM	5600	N	THR	C	176	37.351	-20.773	50.611	1.00	39.81	N
[5653]	ATOM	5601	CA	THR	C	176	36.237	-21.527	50.220	1.00	40.47	C
[5654]	ATOM	5602	C	THR	C	176	35.760	-21.176	48.791	1.00	41.89	C
[5655]	ATOM	5603	O	THR	C	176	34.959	-21.935	48.195	1.00	43.01	O
[5656]	ATOM	5604	CB	THR	C	176	35.165	-21.393	51.319	1.00	40.72	C
[5657]	ATOM	5605	OG1	THR	C	176	35.257	-22.565	52.105	1.00	41.93	O
[5658]	ATOM	5606	CG2	THR	C	176	33.710	-21.215	50.827	1.00	39.14	C
[5659]	ATOM	5607	N	SER	C	177	36.229	-20.041	48.238	1.00	41.04	N
[5660]	ATOM	5608	CA	SER	C	177	35.957	-19.736	46.865	1.00	39.79	C
[5661]	ATOM	5609	C	SER	C	177	37.211	-19.872	46.021	1.00	39.47	C
[5662]	ATOM	5610	O	SER	C	177	38.283	-19.475	46.480	1.00	39.18	O
[5663]	ATOM	5611	CB	SER	C	177	35.437	-18.339	46.786	1.00	40.54	C
[5664]	ATOM	5612	OG	SER	C	177	34.060	-18.301	46.993	1.00	41.39	O
[5665]	ATOM	5613	N	SER	C	178	37.083	-20.443	44.812	1.00	38.65	N
[5666]	ATOM	5614	CA	SER	C	178	38.141	-20.410	43.891	1.00	38.14	C
[5667]	ATOM	5615	C	SER	C	178	38.330	-18.958	43.442	1.00	39.04	C
[5668]	ATOM	5616	O	SER	C	178	37.463	-18.067	43.538	1.00	38.64	O
[5669]	ATOM	5617	CB	SER	C	178	37.748	-21.207	42.688	1.00	38.49	C
[5670]	ATOM	5618	OG	SER	C	178	36.774	-20.528	41.891	1.00	39.41	O
[5671]	ATOM	5619	N	ILE	C	179	39.466	-18.732	42.844	1.00	38.87	N
[5672]	ATOM	5620	CA	ILE	C	179	39.704	-17.450	42.336	1.00	37.97	C
[5673]	ATOM	5621	C	ILE	C	179	38.665	-16.924	41.315	1.00	36.60	C

[5674]	ATOM	5622	O	ILE	C	179	38.225	-15.780	41.398	1.00	37.02	O
[5675]	ATOM	5623	CB	ILE	C	179	41.194	-17.330	41.992	1.00	38.58	C
[5676]	ATOM	5624	CG1	ILE	C	179	41.919	-17.015	43.337	1.00	36.93	C
[5677]	ATOM	5625	CG2	ILE	C	179	41.435	-16.266	40.870	1.00	38.86	C
[5678]	ATOM	5626	CD1	ILE	C	179	43.395	-17.227	43.357	1.00	38.62	C
[5679]	ATOM	5627	N	PRO	C	180	38.283	-17.726	40.333	1.00	35.22	N
[5680]	ATOM	5628	CA	PRO	C	180	37.225	-17.253	39.431	1.00	33.92	C
[5681]	ATOM	5629	C	PRO	C	180	35.990	-16.856	40.218	1.00	34.31	C
[5682]	ATOM	5630	O	PRO	C	180	35.406	-15.787	39.990	1.00	35.06	O
[5683]	ATOM	5631	CB	PRO	C	180	36.928	-18.485	38.592	1.00	33.08	C
[5684]	ATOM	5632	CG	PRO	C	180	38.222	-19.191	38.521	1.00	33.81	C
[5685]	ATOM	5633	CD	PRO	C	180	38.820	-19.023	39.907	1.00	34.46	C
[5686]	ATOM	5634	N	GLU	C	181	35.603	-17.705	41.178	1.00	33.82	N
[5687]	ATOM	5635	CA	GLU	C	181	34.406	-17.455	41.943	1.00	32.42	C
[5688]	ATOM	5636	C	GLU	C	181	34.710	-16.107	42.628	1.00	32.03	C
[5689]	ATOM	5637	O	GLU	C	181	33.907	-15.191	42.758	1.00	32.31	O
[5690]	ATOM	5638	CB	GLU	C	181	34.166	-18.611	42.922	1.00	32.56	C
[5691]	ATOM	5639	CG	GLU	C	181	33.580	-19.914	42.307	1.00	35.23	C
[5692]	ATOM	5640	CD	GLU	C	181	32.405	-19.651	41.251	1.00	43.04	C
[5693]	ATOM	5641	OE1	GLU	C	181	32.154	-20.360	40.247	1.00	42.22	O
[5694]	ATOM	5642	OE2	GLU	C	181	31.646	-18.664	41.411	1.00	43.89	O
[5695]	ATOM	5643	N	MET	C	182	35.931	-15.953	43.043	1.00	31.74	N
[5696]	ATOM	5644	CA	MET	C	182	36.266	-14.728	43.670	1.00	32.77	C
[5697]	ATOM	5645	C	MET	C	182	36.183	-13.447	42.739	1.00	32.25	C
[5698]	ATOM	5646	O	MET	C	182	35.652	-12.352	43.133	1.00	32.89	O
[5699]	ATOM	5647	CB	MET	C	182	37.606	-14.972	44.334	1.00	32.05	C
[5700]	ATOM	5648	CG	MET	C	182	37.564	-14.394	45.603	1.00	34.89	C
[5701]	ATOM	5649	SD	MET	C	182	38.118	-14.803	47.244	1.00	38.93	S
[5702]	ATOM	5650	CE	MET	C	182	36.688	-15.653	47.444	1.00	36.07	C
[5703]	ATOM	5651	N	ILE	C	183	36.678	-13.579	41.507	1.00	31.39	N
[5704]	ATOM	5652	CA	ILE	C	183	36.579	-12.486	40.571	1.00	29.72	C
[5705]	ATOM	5653	C	ILE	C	183	35.114	-12.231	40.195	1.00	30.49	C
[5706]	ATOM	5654	O	ILE	C	183	34.652	-11.068	40.131	1.00	30.03	O
[5707]	ATOM	5655	CB	ILE	C	183	37.467	-12.719	39.406	1.00	29.16	C
[5708]	ATOM	5656	CG1	ILE	C	183	38.895	-12.437	39.829	1.00	28.40	C
[5709]	ATOM	5657	CG2	ILE	C	183	37.076	-11.826	38.302	1.00	27.18	C

[5710]	ATOM	5658	CD1	ILE	C	183	39.877	-13.174	39.046	1.00	23.51	C
[5711]	ATOM	5659	N	LEU	C	184	34.371	-13.324	39.979	1.00	30.49	N
[5712]	ATOM	5660	CA	LEU	C	184	32.961	-13.211	39.706	1.00	30.88	C
[5713]	ATOM	5661	C	LEU	C	184	32.235	-12.406	40.792	1.00	31.17	C
[5714]	ATOM	5662	O	LEU	C	184	31.379	-11.591	40.460	1.00	31.39	O
[5715]	ATOM	5663	CB	LEU	C	184	32.347	-14.585	39.490	1.00	30.69	C
[5716]	ATOM	5664	CG	LEU	C	184	32.628	-15.032	38.084	1.00	32.22	C
[5717]	ATOM	5665	CD1	LEU	C	184	32.697	-16.558	38.112	1.00	34.66	C
[5718]	ATOM	5666	CD2	LEU	C	184	31.612	-14.570	37.077	1.00	26.76	C
[5719]	ATOM	5667	N	GLY	C	185	32.616	-12.609	42.058	1.00	31.05	N
[5720]	ATOM	5668	CA	GLY	C	185	32.053	-11.876	43.164	1.00	31.91	C
[5721]	ATOM	5669	C	GLY	C	185	32.408	-10.411	43.211	1.00	32.67	C
[5722]	ATOM	5670	O	GLY	C	185	31.685	-9.601	43.752	1.00	33.80	O
[5723]	ATOM	5671	N	HIS	C	186	33.533	-10.058	42.644	1.00	32.79	N
[5724]	ATOM	5672	CA	HIS	C	186	33.841	-8.692	42.405	1.00	32.21	C
[5725]	ATOM	5673	C	HIS	C	186	32.955	-8.054	41.333	1.00	32.44	C
[5726]	ATOM	5674	O	HIS	C	186	32.691	-6.861	41.435	1.00	32.74	O
[5727]	ATOM	5675	CB	HIS	C	186	35.307	-8.649	42.017	1.00	32.24	C
[5728]	ATOM	5676	CG	HIS	C	186	35.736	-7.374	41.379	1.00	30.99	C
[5729]	ATOM	5677	ND1	HIS	C	186	35.933	-6.219	42.095	1.00	33.19	N
[5730]	ATOM	5678	CD2	HIS	C	186	36.001	-7.066	40.092	1.00	28.22	C
[5731]	ATOM	5679	CE1	HIS	C	186	36.326	-5.256	41.280	1.00	29.04	C
[5732]	ATOM	5680	NE2	HIS	C	186	36.351	-5.741	40.054	1.00	27.35	N
[5733]	ATOM	5681	N	LEU	C	187	32.529	-8.841	40.329	1.00	32.20	N
[5734]	ATOM	5682	CA	LEU	C	187	31.827	-8.322	39.154	1.00	33.15	C
[5735]	ATOM	5683	C	LEU	C	187	30.323	-8.288	39.274	1.00	34.50	C
[5736]	ATOM	5684	O	LEU	C	187	29.685	-7.450	38.699	1.00	35.23	O
[5737]	ATOM	5685	CB	LEU	C	187	32.193	-9.093	37.872	1.00	32.53	C
[5738]	ATOM	5686	CG	LEU	C	187	33.668	-9.066	37.370	1.00	31.02	C
[5739]	ATOM	5687	CD1	LEU	C	187	33.887	-10.006	36.274	1.00	27.29	C
[5740]	ATOM	5688	CD2	LEU	C	187	34.215	-7.754	36.915	1.00	27.85	C
[5741]	ATOM	5689	N	PHE	C	188	29.771	-9.253	39.984	1.00	35.83	N
[5742]	ATOM	5690	CA	PHE	C	188	28.346	-9.465	40.014	1.00	36.69	C
[5743]	ATOM	5691	C	PHE	C	188	27.969	-9.665	41.450	1.00	38.79	C
[5744]	ATOM	5692	O	PHE	C	188	28.839	-9.976	42.288	1.00	39.66	O
[5745]	ATOM	5693	CB	PHE	C	188	27.920	-10.702	39.213	1.00	35.24	C

[5746]	ATOM	5694	CG	PHE	C	188	28.193	-10.609	37.761	1.00	33.80	C
[5747]	ATOM	5695	CD1	PHE	C	188	27.352	-9.872	36.927	1.00	31.25	C
[5748]	ATOM	5696	CD2	PHE	C	188	29.317	-11.216	37.219	1.00	31.79	C
[5749]	ATOM	5697	CE1	PHE	C	188	27.583	-9.751	35.575	1.00	30.03	C
[5750]	ATOM	5698	CE2	PHE	C	188	29.584	-11.109	35.847	1.00	30.39	C
[5751]	ATOM	5699	CZ	PHE	C	188	28.723	-10.367	35.005	1.00	30.44	C
[5752]	ATOM	5700	N	SER	C	189	26.683	-9.466	41.743	1.00	40.24	N
[5753]	ATOM	5701	CA	SER	C	189	26.171	-9.657	43.074	1.00	42.09	C
[5754]	ATOM	5702	C	SER	C	189	25.924	-11.125	43.351	1.00	43.03	C
[5755]	ATOM	5703	O	SER	C	189	25.743	-11.907	42.434	1.00	43.27	O
[5756]	ATOM	5704	CB	SER	C	189	24.863	-8.915	43.214	1.00	42.43	C
[5757]	ATOM	5705	OG	SER	C	189	23.839	-9.619	42.575	1.00	44.11	O
[5758]	ATOM	5706	N	GLN	C	190	25.897	-11.503	44.622	1.00	44.28	N
[5759]	ATOM	5707	CA	GLN	C	190	25.661	-12.888	45.006	1.00	44.93	C
[5760]	ATOM	5708	C	GLN	C	190	24.248	-13.335	44.570	1.00	45.85	C
[5761]	ATOM	5709	O	GLN	C	190	24.087	-14.398	43.975	1.00	46.03	O
[5762]	ATOM	5710	CB	GLN	C	190	25.828	-12.985	46.481	1.00	44.39	C
[5763]	ATOM	5711	CG	GLN	C	190	26.714	-14.093	46.904	1.00	46.66	C
[5764]	ATOM	5712	CD	GLN	C	190	28.158	-14.081	46.325	1.00	47.60	C
[5765]	ATOM	5713	OE1	GLN	C	190	28.965	-13.249	46.664	1.00	48.63	O
[5766]	ATOM	5714	NE2	GLN	C	190	28.482	-15.076	45.510	1.00	47.71	N
[5767]	ATOM	5715	N	GLU	C	191	23.240	-12.486	44.803	1.00	46.98	N
[5768]	ATOM	5716	CA	GLU	C	191	21.925	-12.651	44.191	1.00	48.77	C
[5769]	ATOM	5717	C	GLU	C	191	22.031	-13.071	42.694	1.00	48.93	C
[5770]	ATOM	5718	O	GLU	C	191	21.523	-14.101	42.313	1.00	49.03	O
[5771]	ATOM	5719	CB	GLU	C	191	21.075	-11.389	44.387	1.00	48.36	C
[5772]	ATOM	5720	CG	GLU	C	191	19.573	-11.535	43.956	1.00	51.68	C
[5773]	ATOM	5721	CD	GLU	C	191	18.658	-10.260	44.255	1.00	53.68	C
[5774]	ATOM	5722	OE1	GLU	C	191	18.572	-9.742	45.420	1.00	56.08	O
[5775]	ATOM	5723	OE2	GLU	C	191	17.994	-9.781	43.290	1.00	55.77	O
[5776]	ATOM	5724	N	GLU	C	192	22.746	-12.313	41.874	1.00	50.13	N
[5777]	ATOM	5725	CA	GLU	C	192	22.891	-12.615	40.454	1.00	51.31	C
[5778]	ATOM	5726	C	GLU	C	192	23.568	-13.935	40.181	1.00	52.07	C
[5779]	ATOM	5727	O	GLU	C	192	23.242	-14.646	39.218	1.00	52.16	O
[5780]	ATOM	5728	CB	GLU	C	192	23.757	-11.573	39.788	1.00	51.80	C
[5781]	ATOM	5729	CG	GLU	C	192	23.351	-10.150	39.908	1.00	53.84	C

[5782]	ATOM	5730	CD	GLU	C	192	24.167	-9.258	38.987	1.00	55.78	C
[5783]	ATOM	5731	OE1	GLU	C	192	25.107	-8.590	39.478	1.00	54.54	O
[5784]	ATOM	5732	OE2	GLU	C	192	23.871	-9.233	37.774	1.00	56.71	O
[5785]	ATOM	5733	N	LEU	C	193	24.543	-14.240	41.020	1.00	52.33	N
[5786]	ATOM	5734	CA	LEU	C	193	25.236	-15.499	40.936	1.00	52.62	C
[5787]	ATOM	5735	C	LEU	C	193	24.326	-16.734	41.145	1.00	53.23	C
[5788]	ATOM	5736	O	LEU	C	193	24.332	-17.581	40.279	1.00	53.46	O
[5789]	ATOM	5737	CB	LEU	C	193	26.502	-15.479	41.801	1.00	52.45	C
[5790]	ATOM	5738	CG	LEU	C	193	27.553	-14.459	41.310	1.00	50.51	C
[5791]	ATOM	5739	CD1	LEU	C	193	28.648	-14.249	42.286	1.00	48.49	C
[5792]	ATOM	5740	CD2	LEU	C	193	28.143	-14.778	39.960	1.00	47.74	C
[5793]	ATOM	5741	N	SER	C	194	23.527	-16.837	42.217	1.00	53.70	N
[5794]	ATOM	5742	CA	SER	C	194	22.562	-17.959	42.277	1.00	54.48	C
[5795]	ATOM	5743	C	SER	C	194	21.503	-17.846	41.197	1.00	54.22	C
[5796]	ATOM	5744	O	SER	C	194	21.209	-18.817	40.522	1.00	54.18	O
[5797]	ATOM	5745	CB	SER	C	194	21.850	-18.098	43.599	1.00	54.81	C
[5798]	ATOM	5746	OG	SER	C	194	22.387	-17.204	44.501	1.00	56.89	O
[5799]	ATOM	5747	N	GLY	C	195	20.922	-16.666	41.055	1.00	53.95	N
[5800]	ATOM	5748	CA	GLY	C	195	19.998	-16.357	39.958	1.00	53.62	C
[5801]	ATOM	5749	C	GLY	C	195	20.402	-17.098	38.705	1.00	53.58	C
[5802]	ATOM	5750	O	GLY	C	195	19.559	-17.615	37.980	1.00	53.87	O
[5803]	ATOM	5751	N	ASN	C	196	21.705	-17.173	38.461	1.00	53.35	N
[5804]	ATOM	5752	CA	ASN	C	196	22.267	-17.936	37.327	1.00	53.23	C
[5805]	ATOM	5753	C	ASN	C	196	21.665	-17.680	35.932	1.00	53.67	C
[5806]	ATOM	5754	O	ASN	C	196	21.416	-18.622	35.199	1.00	52.96	O
[5807]	ATOM	5755	CB	ASN	C	196	22.318	-19.443	37.618	1.00	52.60	C
[5808]	ATOM	5756	CG	ASN	C	196	23.458	-20.146	36.852	1.00	52.63	C
[5809]	ATOM	5757	OD1	ASN	C	196	24.527	-19.554	36.638	1.00	54.63	O
[5810]	ATOM	5758	ND2	ASN	C	196	23.247	-21.407	36.453	1.00	47.09	N
[5811]	ATOM	5759	N	SER	C	197	21.468	-16.411	35.565	1.00	54.56	N
[5812]	ATOM	5760	CA	SER	C	197	20.901	-16.076	34.255	1.00	56.15	C
[5813]	ATOM	5761	C	SER	C	197	21.771	-16.535	33.108	1.00	56.89	C
[5814]	ATOM	5762	O	SER	C	197	22.828	-17.127	33.308	1.00	57.29	O
[5815]	ATOM	5763	CB	SER	C	197	20.690	-14.581	34.112	1.00	56.15	C
[5816]	ATOM	5764	OG	SER	C	197	21.910	-13.919	33.946	1.00	58.28	O
[5817]	ATOM	5765	N	GLU	C	198	21.351	-16.239	31.886	1.00	57.71	N



[5818]	ATOM	5766	CA	GLU	C	198	22.129	-16.664	30.731	1.00	58.49	C
[5819]	ATOM	5767	C	GLU	C	198	23.462	-15.927	30.651	1.00	56.82	C
[5820]	ATOM	5768	O	GLU	C	198	24.478	-16.449	30.232	1.00	56.62	O
[5821]	ATOM	5769	CB	GLU	C	198	21.317	-16.452	29.476	1.00	59.38	C
[5822]	ATOM	5770	CG	GLU	C	198	21.609	-17.442	28.400	1.00	66.09	C
[5823]	ATOM	5771	CD	GLU	C	198	20.350	-18.247	27.978	1.00	74.15	C
[5824]	ATOM	5772	OE1	GLU	C	198	19.273	-17.630	27.847	1.00	74.23	O
[5825]	ATOM	5773	OE2	GLU	C	198	20.440	-19.503	27.783	1.00	76.06	O
[5826]	ATOM	5774	N	LEU	C	199	23.426	-14.690	31.074	1.00	55.25	N
[5827]	ATOM	5775	CA	LEU	C	199	24.590	-13.874	31.073	1.00	53.11	C
[5828]	ATOM	5776	C	LEU	C	199	25.565	-14.332	32.160	1.00	52.09	C
[5829]	ATOM	5777	O	LEU	C	199	26.755	-14.529	31.866	1.00	51.58	O
[5830]	ATOM	5778	CB	LEU	C	199	24.157	-12.473	31.329	1.00	53.33	C
[5831]	ATOM	5779	CG	LEU	C	199	25.170	-11.369	31.209	1.00	53.28	C
[5832]	ATOM	5780	CD1	LEU	C	199	25.339	-10.940	29.786	1.00	53.16	C
[5833]	ATOM	5781	CD2	LEU	C	199	24.700	-10.232	32.058	1.00	52.97	C
[5834]	ATOM	5782	N	ILE	C	200	25.074	-14.533	33.398	1.00	49.50	N
[5835]	ATOM	5783	CA	ILE	C	200	25.927	-15.070	34.443	1.00	47.26	C
[5836]	ATOM	5784	C	ILE	C	200	26.622	-16.357	33.973	1.00	46.11	C
[5837]	ATOM	5785	O	ILE	C	200	27.798	-16.549	34.249	1.00	46.01	O
[5838]	ATOM	5786	CB	ILE	C	200	25.160	-15.269	35.766	1.00	47.35	C
[5839]	ATOM	5787	CG1	ILE	C	200	24.564	-13.941	36.265	1.00	48.17	C
[5840]	ATOM	5788	CG2	ILE	C	200	25.986	-16.013	36.822	1.00	45.29	C
[5841]	ATOM	5789	CD1	ILE	C	200	25.502	-12.848	36.649	1.00	46.03	C
[5842]	ATOM	5790	N	GLN	C	201	25.916	-17.216	33.243	1.00	44.70	N
[5843]	ATOM	5791	CA	GLN	C	201	26.496	-18.490	32.847	1.00	44.10	C
[5844]	ATOM	5792	C	GLN	C	201	27.651	-18.264	31.927	1.00	42.94	C
[5845]	ATOM	5793	O	GLN	C	201	28.673	-18.894	32.046	1.00	42.63	O
[5846]	ATOM	5794	CB	GLN	C	201	25.472	-19.366	32.163	1.00	43.92	C
[5847]	ATOM	5795	CG	GLN	C	201	24.571	-20.190	33.097	1.00	45.11	C
[5848]	ATOM	5796	CD	GLN	C	201	23.232	-20.618	32.406	1.00	45.48	C
[5849]	ATOM	5797	OE1	GLN	C	201	22.148	-20.239	32.857	1.00	43.51	O
[5850]	ATOM	5798	NE2	GLN	C	201	23.322	-21.404	31.303	1.00	41.58	N
[5851]	ATOM	5799	N	LYS	C	202	27.455	-17.329	31.016	1.00	42.82	N
[5852]	ATOM	5800	CA	LYS	C	202	28.416	-16.946	30.002	1.00	42.19	C
[5853]	ATOM	5801	C	LYS	C	202	29.670	-16.419	30.637	1.00	41.59	C

[5854]	ATOM	5802	O	LYS	C	202	30.726	-16.847	30.295	1.00	41.81	O
[5855]	ATOM	5803	CB	LYS	C	202	27.817	-15.865	29.122	1.00	41.82	C
[5856]	ATOM	5804	CG	LYS	C	202	28.631	-15.570	27.952	1.00	42.75	C
[5857]	ATOM	5805	CD	LYS	C	202	28.144	-14.360	27.221	1.00	43.26	C
[5858]	ATOM	5806	CE	LYS	C	202	28.790	-14.229	25.879	1.00	41.17	C
[5859]	ATOM	5807	NZ	LYS	C	202	28.772	-12.859	25.554	1.00	40.70	N
[5860]	ATOM	5808	N	TYR	C	203	29.519	-15.513	31.595	1.00	40.70	N
[5861]	ATOM	5809	CA	TYR	C	203	30.613	-14.886	32.291	1.00	39.63	C
[5862]	ATOM	5810	C	TYR	C	203	31.384	-15.794	33.279	1.00	39.39	C
[5863]	ATOM	5811	O	TYR	C	203	32.627	-15.743	33.358	1.00	39.20	O
[5864]	ATOM	5812	CB	TYR	C	203	30.142	-13.536	32.881	1.00	38.95	C
[5865]	ATOM	5813	CG	TYR	C	203	30.110	-12.447	31.797	1.00	37.26	C
[5866]	ATOM	5814	CD1	TYR	C	203	29.110	-12.416	30.843	1.00	36.67	C
[5867]	ATOM	5815	CD2	TYR	C	203	31.108	-11.522	31.682	1.00	35.09	C
[5868]	ATOM	5816	CE1	TYR	C	203	29.111	-11.495	29.865	1.00	34.61	C
[5869]	ATOM	5817	CE2	TYR	C	203	31.100	-10.592	30.681	1.00	34.04	C
[5870]	ATOM	5818	CZ	TYR	C	203	30.106	-10.597	29.791	1.00	34.04	C
[5871]	ATOM	5819	OH	TYR	C	203	30.069	-9.696	28.814	1.00	32.42	O
[5872]	ATOM	5820	N	ARG	C	204	30.654	-16.650	33.975	1.00	38.13	N
[5873]	ATOM	5821	CA	ARG	C	204	31.280	-17.680	34.749	1.00	37.87	C
[5874]	ATOM	5822	C	ARG	C	204	32.231	-18.489	33.849	1.00	37.82	C
[5875]	ATOM	5823	O	ARG	C	204	33.367	-18.884	34.244	1.00	37.00	O
[5876]	ATOM	5824	CB	ARG	C	204	30.240	-18.596	35.383	1.00	38.01	C
[5877]	ATOM	5825	CG	ARG	C	204	30.870	-19.705	36.127	1.00	37.34	C
[5878]	ATOM	5826	CD	ARG	C	204	29.892	-20.397	36.936	1.00	37.21	C
[5879]	ATOM	5827	NE	ARG	C	204	29.707	-19.888	38.284	1.00	40.61	N
[5880]	ATOM	5828	CZ	ARG	C	204	28.619	-19.284	38.720	1.00	42.16	C
[5881]	ATOM	5829	NH1	ARG	C	204	27.721	-19.078	37.921	1.00	37.51	N
[5882]	ATOM	5830	NH2	ARG	C	204	28.386	-18.869	39.915	1.00	40.31	N
[5883]	ATOM	5831	N	ASN	C	205	31.779	-18.697	32.630	1.00	37.17	N
[5884]	ATOM	5832	CA	ASN	C	205	32.503	-19.472	31.719	1.00	37.70	C
[5885]	ATOM	5833	C	ASN	C	205	33.730	-18.713	31.083	1.00	37.79	C
[5886]	ATOM	5834	O	ASN	C	205	34.847	-19.294	30.883	1.00	37.55	O
[5887]	ATOM	5835	CB	ASN	C	205	31.514	-19.969	30.704	1.00	38.09	C
[5888]	ATOM	5836	CG	ASN	C	205	32.165	-20.779	29.663	1.00	42.36	C
[5889]	ATOM	5837	OD1	ASN	C	205	32.816	-20.261	28.731	1.00	42.42	O

[5890]	ATOM	5838	ND2	ASN	C	205	32.069	-22.070	29.825	1.00	42.00	N
[5891]	ATOM	5839	N	ILE	C	206	33.540	-17.441	30.734	1.00	37.35	N
[5892]	ATOM	5840	CA	ILE	C	206	34.626	-16.643	30.232	1.00	36.92	C
[5893]	ATOM	5841	C	ILE	C	206	35.765	-16.648	31.289	1.00	37.99	C
[5894]	ATOM	5842	O	ILE	C	206	36.938	-16.843	30.982	1.00	39.40	O
[5895]	ATOM	5843	CB	ILE	C	206	34.159	-15.205	29.966	1.00	37.45	C
[5896]	ATOM	5844	CG1	ILE	C	206	33.224	-15.118	28.731	1.00	36.86	C
[5897]	ATOM	5845	CG2	ILE	C	206	35.384	-14.203	29.971	1.00	36.23	C
[5898]	ATOM	5846	CD1	ILE	C	206	32.568	-13.745	28.469	1.00	34.81	C
[5899]	ATOM	5847	N	ILE	C	207	35.404	-16.484	32.540	1.00	37.08	N
[5900]	ATOM	5848	CA	ILE	C	207	36.382	-16.258	33.554	1.00	36.42	C
[5901]	ATOM	5849	C	ILE	C	207	36.978	-17.588	33.987	1.00	37.55	C
[5902]	ATOM	5850	O	ILE	C	207	38.222	-17.741	33.940	1.00	37.98	O
[5903]	ATOM	5851	CB	ILE	C	207	35.784	-15.421	34.737	1.00	36.52	C
[5904]	ATOM	5852	CG1	ILE	C	207	35.487	-14.019	34.204	1.00	35.07	C
[5905]	ATOM	5853	CG2	ILE	C	207	36.757	-15.295	35.848	1.00	34.13	C
[5906]	ATOM	5854	CD1	ILE	C	207	34.980	-13.169	35.125	1.00	32.75	C
[5907]	ATOM	5855	N	THR	C	208	36.121	-18.570	34.346	1.00	37.19	N
[5908]	ATOM	5856	CA	THR	C	208	36.596	-19.886	34.749	1.00	35.80	C
[5909]	ATOM	5857	C	THR	C	208	37.438	-20.569	33.717	1.00	35.91	C
[5910]	ATOM	5858	O	THR	C	208	38.415	-21.161	34.092	1.00	36.03	O
[5911]	ATOM	5859	CB	THR	C	208	35.485	-20.819	35.148	1.00	35.97	C
[5912]	ATOM	5860	OG1	THR	C	208	34.757	-20.258	36.237	1.00	35.23	O
[5913]	ATOM	5861	CG2	THR	C	208	36.038	-22.071	35.653	1.00	34.13	C
[5914]	ATOM	5862	N	HIS	C	209	37.121	-20.479	32.437	1.00	36.33	N
[5915]	ATOM	5863	CA	HIS	C	209	37.926	-21.182	31.420	1.00	37.58	C
[5916]	ATOM	5864	C	HIS	C	209	38.815	-20.246	30.613	1.00	37.94	C
[5917]	ATOM	5865	O	HIS	C	209	39.284	-20.584	29.528	1.00	38.17	O
[5918]	ATOM	5866	CB	HIS	C	209	37.048	-22.073	30.490	1.00	37.37	C
[5919]	ATOM	5867	CG	HIS	C	209	36.129	-23.006	31.233	1.00	40.05	C
[5920]	ATOM	5868	ND1	HIS	C	209	36.547	-24.167	31.835	1.00	42.03	N
[5921]	ATOM	5869	CD2	HIS	C	209	34.811	-22.927	31.511	1.00	40.37	C
[5922]	ATOM	5870	CE1	HIS	C	209	35.539	-24.763	32.451	1.00	41.21	C
[5923]	ATOM	5871	NE2	HIS	C	209	34.470	-24.033	32.266	1.00	42.06	N
[5924]	ATOM	5872	N	ALA	C	210	39.043	-19.054	31.120	1.00	38.72	N
[5925]	ATOM	5873	CA	ALA	C	210	39.977	-18.153	30.452	1.00	39.50	C

[5926]	ATOM	5874	C	ALA C 210	41.373	-18.806	30.272	1.00	39.75	C
[5927]	ATOM	5875	O	ALA C 210	42.003	-19.264	31.251	1.00	39.83	O
[5928]	ATOM	5876	CB	ALA C 210	40.097	-16.879	31.243	1.00	39.56	C
[5929]	ATOM	5877	N	PRO C 211	41.855	-18.877	29.015	1.00	39.85	N
[5930]	ATOM	5878	CA	PRO C 211	43.220	-19.413	28.715	1.00	38.73	C
[5931]	ATOM	5879	C	PRO C 211	44.290	-18.566	29.389	1.00	37.55	C
[5932]	ATOM	5880	O	PRO C 211	45.405	-18.987	29.637	1.00	38.25	O
[5933]	ATOM	5881	CB	PRO C 211	43.311	-19.271	27.194	1.00	38.79	C
[5934]	ATOM	5882	CG	PRO C 211	42.201	-18.370	26.790	1.00	39.86	C
[5935]	ATOM	5883	CD	PRO C 211	41.121	-18.491	27.798	1.00	39.42	C
[5936]	ATOM	5884	N	ASN C 212	43.820	-17.400	29.755	1.00	36.20	N
[5937]	ATOM	5885	CA	ASN C 212	44.474	-16.201	30.082	1.00	34.20	C
[5938]	ATOM	5886	C	ASN C 212	44.346	-16.055	31.631	1.00	33.66	C
[5939]	ATOM	5887	O	ASN C 212	44.902	-15.193	32.268	1.00	32.63	O
[5940]	ATOM	5888	CB	ASN C 212	43.542	-15.285	29.283	1.00	33.84	C
[5941]	ATOM	5889	CG	ASN C 212	43.607	-14.019	29.705	1.00	33.74	C
[5942]	ATOM	5890	OD1	ASN C 212	44.410	-13.945	30.419	1.00	36.12	O
[5943]	ATOM	5891	ND2	ASN C 212	42.922	-12.964	29.251	1.00	35.25	N
[5944]	ATOM	5892	N	LEU C 213	43.677	-17.002	32.262	1.00	33.80	N
[5945]	ATOM	5893	CA	LEU C 213	43.417	-16.893	33.675	1.00	34.43	C
[5946]	ATOM	5894	C	LEU C 213	44.563	-16.474	34.624	1.00	34.91	C
[5947]	ATOM	5895	O	LEU C 213	44.319	-15.728	35.558	1.00	36.28	O
[5948]	ATOM	5896	CB	LEU C 213	42.723	-18.147	34.182	1.00	33.69	C
[5949]	ATOM	5897	CG	LEU C 213	42.347	-18.108	35.661	1.00	34.90	C
[5950]	ATOM	5898	CD1	LEU C 213	41.331	-17.027	35.962	1.00	35.92	C
[5951]	ATOM	5899	CD2	LEU C 213	41.836	-19.423	36.088	1.00	34.77	C
[5952]	ATOM	5900	N	ASP C 214	45.785	-16.940	34.427	1.00	35.11	N
[5953]	ATOM	5901	CA	ASP C 214	46.890	-16.499	35.307	1.00	35.55	C
[5954]	ATOM	5902	C	ASP C 214	47.222	-15.013	35.134	1.00	34.78	C
[5955]	ATOM	5903	O	ASP C 214	47.533	-14.333	36.121	1.00	35.38	O
[5956]	ATOM	5904	CB	ASP C 214	48.181	-17.342	35.164	1.00	37.08	C
[5957]	ATOM	5905	CG	ASP C 214	47.945	-18.838	35.317	1.00	39.83	C
[5958]	ATOM	5906	OD1	ASP C 214	48.618	-19.599	34.628	1.00	44.51	O
[5959]	ATOM	5907	OD2	ASP C 214	47.048	-19.269	36.068	1.00	44.26	O
[5960]	ATOM	5908	N	ASN C 215	47.107	-14.493	33.920	1.00	32.73	N
[5961]	ATOM	5909	CA	ASN C 215	47.251	-13.076	33.736	1.00	31.79	C

[5962]	ATOM	5910	C	ASN C 215	46.191	-12.322	34.569	1.00	31.89	C
[5963]	ATOM	5911	O	ASN C 215	46.506	-11.343	35.272	1.00	32.53	O
[5964]	ATOM	5912	CB	ASN C 215	47.197	-12.692	32.241	1.00	31.43	C
[5965]	ATOM	5913	CG	ASN C 215	48.367	-13.305	31.367	1.00	31.39	C
[5966]	ATOM	5914	OD1	ASN C 215	48.693	-12.823	30.369	1.00	32.89	O
[5967]	ATOM	5915	ND2	ASN C 215	48.916	-14.315	31.753	1.00	29.47	N
[5968]	ATOM	5916	N	ILE C 216	44.953	-12.813	34.540	1.00	31.43	N
[5969]	ATOM	5917	CA	ILE C 216	43.824	-12.112	35.134	1.00	31.02	C
[5970]	ATOM	5918	C	ILE C 216	44.024	-12.028	36.616	1.00	31.76	C
[5971]	ATOM	5919	O	ILE C 216	43.722	-11.032	37.267	1.00	31.09	O
[5972]	ATOM	5920	CB	ILE C 216	42.563	-12.925	34.863	1.00	30.99	C
[5973]	ATOM	5921	CG1	ILE C 216	42.201	-12.829	33.377	1.00	29.95	C
[5974]	ATOM	5922	CG2	ILE C 216	41.400	-12.455	35.788	1.00	30.39	C
[5975]	ATOM	5923	CD1	ILE C 216	40.848	-13.410	33.087	1.00	28.27	C
[5976]	ATOM	5924	N	GLU C 217	44.548	-13.129	37.160	1.00	32.80	N
[5977]	ATOM	5925	CA	GLU C 217	44.811	-13.204	38.561	1.00	33.73	C
[5978]	ATOM	5926	C	GLU C 217	45.858	-12.161	39.002	1.00	33.47	C
[5979]	ATOM	5927	O	GLU C 217	45.736	-11.607	40.068	1.00	34.08	O
[5980]	ATOM	5928	CB	GLU C 217	45.212	-14.598	38.934	1.00	33.83	C
[5981]	ATOM	5929	CG	GLU C 217	45.164	-14.781	40.427	1.00	38.17	C
[5982]	ATOM	5930	CD	GLU C 217	45.631	-16.168	40.922	1.00	43.53	C
[5983]	ATOM	5931	OE1	GLU C 217	45.512	-17.172	40.131	1.00	44.81	O
[5984]	ATOM	5932	OE2	GLU C 217	46.087	-16.225	42.123	1.00	41.87	O
[5985]	ATOM	5933	N	ASN C 218	46.853	-11.849	38.174	1.00	32.33	N
[5986]	ATOM	5934	CA	ASN C 218	47.725	-10.751	38.489	1.00	31.96	C
[5987]	ATOM	5935	C	ASN C 218	47.038	-9.404	38.588	1.00	32.03	C
[5988]	ATOM	5936	O	ASN C 218	47.378	-8.564	39.451	1.00	32.03	O
[5989]	ATOM	5937	CB	ASN C 218	48.748	-10.575	37.421	1.00	32.55	C
[5990]	ATOM	5938	CG	ASN C 218	49.788	-11.695	37.422	1.00	33.71	C
[5991]	ATOM	5939	OD1	ASN C 218	49.822	-12.463	36.577	1.00	32.53	O
[5992]	ATOM	5940	ND2	ASN C 218	50.642	-11.709	38.310	1.00	32.82	N
[5993]	ATOM	5941	N	TYR C 219	46.108	-9.174	37.669	1.00	31.07	N
[5994]	ATOM	5942	CA	TYR C 219	45.356	-7.931	37.628	1.00	30.12	C
[5995]	ATOM	5943	C	TYR C 219	44.492	-7.827	38.881	1.00	30.53	C
[5996]	ATOM	5944	O	TYR C 219	44.380	-6.740	39.481	1.00	30.28	O
[5997]	ATOM	5945	CB	TYR C 219	44.524	-7.896	36.350	1.00	28.99	C

[5998]	ATOM	5946	CG	TYR	C	219	43.764	-6.600	36.032	1.00	28.45	C
[5999]	ATOM	5947	CD1	TYR	C	219	44.147	-5.356	36.553	1.00	26.69	C
[6000]	ATOM	5948	CD2	TYR	C	219	42.653	-6.620	35.145	1.00	28.24	C
[6001]	ATOM	5949	CE1	TYR	C	219	43.452	-4.210	36.211	1.00	26.70	C
[6002]	ATOM	5950	CE2	TYR	C	219	41.940	-5.487	34.851	1.00	26.85	C
[6003]	ATOM	5951	CZ	TYR	C	219	42.352	-4.277	35.363	1.00	27.12	C
[6004]	ATOM	5952	OH	TYR	C	219	41.693	-3.109	35.045	1.00	26.81	O
[6005]	ATOM	5953	N	TRP	C	220	43.942	-8.982	39.302	1.00	30.36	N
[6006]	ATOM	5954	CA	TRP	C	220	43.128	-9.044	40.474	1.00	29.87	C
[6007]	ATOM	5955	C	TRP	C	220	44.023	-8.614	41.647	1.00	29.90	C
[6008]	ATOM	5956	O	TRP	C	220	43.704	-7.623	42.332	1.00	29.49	O
[6009]	ATOM	5957	CB	TRP	C	220	42.561	-10.431	40.548	1.00	30.88	C
[6010]	ATOM	5958	CG	TRP	C	220	41.835	-10.867	41.779	1.00	31.12	C
[6011]	ATOM	5959	CD1	TRP	C	220	42.150	-11.931	42.545	1.00	30.39	C
[6012]	ATOM	5960	CD2	TRP	C	220	40.648	-10.327	42.321	1.00	33.22	C
[6013]	ATOM	5961	NE1	TRP	C	220	41.287	-12.065	43.561	1.00	32.07	N
[6014]	ATOM	5962	CE2	TRP	C	220	40.330	-11.096	43.441	1.00	33.55	C
[6015]	ATOM	5963	CE3	TRP	C	220	39.826	-9.252	41.989	1.00	33.68	C
[6016]	ATOM	5964	CZ2	TRP	C	220	39.222	-10.820	44.239	1.00	34.16	C
[6017]	ATOM	5965	CZ3	TRP	C	220	38.731	-9.001	42.764	1.00	32.38	C
[6018]	ATOM	5966	CH2	TRP	C	220	38.446	-9.747	43.884	1.00	33.71	C
[6019]	ATOM	5967	N	ASN	C	221	45.185	-9.252	41.820	1.00	29.30	N
[6020]	ATOM	5968	CA	ASN	C	221	46.171	-8.767	42.792	1.00	30.29	C
[6021]	ATOM	5969	C	ASN	C	221	46.471	-7.305	42.718	1.00	31.47	C
[6022]	ATOM	5970	O	ASN	C	221	46.309	-6.627	43.726	1.00	33.37	O
[6023]	ATOM	5971	CB	ASN	C	221	47.469	-9.463	42.692	1.00	30.16	C
[6024]	ATOM	5972	CG	ASN	C	221	47.325	-10.904	43.060	1.00	33.50	C
[6025]	ATOM	5973	OD1	ASN	C	221	47.987	-11.744	42.642	1.00	36.02	O
[6026]	ATOM	5974	ND2	ASN	C	221	46.416	-11.177	43.815	1.00	30.33	N
[6027]	ATOM	5975	N	SER	C	222	46.842	-6.746	41.574	1.00	31.22	N
[6028]	ATOM	5976	CA	SER	C	222	46.962	-5.316	41.549	1.00	31.15	C
[6029]	ATOM	5977	C	SER	C	222	45.735	-4.616	42.113	1.00	31.68	C
[6030]	ATOM	5978	O	SER	C	222	45.836	-3.730	42.925	1.00	32.01	O
[6031]	ATOM	5979	CB	SER	C	222	47.135	-4.869	40.153	1.00	31.43	C
[6032]	ATOM	5980	OG	SER	C	222	48.475	-4.798	39.809	1.00	32.76	O
[6033]	ATOM	5981	N	TYR	C	223	44.560	-5.050	41.714	1.00	31.84	N

[6034]	ATOM	5982	CA	TYR	C	223	43.371	-4.411	42.234	1.00	32.03	C
[6035]	ATOM	5983	C	TYR	C	223	43.274	-4.529	43.752	1.00	32.22	C
[6036]	ATOM	5984	O	TYR	C	223	42.947	-3.574	44.452	1.00	31.91	O
[6037]	ATOM	5985	CB	TYR	C	223	42.100	-4.977	41.591	1.00	31.09	C
[6038]	ATOM	5986	CG	TYR	C	223	40.890	-4.382	42.154	1.00	31.30	C
[6039]	ATOM	5987	CD1	TYR	C	223	40.511	-3.116	41.820	1.00	31.55	C
[6040]	ATOM	5988	CD2	TYR	C	223	40.133	-5.076	43.069	1.00	32.55	C
[6041]	ATOM	5989	CE1	TYR	C	223	39.380	-2.554	42.362	1.00	31.38	C
[6042]	ATOM	5990	CE2	TYR	C	223	39.006	-4.519	43.626	1.00	32.55	C
[6043]	ATOM	5991	CZ	TYR	C	223	38.638	-3.238	43.255	1.00	33.01	C
[6044]	ATOM	5992	OH	TYR	C	223	37.497	-2.646	43.744	1.00	33.88	O
[6045]	ATOM	5993	N	ASN	C	224	43.489	-5.719	44.282	1.00	32.71	N
[6046]	ATOM	5994	CA	ASN	C	224	43.214	-5.840	45.674	1.00	32.92	C
[6047]	ATOM	5995	C	ASN	C	224	44.212	-4.976	46.456	1.00	33.94	C
[6048]	ATOM	5996	O	ASN	C	224	43.900	-4.393	47.500	1.00	33.70	O
[6049]	ATOM	5997	CB	ASN	C	224	43.256	-7.286	46.074	1.00	32.29	C
[6050]	ATOM	5998	CG	ASN	C	224	41.988	-8.033	45.695	1.00	33.05	C
[6051]	ATOM	5999	OD1	ASN	C	224	40.847	-7.475	45.748	1.00	35.19	O
[6052]	ATOM	6000	ND2	ASN	C	224	42.157	-9.325	45.351	1.00	26.54	N
[6053]	ATOM	6001	N	ASN	C	225	45.424	-4.866	45.940	1.00	34.69	N
[6054]	ATOM	6002	CA	ASN	C	225	46.461	-4.109	46.656	1.00	35.40	C
[6055]	ATOM	6003	C	ASN	C	225	46.483	-2.574	46.459	1.00	35.77	C
[6056]	ATOM	6004	O	ASN	C	225	47.328	-1.905	46.992	1.00	35.55	O
[6057]	ATOM	6005	CB	ASN	C	225	47.802	-4.711	46.325	1.00	34.89	C
[6058]	ATOM	6006	CG	ASN	C	225	47.962	-6.043	46.920	1.00	37.55	C
[6059]	ATOM	6007	OD1	ASN	C	225	48.342	-6.165	48.073	1.00	42.34	O
[6060]	ATOM	6008	ND2	ASN	C	225	47.643	-7.064	46.181	1.00	38.57	N
[6061]	ATOM	6009	N	ARG	C	226	45.554	-2.041	45.690	1.00	36.61	N
[6062]	ATOM	6010	CA	ARG	C	226	45.511	-0.639	45.359	1.00	37.61	C
[6063]	ATOM	6011	C	ARG	C	226	45.622	0.289	46.569	1.00	38.99	C
[6064]	ATOM	6012	O	ARG	C	226	45.313	-0.133	47.674	1.00	39.38	O
[6065]	ATOM	6013	CB	ARG	C	226	44.184	-0.348	44.669	1.00	37.25	C
[6066]	ATOM	6014	CG	ARG	C	226	42.993	-0.367	45.505	1.00	32.94	C
[6067]	ATOM	6015	CD	ARG	C	226	41.831	-0.275	44.586	1.00	33.34	C
[6068]	ATOM	6016	NE	ARG	C	226	40.606	-0.208	45.338	1.00	29.36	N
[6069]	ATOM	6017	CZ	ARG	C	226	40.119	-1.202	46.034	1.00	27.01	C

[6070]	ATOM	6018	NH1	ARG	C	226	40.712	-2.376	46.017	1.00	23.79	N
[6071]	ATOM	6019	NH2	ARG	C	226	39.022	-1.012	46.729	1.00	29.87	N
[6072]	ATOM	6020	N	ARG	C	227	46.018	1.546	46.365	1.00	39.87	N
[6073]	ATOM	6021	CA	ARG	C	227	46.027	2.479	47.492	1.00	41.60	C
[6074]	ATOM	6022	C	ARG	C	227	44.958	3.491	47.429	1.00	42.55	C
[6075]	ATOM	6023	O	ARG	C	227	44.223	3.545	46.486	1.00	42.87	O
[6076]	ATOM	6024	CB	ARG	C	227	47.358	3.154	47.756	1.00	41.44	C
[6077]	ATOM	6025	CG	ARG	C	227	48.199	3.163	46.617	1.00	42.87	C
[6078]	ATOM	6026	CD	ARG	C	227	49.666	3.349	46.820	1.00	46.69	C
[6079]	ATOM	6027	NE	ARG	C	227	50.015	4.510	45.966	1.00	52.30	N
[6080]	ATOM	6028	CZ	ARG	C	227	49.384	5.711	45.972	1.00	52.36	C
[6081]	ATOM	6029	NH1	ARG	C	227	48.348	5.937	46.787	1.00	54.22	N
[6082]	ATOM	6030	NH2	ARG	C	227	49.765	6.719	45.180	1.00	46.95	N
[6083]	ATOM	6031	N	ASP	C	228	44.847	4.248	48.508	1.00	44.91	N
[6084]	ATOM	6032	CA	ASP	C	228	43.878	5.306	48.654	1.00	47.03	C
[6085]	ATOM	6033	C	ASP	C	228	44.043	6.354	47.551	1.00	47.25	C
[6086]	ATOM	6034	O	ASP	C	228	45.163	6.682	47.165	1.00	46.69	O
[6087]	ATOM	6035	CB	ASP	C	228	44.114	5.933	50.016	1.00	47.80	C
[6088]	ATOM	6036	CG	ASP	C	228	43.259	5.330	51.072	1.00	51.63	C
[6089]	ATOM	6037	OD1	ASP	C	228	42.022	5.308	50.871	1.00	56.50	O
[6090]	ATOM	6038	OD2	ASP	C	228	43.826	4.911	52.112	1.00	55.39	O
[6091]	ATOM	6039	N	LEU	C	229	42.921	6.809	47.025	1.00	47.63	N
[6092]	ATOM	6040	CA	LEU	C	229	42.893	7.969	46.171	1.00	48.22	C
[6093]	ATOM	6041	C	LEU	C	229	42.755	9.260	46.990	1.00	49.66	C
[6094]	ATOM	6042	O	LEU	C	229	43.218	10.317	46.565	1.00	50.16	O
[6095]	ATOM	6043	CB	LEU	C	229	41.766	7.873	45.141	1.00	47.52	C
[6096]	ATOM	6044	CG	LEU	C	229	41.953	7.001	43.887	1.00	46.29	C
[6097]	ATOM	6045	CD1	LEU	C	229	40.729	7.057	43.073	1.00	42.98	C
[6098]	ATOM	6046	CD2	LEU	C	229	43.098	7.422	43.020	1.00	44.86	C
[6099]	ATOM	6047	N	ASN	C	230	42.139	9.185	48.164	1.00	51.00	N
[6100]	ATOM	6048	CA	ASN	C	230	42.049	10.324	49.071	1.00	52.29	C
[6101]	ATOM	6049	C	ASN	C	230	41.356	11.520	48.520	1.00	54.20	C
[6102]	ATOM	6050	O	ASN	C	230	41.761	12.644	48.773	1.00	54.12	O
[6103]	ATOM	6051	CB	ASN	C	230	43.421	10.821	49.488	1.00	51.85	C
[6104]	ATOM	6052	CG	ASN	C	230	44.123	9.894	50.362	1.00	50.27	C
[6105]	ATOM	6053	OD1	ASN	C	230	43.621	9.503	51.387	1.00	50.69	O



[6106]	ATOM	6054	ND2	ASN	C	230	45.320	9.541	49.981	1.00	48.28	N
[6107]	ATOM	6055	N	PHE	C	231	40.313	11.306	47.753	1.00	57.22	N
[6108]	ATOM	6056	CA	PHE	C	231	39.438	12.408	47.450	1.00	59.47	C
[6109]	ATOM	6057	C	PHE	C	231	39.043	13.063	48.764	1.00	61.85	C
[6110]	ATOM	6058	O	PHE	C	231	38.466	12.447	49.674	1.00	62.69	O
[6111]	ATOM	6059	CB	PHE	C	231	38.220	11.956	46.697	1.00	58.95	C
[6112]	ATOM	6060	CG	PHE	C	231	38.524	11.328	45.389	1.00	58.52	C
[6113]	ATOM	6061	CD1	PHE	C	231	39.456	11.876	44.554	1.00	57.99	C
[6114]	ATOM	6062	CD2	PHE	C	231	37.850	10.198	44.982	1.00	58.21	C
[6115]	ATOM	6063	CE1	PHE	C	231	39.739	11.301	43.340	1.00	58.21	C
[6116]	ATOM	6064	CE2	PHE	C	231	38.107	9.628	43.766	1.00	57.15	C
[6117]	ATOM	6065	CZ	PHE	C	231	39.062	10.173	42.940	1.00	57.41	C
[6118]	ATOM	6066	N	GLU	C	232	39.441	14.313	48.888	1.00	63.82	N
[6119]	ATOM	6067	CA	GLU	C	232	38.966	15.154	49.952	1.00	66.18	C
[6120]	ATOM	6068	C	GLU	C	232	38.023	16.183	49.271	1.00	65.88	C
[6121]	ATOM	6069	O	GLU	C	232	38.425	16.818	48.266	1.00	66.28	O
[6122]	ATOM	6070	CB	GLU	C	232	40.189	15.815	50.600	1.00	66.30	C
[6123]	ATOM	6071	CG	GLU	C	232	40.002	16.327	52.031	1.00	69.40	C
[6124]	ATOM	6072	CD	GLU	C	232	40.941	17.494	52.381	1.00	70.53	C
[6125]	ATOM	6073	OE1	GLU	C	232	41.796	17.904	51.557	1.00	72.68	O
[6126]	ATOM	6074	OE2	GLU	C	232	40.821	18.006	53.509	1.00	72.48	O
[6127]	ATOM	6075	N	ARG	C	233	36.777	16.321	49.757	1.00	65.59	N
[6128]	ATOM	6076	CA	ARG	C	233	35.896	17.399	49.232	1.00	65.46	C
[6129]	ATOM	6077	C	ARG	C	233	36.432	18.820	49.569	1.00	66.57	C
[6130]	ATOM	6078	O	ARG	C	233	36.716	19.144	50.738	1.00	66.50	O
[6131]	ATOM	6079	CB	ARG	C	233	34.420	17.260	49.643	1.00	64.36	C
[6132]	ATOM	6080	CG	ARG	C	233	33.631	18.529	49.227	1.00	62.22	C
[6133]	ATOM	6081	CD	ARG	C	233	32.199	18.427	49.517	1.00	58.98	C
[6134]	ATOM	6082	NE	ARG	C	233	31.761	17.102	49.128	1.00	59.33	N
[6135]	ATOM	6083	CZ	ARG	C	233	30.487	16.734	49.092	1.00	61.14	C
[6136]	ATOM	6084	NH1	ARG	C	233	29.536	17.628	49.405	1.00	62.41	N
[6137]	ATOM	6085	NH2	ARG	C	233	30.151	15.491	48.728	1.00	59.65	N
[6138]	ATOM	6086	N	GLY	C	234	36.506	19.631	48.507	1.00	67.92	N
[6139]	ATOM	6087	CA	GLY	C	234	37.308	20.823	48.360	1.00	69.38	C
[6140]	ATOM	6088	C	GLY	C	234	38.711	20.865	48.919	1.00	70.86	C
[6141]	ATOM	6089	O	GLY	C	234	39.085	21.917	49.410	1.00	71.47	O

[6142]	ATOM	6090	N	GLY	C	235	39.467	19.757	48.899	1.00	71.60	N
[6143]	ATOM	6091	CA	GLY	C	235	40.894	19.771	49.246	1.00	71.79	C
[6144]	ATOM	6092	C	GLY	C	235	41.729	19.813	47.973	1.00	72.19	C
[6145]	ATOM	6093	O	GLY	C	235	41.208	20.060	46.899	1.00	72.24	O
[6146]	ATOM	6094	N	ASP	C	236	43.029	19.556	48.080	1.00	72.78	N
[6147]	ATOM	6095	CA	ASP	C	236	43.970	19.527	46.917	1.00	73.18	C
[6148]	ATOM	6096	C	ASP	C	236	43.792	18.314	46.030	1.00	71.84	C
[6149]	ATOM	6097	O	ASP	C	236	44.075	18.376	44.826	1.00	71.83	O
[6150]	ATOM	6098	CB	ASP	C	236	45.442	19.527	47.382	1.00	74.41	C
[6151]	ATOM	6099	CG	ASP	C	236	45.952	20.944	47.745	1.00	78.45	C
[6152]	ATOM	6100	OD1	ASP	C	236	45.603	21.909	46.999	1.00	81.61	O
[6153]	ATOM	6101	OD2	ASP	C	236	46.693	21.079	48.776	1.00	81.77	O
[6154]	ATOM	6102	N	ILE	C	237	43.372	17.199	46.643	1.00	69.83	N
[6155]	ATOM	6103	CA	ILE	C	237	43.157	15.973	45.907	1.00	67.15	C
[6156]	ATOM	6104	C	ILE	C	237	41.679	15.758	45.591	1.00	64.66	C
[6157]	ATOM	6105	O	ILE	C	237	40.973	15.164	46.349	1.00	64.52	O
[6158]	ATOM	6106	CB	ILE	C	237	43.851	14.756	46.597	1.00	67.96	C
[6159]	ATOM	6107	CG1	ILE	C	237	45.245	15.167	47.182	1.00	68.72	C
[6160]	ATOM	6108	CG2	ILE	C	237	43.974	13.536	45.585	1.00	67.34	C
[6161]	ATOM	6109	CD1	ILE	C	237	46.063	14.041	47.925	1.00	66.63	C
[6162]	ATOM	6110	N	THR	C	238	41.234	16.327	44.479	1.00	61.61	N
[6163]	ATOM	6111	CA	THR	C	238	39.972	15.989	43.826	1.00	59.06	C
[6164]	ATOM	6112	C	THR	C	238	40.127	15.934	42.311	1.00	55.96	C
[6165]	ATOM	6113	O	THR	C	238	41.211	16.110	41.738	1.00	55.59	O
[6166]	ATOM	6114	CB	THR	C	238	38.866	17.039	44.003	1.00	60.14	C
[6167]	ATOM	6115	OG1	THR	C	238	39.444	18.344	43.922	1.00	60.79	O
[6168]	ATOM	6116	CG2	THR	C	238	38.084	16.847	45.293	1.00	62.46	C
[6169]	ATOM	6117	N	LEU	C	239	38.985	15.698	41.672	1.00	51.54	N
[6170]	ATOM	6118	CA	LEU	C	239	38.849	15.709	40.218	1.00	47.88	C
[6171]	ATOM	6119	C	LEU	C	239	38.290	17.075	39.894	1.00	48.40	C
[6172]	ATOM	6120	O	LEU	C	239	37.404	17.584	40.611	1.00	48.74	O
[6173]	ATOM	6121	CB	LEU	C	239	37.897	14.585	39.786	1.00	45.15	C
[6174]	ATOM	6122	CG	LEU	C	239	38.403	13.177	40.156	1.00	40.45	C
[6175]	ATOM	6123	CD1	LEU	C	239	37.368	12.063	40.052	1.00	36.19	C
[6176]	ATOM	6124	CD2	LEU	C	239	39.612	12.861	39.326	1.00	38.62	C
[6177]	ATOM	6125	N	ARG	C	240	38.821	17.711	38.853	1.00	49.38	N

[6178]	ATOM	6126	CA	ARG	C	240	38.346	19.072	38.511	1.00	50.20	C
[6179]	ATOM	6127	C	ARG	C	240	37.379	19.055	37.321	1.00	49.29	C
[6180]	ATOM	6128	O	ARG	C	240	36.847	20.103	36.936	1.00	50.34	O
[6181]	ATOM	6129	CB	ARG	C	240	39.553	20.030	38.267	1.00	50.61	C
[6182]	ATOM	6130	CG	ARG	C	240	40.220	20.588	39.572	1.00	51.10	C
[6183]	ATOM	6131	CD	ARG	C	240	41.782	20.734	39.379	1.00	53.52	C
[6184]	ATOM	6132	NE	ARG	C	240	42.583	20.213	40.520	1.00	55.88	N
[6185]	ATOM	6133	CZ	ARG	C	240	42.555	20.702	41.780	1.00	54.82	C
[6186]	ATOM	6134	NH1	ARG	C	240	41.754	21.744	42.088	1.00	54.38	N
[6187]	ATOM	6135	NH2	ARG	C	240	43.329	20.165	42.730	1.00	51.76	N
[6188]	ATOM	6136	N	CYS	C	241	37.158	17.871	36.756	1.00	47.51	N
[6189]	ATOM	6137	CA	CYS	C	241	36.275	17.702	35.637	1.00	46.04	C
[6190]	ATOM	6138	C	CYS	C	241	34.952	17.077	36.053	1.00	45.87	C
[6191]	ATOM	6139	O	CYS	C	241	34.874	16.435	37.124	1.00	45.87	O
[6192]	ATOM	6140	CB	CYS	C	241	36.920	16.779	34.681	1.00	46.09	C
[6193]	ATOM	6141	SG	CYS	C	241	36.868	15.086	35.282	1.00	43.76	S
[6194]	ATOM	6142	N	PRO	C	242	33.889	17.301	35.234	1.00	44.82	N
[6195]	ATOM	6143	CA	PRO	C	242	32.639	16.631	35.575	1.00	43.58	C
[6196]	ATOM	6144	C	PRO	C	242	32.824	15.103	35.589	1.00	42.75	C
[6197]	ATOM	6145	O	PRO	C	242	33.620	14.537	34.820	1.00	42.00	O
[6198]	ATOM	6146	CB	PRO	C	242	31.650	17.114	34.503	1.00	43.00	C
[6199]	ATOM	6147	CG	PRO	C	242	32.518	17.613	33.401	1.00	43.79	C
[6200]	ATOM	6148	CD	PRO	C	242	33.753	18.159	34.043	1.00	43.82	C
[6201]	ATOM	6149	N	VAL	C	243	32.089	14.477	36.520	1.00	41.77	N
[6202]	ATOM	6150	CA	VAL	C	243	32.136	13.052	36.798	1.00	39.83	C
[6203]	ATOM	6151	C	VAL	C	243	30.730	12.504	36.903	1.00	39.18	C
[6204]	ATOM	6152	O	VAL	C	243	29.911	13.078	37.570	1.00	39.57	O
[6205]	ATOM	6153	CB	VAL	C	243	32.903	12.796	38.089	1.00	39.18	C
[6206]	ATOM	6154	CG1	VAL	C	243	32.674	11.376	38.633	1.00	39.29	C
[6207]	ATOM	6155	CG2	VAL	C	243	34.323	12.978	37.846	1.00	38.24	C
[6208]	ATOM	6156	N	MET	C	244	30.459	11.400	36.222	1.00	38.95	N
[6209]	ATOM	6157	CA	MET	C	244	29.263	10.616	36.498	1.00	38.60	C
[6210]	ATOM	6158	C	MET	C	244	29.610	9.284	37.153	1.00	37.88	C
[6211]	ATOM	6159	O	MET	C	244	30.208	8.438	36.533	1.00	37.42	O
[6212]	ATOM	6160	CB	MET	C	244	28.494	10.337	35.234	1.00	38.72	C
[6213]	ATOM	6161	CG	MET	C	244	27.274	9.450	35.474	1.00	39.74	C

[6214]	ATOM	6162	SD	MET	C	244	26.111	9.425	34.048	1.00	38.54	S
[6215]	ATOM	6163	CE	MET	C	244	26.776	8.264	32.914	1.00	36.94	C
[6216]	ATOM	6164	N	LEU	C	245	29.240	9.149	38.432	1.00	37.62	N
[6217]	ATOM	6165	CA	LEU	C	245	29.281	7.888	39.210	1.00	36.51	C
[6218]	ATOM	6166	C	LEU	C	245	28.092	6.968	38.904	1.00	36.17	C
[6219]	ATOM	6167	O	LEU	C	245	26.961	7.423	38.704	1.00	35.95	O
[6220]	ATOM	6168	CB	LEU	C	245	29.375	8.173	40.713	1.00	35.84	C
[6221]	ATOM	6169	CG	LEU	C	245	30.658	8.893	41.180	1.00	34.63	C
[6222]	ATOM	6170	CD1	LEU	C	245	30.743	9.113	42.654	1.00	32.70	C
[6223]	ATOM	6171	CD2	LEU	C	245	31.947	8.194	40.754	1.00	30.49	C
[6224]	ATOM	6172	N	VAL	C	246	28.383	5.675	38.820	1.00	35.63	N
[6225]	ATOM	6173	CA	VAL	C	246	27.401	4.658	38.465	1.00	35.33	C
[6226]	ATOM	6174	C	VAL	C	246	27.555	3.415	39.285	1.00	36.06	C
[6227]	ATOM	6175	O	VAL	C	246	28.629	2.985	39.566	1.00	36.18	O
[6228]	ATOM	6176	CB	VAL	C	246	27.578	4.270	37.026	1.00	35.00	C
[6229]	ATOM	6177	CG1	VAL	C	246	26.534	3.269	36.643	1.00	32.24	C
[6230]	ATOM	6178	CG2	VAL	C	246	27.513	5.527	36.179	1.00	34.42	C
[6231]	ATOM	6179	N	VAL	C	247	26.467	2.810	39.662	1.00	37.63	N
[6232]	ATOM	6180	CA	VAL	C	247	26.519	1.537	40.416	1.00	38.73	C
[6233]	ATOM	6181	C	VAL	C	247	25.108	0.965	40.482	1.00	40.27	C
[6234]	ATOM	6182	O	VAL	C	247	24.144	1.700	40.476	1.00	40.33	O
[6235]	ATOM	6183	CB	VAL	C	247	27.036	1.790	41.833	1.00	38.59	C
[6236]	ATOM	6184	CG1	VAL	C	247	25.961	2.556	42.701	1.00	37.34	C
[6237]	ATOM	6185	CG2	VAL	C	247	27.582	0.517	42.485	1.00	36.19	C
[6238]	ATOM	6186	N	GLY	C	248	24.990	-0.335	40.551	1.00	42.15	N
[6239]	ATOM	6187	CA	GLY	C	248	23.695	-0.970	40.684	1.00	44.36	C
[6240]	ATOM	6188	C	GLY	C	248	23.216	-0.984	42.121	1.00	46.39	C
[6241]	ATOM	6189	O	GLY	C	248	24.047	-1.025	43.031	1.00	45.52	O
[6242]	ATOM	6190	N	ASP	C	249	21.877	-0.963	42.323	1.00	49.03	N
[6243]	ATOM	6191	CA	ASP	C	249	21.345	-1.004	43.675	1.00	50.01	C
[6244]	ATOM	6192	C	ASP	C	249	21.608	-2.388	44.265	1.00	49.68	C
[6245]	ATOM	6193	O	ASP	C	249	21.545	-3.404	43.566	1.00	48.86	O
[6246]	ATOM	6194	CB	ASP	C	249	19.868	-0.523	43.813	1.00	51.01	C
[6247]	ATOM	6195	CG	ASP	C	249	19.386	-0.472	45.324	1.00	52.84	C
[6248]	ATOM	6196	OD1	ASP	C	249	20.006	0.238	46.211	1.00	55.94	O
[6249]	ATOM	6197	OD2	ASP	C	249	18.394	-1.191	45.621	1.00	57.53	O

[6250]	ATOM	6198	N	GLN	C	250	21.989	-2.372	45.534	1.00	49.86	N
[6251]	ATOM	6199	CA	GLN	C	250	22.336	-3.559	46.321	1.00	50.80	C
[6252]	ATOM	6200	C	GLN	C	250	23.398	-4.402	45.616	1.00	49.65	C
[6253]	ATOM	6201	O	GLN	C	250	23.400	-5.618	45.687	1.00	50.35	O
[6254]	ATOM	6202	CB	GLN	C	250	21.071	-4.319	46.873	1.00	52.03	C
[6255]	ATOM	6203	CG	GLN	C	250	19.944	-3.446	47.755	1.00	55.27	C
[6256]	ATOM	6204	CD	GLN	C	250	20.482	-2.216	48.719	1.00	60.21	C
[6257]	ATOM	6205	OE1	GLN	C	250	21.393	-2.403	49.558	1.00	60.14	O
[6258]	ATOM	6206	NE2	GLN	C	250	19.868	-0.989	48.581	1.00	59.15	N
[6259]	ATOM	6207	N	ALA	C	251	24.331	-3.737	44.937	1.00	48.01	N
[6260]	ATOM	6208	CA	ALA	C	251	25.431	-4.452	44.304	1.00	45.90	C
[6261]	ATOM	6209	C	ALA	C	251	26.711	-4.415	45.164	1.00	44.40	C
[6262]	ATOM	6210	O	ALA	C	251	26.814	-3.630	46.127	1.00	44.89	O
[6263]	ATOM	6211	CB	ALA	C	251	25.662	-3.921	42.884	1.00	46.22	C
[6264]	ATOM	6212	N	PRO	C	252	27.709	-5.242	44.834	1.00	42.09	N
[6265]	ATOM	6213	CA	PRO	C	252	28.813	-5.299	45.786	1.00	40.67	C
[6266]	ATOM	6214	C	PRO	C	252	29.525	-3.971	46.011	1.00	39.67	C
[6267]	ATOM	6215	O	PRO	C	252	29.965	-3.720	47.086	1.00	38.97	O
[6268]	ATOM	6216	CB	PRO	C	252	29.754	-6.339	45.194	1.00	40.10	C
[6269]	ATOM	6217	CG	PRO	C	252	29.008	-7.037	44.203	1.00	40.32	C
[6270]	ATOM	6218	CD	PRO	C	252	27.950	-6.114	43.689	1.00	41.99	C
[6271]	ATOM	6219	N	HIS	C	253	29.590	-3.094	45.031	1.00	40.21	N
[6272]	ATOM	6220	CA	HIS	C	253	30.284	-1.835	45.263	1.00	39.82	C
[6273]	ATOM	6221	C	HIS	C	253	29.449	-0.634	45.626	1.00	40.98	C
[6274]	ATOM	6222	O	HIS	C	253	30.027	0.469	45.663	1.00	41.36	O
[6275]	ATOM	6223	CB	HIS	C	253	31.159	-1.522	44.069	1.00	39.00	C
[6276]	ATOM	6224	CG	HIS	C	253	32.143	-2.615	43.767	1.00	35.94	C
[6277]	ATOM	6225	ND1	HIS	C	253	33.253	-2.860	44.549	1.00	29.75	N
[6278]	ATOM	6226	CD2	HIS	C	253	32.156	-3.548	42.786	1.00	32.99	C
[6279]	ATOM	6227	CE1	HIS	C	253	33.920	-3.879	44.038	1.00	30.11	C
[6280]	ATOM	6228	NE2	HIS	C	253	33.270	-4.328	42.983	1.00	28.59	N
[6281]	ATOM	6229	N	GLU	C	254	28.142	-0.821	45.926	1.00	41.70	N
[6282]	ATOM	6230	CA	GLU	C	254	27.254	0.301	46.190	1.00	43.33	C
[6283]	ATOM	6231	C	GLU	C	254	27.821	1.166	47.302	1.00	42.48	C
[6284]	ATOM	6232	O	GLU	C	254	27.980	2.343	47.128	1.00	41.82	O
[6285]	ATOM	6233	CB	GLU	C	254	25.834	-0.151	46.485	1.00	43.05	C

[6286]	ATOM	6234	CG	GLU	C	254	24.870	0.990	46.923	1.00	45.88	C
[6287]	ATOM	6235	CD	GLU	C	254	23.534	0.510	47.490	1.00	49.12	C
[6288]	ATOM	6236	OE1	GLU	C	254	23.326	-0.691	47.649	1.00	55.47	O
[6289]	ATOM	6237	OE2	GLU	C	254	22.658	1.331	47.779	1.00	54.60	O
[6290]	ATOM	6238	N	ASP	C	255	28.161	0.583	48.424	1.00	43.35	N
[6291]	ATOM	6239	CA	ASP	C	255	28.671	1.395	49.493	1.00	45.69	C
[6292]	ATOM	6240	C	ASP	C	255	29.882	2.247	49.100	1.00	46.32	C
[6293]	ATOM	6241	O	ASP	C	255	29.893	3.446	49.420	1.00	47.16	O
[6294]	ATOM	6242	CB	ASP	C	255	28.973	0.570	50.754	1.00	46.38	C
[6295]	ATOM	6243	CG	ASP	C	255	27.710	-0.018	51.372	1.00	49.35	C
[6296]	ATOM	6244	OD1	ASP	C	255	26.596	0.338	50.893	1.00	49.26	O
[6297]	ATOM	6245	OD2	ASP	C	255	27.833	-0.816	52.340	1.00	52.46	O
[6298]	ATOM	6246	N	ALA	C	256	30.885	1.660	48.418	1.00	46.22	N
[6299]	ATOM	6247	CA	ALA	C	256	32.059	2.426	47.980	1.00	44.77	C
[6300]	ATOM	6248	C	ALA	C	256	31.682	3.559	47.022	1.00	44.22	C
[6301]	ATOM	6249	O	ALA	C	256	32.177	4.643	47.135	1.00	44.57	O
[6302]	ATOM	6250	CB	ALA	C	256	33.107	1.537	47.386	1.00	44.34	C
[6303]	ATOM	6251	N	VAL	C	257	30.799	3.331	46.083	1.00	43.36	N
[6304]	ATOM	6252	CA	VAL	C	257	30.453	4.438	45.205	1.00	42.88	C
[6305]	ATOM	6253	C	VAL	C	257	29.765	5.526	46.010	1.00	43.98	C
[6306]	ATOM	6254	O	VAL	C	257	30.145	6.694	45.860	1.00	44.32	O
[6307]	ATOM	6255	CB	VAL	C	257	29.646	4.005	43.920	1.00	42.19	C
[6308]	ATOM	6256	CG1	VAL	C	257	29.315	5.168	43.041	1.00	38.05	C
[6309]	ATOM	6257	CG2	VAL	C	257	30.443	3.009	43.171	1.00	39.42	C
[6310]	ATOM	6258	N	VAL	C	258	28.808	5.145	46.876	1.00	44.64	N
[6311]	ATOM	6259	CA	VAL	C	258	28.115	6.088	47.738	1.00	45.23	C
[6312]	ATOM	6260	C	VAL	C	258	29.085	6.969	48.535	1.00	46.42	C
[6313]	ATOM	6261	O	VAL	C	258	28.944	8.199	48.577	1.00	46.84	O
[6314]	ATOM	6262	CB	VAL	C	258	27.122	5.432	48.672	1.00	44.36	C
[6315]	ATOM	6263	CG1	VAL	C	258	26.810	6.334	49.814	1.00	43.23	C
[6316]	ATOM	6264	CG2	VAL	C	258	25.845	5.186	47.937	1.00	45.56	C
[6317]	ATOM	6265	N	GLU	C	259	30.071	6.360	49.161	1.00	47.26	N
[6318]	ATOM	6266	CA	GLU	C	259	31.014	7.144	49.925	1.00	49.00	C
[6319]	ATOM	6267	C	GLU	C	259	31.770	8.106	49.044	1.00	48.79	C
[6320]	ATOM	6268	O	GLU	C	259	31.830	9.288	49.357	1.00	50.22	O
[6321]	ATOM	6269	CB	GLU	C	259	31.977	6.267	50.673	1.00	49.79	C

[6322]	ATOM	6270	CG	GLU	C	259	33.373	6.826	50.710	1.00	55.26	C
[6323]	ATOM	6271	CD	GLU	C	259	33.931	6.698	52.086	1.00	60.86	C
[6324]	ATOM	6272	OE1	GLU	C	259	33.859	5.590	52.648	1.00	63.46	O
[6325]	ATOM	6273	OE2	GLU	C	259	34.425	7.700	52.624	1.00	62.97	O
[6326]	ATOM	6274	N	CYS	C	260	32.337	7.597	47.957	1.00	47.59	N
[6327]	ATOM	6275	CA	CYS	C	260	32.967	8.388	46.909	1.00	46.19	C
[6328]	ATOM	6276	C	CYS	C	260	32.161	9.628	46.508	1.00	45.46	C
[6329]	ATOM	6277	O	CYS	C	260	32.743	10.725	46.468	1.00	45.63	O
[6330]	ATOM	6278	CB	CYS	C	260	33.203	7.531	45.684	1.00	45.76	C
[6331]	ATOM	6279	SG	CYS	C	260	34.466	8.148	44.717	1.00	44.44	S
[6332]	ATOM	6280	N	ASN	C	261	30.865	9.482	46.215	1.00	43.74	N
[6333]	ATOM	6281	CA	ASN	C	261	30.042	10.656	45.876	1.00	43.12	C
[6334]	ATOM	6282	C	ASN	C	261	30.206	11.779	46.912	1.00	44.35	C
[6335]	ATOM	6283	O	ASN	C	261	30.282	12.962	46.595	1.00	44.47	O
[6336]	ATOM	6284	CB	ASN	C	261	28.586	10.273	45.784	1.00	41.70	C
[6337]	ATOM	6285	CG	ASN	C	261	27.735	11.377	45.204	1.00	40.44	C
[6338]	ATOM	6286	OD1	ASN	C	261	28.146	12.121	44.289	1.00	39.73	O
[6339]	ATOM	6287	ND2	ASN	C	261	26.513	11.480	45.698	1.00	38.60	N
[6340]	ATOM	6288	N	SER	C	262	30.319	11.369	48.169	1.00	45.92	N
[6341]	ATOM	6289	CA	SER	C	262	30.389	12.262	49.309	1.00	46.79	C
[6342]	ATOM	6290	C	SER	C	262	31.759	12.926	49.365	1.00	46.83	C
[6343]	ATOM	6291	O	SER	C	262	31.927	13.856	50.105	1.00	47.91	O
[6344]	ATOM	6292	CB	SER	C	262	30.118	11.462	50.619	1.00	47.05	C
[6345]	ATOM	6293	OG	SER	C	262	31.291	10.756	51.065	1.00	46.21	O
[6346]	ATOM	6294	N	LYS	C	263	32.741	12.448	48.628	1.00	46.64	N
[6347]	ATOM	6295	CA	LYS	C	263	34.034	13.135	48.648	1.00	47.00	C
[6348]	ATOM	6296	C	LYS	C	263	34.302	14.021	47.448	1.00	48.35	C
[6349]	ATOM	6297	O	LYS	C	263	35.298	14.726	47.430	1.00	49.10	O
[6350]	ATOM	6298	CB	LYS	C	263	35.195	12.177	48.910	1.00	45.86	C
[6351]	ATOM	6299	CG	LYS	C	263	34.968	11.508	50.264	1.00	43.65	C
[6352]	ATOM	6300	CD	LYS	C	263	36.128	11.190	51.192	1.00	40.64	C
[6353]	ATOM	6301	CE	LYS	C	263	35.711	11.587	52.636	1.00	40.82	C
[6354]	ATOM	6302	NZ	LYS	C	263	35.168	10.379	53.337	1.00	40.12	N
[6355]	ATOM	6303	N	LEU	C	264	33.414	14.000	46.466	1.00	50.05	N
[6356]	ATOM	6304	CA	LEU	C	264	33.683	14.723	45.252	1.00	52.36	C
[6357]	ATOM	6305	C	LEU	C	264	32.816	15.974	45.136	1.00	54.52	C

[6358]	ATOM	6306	O	LEU	C	264	31.750	16.058	45.750	1.00	55.41	O
[6359]	ATOM	6307	CB	LEU	C	264	33.522	13.819	44.030	1.00	52.14	C
[6360]	ATOM	6308	CG	LEU	C	264	34.539	12.667	43.935	1.00	51.68	C
[6361]	ATOM	6309	CD1	LEU	C	264	33.966	11.610	43.012	1.00	50.92	C
[6362]	ATOM	6310	CD2	LEU	C	264	35.886	13.123	43.439	1.00	50.22	C
[6363]	ATOM	6311	N	ASP	C	265	33.300	16.940	44.346	1.00	56.17	N
[6364]	ATOM	6312	CA	ASP	C	265	32.642	18.223	44.120	1.00	57.31	C
[6365]	ATOM	6313	C	ASP	C	265	31.204	18.072	43.556	1.00	57.21	C
[6366]	ATOM	6314	O	ASP	C	265	31.041	17.780	42.380	1.00	57.65	O
[6367]	ATOM	6315	CB	ASP	C	265	33.573	19.077	43.237	1.00	57.94	C
[6368]	ATOM	6316	CG	ASP	C	265	33.035	20.488	42.941	1.00	59.87	C
[6369]	ATOM	6317	OD1	ASP	C	265	31.843	20.804	43.185	1.00	60.01	O
[6370]	ATOM	6318	OD2	ASP	C	265	33.836	21.280	42.406	1.00	61.35	O
[6371]	ATOM	6319	N	PRO	C	266	30.165	18.334	44.380	1.00	56.84	N
[6372]	ATOM	6320	CA	PRO	C	266	28.770	18.093	43.997	1.00	56.40	C
[6373]	ATOM	6321	C	PRO	C	266	28.300	18.829	42.766	1.00	55.74	C
[6374]	ATOM	6322	O	PRO	C	266	27.323	18.394	42.158	1.00	55.68	O
[6375]	ATOM	6323	CB	PRO	C	266	27.972	18.627	45.193	1.00	56.67	C
[6376]	ATOM	6324	CG	PRO	C	266	28.938	18.717	46.335	1.00	56.50	C
[6377]	ATOM	6325	CD	PRO	C	266	30.273	18.945	45.721	1.00	56.97	C
[6378]	ATOM	6326	N	THR	C	267	28.962	19.940	42.434	1.00	55.32	N
[6379]	ATOM	6327	CA	THR	C	267	28.559	20.824	41.319	1.00	55.22	C
[6380]	ATOM	6328	C	THR	C	267	28.811	20.118	40.013	1.00	53.91	C
[6381]	ATOM	6329	O	THR	C	267	28.102	20.302	39.070	1.00	53.96	O
[6382]	ATOM	6330	CB	THR	C	267	29.329	22.214	41.300	1.00	55.94	C
[6383]	ATOM	6331	OG1	THR	C	267	30.724	22.003	41.576	1.00	56.09	O
[6384]	ATOM	6332	CG2	THR	C	267	28.747	23.229	42.315	1.00	55.59	C
[6385]	ATOM	6333	N	GLN	C	268	29.823	19.271	40.007	1.00	53.13	N
[6386]	ATOM	6334	CA	GLN	C	268	30.320	18.625	38.807	1.00	51.66	C
[6387]	ATOM	6335	C	GLN	C	268	30.289	17.087	38.877	1.00	51.60	C
[6388]	ATOM	6336	O	GLN	C	268	30.992	16.388	38.128	1.00	52.24	O
[6389]	ATOM	6337	CB	GLN	C	268	31.747	19.085	38.614	1.00	50.81	C
[6390]	ATOM	6338	CG	GLN	C	268	31.868	20.302	37.708	1.00	48.66	C
[6391]	ATOM	6339	CD	GLN	C	268	33.334	20.546	37.497	1.00	50.93	C
[6392]	ATOM	6340	OE1	GLN	C	268	34.014	20.560	38.463	1.00	52.83	O
[6393]	ATOM	6341	NE2	GLN	C	268	33.847	20.627	36.286	1.00	47.86	N



[6394]	ATOM	6342	N	THR	C	269	29.523	16.556	39.820	1.00	50.79	N
[6395]	ATOM	6343	CA	THR	C	269	29.455	15.122	40.028	1.00	49.74	C
[6396]	ATOM	6344	C	THR	C	269	28.029	14.722	40.107	1.00	49.72	C
[6397]	ATOM	6345	O	THR	C	269	27.361	15.092	41.045	1.00	50.39	O
[6398]	ATOM	6346	CB	THR	C	269	30.087	14.739	41.313	1.00	49.20	C
[6399]	ATOM	6347	OG1	THR	C	269	31.481	15.011	41.243	1.00	51.07	O
[6400]	ATOM	6348	CG2	THR	C	269	29.969	13.312	41.514	1.00	48.88	C
[6401]	ATOM	6349	N	SER	C	270	27.551	14.011	39.098	1.00	49.43	N
[6402]	ATOM	6350	CA	SER	C	270	26.260	13.351	39.203	1.00	49.74	C
[6403]	ATOM	6351	C	SER	C	270	26.426	11.839	39.565	1.00	48.93	C
[6404]	ATOM	6352	O	SER	C	270	27.512	11.268	39.487	1.00	48.68	O
[6405]	ATOM	6353	CB	SER	C	270	25.470	13.562	37.916	1.00	50.10	C
[6406]	ATOM	6354	OG	SER	C	270	26.341	13.342	36.834	1.00	52.45	O
[6407]	ATOM	6355	N	PHE	C	271	25.337	11.208	39.972	1.00	48.18	N
[6408]	ATOM	6356	CA	PHE	C	271	25.387	9.865	40.578	1.00	47.58	C
[6409]	ATOM	6357	C	PHE	C	271	24.207	9.092	40.085	1.00	46.71	C
[6410]	ATOM	6358	O	PHE	C	271	23.078	9.358	40.467	1.00	46.46	O
[6411]	ATOM	6359	CB	PHE	C	271	25.304	9.966	42.092	1.00	48.01	C
[6412]	ATOM	6360	CG	PHE	C	271	25.320	8.659	42.823	1.00	49.60	C
[6413]	ATOM	6361	CD1	PHE	C	271	25.811	7.496	42.272	1.00	51.94	C
[6414]	ATOM	6362	CD2	PHE	C	271	24.883	8.601	44.141	1.00	52.35	C
[6415]	ATOM	6363	CE1	PHE	C	271	25.839	6.317	43.008	1.00	51.14	C
[6416]	ATOM	6364	CE2	PHE	C	271	24.918	7.407	44.860	1.00	53.05	C
[6417]	ATOM	6365	CZ	PHE	C	271	25.398	6.290	44.284	1.00	51.10	C
[6418]	ATOM	6366	N	LEU	C	272	24.470	8.150	39.195	1.00	45.93	N
[6419]	ATOM	6367	CA	LEU	C	272	23.429	7.339	38.655	1.00	45.56	C
[6420]	ATOM	6368	C	LEU	C	272	23.439	6.005	39.412	1.00	45.79	C
[6421]	ATOM	6369	O	LEU	C	272	24.304	5.182	39.188	1.00	46.66	O
[6422]	ATOM	6370	CB	LEU	C	272	23.682	7.153	37.191	1.00	44.58	C
[6423]	ATOM	6371	CG	LEU	C	272	22.681	6.234	36.556	1.00	46.00	C
[6424]	ATOM	6372	CD1	LEU	C	272	21.395	6.965	36.395	1.00	47.99	C
[6425]	ATOM	6373	CD2	LEU	C	272	23.202	5.846	35.225	1.00	43.37	C
[6426]	ATOM	6374	N	LYS	C	273	22.529	5.808	40.354	1.00	45.71	N
[6427]	ATOM	6375	CA	LYS	C	273	22.442	4.517	41.028	1.00	45.67	C
[6428]	ATOM	6376	C	LYS	C	273	21.254	3.758	40.486	1.00	46.55	C
[6429]	ATOM	6377	O	LYS	C	273	20.134	4.129	40.730	1.00	45.78	O

[6430]	ATOM	6378	CB	LYS	C	273	22.277	4.699	42.505	1.00	45.33	C
[6431]	ATOM	6379	CG	LYS	C	273	21.964	3.407	43.231	1.00	44.75	C
[6432]	ATOM	6380	CD	LYS	C	273	21.246	3.759	44.554	1.00	45.15	C
[6433]	ATOM	6381	CE	LYS	C	273	22.109	3.528	45.778	1.00	45.03	C
[6434]	ATOM	6382	NZ	LYS	C	273	21.817	4.540	46.874	1.00	49.13	N
[6435]	ATOM	6383	N	MET	C	274	21.504	2.704	39.726	1.00	48.65	N
[6436]	ATOM	6384	CA	MET	C	274	20.457	2.067	38.939	1.00	51.35	C
[6437]	ATOM	6385	C	MET	C	274	19.728	0.949	39.663	1.00	52.73	C
[6438]	ATOM	6386	O	MET	C	274	20.320	0.039	40.264	1.00	52.16	O
[6439]	ATOM	6387	CB	MET	C	274	20.982	1.592	37.583	1.00	51.17	C
[6440]	ATOM	6388	CG	MET	C	274	21.572	2.695	36.769	1.00	52.57	C
[6441]	ATOM	6389	SD	MET	C	274	22.592	2.103	35.416	1.00	54.01	S
[6442]	ATOM	6390	CE	MET	C	274	21.354	1.832	34.159	1.00	58.17	C
[6443]	ATOM	6391	N	ALA	C	275	18.401	1.054	39.619	1.00	55.14	N
[6444]	ATOM	6392	CA	ALA	C	275	17.576	-0.049	40.062	1.00	56.60	C
[6445]	ATOM	6393	C	ALA	C	275	17.765	-1.194	39.012	1.00	57.04	C
[6446]	ATOM	6394	O	ALA	C	275	17.980	-0.927	37.791	1.00	56.61	O
[6447]	ATOM	6395	CB	ALA	C	275	16.110	0.415	40.234	1.00	56.11	C
[6448]	ATOM	6396	N	ASP	C	276	17.790	-2.431	39.504	1.00	57.18	N
[6449]	ATOM	6397	CA	ASP	C	276	17.727	-3.635	38.632	1.00	58.62	C
[6450]	ATOM	6398	C	ASP	C	276	18.909	-3.907	37.696	1.00	57.55	C
[6451]	ATOM	6399	O	ASP	C	276	18.714	-4.481	36.613	1.00	57.46	O
[6452]	ATOM	6400	CB	ASP	C	276	16.416	-3.659	37.781	1.00	59.55	C
[6453]	ATOM	6401	CG	ASP	C	276	15.176	-3.860	38.631	1.00	62.83	C
[6454]	ATOM	6402	OD1	ASP	C	276	15.009	-4.983	39.187	1.00	65.51	O
[6455]	ATOM	6403	OD2	ASP	C	276	14.404	-2.871	38.778	1.00	66.04	O
[6456]	ATOM	6404	N	SER	C	277	20.119	-3.516	38.089	1.00	56.06	N
[6457]	ATOM	6405	CA	SER	C	277	21.214	-3.523	37.105	1.00	54.13	C
[6458]	ATOM	6406	C	SER	C	277	22.329	-4.485	37.481	1.00	52.58	C
[6459]	ATOM	6407	O	SER	C	277	23.057	-4.995	36.608	1.00	52.74	O
[6460]	ATOM	6408	CB	SER	C	277	21.745	-2.114	36.857	1.00	53.99	C
[6461]	ATOM	6409	OG	SER	C	277	22.205	-1.582	38.062	1.00	54.79	O
[6462]	ATOM	6410	N	GLY	C	278	22.420	-4.757	38.784	1.00	50.23	N
[6463]	ATOM	6411	CA	GLY	C	278	23.391	-5.669	39.305	1.00	46.81	C
[6464]	ATOM	6412	C	GLY	C	278	24.778	-5.054	39.240	1.00	45.37	C
[6465]	ATOM	6413	O	GLY	C	278	24.941	-3.833	39.202	1.00	44.79	O

[6466]	ATOM	6414	N	GLY	C	279	25.784	-5.928	39.218	1.00	43.25	N
[6467]	ATOM	6415	CA	GLY	C	279	27.177	-5.541	39.252	1.00	40.00	C
[6468]	ATOM	6416	C	GLY	C	279	27.796	-5.015	37.957	1.00	37.89	C
[6469]	ATOM	6417	O	GLY	C	279	28.823	-4.365	38.008	1.00	37.67	O
[6470]	ATOM	6418	N	GLN	C	280	27.196	-5.331	36.812	1.00	35.26	N
[6471]	ATOM	6419	CA	GLN	C	280	27.619	-4.816	35.525	1.00	33.07	C
[6472]	ATOM	6420	C	GLN	C	280	26.480	-4.075	34.804	1.00	32.53	C
[6473]	ATOM	6421	O	GLN	C	280	25.940	-4.493	33.776	1.00	32.37	O
[6474]	ATOM	6422	CB	GLN	C	280	28.303	-5.904	34.673	1.00	32.29	C
[6475]	ATOM	6423	CG	GLN	C	280	29.420	-6.593	35.398	1.00	29.72	C
[6476]	ATOM	6424	CD	GLN	C	280	30.754	-5.754	35.532	1.00	29.56	C
[6477]	ATOM	6425	OE1	GLN	C	280	31.311	-5.597	36.627	1.00	29.44	O
[6478]	ATOM	6426	NE2	GLN	C	280	31.266	-5.281	34.434	1.00	26.76	N
[6479]	ATOM	6427	N	PRO	C	281	26.178	-2.902	35.302	1.00	31.87	N
[6480]	ATOM	6428	CA	PRO	C	281	25.076	-2.188	34.767	1.00	31.92	C
[6481]	ATOM	6429	C	PRO	C	281	25.346	-1.904	33.321	1.00	33.09	C
[6482]	ATOM	6430	O	PRO	C	281	24.395	-1.765	32.559	1.00	35.07	O
[6483]	ATOM	6431	CB	PRO	C	281	25.087	-0.902	35.513	1.00	31.34	C
[6484]	ATOM	6432	CG	PRO	C	281	26.044	-1.050	36.562	1.00	31.68	C
[6485]	ATOM	6433	CD	PRO	C	281	26.908	-2.160	36.317	1.00	31.84	C
[6486]	ATOM	6434	N	GLN	C	282	26.597	-1.831	32.892	1.00	32.88	N
[6487]	ATOM	6435	CA	GLN	C	282	26.774	-1.687	31.439	1.00	33.01	C
[6488]	ATOM	6436	C	GLN	C	282	26.465	-2.973	30.699	1.00	34.17	C
[6489]	ATOM	6437	O	GLN	C	282	26.288	-2.955	29.478	1.00	34.78	O
[6490]	ATOM	6438	CB	GLN	C	282	28.145	-1.121	31.033	1.00	32.20	C
[6491]	ATOM	6439	CG	GLN	C	282	29.282	-2.089	30.912	1.00	31.27	C
[6492]	ATOM	6440	CD	GLN	C	282	29.662	-2.836	32.219	1.00	31.64	C
[6493]	ATOM	6441	OE1	GLN	C	282	30.256	-3.821	32.174	1.00	31.43	O
[6494]	ATOM	6442	NE2	GLN	C	282	29.306	-2.358	33.311	1.00	28.24	N
[6495]	ATOM	6443	N	LEU	C	283	26.411	-4.100	31.389	1.00	34.02	N
[6496]	ATOM	6444	CA	LEU	C	283	26.006	-5.196	30.621	1.00	35.53	C
[6497]	ATOM	6445	C	LEU	C	283	24.488	-5.434	30.689	1.00	36.46	C
[6498]	ATOM	6446	O	LEU	C	283	23.923	-5.945	29.737	1.00	36.57	O
[6499]	ATOM	6447	CB	LEU	C	283	26.811	-6.411	30.972	1.00	35.66	C
[6500]	ATOM	6448	CG	LEU	C	283	28.275	-6.331	30.608	1.00	35.42	C
[6501]	ATOM	6449	CD1	LEU	C	283	28.905	-7.134	31.616	1.00	36.14	C

[6502]	ATOM	6450	CD2	LEU	C	283	28.512	-6.946	29.293	1.00	36.34	C
[6503]	ATOM	6451	N	THR	C	284	23.840	-5.083	31.791	1.00	36.93	N
[6504]	ATOM	6452	CA	THR	C	284	22.433	-5.408	31.923	1.00	38.46	C
[6505]	ATOM	6453	C	THR	C	284	21.547	-4.224	31.547	1.00	40.21	C
[6506]	ATOM	6454	O	THR	C	284	20.466	-4.442	30.995	1.00	41.19	O
[6507]	ATOM	6455	CB	THR	C	284	22.047	-5.799	33.318	1.00	38.29	C
[6508]	ATOM	6456	OG1	THR	C	284	22.327	-4.696	34.165	1.00	37.29	O
[6509]	ATOM	6457	CG2	THR	C	284	22.815	-7.062	33.781	1.00	37.78	C
[6510]	ATOM	6458	N	GLN	C	285	21.980	-2.979	31.799	1.00	40.36	N
[6511]	ATOM	6459	CA	GLN	C	285	21.193	-1.848	31.320	1.00	39.90	C
[6512]	ATOM	6460	C	GLN	C	285	21.844	-0.959	30.273	1.00	39.26	C
[6513]	ATOM	6461	O	GLN	C	285	21.925	0.237	30.442	1.00	38.04	O
[6514]	ATOM	6462	CB	GLN	C	285	20.759	-0.988	32.479	1.00	40.65	C
[6515]	ATOM	6463	CG	GLN	C	285	20.252	-1.719	33.733	1.00	43.38	C
[6516]	ATOM	6464	CD	GLN	C	285	18.917	-2.290	33.599	1.00	47.08	C
[6517]	ATOM	6465	OE1	GLN	C	285	18.393	-2.290	32.528	1.00	47.34	O
[6518]	ATOM	6466	NE2	GLN	C	285	18.358	-2.823	34.669	1.00	45.90	N
[6519]	ATOM	6467	N	PRO	C	286	22.262	-1.517	29.150	1.00	39.80	N
[6520]	ATOM	6468	CA	PRO	C	286	22.873	-0.602	28.183	1.00	40.66	C
[6521]	ATOM	6469	C	PRO	C	286	21.985	0.612	27.952	1.00	41.34	C
[6522]	ATOM	6470	O	PRO	C	286	22.504	1.747	27.983	1.00	42.22	O
[6523]	ATOM	6471	CB	PRO	C	286	22.997	-1.440	26.897	1.00	40.52	C
[6524]	ATOM	6472	CG	PRO	C	286	22.317	-2.739	27.212	1.00	40.32	C
[6525]	ATOM	6473	CD	PRO	C	286	22.232	-2.902	28.673	1.00	39.83	C
[6526]	ATOM	6474	N	GLY	C	287	20.670	0.377	27.782	1.00	41.29	N
[6527]	ATOM	6475	CA	GLY	C	287	19.702	1.414	27.387	1.00	40.72	C
[6528]	ATOM	6476	C	GLY	C	287	19.767	2.645	28.222	1.00	40.47	C
[6529]	ATOM	6477	O	GLY	C	287	20.069	3.688	27.744	1.00	41.25	O
[6530]	ATOM	6478	N	LYS	C	288	19.496	2.494	29.491	1.00	40.28	N
[6531]	ATOM	6479	CA	LYS	C	288	19.584	3.567	30.446	1.00	40.92	C
[6532]	ATOM	6480	C	LYS	C	288	21.009	4.215	30.570	1.00	40.54	C
[6533]	ATOM	6481	O	LYS	C	288	21.118	5.461	30.763	1.00	40.88	O
[6534]	ATOM	6482	CB	LYS	C	288	19.152	3.023	31.822	1.00	41.66	C
[6535]	ATOM	6483	CG	LYS	C	288	17.989	3.706	32.537	1.00	43.98	C
[6536]	ATOM	6484	CD	LYS	C	288	18.115	3.442	34.063	1.00	47.31	C
[6537]	ATOM	6485	CE	LYS	C	288	16.764	3.428	34.841	1.00	49.73	C

[6538]	ATOM	6486	NZ	LYS	C	288	15.796	4.552	34.489	1.00	50.94	N
[6539]	ATOM	6487	N	LEU	C	289	22.087	3.402	30.501	1.00	38.88	N
[6540]	ATOM	6488	CA	LEU	C	289	23.407	3.907	30.794	1.00	36.59	C
[6541]	ATOM	6489	C	LEU	C	289	23.750	4.783	29.637	1.00	36.20	C
[6542]	ATOM	6490	O	LEU	C	289	24.355	5.798	29.823	1.00	35.83	O
[6543]	ATOM	6491	CB	LEU	C	289	24.434	2.794	30.952	1.00	36.42	C
[6544]	ATOM	6492	CG	LEU	C	289	25.923	3.186	31.024	1.00	35.00	C
[6545]	ATOM	6493	CD1	LEU	C	289	26.194	4.203	32.095	1.00	32.17	C
[6546]	ATOM	6494	CD2	LEU	C	289	26.753	2.011	31.291	1.00	33.34	C
[6547]	ATOM	6495	N	THR	C	290	23.312	4.406	28.444	1.00	35.51	N
[6548]	ATOM	6496	CA	THR	C	290	23.531	5.218	27.250	1.00	35.52	C
[6549]	ATOM	6497	C	THR	C	290	22.785	6.524	27.367	1.00	35.80	C
[6550]	ATOM	6498	O	THR	C	290	23.241	7.566	26.887	1.00	36.04	O
[6551]	ATOM	6499	CB	THR	C	290	23.008	4.509	26.033	1.00	35.13	C
[6552]	ATOM	6500	OG1	THR	C	290	23.753	3.310	25.884	1.00	36.99	O
[6553]	ATOM	6501	CG2	THR	C	290	23.121	5.349	24.806	1.00	34.07	C
[6554]	ATOM	6502	N	GLU	C	291	21.628	6.487	28.000	1.00	35.52	N
[6555]	ATOM	6503	CA	GLU	C	291	20.872	7.692	28.033	1.00	36.62	C
[6556]	ATOM	6504	C	GLU	C	291	21.560	8.628	29.013	1.00	35.71	C
[6557]	ATOM	6505	O	GLU	C	291	21.744	9.787	28.713	1.00	35.35	O
[6558]	ATOM	6506	CB	GLU	C	291	19.398	7.436	28.355	1.00	36.99	C
[6559]	ATOM	6507	CG	GLU	C	291	18.502	7.958	27.227	1.00	40.84	C
[6560]	ATOM	6508	CD	GLU	C	291	17.049	8.117	27.722	1.00	47.72	C
[6561]	ATOM	6509	OE1	GLU	C	291	16.353	7.088	27.786	1.00	49.58	O
[6562]	ATOM	6510	OE2	GLU	C	291	16.583	9.247	28.073	1.00	47.44	O
[6563]	ATOM	6511	N	ALA	C	292	21.988	8.105	30.155	1.00	35.37	N
[6564]	ATOM	6512	CA	ALA	C	292	22.750	8.884	31.073	1.00	35.14	C
[6565]	ATOM	6513	C	ALA	C	292	24.026	9.446	30.402	1.00	36.01	C
[6566]	ATOM	6514	O	ALA	C	292	24.422	10.557	30.625	1.00	36.65	O
[6567]	ATOM	6515	CB	ALA	C	292	23.077	8.062	32.166	1.00	34.85	C
[6568]	ATOM	6516	N	PHE	C	293	24.686	8.690	29.566	1.00	36.28	N
[6569]	ATOM	6517	CA	PHE	C	293	25.847	9.188	28.931	1.00	35.65	C
[6570]	ATOM	6518	C	PHE	C	293	25.508	10.368	28.034	1.00	35.61	C
[6571]	ATOM	6519	O	PHE	C	293	26.286	11.323	27.916	1.00	36.09	O
[6572]	ATOM	6520	CB	PHE	C	293	26.527	8.069	28.168	1.00	35.28	C
[6573]	ATOM	6521	CG	PHE	C	293	27.900	8.388	27.782	1.00	33.57	C

[6574]	ATOM	6522	CD1	PHE	C	293	28.792	8.793	28.711	1.00	30.99	C
[6575]	ATOM	6523	CD2	PHE	C	293	28.296	8.322	26.461	1.00	34.75	C
[6576]	ATOM	6524	CE1	PHE	C	293	30.070	9.158	28.317	1.00	32.91	C
[6577]	ATOM	6525	CE2	PHE	C	293	29.601	8.656	26.054	1.00	32.15	C
[6578]	ATOM	6526	CZ	PHE	C	293	30.486	9.082	26.970	1.00	31.72	C
[6579]	ATOM	6527	N	LYS	C	294	24.331	10.346	27.459	1.00	35.51	N
[6580]	ATOM	6528	CA	LYS	C	294	23.908	11.408	26.543	1.00	35.88	C
[6581]	ATOM	6529	C	LYS	C	294	23.821	12.687	27.307	1.00	35.76	C
[6582]	ATOM	6530	O	LYS	C	294	24.389	13.688	26.900	1.00	36.70	O
[6583]	ATOM	6531	CB	LYS	C	294	22.524	11.043	25.927	1.00	36.02	C
[6584]	ATOM	6532	CG	LYS	C	294	21.870	12.021	24.884	1.00	36.26	C
[6585]	ATOM	6533	CD	LYS	C	294	20.541	11.400	24.443	1.00	37.84	C
[6586]	ATOM	6534	CE	LYS	C	294	19.526	12.371	23.808	1.00	40.81	C
[6587]	ATOM	6535	NZ	LYS	C	294	19.417	12.201	22.270	1.00	41.67	N
[6588]	ATOM	6536	N	TYR	C	295	23.108	12.650	28.423	1.00	35.76	N
[6589]	ATOM	6537	CA	TYR	C	295	22.877	13.829	29.278	1.00	36.32	C
[6590]	ATOM	6538	C	TYR	C	295	24.130	14.321	29.932	1.00	36.75	C
[6591]	ATOM	6539	O	TYR	C	295	24.282	15.519	30.119	1.00	38.13	O
[6592]	ATOM	6540	CB	TYR	C	295	21.841	13.549	30.370	1.00	35.80	C
[6593]	ATOM	6541	CG	TYR	C	295	20.527	13.132	29.793	1.00	36.06	C
[6594]	ATOM	6542	CD1	TYR	C	295	19.967	13.847	28.761	1.00	38.95	C
[6595]	ATOM	6543	CD2	TYR	C	295	19.852	12.016	30.253	1.00	34.16	C
[6596]	ATOM	6544	CE1	TYR	C	295	18.760	13.451	28.219	1.00	38.45	C
[6597]	ATOM	6545	CE2	TYR	C	295	18.662	11.633	29.702	1.00	34.62	C
[6598]	ATOM	6546	CZ	TYR	C	295	18.149	12.340	28.704	1.00	36.00	C
[6599]	ATOM	6547	OH	TYR	C	295	16.997	11.961	28.174	1.00	38.17	O
[6600]	ATOM	6548	N	PHE	C	296	25.008	13.393	30.305	1.00	36.52	N
[6601]	ATOM	6549	CA	PHE	C	296	26.280	13.737	30.857	1.00	35.17	C
[6602]	ATOM	6550	C	PHE	C	296	27.029	14.578	29.807	1.00	35.98	C
[6603]	ATOM	6551	O	PHE	C	296	27.685	15.559	30.148	1.00	36.30	O
[6604]	ATOM	6552	CB	PHE	C	296	27.036	12.459	31.227	1.00	34.89	C
[6605]	ATOM	6553	CG	PHE	C	296	28.426	12.705	31.784	1.00	31.37	C
[6606]	ATOM	6554	CD1	PHE	C	296	28.602	13.367	33.000	1.00	28.32	C
[6607]	ATOM	6555	CD2	PHE	C	296	29.552	12.249	31.088	1.00	28.67	C
[6608]	ATOM	6556	CE1	PHE	C	296	29.856	13.560	33.504	1.00	30.55	C
[6609]	ATOM	6557	CE2	PHE	C	296	30.821	12.432	31.596	1.00	29.84	C

[6610]	ATOM	6558	CZ	PHE	C	296	30.985	13.070	32.816	1.00	32.18	C
[6611]	ATOM	6559	N	LEU	C	297	26.911	14.197	28.540	1.00	36.03	N
[6612]	ATOM	6560	CA	LEU	C	297	27.701	14.815	27.496	1.00	36.29	C
[6613]	ATOM	6561	C	LEU	C	297	27.109	16.172	27.229	1.00	36.97	C
[6614]	ATOM	6562	O	LEU	C	297	27.811	17.183	27.109	1.00	37.21	O
[6615]	ATOM	6563	CB	LEU	C	297	27.637	13.961	26.231	1.00	36.34	C
[6616]	ATOM	6564	CG	LEU	C	297	28.406	12.630	26.253	1.00	36.45	C
[6617]	ATOM	6565	CD1	LEU	C	297	28.182	11.959	24.968	1.00	37.10	C
[6618]	ATOM	6566	CD2	LEU	C	297	29.898	12.897	26.413	1.00	34.74	C
[6619]	ATOM	6567	N	GLN	C	298	25.794	16.239	27.157	1.00	37.40	N
[6620]	ATOM	6568	CA	GLN	C	298	25.193	17.572	27.065	1.00	37.67	C
[6621]	ATOM	6569	C	GLN	C	298	25.547	18.390	28.260	1.00	38.25	C
[6622]	ATOM	6570	O	GLN	C	298	25.729	19.590	28.156	1.00	38.50	O
[6623]	ATOM	6571	CB	GLN	C	298	23.707	17.473	27.087	1.00	37.22	C
[6624]	ATOM	6572	CG	GLN	C	298	23.228	16.844	25.811	1.00	37.35	C
[6625]	ATOM	6573	CD	GLN	C	298	21.724	16.658	25.821	1.00	37.41	C
[6626]	ATOM	6574	OE1	GLN	C	298	21.153	16.126	24.802	1.00	38.49	O
[6627]	ATOM	6575	NE2	GLN	C	298	21.049	17.090	26.964	1.00	35.05	N
[6628]	ATOM	6576	N	GLY	C	299	25.605	17.751	29.417	1.00	38.95	N
[6629]	ATOM	6577	CA	GLY	C	299	26.097	18.446	30.604	1.00	40.98	C
[6630]	ATOM	6578	C	GLY	C	299	27.379	19.272	30.389	1.00	41.96	C
[6631]	ATOM	6579	O	GLY	C	299	27.503	20.384	30.928	1.00	41.93	O
[6632]	ATOM	6580	N	MET	C	300	28.333	18.723	29.635	1.00	43.50	N
[6633]	ATOM	6581	CA	MET	C	300	29.579	19.406	29.439	1.00	45.85	C
[6634]	ATOM	6582	C	MET	C	300	29.509	20.219	28.193	1.00	46.08	C
[6635]	ATOM	6583	O	MET	C	300	30.502	20.646	27.687	1.00	47.09	O
[6636]	ATOM	6584	CB	MET	C	300	30.801	18.465	29.422	1.00	45.57	C
[6637]	ATOM	6585	CG	MET	C	300	30.610	17.106	28.880	1.00	47.99	C
[6638]	ATOM	6586	SD	MET	C	300	31.720	15.955	29.699	1.00	50.40	S
[6639]	ATOM	6587	CE	MET	C	300	33.118	16.222	28.581	1.00	53.16	C
[6640]	ATOM	6588	N	GLY	C	301	28.323	20.442	27.686	1.00	46.92	N
[6641]	ATOM	6589	CA	GLY	C	301	28.156	21.284	26.509	1.00	47.39	C
[6642]	ATOM	6590	C	GLY	C	301	28.329	20.572	25.177	1.00	47.98	C
[6643]	ATOM	6591	O	GLY	C	301	28.461	21.172	24.134	1.00	47.18	O
[6644]	ATOM	6592	N	TYR	C	302	28.362	19.259	25.187	1.00	49.37	N
[6645]	ATOM	6593	CA	TYR	C	302	28.438	18.547	23.886	1.00	50.80	C

[6646]	ATOM	6594	C	TYR C 302	27.078	18.169	23.380	1.00	51.94	C
[6647]	ATOM	6595	O	TYR C 302	26.370	17.350	23.995	1.00	51.84	O
[6648]	ATOM	6596	CB	TYR C 302	29.305	17.297	23.929	1.00	49.90	C
[6649]	ATOM	6597	CG	TYR C 302	30.741	17.651	24.016	1.00	49.40	C
[6650]	ATOM	6598	CD1	TYR C 302	31.346	18.403	23.011	1.00	48.70	C
[6651]	ATOM	6599	CD2	TYR C 302	31.483	17.270	25.120	1.00	47.94	C
[6652]	ATOM	6600	CE1	TYR C 302	32.689	18.756	23.105	1.00	49.44	C
[6653]	ATOM	6601	CE2	TYR C 302	32.815	17.589	25.226	1.00	48.86	C
[6654]	ATOM	6602	CZ	TYR C 302	33.426	18.341	24.216	1.00	49.11	C
[6655]	ATOM	6603	OH	TYR C 302	34.767	18.668	24.303	1.00	49.66	O
[6656]	ATOM	6604	N	MET C 303	26.716	18.805	22.274	1.00	53.90	N
[6657]	ATOM	6605	CA	MET C 303	25.446	18.519	21.629	1.00	56.67	C
[6658]	ATOM	6606	C	MET C 303	25.269	17.012	21.315	1.00	57.83	C
[6659]	ATOM	6607	O	MET C 303	25.983	16.478	20.404	1.00	58.39	O
[6660]	ATOM	6608	CB	MET C 303	25.294	19.402	20.379	1.00	56.34	C
[6661]	ATOM	6609	CG	MET C 303	24.929	20.851	20.814	1.00	58.67	C
[6662]	ATOM	6610	SD	MET C 303	23.721	21.123	22.289	1.00	63.90	S
[6663]	ATOM	6611	CE	MET C 303	22.660	19.628	22.453	1.00	64.02	C
[6664]	ATOM	6612	N	ALA C 304	24.371	16.322	22.054	1.00	58.86	N
[6665]	ATOM	6613	CA	ALA C 304	24.426	14.816	22.054	1.00	59.53	C
[6666]	ATOM	6614	C	ALA C 304	23.120	14.188	21.570	1.00	60.32	C
[6667]	ATOM	6615	O	ALA C 304	23.143	13.216	20.760	1.00	60.63	O
[6668]	ATOM	6616	CB	ALA C 304	24.829	14.234	23.462	1.00	59.62	C
[6669]	ATOM	6617	OXT	ALA C 304	22.028	14.671	22.008	1.00	60.92	O
[6670]	TER	6618		ALA C 304						
[6671]	HETATM	6619	C	ACT A1305	7.836	-12.648	7.005	1.00	47.80	C
[6672]	HETATM	6620	O	ACT A1305	8.460	-12.255	6.002	1.00	48.74	O
[6673]	HETATM	6621	OXT	ACT A1305	7.641	-11.800	7.935	1.00	46.51	O
[6674]	HETATM	6622	CH3	ACT A1305	7.378	-14.078	7.016	1.00	46.91	C
[6675]	HETATM	6623	C	ACT B1305	0.199	25.620	11.847	1.00	31.35	C
[6676]	HETATM	6624	O	ACT B1305	-1.037	25.381	12.096	1.00	31.15	O
[6677]	HETATM	6625	OXT	ACT B1305	1.048	24.671	11.812	1.00	31.08	O
[6678]	HETATM	6626	CH3	ACT B1305	0.712	26.991	11.573	1.00	30.68	C
[6679]	HETATM	6627	C	ACT C1305	33.064	1.561	18.940	1.00	34.64	C
[6680]	HETATM	6628	O	ACT C1305	32.447	1.853	17.814	1.00	34.85	O
[6681]	HETATM	6629	OXT	ACT C1305	33.585	2.538	19.592	1.00	33.95	O



[6682]	HETATM	6630	CH3	ACT	C1305	33.161	0.157	19.500	1.00	30.68	C
[6683]	HETATM	6631	0	HOH	A2001	4.271	-14.269	25.400	1.00	9.25	0
[6684]	HETATM	6632	0	HOH	A2002	8.510	-17.515	6.898	1.00	29.34	0
[6685]	HETATM	6633	0	HOH	A2003	2.310	-26.245	14.514	1.00	23.26	0
[6686]	HETATM	6634	0	HOH	A2004	3.810	-27.936	13.439	1.00	27.98	0
[6687]	HETATM	6635	0	HOH	A2005	5.775	-19.409	34.796	1.00	38.35	0
[6688]	HETATM	6636	0	HOH	A2006	19.905	-7.586	22.894	1.00	38.38	0
[6689]	HETATM	6637	0	HOH	A2007	7.511	-2.813	25.765	1.00	38.09	0
[6690]	HETATM	6638	0	HOH	A2008	-4.725	1.272	28.382	1.00	23.19	0
[6691]	HETATM	6639	0	HOH	A2009	1.546	-6.567	29.114	1.00	30.19	0
[6692]	HETATM	6640	0	HOH	A2010	6.862	4.996	13.934	1.00	33.76	0
[6693]	HETATM	6641	0	HOH	A2011	-15.070	-32.504	31.060	1.00	32.81	0
[6694]	HETATM	6642	0	HOH	A2012	-17.948	-26.533	24.105	1.00	35.42	0
[6695]	HETATM	6643	0	HOH	A2013	-12.221	-36.805	20.283	1.00	32.02	0
[6696]	HETATM	6644	0	HOH	A2014	-7.937	-36.666	17.106	1.00	31.86	0
[6697]	HETATM	6645	0	HOH	A2015	-13.731	-26.781	21.595	1.00	23.30	0
[6698]	HETATM	6646	0	HOH	A2016	-13.187	-23.276	5.277	1.00	36.61	0
[6699]	HETATM	6647	0	HOH	A2017	-10.703	-25.822	4.248	1.00	42.03	0
[6700]	HETATM	6648	0	HOH	A2018	-5.699	-36.204	-1.183	1.00	31.55	0
[6701]	HETATM	6649	0	HOH	A2019	-2.638	-35.708	0.921	1.00	40.86	0
[6702]	HETATM	6650	0	HOH	A2020	-6.291	-38.823	2.967	1.00	41.41	0
[6703]	HETATM	6651	0	HOH	A2021	-3.087	-37.584	20.283	1.00	27.01	0
[6704]	HETATM	6652	0	HOH	A2022	3.621	-28.878	17.580	1.00	25.95	0
[6705]	HETATM	6653	0	HOH	A2023	-2.862	-24.211	32.405	1.00	21.83	0
[6706]	HETATM	6654	0	HOH	A2024	-7.265	-29.595	29.242	1.00	36.00	0
[6707]	HETATM	6655	0	HOH	A2025	-5.262	-17.153	31.589	1.00	33.29	0
[6708]	HETATM	6656	0	HOH	A2026	-17.960	-11.316	32.179	1.00	33.52	0
[6709]	HETATM	6657	0	HOH	A2027	-14.111	0.384	31.651	1.00	40.49	0
[6710]	HETATM	6658	0	HOH	A2028	-19.364	-0.722	25.638	1.00	46.82	0
[6711]	HETATM	6659	0	HOH	A2029	-5.288	1.496	25.497	1.00	38.81	0
[6712]	HETATM	6660	0	HOH	A2030	-22.326	-18.755	14.149	1.00	42.96	0
[6713]	HETATM	6661	0	HOH	A2031	-24.422	-14.717	11.634	1.00	38.45	0
[6714]	HETATM	6662	0	HOH	A2032	-18.347	-21.737	2.796	1.00	28.94	0
[6715]	HETATM	6663	0	HOH	A2033	-20.117	-17.573	4.900	1.00	32.46	0
[6716]	HETATM	6664	0	HOH	A2034	-10.908	-21.518	8.287	1.00	19.25	0
[6717]	HETATM	6665	0	HOH	A2035	-7.203	-15.711	-0.734	1.00	42.59	0

[6718]	HETATM 6666	0	HOH A2036	4.352	2.699	3.833	1.00	30.71	0
[6719]	HETATM 6667	0	HOH B2001	6.517	7.625	13.891	1.00	39.63	0
[6720]	HETATM 6668	0	HOH B2002	6.920	13.397	17.273	1.00	27.89	0
[6721]	HETATM 6669	0	HOH B2003	6.785	34.181	14.819	1.00	41.19	0
[6722]	HETATM 6670	0	HOH B2004	9.965	44.580	23.044	1.00	28.68	0
[6723]	HETATM 6671	0	HOH B2005	26.694	33.165	20.678	1.00	29.23	0
[6724]	HETATM 6672	0	HOH B2006	26.065	22.038	14.667	1.00	20.81	0
[6725]	HETATM 6673	0	HOH B2007	16.609	21.068	26.752	1.00	26.93	0
[6726]	HETATM 6674	0	HOH B2008	15.243	8.791	16.490	1.00	31.93	0
[6727]	HETATM 6675	0	HOH B2009	32.931	32.857	3.583	1.00	33.30	0
[6728]	HETATM 6676	0	HOH B2010	30.156	47.130	2.067	1.00	32.64	0
[6729]	HETATM 6677	0	HOH B2011	19.379	51.025	-0.807	1.00	40.34	0
[6730]	HETATM 6678	0	HOH B2012	10.974	49.991	-9.339	1.00	50.26	0
[6731]	HETATM 6679	0	HOH B2013	10.786	41.868	12.857	1.00	15.31	0
[6732]	HETATM 6680	0	HOH B2014	17.138	47.078	15.818	1.00	34.30	0
[6733]	HETATM 6681	0	HOH B2015	23.044	44.830	14.525	1.00	38.84	0
[6734]	HETATM 6682	0	HOH B2016	20.880	46.938	10.045	1.00	42.70	0
[6735]	HETATM 6683	0	HOH B2017	33.703	22.158	-0.402	1.00	25.82	0
[6736]	HETATM 6684	0	HOH B2018	18.172	29.378	-15.080	1.00	31.12	0
[6737]	HETATM 6685	0	HOH B2019	14.237	10.294	-7.085	1.00	47.24	0
[6738]	HETATM 6686	0	HOH B2020	19.074	13.204	-0.387	1.00	34.20	0
[6739]	HETATM 6687	0	HOH B2021	14.353	13.264	-8.825	1.00	45.83	0
[6740]	HETATM 6688	0	HOH B2022	-0.805	29.345	-5.228	1.00	38.82	0
[6741]	HETATM 6689	0	HOH B2023	-3.301	26.857	12.867	1.00	33.17	0
[6742]	HETATM 6690	0	HOH C2001	36.365	2.034	12.223	1.00	43.16	0
[6743]	HETATM 6691	0	HOH C2002	40.243	4.561	12.911	1.00	30.03	0
[6744]	HETATM 6692	0	HOH C2003	39.399	-12.402	29.696	1.00	30.07	0
[6745]	HETATM 6693	0	HOH C2004	41.005	-8.761	32.896	1.00	15.80	0
[6746]	HETATM 6694	0	HOH C2005	26.995	-6.241	20.374	1.00	38.07	0
[6747]	HETATM 6695	0	HOH C2006	19.208	4.738	25.037	1.00	31.84	0
[6748]	HETATM 6696	0	HOH C2007	16.584	2.152	24.492	1.00	36.56	0
[6749]	HETATM 6697	0	HOH C2008	46.907	-4.925	26.569	1.00	31.30	0
[6750]	HETATM 6698	0	HOH C2009	42.896	-13.811	25.864	1.00	27.96	0
[6751]	HETATM 6699	0	HOH C2010	45.161	-15.804	25.802	1.00	38.78	0
[6752]	HETATM 6700	0	HOH C2011	54.812	-15.548	28.231	1.00	30.21	0
[6753]	HETATM 6701	0	HOH C2012	52.533	-9.427	39.782	1.00	22.84	0

[6754]	HETATM	6702	O	HOH	C2013	50.022	6.313	38.669	1.00	20.42	0
[6755]	HETATM	6703	O	HOH	C2014	42.187	14.398	21.831	1.00	51.70	0
[6756]	HETATM	6704	O	HOH	C2015	48.671	17.430	32.698	1.00	38.30	0
[6757]	HETATM	6705	O	HOH	C2016	35.708	-1.558	41.897	1.00	20.64	0
[6758]	HETATM	6706	O	HOH	C2017	37.985	0.147	51.465	1.00	47.54	0
[6759]	HETATM	6707	O	HOH	C2018	40.969	-18.885	46.732	1.00	20.10	0
[6760]	HETATM	6708	O	HOH	C2019	35.213	-11.350	45.552	1.00	41.88	0
[6761]	HETATM	6709	O	HOH	C2020	30.209	-14.948	49.152	1.00	27.28	0
[6762]	HETATM	6710	O	HOH	C2021	17.699	-16.772	35.686	1.00	30.39	0
[6763]	HETATM	6711	O	HOH	C2022	18.467	-19.318	36.378	1.00	43.91	0
[6764]	HETATM	6712	O	HOH	C2023	22.717	-21.827	28.752	1.00	39.81	0
[6765]	HETATM	6713	O	HOH	C2024	44.591	-10.433	45.520	1.00	11.00	0
[6766]	HETATM	6714	O	HOH	C2025	48.033	-2.372	42.494	1.00	27.27	0
[6767]	HETATM	6715	O	HOH	C2026	49.721	-6.554	44.450	1.00	32.74	0
[6768]	HETATM	6716	O	HOH	C2027	44.410	-2.203	48.966	1.00	21.88	0
[6769]	HETATM	6717	O	HOH	C2028	41.871	5.506	53.921	1.00	40.81	0
[6770]	HETATM	6718	O	HOH	C2029	42.587	8.421	53.891	1.00	44.23	0
[6771]	HETATM	6719	O	HOH	C2030	36.815	21.161	34.166	1.00	37.11	0
[6772]	HETATM	6720	O	HOH	C2031	21.410	0.275	50.055	1.00	39.85	0
[6773]	HETATM	6721	O	HOH	C2032	18.195	4.418	42.731	1.00	35.73	0
[6774]	HETATM	6722	O	HOH	C2033	18.598	-0.841	30.293	1.00	36.06	0
[6775]	HETATM	6723	O	HOH	C2034	19.238	19.763	27.107	1.00	44.65	0

[6776] [표 3]

[6777] 인간 NDRG2 단백질의 K2A 변이체의 X, Y, Z 원자좌표

[6778]	ATOM	1	N	ALA	A	24	-2.158	-24.994	-20.809	1.00	44.40	N
[6779]	ATOM	2	CA	ALA	A	24	-1.385	-26.105	-20.158	1.00	44.47	C
[6780]	ATOM	3	C	ALA	A	24	-0.543	-26.935	-21.160	1.00	44.26	C
[6781]	ATOM	4	O	ALA	A	24	-0.981	-27.992	-21.637	1.00	44.62	O
[6782]	ATOM	5	CB	ALA	A	24	-2.327	-27.000	-19.349	1.00	44.44	C
[6783]	ATOM	6	N	LYS	A	25	0.672	-26.463	-21.457	1.00	43.29	N
[6784]	ATOM	7	CA	LYS	A	25	1.464	-27.042	-22.540	1.00	41.91	C
[6785]	ATOM	8	C	LYS	A	25	2.845	-27.512	-22.076	1.00	40.55	C
[6786]	ATOM	9	O	LYS	A	25	3.503	-26.837	-21.288	1.00	39.94	O
[6787]	ATOM	10	CB	LYS	A	25	1.610	-26.043	-23.704	1.00	42.48	C
[6788]	ATOM	11	CG	LYS	A	25	1.207	-26.551	-25.132	1.00	43.69	C

[6789]	ATOM	12	CD	LYS	A	25	1.998	-27.767	-25.656	1.00	44.16	C
[6790]	ATOM	13	CE	LYS	A	25	1.186	-29.069	-25.543	1.00	44.70	C
[6791]	ATOM	14	NZ	LYS	A	25	1.240	-29.760	-24.201	1.00	43.93	N
[6792]	ATOM	15	N	THR	A	26	3.257	-28.668	-22.596	1.00	38.51	N
[6793]	ATOM	16	CA	THR	A	26	4.568	-29.257	-22.382	1.00	37.28	C
[6794]	ATOM	17	C	THR	A	26	5.529	-28.936	-23.547	1.00	35.49	C
[6795]	ATOM	18	O	THR	A	26	5.263	-29.275	-24.712	1.00	35.61	O
[6796]	ATOM	19	CB	THR	A	26	4.436	-30.770	-22.152	1.00	37.41	C
[6797]	ATOM	20	OG1	THR	A	26	3.796	-30.971	-20.886	1.00	39.53	O
[6798]	ATOM	21	CG2	THR	A	26	5.804	-31.451	-22.118	1.00	38.28	C
[6799]	ATOM	22	N	HIS	A	27	6.636	-28.276	-23.223	1.00	32.48	N
[6800]	ATOM	23	CA	HIS	A	27	7.576	-27.832	-24.243	1.00	30.12	C
[6801]	ATOM	24	C	HIS	A	27	8.934	-28.502	-24.044	1.00	28.95	C
[6802]	ATOM	25	O	HIS	A	27	9.162	-29.187	-23.052	1.00	27.36	O
[6803]	ATOM	26	CB	HIS	A	27	7.765	-26.319	-24.162	1.00	29.24	C
[6804]	ATOM	27	CG	HIS	A	27	6.511	-25.521	-24.342	1.00	28.78	C
[6805]	ATOM	28	ND1	HIS	A	27	5.697	-25.161	-23.287	1.00	27.42	N
[6806]	ATOM	29	CD2	HIS	A	27	5.959	-24.969	-25.449	1.00	24.78	C
[6807]	ATOM	30	CE1	HIS	A	27	4.694	-24.429	-23.738	1.00	26.41	C
[6808]	ATOM	31	NE2	HIS	A	27	4.830	-24.297	-25.045	1.00	26.96	N
[6809]	ATOM	32	N	SER	A	28	9.837	-28.267	-24.984	1.00	27.81	N
[6810]	ATOM	33	CA	SER	A	28	11.186	-28.797	-24.914	1.00	28.20	C
[6811]	ATOM	34	C	SER	A	28	12.105	-27.874	-25.714	1.00	27.44	C
[6812]	ATOM	35	O	SER	A	28	11.710	-27.393	-26.773	1.00	27.19	O
[6813]	ATOM	36	CB	SER	A	28	11.201	-30.192	-25.525	1.00	28.32	C
[6814]	ATOM	37	OG	SER	A	28	12.529	-30.633	-25.685	1.00	31.76	O
[6815]	ATOM	38	N	VAL	A	29	13.318	-27.630	-25.222	1.00	26.71	N
[6816]	ATOM	39	CA	VAL	A	29	14.288	-26.777	-25.942	1.00	26.38	C
[6817]	ATOM	40	C	VAL	A	29	15.658	-27.421	-25.924	1.00	25.64	C
[6818]	ATOM	41	O	VAL	A	29	16.012	-28.059	-24.942	1.00	25.70	O
[6819]	ATOM	42	CB	VAL	A	29	14.448	-25.359	-25.311	1.00	26.72	C
[6820]	ATOM	43	CG1	VAL	A	29	13.228	-24.559	-25.492	1.00	28.87	C
[6821]	ATOM	44	CG2	VAL	A	29	14.787	-25.436	-23.826	1.00	26.03	C
[6822]	ATOM	45	N	GLU	A	30	16.425	-27.238	-26.993	1.00	25.00	N
[6823]	ATOM	46	CA	GLU	A	30	17.812	-27.674	-27.032	1.00	24.90	C
[6824]	ATOM	47	C	GLU	A	30	18.684	-26.623	-26.401	1.00	23.81	C

[6825]	ATOM	48	O	GLU	A	30	18.432	-25.414	-26.543	1.00	23.35	O
[6826]	ATOM	49	CB	GLU	A	30	18.275	-27.891	-28.466	1.00	25.57	C
[6827]	ATOM	50	CG	GLU	A	30	17.453	-28.896	-29.242	1.00	30.59	C
[6828]	ATOM	51	CD	GLU	A	30	17.694	-30.304	-28.788	1.00	37.93	C
[6829]	ATOM	52	OE1	GLU	A	30	18.864	-30.755	-28.837	1.00	40.78	O
[6830]	ATOM	53	OE2	GLU	A	30	16.710	-30.960	-28.379	1.00	42.27	O
[6831]	ATOM	54	N	THR	A	31	19.709	-27.094	-25.700	1.00	22.88	N
[6832]	ATOM	55	CA	THR	A	31	20.656	-26.231	-24.990	1.00	22.70	C
[6833]	ATOM	56	C	THR	A	31	22.040	-26.864	-25.224	1.00	22.28	C
[6834]	ATOM	57	O	THR	A	31	22.104	-27.996	-25.703	1.00	22.66	O
[6835]	ATOM	58	CB	THR	A	31	20.383	-26.193	-23.458	1.00	22.32	C
[6836]	ATOM	59	OG1	THR	A	31	20.929	-27.370	-22.869	1.00	20.40	O
[6837]	ATOM	60	CG2	THR	A	31	18.861	-26.071	-23.104	1.00	22.72	C
[6838]	ATOM	61	N	PRO	A	32	23.149	-26.164	-24.892	1.00	22.41	N
[6839]	ATOM	62	CA	PRO	A	32	24.483	-26.791	-25.108	1.00	21.69	C
[6840]	ATOM	63	C	PRO	A	32	24.668	-28.143	-24.388	1.00	22.33	C
[6841]	ATOM	64	O	PRO	A	32	25.491	-28.970	-24.816	1.00	21.68	O
[6842]	ATOM	65	CB	PRO	A	32	25.456	-25.762	-24.520	1.00	22.17	C
[6843]	ATOM	66	CG	PRO	A	32	24.740	-24.460	-24.620	1.00	21.98	C
[6844]	ATOM	67	CD	PRO	A	32	23.275	-24.787	-24.371	1.00	22.45	C
[6845]	ATOM	68	N	TYR	A	33	23.885	-28.368	-23.324	1.00	21.91	N
[6846]	ATOM	69	CA	TYR	A	33	24.018	-29.552	-22.476	1.00	21.90	C
[6847]	ATOM	70	C	TYR	A	33	22.861	-30.553	-22.656	1.00	22.61	C
[6848]	ATOM	71	O	TYR	A	33	22.586	-31.411	-21.793	1.00	21.94	O
[6849]	ATOM	72	CB	TYR	A	33	24.220	-29.105	-21.015	1.00	21.94	C
[6850]	ATOM	73	CG	TYR	A	33	25.355	-28.091	-20.881	1.00	21.12	C
[6851]	ATOM	74	CD1	TYR	A	33	26.669	-28.445	-21.167	1.00	23.18	C
[6852]	ATOM	75	CD2	TYR	A	33	25.097	-26.771	-20.516	1.00	21.27	C
[6853]	ATOM	76	CE1	TYR	A	33	27.709	-27.498	-21.070	1.00	23.02	C
[6854]	ATOM	77	CE2	TYR	A	33	26.114	-25.831	-20.436	1.00	20.68	C
[6855]	ATOM	78	CZ	TYR	A	33	27.402	-26.197	-20.695	1.00	21.99	C
[6856]	ATOM	79	OH	TYR	A	33	28.392	-25.258	-20.584	1.00	25.37	O
[6857]	ATOM	80	N	GLY	A	34	22.195	-30.446	-23.799	1.00	22.85	N
[6858]	ATOM	81	CA	GLY	A	34	21.090	-31.334	-24.130	1.00	24.22	C
[6859]	ATOM	82	C	GLY	A	34	19.739	-30.640	-23.991	1.00	24.66	C
[6860]	ATOM	83	O	GLY	A	34	19.674	-29.451	-23.677	1.00	24.06	O

[6861]	ATOM	84	N	SER	A	35	18.656	-31.369	-24.253	1.00	24.69	N
[6862]	ATOM	85	CA	SER	A	35	17.345	-30.760	-24.174	1.00	25.29	C
[6863]	ATOM	86	C	SER	A	35	16.776	-30.852	-22.793	1.00	24.77	C
[6864]	ATOM	87	O	SER	A	35	17.122	-31.731	-22.013	1.00	24.87	O
[6865]	ATOM	88	CB	SER	A	35	16.375	-31.351	-25.182	1.00	26.11	C
[6866]	ATOM	89	OG	SER	A	35	16.377	-32.752	-25.091	1.00	29.40	O
[6867]	ATOM	90	N	VAL	A	36	15.890	-29.918	-22.498	1.00	24.40	N
[6868]	ATOM	91	CA	VAL	A	36	15.177	-29.920	-21.234	1.00	23.58	C
[6869]	ATOM	92	C	VAL	A	36	13.693	-29.700	-21.555	1.00	23.42	C
[6870]	ATOM	93	O	VAL	A	36	13.335	-28.961	-22.487	1.00	21.97	O
[6871]	ATOM	94	CB	VAL	A	36	15.787	-28.886	-20.276	1.00	23.43	C
[6872]	ATOM	95	CG1	VAL	A	36	15.622	-27.485	-20.830	1.00	23.17	C
[6873]	ATOM	96	CG2	VAL	A	36	15.233	-29.007	-18.842	1.00	23.40	C
[6874]	ATOM	97	N	THR	A	37	12.858	-30.420	-20.816	1.00	23.02	N
[6875]	ATOM	98	CA	THR	A	37	11.405	-30.426	-20.957	1.00	23.78	C
[6876]	ATOM	99	C	THR	A	37	10.811	-29.618	-19.801	1.00	23.17	C
[6877]	ATOM	100	O	THR	A	37	11.353	-29.641	-18.701	1.00	22.85	O
[6878]	ATOM	101	CB	THR	A	37	10.910	-31.875	-20.880	1.00	23.92	C
[6879]	ATOM	102	OG1	THR	A	37	11.189	-32.524	-22.132	1.00	25.51	O
[6880]	ATOM	103	CG2	THR	A	37	9.411	-31.946	-20.577	1.00	25.43	C
[6881]	ATOM	104	N	PHE	A	38	9.725	-28.907	-20.061	1.00	22.69	N
[6882]	ATOM	105	CA	PHE	A	38	9.095	-28.033	-19.069	1.00	23.65	C
[6883]	ATOM	106	C	PHE	A	38	7.623	-27.823	-19.452	1.00	23.83	C
[6884]	ATOM	107	O	PHE	A	38	7.256	-27.872	-20.626	1.00	24.63	O
[6885]	ATOM	108	CB	PHE	A	38	9.837	-26.685	-18.905	1.00	23.20	C
[6886]	ATOM	109	CG	PHE	A	38	10.119	-25.965	-20.209	1.00	23.88	C
[6887]	ATOM	110	CD1	PHE	A	38	11.280	-26.244	-20.949	1.00	22.20	C
[6888]	ATOM	111	CD2	PHE	A	38	9.235	-25.004	-20.689	1.00	23.34	C
[6889]	ATOM	112	CE1	PHE	A	38	11.538	-25.592	-22.163	1.00	24.00	C
[6890]	ATOM	113	CE2	PHE	A	38	9.491	-24.323	-21.898	1.00	24.12	C
[6891]	ATOM	114	CZ	PHE	A	38	10.637	-24.615	-22.639	1.00	24.93	C
[6892]	ATOM	115	N	THR	A	39	6.786	-27.618	-18.451	1.00	24.26	N
[6893]	ATOM	116	CA	THR	A	39	5.351	-27.442	-18.643	1.00	24.82	C
[6894]	ATOM	117	C	THR	A	39	4.990	-26.058	-18.162	1.00	24.80	C
[6895]	ATOM	118	O	THR	A	39	5.406	-25.641	-17.063	1.00	24.31	O
[6896]	ATOM	119	CB	THR	A	39	4.563	-28.517	-17.854	1.00	25.01	C

[6897]	ATOM	120	OG1	THR	A	39	5.094	-29.798	-18.200	1.00	27.94	O
[6898]	ATOM	121	CG2	THR	A	39	3.090	-28.510	-18.221	1.00	26.34	C
[6899]	ATOM	122	N	VAL	A	40	4.219	-25.356	-18.986	1.00	24.87	N
[6900]	ATOM	123	CA	VAL	A	40	3.804	-23.998	-18.697	1.00	25.39	C
[6901]	ATOM	124	C	VAL	A	40	2.287	-23.946	-18.360	1.00	26.63	C
[6902]	ATOM	125	O	VAL	A	40	1.474	-24.508	-19.076	1.00	24.97	O
[6903]	ATOM	126	CB	VAL	A	40	4.161	-23.043	-19.861	1.00	25.34	C
[6904]	ATOM	127	CG1	VAL	A	40	3.749	-21.616	-19.525	1.00	24.98	C
[6905]	ATOM	128	CG2	VAL	A	40	5.678	-23.106	-20.169	1.00	24.86	C
[6906]	ATOM	129	N	TYR	A	41	1.948	-23.290	-17.247	1.00	27.70	N
[6907]	ATOM	130	CA	TYR	A	41	0.568	-23.130	-16.828	1.00	29.88	C
[6908]	ATOM	131	C	TYR	A	41	0.221	-21.672	-16.579	1.00	31.00	C
[6909]	ATOM	132	O	TYR	A	41	1.057	-20.877	-16.138	1.00	30.58	O
[6910]	ATOM	133	CB	TYR	A	41	0.327	-23.865	-15.524	1.00	30.98	C
[6911]	ATOM	134	CG	TYR	A	41	0.377	-25.368	-15.591	1.00	32.37	C
[6912]	ATOM	135	CD1	TYR	A	41	1.567	-26.054	-15.363	1.00	33.38	C
[6913]	ATOM	136	CD2	TYR	A	41	-0.772	-26.103	-15.837	1.00	33.60	C
[6914]	ATOM	137	CE1	TYR	A	41	1.609	-27.437	-15.388	1.00	34.19	C
[6915]	ATOM	138	CE2	TYR	A	41	-0.739	-27.479	-15.875	1.00	34.62	C
[6916]	ATOM	139	CZ	TYR	A	41	0.441	-28.145	-15.642	1.00	34.62	C
[6917]	ATOM	140	OH	TYR	A	41	0.449	-29.528	-15.673	1.00	35.49	O
[6918]	ATOM	141	N	GLY	A	42	-1.037	-21.338	-16.825	1.00	32.73	N
[6919]	ATOM	142	CA	GLY	A	42	-1.561	-20.055	-16.435	1.00	34.59	C
[6920]	ATOM	143	C	GLY	A	42	-1.766	-19.068	-17.557	1.00	36.51	C
[6921]	ATOM	144	O	GLY	A	42	-1.126	-19.118	-18.612	1.00	36.45	O
[6922]	ATOM	145	N	THR	A	43	-2.696	-18.171	-17.295	1.00	38.57	N
[6923]	ATOM	146	CA	THR	A	43	-3.033	-17.062	-18.159	1.00	40.90	C
[6924]	ATOM	147	C	THR	A	43	-1.841	-16.100	-18.257	1.00	41.78	C
[6925]	ATOM	148	O	THR	A	43	-1.106	-15.927	-17.271	1.00	42.53	O
[6926]	ATOM	149	CB	THR	A	43	-4.317	-16.388	-17.612	1.00	40.78	C
[6927]	ATOM	150	OG1	THR	A	43	-5.415	-16.739	-18.458	1.00	41.71	O
[6928]	ATOM	151	CG2	THR	A	43	-4.199	-14.851	-17.513	1.00	41.67	C
[6929]	ATOM	152	N	PRO	A	44	-1.631	-15.486	-19.444	1.00	42.77	N
[6930]	ATOM	153	CA	PRO	A	44	-0.509	-14.535	-19.582	1.00	43.07	C
[6931]	ATOM	154	C	PRO	A	44	-0.576	-13.460	-18.486	1.00	43.14	C
[6932]	ATOM	155	O	PRO	A	44	-1.646	-12.884	-18.249	1.00	43.72	O

[6933]	ATOM	156	CB	PRO	A	44	-0.734	-13.925	-20.978	1.00	43.25	C
[6934]	ATOM	157	CG	PRO	A	44	-1.478	-14.988	-21.732	1.00	43.23	C
[6935]	ATOM	158	CD	PRO	A	44	-2.396	-15.617	-20.702	1.00	42.75	C
[6936]	ATOM	159	N	ALA	A	45	0.543	-13.234	-17.796	1.00	42.69	N
[6937]	ATOM	160	CA	ALA	A	45	0.610	-12.260	-16.700	1.00	42.27	C
[6938]	ATOM	161	C	ALA	A	45	1.893	-11.412	-16.817	1.00	41.64	C
[6939]	ATOM	162	O	ALA	A	45	2.853	-11.617	-16.071	1.00	41.76	O
[6940]	ATOM	163	CB	ALA	A	45	0.512	-12.974	-15.343	1.00	42.26	C
[6941]	ATOM	164	N	PRO	A	46	1.908	-10.459	-17.771	1.00	41.09	N
[6942]	ATOM	165	CA	PRO	A	46	3.139	-9.759	-18.173	1.00	40.49	C
[6943]	ATOM	166	C	PRO	A	46	3.847	-8.934	-17.083	1.00	39.45	C
[6944]	ATOM	167	O	PRO	A	46	5.065	-8.762	-17.170	1.00	39.72	O
[6945]	ATOM	168	CB	PRO	A	46	2.676	-8.858	-19.332	1.00	40.86	C
[6946]	ATOM	169	CG	PRO	A	46	1.204	-8.709	-19.143	1.00	41.19	C
[6947]	ATOM	170	CD	PRO	A	46	0.739	-9.997	-18.544	1.00	41.01	C
[6948]	ATOM	171	N	ALA	A	47	3.104	-8.450	-16.080	1.00	37.73	N
[6949]	ATOM	172	CA	ALA	A	47	3.660	-7.601	-14.987	1.00	35.70	C
[6950]	ATOM	173	C	ALA	A	47	4.023	-8.336	-13.676	1.00	34.24	C
[6951]	ATOM	174	O	ALA	A	47	4.186	-7.719	-12.601	1.00	34.29	O
[6952]	ATOM	175	CB	ALA	A	47	2.718	-6.471	-14.690	1.00	35.64	C
[6953]	ATOM	176	N	ARG	A	48	4.128	-9.657	-13.759	1.00	31.94	N
[6954]	ATOM	177	CA	ARG	A	48	4.618	-10.447	-12.641	1.00	29.11	C
[6955]	ATOM	178	C	ARG	A	48	5.693	-11.393	-13.149	1.00	27.15	C
[6956]	ATOM	179	O	ARG	A	48	5.661	-11.797	-14.319	1.00	25.94	O
[6957]	ATOM	180	CB	ARG	A	48	3.482	-11.227	-11.980	1.00	29.88	C
[6958]	ATOM	181	CG	ARG	A	48	2.440	-10.309	-11.332	1.00	32.19	C
[6959]	ATOM	182	CD	ARG	A	48	1.746	-10.996	-10.219	1.00	34.16	C
[6960]	ATOM	183	NE	ARG	A	48	1.237	-10.059	-9.218	1.00	34.12	N
[6961]	ATOM	184	CZ	ARG	A	48	0.653	-10.440	-8.087	1.00	33.43	C
[6962]	ATOM	185	NH1	ARG	A	48	0.506	-11.731	-7.833	1.00	33.19	N
[6963]	ATOM	186	NH2	ARG	A	48	0.209	-9.538	-7.224	1.00	31.46	N
[6964]	ATOM	187	N	PRO	A	49	6.637	-11.772	-12.268	1.00	25.03	N
[6965]	ATOM	188	CA	PRO	A	49	7.579	-12.803	-12.686	1.00	24.11	C
[6966]	ATOM	189	C	PRO	A	49	6.852	-14.149	-12.894	1.00	23.58	C
[6967]	ATOM	190	O	PRO	A	49	5.771	-14.357	-12.329	1.00	23.82	O
[6968]	ATOM	191	CB	PRO	A	49	8.538	-12.886	-11.503	1.00	23.07	C



[6969]	ATOM	192	CG	PRO	A	49	7.697	-12.450	-10.318	1.00	24.75	C
[6970]	ATOM	193	CD	PRO	A	49	6.872	-11.330	-10.880	1.00	24.30	C
[6971]	ATOM	194	N	ALA	A	50	7.429	-15.026	-13.715	1.00	22.45	N
[6972]	ATOM	195	CA	ALA	A	50	7.005	-16.423	-13.801	1.00	22.35	C
[6973]	ATOM	196	C	ALA	A	50	7.438	-17.156	-12.530	1.00	21.90	C
[6974]	ATOM	197	O	ALA	A	50	8.549	-16.970	-12.077	1.00	21.58	O
[6975]	ATOM	198	CB	ALA	A	50	7.654	-17.097	-15.035	1.00	20.85	C
[6976]	ATOM	199	N	ILE	A	51	6.579	-17.995	-11.965	1.00	21.75	N
[6977]	ATOM	200	CA	ILE	A	51	7.055	-18.938	-10.961	1.00	21.86	C
[6978]	ATOM	201	C	ILE	A	51	7.740	-20.129	-11.661	1.00	22.20	C
[6979]	ATOM	202	O	ILE	A	51	7.073	-20.908	-12.364	1.00	22.31	O
[6980]	ATOM	203	CB	ILE	A	51	5.924	-19.429	-10.076	1.00	21.61	C
[6981]	ATOM	204	CG1	ILE	A	51	5.324	-18.258	-9.269	1.00	21.39	C
[6982]	ATOM	205	CG2	ILE	A	51	6.457	-20.462	-9.102	1.00	23.82	C
[6983]	ATOM	206	CD1	ILE	A	51	3.987	-18.593	-8.628	1.00	21.90	C
[6984]	ATOM	207	N	LEU	A	52	9.054	-20.280	-11.474	1.00	21.71	N
[6985]	ATOM	208	CA	LEU	A	52	9.776	-21.372	-12.113	1.00	21.72	C
[6986]	ATOM	209	C	LEU	A	52	10.200	-22.375	-11.073	1.00	21.82	C
[6987]	ATOM	210	O	LEU	A	52	10.855	-22.009	-10.092	1.00	21.79	O
[6988]	ATOM	211	CB	LEU	A	52	10.991	-20.884	-12.898	1.00	21.59	C
[6989]	ATOM	212	CG	LEU	A	52	11.622	-22.016	-13.719	1.00	22.16	C
[6990]	ATOM	213	CD1	LEU	A	52	12.072	-21.554	-15.082	1.00	24.42	C
[6991]	ATOM	214	CD2	LEU	A	52	12.782	-22.663	-12.990	1.00	25.71	C
[6992]	ATOM	215	N	THR	A	53	9.838	-23.641	-11.283	1.00	21.34	N
[6993]	ATOM	216	CA	THR	A	53	10.190	-24.693	-10.311	1.00	21.26	C
[6994]	ATOM	217	C	THR	A	53	11.207	-25.702	-10.846	1.00	21.32	C
[6995]	ATOM	218	O	THR	A	53	11.266	-25.984	-12.075	1.00	21.13	O
[6996]	ATOM	219	CB	THR	A	53	8.971	-25.489	-9.817	1.00	21.23	C
[6997]	ATOM	220	OG1	THR	A	53	8.523	-26.375	-10.854	1.00	20.90	O
[6998]	ATOM	221	CG2	THR	A	53	7.848	-24.561	-9.348	1.00	20.69	C
[6999]	ATOM	222	N	TYR	A	54	11.968	-26.268	-9.913	1.00	20.49	N
[7000]	ATOM	223	CA	TYR	A	54	13.015	-27.265	-10.229	1.00	19.09	C
[7001]	ATOM	224	C	TYR	A	54	13.096	-28.258	-9.071	1.00	19.21	C
[7002]	ATOM	225	O	TYR	A	54	13.294	-27.871	-7.893	1.00	19.52	O
[7003]	ATOM	226	CB	TYR	A	54	14.373	-26.590	-10.477	1.00	19.18	C
[7004]	ATOM	227	CG	TYR	A	54	15.242	-27.290	-11.525	1.00	17.87	C

[7005]	ATOM	228	CD1	TYR	A	54	15.738	-28.578	-11.314	1.00	18.82	C
[7006]	ATOM	229	CD2	TYR	A	54	15.589	-26.642	-12.699	1.00	17.97	C
[7007]	ATOM	230	CE1	TYR	A	54	16.517	-29.225	-12.277	1.00	18.04	C
[7008]	ATOM	231	CE2	TYR	A	54	16.360	-27.277	-13.680	1.00	17.01	C
[7009]	ATOM	232	CZ	TYR	A	54	16.830	-28.562	-13.460	1.00	19.57	C
[7010]	ATOM	233	OH	TYR	A	54	17.621	-29.168	-14.431	1.00	18.46	O
[7011]	ATOM	234	N	HIS	A	55	12.965	-29.536	-9.415	1.00	18.82	N
[7012]	ATOM	235	CA	HIS	A	55	12.712	-30.622	-8.452	1.00	19.71	C
[7013]	ATOM	236	C	HIS	A	55	14.009	-31.258	-7.955	1.00	20.31	C
[7014]	ATOM	237	O	HIS	A	55	15.103	-30.955	-8.465	1.00	20.85	O
[7015]	ATOM	238	CB	HIS	A	55	11.858	-31.686	-9.125	1.00	19.67	C
[7016]	ATOM	239	CG	HIS	A	55	12.509	-32.262	-10.338	1.00	18.84	C
[7017]	ATOM	240	ND1	HIS	A	55	13.437	-33.281	-10.269	1.00	21.91	N
[7018]	ATOM	241	CD2	HIS	A	55	12.430	-31.908	-11.643	1.00	18.33	C
[7019]	ATOM	242	CE1	HIS	A	55	13.867	-33.558	-11.491	1.00	21.20	C
[7020]	ATOM	243	NE2	HIS	A	55	13.277	-32.731	-12.339	1.00	20.02	N
[7021]	ATOM	244	N	ASP	A	56	13.871	-32.148	-6.974	1.00	20.61	N
[7022]	ATOM	245	CA	ASP	A	56	15.010	-32.809	-6.348	1.00	20.56	C
[7023]	ATOM	246	C	ASP	A	56	15.384	-34.085	-7.075	1.00	20.94	C
[7024]	ATOM	247	O	ASP	A	56	14.640	-34.562	-7.936	1.00	19.88	O
[7025]	ATOM	248	CB	ASP	A	56	14.681	-33.144	-4.894	1.00	19.95	C
[7026]	ATOM	249	CG	ASP	A	56	15.899	-33.077	-3.992	1.00	21.99	C
[7027]	ATOM	250	OD1	ASP	A	56	17.060	-33.044	-4.505	1.00	21.73	O
[7028]	ATOM	251	OD2	ASP	A	56	15.699	-33.033	-2.757	1.00	22.57	O
[7029]	ATOM	252	N	VAL	A	57	16.544	-34.637	-6.708	1.00	21.66	N
[7030]	ATOM	253	CA	VAL	A	57	17.005	-35.956	-7.179	1.00	21.36	C
[7031]	ATOM	254	C	VAL	A	57	16.011	-37.054	-6.794	1.00	21.88	C
[7032]	ATOM	255	O	VAL	A	57	15.536	-37.136	-5.636	1.00	21.45	O
[7033]	ATOM	256	CB	VAL	A	57	18.387	-36.322	-6.594	1.00	21.66	C
[7034]	ATOM	257	CG1	VAL	A	57	18.860	-37.674	-7.149	1.00	21.54	C
[7035]	ATOM	258	CG2	VAL	A	57	19.403	-35.238	-6.903	1.00	20.67	C
[7036]	ATOM	259	N	GLY	A	58	15.682	-37.883	-7.782	1.00	21.97	N
[7037]	ATOM	260	CA	GLY	A	58	14.771	-38.985	-7.597	1.00	21.99	C
[7038]	ATOM	261	C	GLY	A	58	13.379	-38.640	-8.065	1.00	22.88	C
[7039]	ATOM	262	O	GLY	A	58	12.555	-39.524	-8.281	1.00	23.61	O
[7040]	ATOM	263	N	LEU	A	59	13.107	-37.351	-8.206	1.00	22.90	N

[7041]	ATOM	264	CA	LEU	A	59	11.746	-36.884	-8.478	1.00	22.52	C
[7042]	ATOM	265	C	LEU	A	59	11.673	-36.244	-9.856	1.00	22.85	C
[7043]	ATOM	266	O	LEU	A	59	12.685	-36.165	-10.555	1.00	22.92	O
[7044]	ATOM	267	CB	LEU	A	59	11.304	-35.890	-7.387	1.00	22.18	C
[7045]	ATOM	268	CG	LEU	A	59	11.486	-36.323	-5.923	1.00	22.57	C
[7046]	ATOM	269	CD1	LEU	A	59	11.102	-35.205	-4.977	1.00	22.33	C
[7047]	ATOM	270	CD2	LEU	A	59	10.666	-37.556	-5.611	1.00	21.33	C
[7048]	ATOM	271	N	ASN	A	60	10.470	-35.842	-10.261	1.00	22.54	N
[7049]	ATOM	272	CA	ASN	A	60	10.300	-34.904	-11.361	1.00	22.87	C
[7050]	ATOM	273	C	ASN	A	60	9.223	-33.892	-10.919	1.00	22.83	C
[7051]	ATOM	274	O	ASN	A	60	8.805	-33.942	-9.764	1.00	22.97	O
[7052]	ATOM	275	CB	ASN	A	60	10.014	-35.630	-12.707	1.00	22.55	C
[7053]	ATOM	276	CG	ASN	A	60	8.742	-36.464	-12.695	1.00	24.10	C
[7054]	ATOM	277	OD1	ASN	A	60	7.909	-36.393	-11.774	1.00	24.36	O
[7055]	ATOM	278	ND2	ASN	A	60	8.561	-37.242	-13.757	1.00	24.85	N
[7056]	ATOM	279	N	TYR	A	61	8.787	-32.968	-11.770	1.00	22.52	N
[7057]	ATOM	280	CA	TYR	A	61	7.750	-32.034	-11.319	1.00	23.07	C
[7058]	ATOM	281	C	TYR	A	61	6.581	-32.758	-10.630	1.00	23.47	C
[7059]	ATOM	282	O	TYR	A	61	6.162	-32.391	-9.540	1.00	23.70	O
[7060]	ATOM	283	CB	TYR	A	61	7.201	-31.174	-12.464	1.00	23.50	C
[7061]	ATOM	284	CG	TYR	A	61	5.842	-30.611	-12.110	1.00	23.60	C
[7062]	ATOM	285	CD1	TYR	A	61	5.715	-29.548	-11.220	1.00	22.36	C
[7063]	ATOM	286	CD2	TYR	A	61	4.684	-31.168	-12.632	1.00	23.54	C
[7064]	ATOM	287	CE1	TYR	A	61	4.459	-29.033	-10.875	1.00	22.77	C
[7065]	ATOM	288	CE2	TYR	A	61	3.428	-30.663	-12.292	1.00	25.18	C
[7066]	ATOM	289	CZ	TYR	A	61	3.326	-29.604	-11.407	1.00	24.32	C
[7067]	ATOM	290	OH	TYR	A	61	2.082	-29.117	-11.063	1.00	25.60	O
[7068]	ATOM	291	N	LYS	A	62	6.089	-33.813	-11.262	1.00	23.81	N
[7069]	ATOM	292	CA	LYS	A	62	4.913	-34.542	-10.796	1.00	24.62	C
[7070]	ATOM	293	C	LYS	A	62	5.084	-35.115	-9.403	1.00	24.31	C
[7071]	ATOM	294	O	LYS	A	62	4.206	-34.949	-8.570	1.00	24.50	O
[7072]	ATOM	295	CB	LYS	A	62	4.552	-35.641	-11.807	1.00	25.02	C
[7073]	ATOM	296	CG	LYS	A	62	3.255	-36.350	-11.542	1.00	29.88	C
[7074]	ATOM	297	CD	LYS	A	62	2.716	-36.963	-12.828	1.00	35.24	C
[7075]	ATOM	298	CE	LYS	A	62	1.833	-38.155	-12.515	1.00	39.86	C
[7076]	ATOM	299	NZ	LYS	A	62	2.680	-39.366	-12.203	1.00	43.77	N

[7077]	ATOM	300	N	SER	A	63	6.221	-35.760	-9.124	1.00	24.36	N
[7078]	ATOM	301	CA	SER	A	63	6.405	-36.397	-7.802	1.00	23.78	C
[7079]	ATOM	302	C	SER	A	63	6.913	-35.417	-6.752	1.00	23.33	C
[7080]	ATOM	303	O	SER	A	63	6.849	-35.680	-5.551	1.00	24.00	O
[7081]	ATOM	304	CB	SER	A	63	7.318	-37.620	-7.897	1.00	24.07	C
[7082]	ATOM	305	OG	SER	A	63	8.512	-37.318	-8.603	1.00	23.53	O
[7083]	ATOM	306	N	CYS	A	64	7.401	-34.272	-7.204	1.00	22.81	N
[7084]	ATOM	307	CA	CYS	A	64	7.983	-33.303	-6.296	1.00	23.02	C
[7085]	ATOM	308	C	CYS	A	64	7.000	-32.196	-5.880	1.00	23.64	C
[7086]	ATOM	309	O	CYS	A	64	6.832	-31.930	-4.677	1.00	24.27	O
[7087]	ATOM	310	CB	CYS	A	64	9.247	-32.692	-6.903	1.00	22.17	C
[7088]	ATOM	311	SG	CYS	A	64	10.208	-31.706	-5.739	1.00	22.03	S
[7089]	ATOM	312	N	PHE	A	65	6.372	-31.569	-6.875	1.00	24.12	N
[7090]	ATOM	313	CA	PHE	A	65	5.671	-30.294	-6.721	1.00	24.77	C
[7091]	ATOM	314	C	PHE	A	65	4.185	-30.308	-7.034	1.00	25.41	C
[7092]	ATOM	315	O	PHE	A	65	3.455	-29.353	-6.696	1.00	25.12	O
[7093]	ATOM	316	CB	PHE	A	65	6.291	-29.257	-7.647	1.00	24.58	C
[7094]	ATOM	317	CG	PHE	A	65	7.561	-28.666	-7.133	1.00	24.92	C
[7095]	ATOM	318	CD1	PHE	A	65	7.605	-28.056	-5.885	1.00	24.62	C
[7096]	ATOM	319	CD2	PHE	A	65	8.722	-28.726	-7.898	1.00	24.26	C
[7097]	ATOM	320	CE1	PHE	A	65	8.756	-27.487	-5.425	1.00	23.87	C
[7098]	ATOM	321	CE2	PHE	A	65	9.880	-28.166	-7.431	1.00	23.68	C
[7099]	ATOM	322	CZ	PHE	A	65	9.896	-27.553	-6.187	1.00	23.96	C
[7100]	ATOM	323	N	GLN	A	66	3.725	-31.343	-7.722	1.00	26.47	N
[7101]	ATOM	324	CA	GLN	A	66	2.323	-31.357	-8.148	1.00	27.19	C
[7102]	ATOM	325	C	GLN	A	66	1.343	-31.352	-6.966	1.00	27.16	C
[7103]	ATOM	326	O	GLN	A	66	0.381	-30.583	-6.976	1.00	27.26	O
[7104]	ATOM	327	CB	GLN	A	66	2.036	-32.492	-9.138	1.00	27.86	C
[7105]	ATOM	328	CG	GLN	A	66	0.656	-32.380	-9.752	1.00	29.72	C
[7106]	ATOM	329	CD	GLN	A	66	0.351	-33.502	-10.683	1.00	30.88	C
[7107]	ATOM	330	OE1	GLN	A	66	0.096	-34.626	-10.243	1.00	32.53	O
[7108]	ATOM	331	NE2	GLN	A	66	0.360	-33.215	-11.984	1.00	29.59	N
[7109]	ATOM	332	N	PRO	A	67	1.580	-32.192	-5.941	1.00	27.41	N
[7110]	ATOM	333	CA	PRO	A	67	0.697	-32.089	-4.782	1.00	26.95	C
[7111]	ATOM	334	C	PRO	A	67	0.629	-30.654	-4.229	1.00	27.30	C
[7112]	ATOM	335	O	PRO	A	67	-0.453	-30.188	-3.882	1.00	28.47	O

[7113]	ATOM	336	CB	PRO	A	67	1.342	-33.042	-3.771	1.00	26.67	C
[7114]	ATOM	337	CG	PRO	A	67	2.048	-34.058	-4.628	1.00	26.80	C
[7115]	ATOM	338	CD	PRO	A	67	2.595	-33.250	-5.762	1.00	27.09	C
[7116]	ATOM	339	N	LEU	A	68	1.749	-29.937	-4.176	1.00	26.47	N
[7117]	ATOM	340	CA	LEU	A	68	1.697	-28.563	-3.663	1.00	25.81	C
[7118]	ATOM	341	C	LEU	A	68	0.967	-27.597	-4.621	1.00	25.81	C
[7119]	ATOM	342	O	LEU	A	68	0.089	-26.844	-4.201	1.00	25.41	O
[7120]	ATOM	343	CB	LEU	A	68	3.090	-28.066	-3.306	1.00	24.90	C
[7121]	ATOM	344	CG	LEU	A	68	3.213	-26.594	-2.955	1.00	23.93	C
[7122]	ATOM	345	CD1	LEU	A	68	2.888	-26.377	-1.468	1.00	20.25	C
[7123]	ATOM	346	CD2	LEU	A	68	4.600	-26.184	-3.242	1.00	20.48	C
[7124]	ATOM	347	N	PHE	A	69	1.289	-27.641	-5.906	1.00	25.63	N
[7125]	ATOM	348	CA	PHE	A	69	0.663	-26.717	-6.853	1.00	25.65	C
[7126]	ATOM	349	C	PHE	A	69	-0.809	-27.010	-7.192	1.00	26.39	C
[7127]	ATOM	350	O	PHE	A	69	-1.537	-26.128	-7.656	1.00	26.41	O
[7128]	ATOM	351	CB	PHE	A	69	1.539	-26.538	-8.092	1.00	24.88	C
[7129]	ATOM	352	CG	PHE	A	69	2.735	-25.659	-7.855	1.00	25.44	C
[7130]	ATOM	353	CD1	PHE	A	69	3.904	-26.172	-7.283	1.00	25.16	C
[7131]	ATOM	354	CD2	PHE	A	69	2.699	-24.311	-8.196	1.00	25.78	C
[7132]	ATOM	355	CE1	PHE	A	69	5.020	-25.347	-7.050	1.00	26.96	C
[7133]	ATOM	356	CE2	PHE	A	69	3.797	-23.483	-7.971	1.00	27.11	C
[7134]	ATOM	357	CZ	PHE	A	69	4.961	-24.000	-7.390	1.00	26.12	C
[7135]	ATOM	358	N	GLN	A	70	-1.253	-28.239	-6.949	1.00	27.46	N
[7136]	ATOM	359	CA	GLN	A	70	-2.685	-28.601	-7.068	1.00	27.69	C
[7137]	ATOM	360	C	GLN	A	70	-3.493	-28.385	-5.786	1.00	27.72	C
[7138]	ATOM	361	O	GLN	A	70	-4.726	-28.395	-5.807	1.00	27.73	O
[7139]	ATOM	362	CB	GLN	A	70	-2.849	-30.029	-7.575	1.00	27.83	C
[7140]	ATOM	363	CG	GLN	A	70	-2.653	-30.112	-9.081	1.00	29.93	C
[7141]	ATOM	364	CD	GLN	A	70	-2.860	-31.507	-9.634	1.00	32.59	C
[7142]	ATOM	365	OE1	GLN	A	70	-2.956	-32.491	-8.887	1.00	32.74	O
[7143]	ATOM	366	NE2	GLN	A	70	-2.925	-31.603	-10.960	1.00	32.19	N
[7144]	ATOM	367	N	PHE	A	71	-2.799	-28.188	-4.671	1.00	27.86	N
[7145]	ATOM	368	CA	PHE	A	71	-3.437	-27.762	-3.421	1.00	27.96	C
[7146]	ATOM	369	C	PHE	A	71	-4.311	-26.505	-3.650	1.00	28.66	C
[7147]	ATOM	370	O	PHE	A	71	-3.822	-25.506	-4.172	1.00	28.09	O
[7148]	ATOM	371	CB	PHE	A	71	-2.347	-27.464	-2.405	1.00	27.51	C

[7149]	ATOM	372	CG	PHE	A	71	-2.831	-27.341	-1.013	1.00	26.29	C
[7150]	ATOM	373	CD1	PHE	A	71	-3.268	-28.457	-0.319	1.00	25.39	C
[7151]	ATOM	374	CD2	PHE	A	71	-2.810	-26.124	-0.375	1.00	25.00	C
[7152]	ATOM	375	CE1	PHE	A	71	-3.701	-28.355	0.996	1.00	24.83	C
[7153]	ATOM	376	CE2	PHE	A	71	-3.246	-26.009	0.945	1.00	25.68	C
[7154]	ATOM	377	CZ	PHE	A	71	-3.691	-27.124	1.623	1.00	26.39	C
[7155]	ATOM	378	N	GLU	A	72	-5.593	-26.564	-3.267	1.00	29.72	N
[7156]	ATOM	379	CA	GLU	A	72	-6.559	-25.488	-3.555	1.00	31.04	C
[7157]	ATOM	380	C	GLU	A	72	-6.071	-24.075	-3.182	1.00	30.43	C
[7158]	ATOM	381	O	GLU	A	72	-6.180	-23.144	-3.995	1.00	29.90	O
[7159]	ATOM	382	CB	GLU	A	72	-7.931	-25.757	-2.912	1.00	31.34	C
[7160]	ATOM	383	CG	GLU	A	72	-8.985	-24.705	-3.322	1.00	33.97	C
[7161]	ATOM	384	CD	GLU	A	72	-10.275	-24.729	-2.489	1.00	35.10	C
[7162]	ATOM	385	OE1	GLU	A	72	-10.548	-23.712	-1.786	1.00	41.46	O
[7163]	ATOM	386	OE2	GLU	A	72	-11.018	-25.749	-2.550	1.00	40.37	O
[7164]	ATOM	387	N	ASP	A	73	-5.528	-23.923	-1.970	1.00	30.33	N
[7165]	ATOM	388	CA	ASP	A	73	-4.991	-22.632	-1.524	1.00	30.21	C
[7166]	ATOM	389	C	ASP	A	73	-3.827	-22.150	-2.401	1.00	29.32	C
[7167]	ATOM	390	O	ASP	A	73	-3.672	-20.949	-2.617	1.00	28.81	O
[7168]	ATOM	391	CB	ASP	A	73	-4.570	-22.687	-0.053	1.00	30.86	C
[7169]	ATOM	392	CG	ASP	A	73	-5.747	-22.920	0.899	1.00	33.81	C
[7170]	ATOM	393	OD1	ASP	A	73	-6.915	-22.640	0.529	1.00	36.71	O
[7171]	ATOM	394	OD2	ASP	A	73	-5.488	-23.372	2.039	1.00	37.11	O
[7172]	ATOM	395	N	MET	A	74	-3.009	-23.079	-2.901	1.00	28.42	N
[7173]	ATOM	396	CA	MET	A	74	-1.917	-22.675	-3.776	1.00	27.79	C
[7174]	ATOM	397	C	MET	A	74	-2.490	-22.242	-5.120	1.00	27.98	C
[7175]	ATOM	398	O	MET	A	74	-2.115	-21.197	-5.635	1.00	27.87	O
[7176]	ATOM	399	CB	MET	A	74	-0.838	-23.751	-3.923	1.00	26.95	C
[7177]	ATOM	400	CG	MET	A	74	0.353	-23.294	-4.764	1.00	25.17	C
[7178]	ATOM	401	SD	MET	A	74	1.300	-21.927	-4.052	1.00	25.92	S
[7179]	ATOM	402	CE	MET	A	74	2.456	-22.802	-3.019	1.00	26.60	C
[7180]	ATOM	403	N	GLN	A	75	-3.436	-23.015	-5.651	1.00	28.64	N
[7181]	ATOM	404	CA	GLN	A	75	-4.137	-22.631	-6.874	1.00	29.20	C
[7182]	ATOM	405	C	GLN	A	75	-4.638	-21.182	-6.826	1.00	29.40	C
[7183]	ATOM	406	O	GLN	A	75	-4.491	-20.435	-7.799	1.00	28.78	O
[7184]	ATOM	407	CB	GLN	A	75	-5.273	-23.602	-7.168	1.00	29.54	C

[7185]	ATOM	408	CG	GLN	A	75	-4.824	-24.880	-7.865	1.00	31.55	C
[7186]	ATOM	409	CD	GLN	A	75	-4.272	-24.656	-9.291	1.00	35.84	C
[7187]	ATOM	410	OE1	GLN	A	75	-3.162	-25.115	-9.625	1.00	37.30	O
[7188]	ATOM	411	NE2	GLN	A	75	-5.036	-23.952	-10.129	1.00	34.26	N
[7189]	ATOM	412	N	GLU	A	76	-5.201	-20.784	-5.685	1.00	29.56	N
[7190]	ATOM	413	CA	GLU	A	76	-5.712	-19.420	-5.497	1.00	31.03	C
[7191]	ATOM	414	C	GLU	A	76	-4.619	-18.351	-5.672	1.00	29.60	C
[7192]	ATOM	415	O	GLU	A	76	-4.867	-17.319	-6.281	1.00	29.68	O
[7193]	ATOM	416	CB	GLU	A	76	-6.419	-19.267	-4.131	1.00	30.67	C
[7194]	ATOM	417	CG	GLU	A	76	-7.834	-19.919	-4.042	1.00	34.93	C
[7195]	ATOM	418	CD	GLU	A	76	-8.450	-19.895	-2.616	1.00	35.43	C
[7196]	ATOM	419	OE1	GLU	A	76	-7.707	-19.636	-1.628	1.00	40.71	O
[7197]	ATOM	420	OE2	GLU	A	76	-9.688	-20.137	-2.471	1.00	42.32	O
[7198]	ATOM	421	N	ILE	A	77	-3.422	-18.596	-5.142	1.00	28.72	N
[7199]	ATOM	422	CA	ILE	A	77	-2.307	-17.645	-5.289	1.00	28.06	C
[7200]	ATOM	423	C	ILE	A	77	-1.758	-17.605	-6.726	1.00	27.72	C
[7201]	ATOM	424	O	ILE	A	77	-1.603	-16.526	-7.309	1.00	26.81	O
[7202]	ATOM	425	CB	ILE	A	77	-1.157	-17.928	-4.280	1.00	28.36	C
[7203]	ATOM	426	CG1	ILE	A	77	-1.662	-17.870	-2.832	1.00	27.62	C
[7204]	ATOM	427	CG2	ILE	A	77	-0.028	-16.921	-4.434	1.00	28.95	C
[7205]	ATOM	428	CD1	ILE	A	77	-0.647	-18.438	-1.851	1.00	31.99	C
[7206]	ATOM	429	N	ILE	A	78	-1.500	-18.780	-7.301	1.00	27.12	N
[7207]	ATOM	430	CA	ILE	A	78	-0.748	-18.869	-8.555	1.00	27.16	C
[7208]	ATOM	431	C	ILE	A	78	-1.560	-18.458	-9.787	1.00	27.74	C
[7209]	ATOM	432	O	ILE	A	78	-0.988	-18.234	-10.862	1.00	27.74	O
[7210]	ATOM	433	CB	ILE	A	78	-0.054	-20.245	-8.733	1.00	27.07	C
[7211]	ATOM	434	CG1	ILE	A	78	-1.093	-21.354	-8.859	1.00	25.40	C
[7212]	ATOM	435	CG2	ILE	A	78	0.937	-20.502	-7.557	1.00	27.09	C
[7213]	ATOM	436	CD1	ILE	A	78	-0.509	-22.712	-9.116	1.00	27.54	C
[7214]	ATOM	437	N	GLN	A	79	-2.877	-18.347	-9.630	1.00	27.80	N
[7215]	ATOM	438	CA	GLN	A	79	-3.755	-17.904	-10.715	1.00	29.11	C
[7216]	ATOM	439	C	GLN	A	79	-3.357	-16.536	-11.255	1.00	28.02	C
[7217]	ATOM	440	O	GLN	A	79	-3.688	-16.214	-12.388	1.00	27.06	O
[7218]	ATOM	441	CB	GLN	A	79	-5.245	-17.931	-10.308	1.00	29.20	C
[7219]	ATOM	442	CG	GLN	A	79	-5.678	-16.748	-9.435	1.00	31.81	C
[7220]	ATOM	443	CD	GLN	A	79	-7.078	-16.903	-8.819	1.00	32.84	C

[7221]	ATOM	444	OE1	GLN	A	79	-8.071	-17.128	-9.524	1.00	38.38	O
[7222]	ATOM	445	NE2	GLN	A	79	-7.163	-16.734	-7.493	1.00	36.76	N
[7223]	ATOM	446	N	ASN	A	80	-2.631	-15.744	-10.454	1.00	27.35	N
[7224]	ATOM	447	CA	ASN	A	80	-2.133	-14.432	-10.909	1.00	27.34	C
[7225]	ATOM	448	C	ASN	A	80	-0.690	-14.430	-11.430	1.00	26.79	C
[7226]	ATOM	449	O	ASN	A	80	-0.061	-13.369	-11.516	1.00	27.09	O
[7227]	ATOM	450	CB	ASN	A	80	-2.330	-13.378	-9.818	1.00	27.72	C
[7228]	ATOM	451	CG	ASN	A	80	-3.784	-13.183	-9.485	1.00	27.68	C
[7229]	ATOM	452	OD1	ASN	A	80	-4.580	-12.822	-10.347	1.00	28.64	O
[7230]	ATOM	453	ND2	ASN	A	80	-4.151	-13.474	-8.245	1.00	30.12	N
[7231]	ATOM	454	N	PHE	A	81	-0.194	-15.624	-11.769	1.00	24.67	N
[7232]	ATOM	455	CA	PHE	A	81	1.176	-15.832	-12.228	1.00	23.67	C
[7233]	ATOM	456	C	PHE	A	81	1.131	-16.817	-13.398	1.00	22.65	C
[7234]	ATOM	457	O	PHE	A	81	0.185	-17.579	-13.531	1.00	22.82	O
[7235]	ATOM	458	CB	PHE	A	81	2.051	-16.469	-11.136	1.00	22.50	C
[7236]	ATOM	459	CG	PHE	A	81	2.347	-15.581	-9.957	1.00	23.60	C
[7237]	ATOM	460	CD1	PHE	A	81	3.493	-14.784	-9.937	1.00	21.88	C
[7238]	ATOM	461	CD2	PHE	A	81	1.518	-15.587	-8.837	1.00	21.53	C
[7239]	ATOM	462	CE1	PHE	A	81	3.793	-13.984	-8.821	1.00	24.02	C
[7240]	ATOM	463	CE2	PHE	A	81	1.802	-14.784	-7.720	1.00	22.75	C
[7241]	ATOM	464	CZ	PHE	A	81	2.936	-13.976	-7.712	1.00	21.41	C
[7242]	ATOM	465	N	VAL	A	82	2.153	-16.788	-14.244	1.00	22.47	N
[7243]	ATOM	466	CA	VAL	A	82	2.455	-17.913	-15.122	1.00	22.16	C
[7244]	ATOM	467	C	VAL	A	82	3.442	-18.826	-14.392	1.00	22.06	C
[7245]	ATOM	468	O	VAL	A	82	4.279	-18.350	-13.620	1.00	22.79	O
[7246]	ATOM	469	CB	VAL	A	82	3.074	-17.463	-16.453	1.00	22.58	C
[7247]	ATOM	470	CG1	VAL	A	82	3.549	-18.688	-17.243	1.00	22.22	C
[7248]	ATOM	471	CG2	VAL	A	82	2.044	-16.730	-17.273	1.00	23.76	C
[7249]	ATOM	472	N	ARG	A	83	3.341	-20.130	-14.608	1.00	21.45	N
[7250]	ATOM	473	CA	ARG	A	83	4.184	-21.084	-13.900	1.00	20.85	C
[7251]	ATOM	474	C	ARG	A	83	4.960	-21.895	-14.913	1.00	20.86	C
[7252]	ATOM	475	O	ARG	A	83	4.408	-22.297	-15.933	1.00	20.43	O
[7253]	ATOM	476	CB	ARG	A	83	3.351	-21.998	-12.990	1.00	20.78	C
[7254]	ATOM	477	CG	ARG	A	83	2.650	-21.251	-11.823	1.00	20.62	C
[7255]	ATOM	478	CD	ARG	A	83	1.318	-20.662	-12.287	1.00	20.16	C
[7256]	ATOM	479	NE	ARG	A	83	0.280	-21.691	-12.379	1.00	18.61	N



[7257]	ATOM	480	CZ	ARG	A	83	-0.961	-21.490	-12.811	1.00	19.41	C
[7258]	ATOM	481	NH1	ARG	A	83	-1.349	-20.277	-13.157	1.00	19.20	N
[7259]	ATOM	482	NH2	ARG	A	83	-1.828	-22.500	-12.856	1.00	16.48	N
[7260]	ATOM	483	N	VAL	A	84	6.240	-22.130	-14.629	1.00	20.25	N
[7261]	ATOM	484	CA	VAL	A	84	7.081	-22.939	-15.517	1.00	20.97	C
[7262]	ATOM	485	C	VAL	A	84	7.663	-24.052	-14.681	1.00	20.72	C
[7263]	ATOM	486	O	VAL	A	84	8.418	-23.805	-13.755	1.00	21.26	O
[7264]	ATOM	487	CB	VAL	A	84	8.173	-22.093	-16.196	1.00	20.67	C
[7265]	ATOM	488	CG1	VAL	A	84	9.045	-22.936	-17.129	1.00	21.19	C
[7266]	ATOM	489	CG2	VAL	A	84	7.514	-20.942	-16.960	1.00	19.49	C
[7267]	ATOM	490	N	HIS	A	85	7.266	-25.284	-14.986	1.00	21.15	N
[7268]	ATOM	491	CA	HIS	A	85	7.687	-26.433	-14.191	1.00	20.77	C
[7269]	ATOM	492	C	HIS	A	85	8.679	-27.235	-14.969	1.00	20.82	C
[7270]	ATOM	493	O	HIS	A	85	8.312	-27.889	-15.952	1.00	20.40	O
[7271]	ATOM	494	CB	HIS	A	85	6.475	-27.280	-13.824	1.00	19.76	C
[7272]	ATOM	495	CG	HIS	A	85	5.494	-26.539	-12.984	1.00	19.86	C
[7273]	ATOM	496	ND1	HIS	A	85	5.789	-26.123	-11.704	1.00	19.78	N
[7274]	ATOM	497	CD2	HIS	A	85	4.236	-26.107	-13.243	1.00	18.54	C
[7275]	ATOM	498	CE1	HIS	A	85	4.762	-25.452	-11.210	1.00	18.87	C
[7276]	ATOM	499	NE2	HIS	A	85	3.802	-25.445	-12.117	1.00	20.75	N
[7277]	ATOM	500	N	VAL	A	86	9.934	-27.162	-14.529	1.00	21.64	N
[7278]	ATOM	501	CA	VAL	A	86	11.057	-27.824	-15.205	1.00	21.73	C
[7279]	ATOM	502	C	VAL	A	86	11.212	-29.276	-14.755	1.00	22.41	C
[7280]	ATOM	503	O	VAL	A	86	11.104	-29.585	-13.558	1.00	22.80	O
[7281]	ATOM	504	CB	VAL	A	86	12.391	-27.042	-15.049	1.00	21.11	C
[7282]	ATOM	505	CG1	VAL	A	86	13.482	-27.654	-15.907	1.00	21.58	C
[7283]	ATOM	506	CG2	VAL	A	86	12.207	-25.571	-15.456	1.00	21.48	C
[7284]	ATOM	507	N	ASP	A	87	11.394	-30.175	-15.730	1.00	22.02	N
[7285]	ATOM	508	CA	ASP	A	87	11.835	-31.549	-15.455	1.00	22.83	C
[7286]	ATOM	509	C	ASP	A	87	13.306	-31.624	-15.836	1.00	22.48	C
[7287]	ATOM	510	O	ASP	A	87	13.657	-31.291	-16.958	1.00	23.29	O
[7288]	ATOM	511	CB	ASP	A	87	11.048	-32.575	-16.305	1.00	23.21	C
[7289]	ATOM	512	CG	ASP	A	87	9.623	-32.807	-15.790	1.00	26.58	C
[7290]	ATOM	513	OD1	ASP	A	87	9.430	-32.990	-14.556	1.00	28.95	O
[7291]	ATOM	514	OD2	ASP	A	87	8.695	-32.803	-16.629	1.00	30.91	O
[7292]	ATOM	515	N	ALA	A	88	14.172	-32.058	-14.927	1.00	21.91	N

[7293]	ATOM	516	CA	ALA	A	88	15.604	-32.200	-15.266	1.00	21.65	C
[7294]	ATOM	517	C	ALA	A	88	15.753	-33.150	-16.464	1.00	21.37	C
[7295]	ATOM	518	O	ALA	A	88	14.916	-34.017	-16.650	1.00	21.40	O
[7296]	ATOM	519	CB	ALA	A	88	16.379	-32.708	-14.061	1.00	21.46	C
[7297]	ATOM	520	N	PRO	A	89	16.804	-32.988	-17.292	1.00	21.07	N
[7298]	ATOM	521	CA	PRO	A	89	16.988	-33.925	-18.405	1.00	21.05	C
[7299]	ATOM	522	C	PRO	A	89	16.916	-35.395	-17.970	1.00	21.61	C
[7300]	ATOM	523	O	PRO	A	89	17.514	-35.762	-16.954	1.00	21.39	O
[7301]	ATOM	524	CB	PRO	A	89	18.386	-33.573	-18.920	1.00	20.48	C
[7302]	ATOM	525	CG	PRO	A	89	18.516	-32.130	-18.608	1.00	20.28	C
[7303]	ATOM	526	CD	PRO	A	89	17.860	-31.964	-17.270	1.00	20.68	C
[7304]	ATOM	527	N	GLY	A	90	16.142	-36.196	-18.710	1.00	22.05	N
[7305]	ATOM	528	CA	GLY	A	90	15.926	-37.628	-18.404	1.00	22.25	C
[7306]	ATOM	529	C	GLY	A	90	14.900	-37.980	-17.321	1.00	22.37	C
[7307]	ATOM	530	O	GLY	A	90	14.695	-39.170	-17.007	1.00	21.98	O
[7308]	ATOM	531	N	MET	A	91	14.267	-36.963	-16.735	1.00	22.60	N
[7309]	ATOM	532	CA	MET	A	91	13.352	-37.162	-15.601	1.00	22.28	C
[7310]	ATOM	533	C	MET	A	91	11.891	-36.992	-15.960	1.00	23.52	C
[7311]	ATOM	534	O	MET	A	91	11.024	-37.377	-15.179	1.00	23.31	O
[7312]	ATOM	535	CB	MET	A	91	13.667	-36.199	-14.458	1.00	21.94	C
[7313]	ATOM	536	CG	MET	A	91	15.114	-36.212	-14.048	1.00	23.30	C
[7314]	ATOM	537	SD	MET	A	91	15.779	-37.869	-13.687	1.00	25.08	S
[7315]	ATOM	538	CE	MET	A	91	17.500	-37.466	-13.950	1.00	21.95	C
[7316]	ATOM	539	N	GLU	A	92	11.612	-36.402	-17.121	1.00	23.81	N
[7317]	ATOM	540	CA	GLU	A	92	10.241	-36.163	-17.506	1.00	25.32	C
[7318]	ATOM	541	C	GLU	A	92	9.510	-37.481	-17.778	1.00	26.51	C
[7319]	ATOM	542	O	GLU	A	92	10.136	-38.511	-18.024	1.00	26.00	O
[7320]	ATOM	543	CB	GLU	A	92	10.159	-35.224	-18.722	1.00	25.66	C
[7321]	ATOM	544	CG	GLU	A	92	10.578	-35.858	-20.057	1.00	24.55	C
[7322]	ATOM	545	CD	GLU	A	92	12.099	-35.860	-20.273	1.00	27.91	C
[7323]	ATOM	546	OE1	GLU	A	92	12.865	-35.420	-19.383	1.00	27.92	O
[7324]	ATOM	547	OE2	GLU	A	92	12.539	-36.291	-21.360	1.00	30.90	O
[7325]	ATOM	548	N	GLU	A	93	8.178	-37.436	-17.708	1.00	28.24	N
[7326]	ATOM	549	CA	GLU	A	93	7.344	-38.592	-18.028	1.00	30.07	C
[7327]	ATOM	550	C	GLU	A	93	7.659	-39.137	-19.418	1.00	29.93	C
[7328]	ATOM	551	O	GLU	A	93	7.649	-38.391	-20.405	1.00	30.44	O

[7329]	ATOM	552	CB	GLU	A	93	5.861	-38.240	-17.887	1.00	30.36	C
[7330]	ATOM	553	CG	GLU	A	93	5.496	-37.952	-16.427	1.00	35.24	C
[7331]	ATOM	554	CD	GLU	A	93	5.570	-39.207	-15.539	1.00	40.82	C
[7332]	ATOM	555	OE1	GLU	A	93	4.952	-40.226	-15.937	1.00	43.64	O
[7333]	ATOM	556	OE2	GLU	A	93	6.233	-39.178	-14.457	1.00	40.48	O
[7334]	ATOM	557	N	GLY	A	94	7.980	-40.428	-19.469	1.00	29.68	N
[7335]	ATOM	558	CA	GLY	A	94	8.318	-41.099	-20.716	1.00	29.44	C
[7336]	ATOM	559	C	GLY	A	94	9.699	-40.803	-21.271	1.00	29.60	C
[7337]	ATOM	560	O	GLY	A	94	9.948	-41.033	-22.463	1.00	28.97	O
[7338]	ATOM	561	N	ALA	A	95	10.608	-40.307	-20.421	1.00	29.16	N
[7339]	ATOM	562	CA	ALA	A	95	11.966	-39.989	-20.856	1.00	29.09	C
[7340]	ATOM	563	C	ALA	A	95	12.716	-41.252	-21.260	1.00	29.34	C
[7341]	ATOM	564	O	ALA	A	95	12.635	-42.255	-20.551	1.00	29.11	O
[7342]	ATOM	565	CB	ALA	A	95	12.728	-39.273	-19.751	1.00	28.96	C
[7343]	ATOM	566	N	PRO	A	96	13.462	-41.205	-22.386	1.00	29.81	N
[7344]	ATOM	567	CA	PRO	A	96	14.282	-42.375	-22.744	1.00	29.85	C
[7345]	ATOM	568	C	PRO	A	96	15.429	-42.540	-21.742	1.00	29.36	C
[7346]	ATOM	569	O	PRO	A	96	15.839	-41.554	-21.104	1.00	29.48	O
[7347]	ATOM	570	CB	PRO	A	96	14.822	-42.018	-24.134	1.00	29.95	C
[7348]	ATOM	571	CG	PRO	A	96	14.836	-40.506	-24.160	1.00	30.36	C
[7349]	ATOM	572	CD	PRO	A	96	13.611	-40.104	-23.364	1.00	30.08	C
[7350]	ATOM	573	N	VAL	A	97	15.917	-43.764	-21.566	1.00	28.86	N
[7351]	ATOM	574	CA	VAL	A	97	17.074	-43.976	-20.696	1.00	29.07	C
[7352]	ATOM	575	C	VAL	A	97	18.326	-43.585	-21.483	1.00	29.01	C
[7353]	ATOM	576	O	VAL	A	97	18.501	-44.004	-22.630	1.00	29.04	O
[7354]	ATOM	577	CB	VAL	A	97	17.161	-45.426	-20.180	1.00	29.54	C
[7355]	ATOM	578	CG1	VAL	A	97	18.331	-45.596	-19.220	1.00	29.05	C
[7356]	ATOM	579	CG2	VAL	A	97	15.856	-45.823	-19.491	1.00	29.71	C
[7357]	ATOM	580	N	PHE	A	98	19.174	-42.753	-20.882	1.00	28.57	N
[7358]	ATOM	581	CA	PHE	A	98	20.417	-42.335	-21.517	1.00	28.49	C
[7359]	ATOM	582	C	PHE	A	98	21.339	-43.545	-21.780	1.00	28.42	C
[7360]	ATOM	583	O	PHE	A	98	21.398	-44.477	-20.975	1.00	27.71	O
[7361]	ATOM	584	CB	PHE	A	98	21.144	-41.303	-20.650	1.00	28.58	C
[7362]	ATOM	585	CG	PHE	A	98	20.468	-39.950	-20.574	1.00	28.11	C
[7363]	ATOM	586	CD1	PHE	A	98	20.194	-39.220	-21.720	1.00	29.05	C
[7364]	ATOM	587	CD2	PHE	A	98	20.166	-39.382	-19.346	1.00	28.58	C

[7365]	ATOM	588	CE1	PHE	A	98	19.577	-37.958	-21.648	1.00	29.46	C
[7366]	ATOM	589	CE2	PHE	A	98	19.559	-38.125	-19.264	1.00	28.06	C
[7367]	ATOM	590	CZ	PHE	A	98	19.265	-37.416	-20.416	1.00	27.77	C
[7368]	ATOM	591	N	PRO	A	99	22.073	-43.530	-22.905	1.00	28.97	N
[7369]	ATOM	592	CA	PRO	A	99	22.966	-44.670	-23.150	1.00	29.27	C
[7370]	ATOM	593	C	PRO	A	99	24.077	-44.735	-22.105	1.00	29.44	C
[7371]	ATOM	594	O	PRO	A	99	24.327	-43.752	-21.391	1.00	28.81	O
[7372]	ATOM	595	CB	PRO	A	99	23.545	-44.380	-24.543	1.00	29.31	C
[7373]	ATOM	596	CG	PRO	A	99	23.420	-42.914	-24.715	1.00	29.42	C
[7374]	ATOM	597	CD	PRO	A	99	22.170	-42.514	-23.972	1.00	28.90	C
[7375]	ATOM	598	N	LEU	A	100	24.732	-45.889	-22.005	1.00	29.63	N
[7376]	ATOM	599	CA	LEU	A	100	25.792	-46.055	-21.030	1.00	29.78	C
[7377]	ATOM	600	C	LEU	A	100	26.967	-45.138	-21.372	1.00	28.92	C
[7378]	ATOM	601	O	LEU	A	100	27.250	-44.904	-22.547	1.00	29.74	O
[7379]	ATOM	602	CB	LEU	A	100	26.229	-47.518	-20.930	1.00	30.44	C
[7380]	ATOM	603	CG	LEU	A	100	26.159	-47.942	-19.457	1.00	32.31	C
[7381]	ATOM	604	CD1	LEU	A	100	24.771	-48.598	-19.134	1.00	34.85	C
[7382]	ATOM	605	CD2	LEU	A	100	27.316	-48.847	-19.077	1.00	32.49	C
[7383]	ATOM	606	N	GLY	A	101	27.616	-44.604	-20.340	1.00	28.08	N
[7384]	ATOM	607	CA	GLY	A	101	28.701	-43.653	-20.505	1.00	27.20	C
[7385]	ATOM	608	C	GLY	A	101	28.264	-42.211	-20.733	1.00	26.58	C
[7386]	ATOM	609	O	GLY	A	101	29.110	-41.339	-20.909	1.00	26.71	O
[7387]	ATOM	610	N	TYR	A	102	26.955	-41.957	-20.745	1.00	25.68	N
[7388]	ATOM	611	CA	TYR	A	102	26.438	-40.603	-20.890	1.00	25.05	C
[7389]	ATOM	612	C	TYR	A	102	27.061	-39.678	-19.847	1.00	24.85	C
[7390]	ATOM	613	O	TYR	A	102	27.084	-39.991	-18.662	1.00	25.13	O
[7391]	ATOM	614	CB	TYR	A	102	24.899	-40.576	-20.773	1.00	25.04	C
[7392]	ATOM	615	CG	TYR	A	102	24.297	-39.263	-21.216	1.00	23.52	C
[7393]	ATOM	616	CD1	TYR	A	102	24.159	-38.969	-22.565	1.00	23.31	C
[7394]	ATOM	617	CD2	TYR	A	102	23.904	-38.303	-20.285	1.00	24.06	C
[7395]	ATOM	618	CE1	TYR	A	102	23.640	-37.750	-22.990	1.00	25.67	C
[7396]	ATOM	619	CE2	TYR	A	102	23.372	-37.075	-20.695	1.00	22.88	C
[7397]	ATOM	620	CZ	TYR	A	102	23.239	-36.815	-22.046	1.00	24.95	C
[7398]	ATOM	621	OH	TYR	A	102	22.715	-35.625	-22.473	1.00	26.58	O
[7399]	ATOM	622	N	GLN	A	103	27.581	-38.544	-20.300	1.00	23.99	N
[7400]	ATOM	623	CA	GLN	A	103	28.126	-37.540	-19.404	1.00	24.36	C

[7401]	ATOM	624	C	GLN	A	103	26.974	-36.598	-19.070	1.00	23.29	C
[7402]	ATOM	625	O	GLN	A	103	26.618	-35.749	-19.887	1.00	22.90	O
[7403]	ATOM	626	CB	GLN	A	103	29.277	-36.778	-20.095	1.00	24.02	C
[7404]	ATOM	627	CG	GLN	A	103	30.466	-37.674	-20.540	1.00	26.50	C
[7405]	ATOM	628	CD	GLN	A	103	31.314	-37.075	-21.681	1.00	26.64	C
[7406]	ATOM	629	OE1	GLN	A	103	31.540	-35.853	-21.736	1.00	29.77	O
[7407]	ATOM	630	NE2	GLN	A	103	31.788	-37.944	-22.600	1.00	27.00	N
[7408]	ATOM	631	N	TYR	A	104	26.380	-36.767	-17.889	1.00	22.55	N
[7409]	ATOM	632	CA	TYR	A	104	25.227	-35.968	-17.465	1.00	21.96	C
[7410]	ATOM	633	C	TYR	A	104	25.713	-34.595	-17.021	1.00	21.59	C
[7411]	ATOM	634	O	TYR	A	104	26.768	-34.498	-16.421	1.00	22.01	O
[7412]	ATOM	635	CB	TYR	A	104	24.501	-36.672	-16.309	1.00	21.41	C
[7413]	ATOM	636	CG	TYR	A	104	23.111	-36.160	-16.028	1.00	20.64	C
[7414]	ATOM	637	CD1	TYR	A	104	22.010	-36.605	-16.774	1.00	20.10	C
[7415]	ATOM	638	CD2	TYR	A	104	22.888	-35.240	-15.007	1.00	20.52	C
[7416]	ATOM	639	CE1	TYR	A	104	20.722	-36.136	-16.499	1.00	18.77	C
[7417]	ATOM	640	CE2	TYR	A	104	21.626	-34.770	-14.739	1.00	19.75	C
[7418]	ATOM	641	CZ	TYR	A	104	20.554	-35.214	-15.483	1.00	18.63	C
[7419]	ATOM	642	OH	TYR	A	104	19.315	-34.731	-15.199	1.00	20.24	O
[7420]	ATOM	643	N	PRO	A	105	24.963	-33.518	-17.333	1.00	21.67	N
[7421]	ATOM	644	CA	PRO	A	105	25.457	-32.169	-16.973	1.00	21.49	C
[7422]	ATOM	645	C	PRO	A	105	25.668	-32.020	-15.467	1.00	21.33	C
[7423]	ATOM	646	O	PRO	A	105	24.964	-32.654	-14.692	1.00	21.26	O
[7424]	ATOM	647	CB	PRO	A	105	24.326	-31.249	-17.428	1.00	21.56	C
[7425]	ATOM	648	CG	PRO	A	105	23.559	-32.042	-18.436	1.00	23.41	C
[7426]	ATOM	649	CD	PRO	A	105	23.661	-33.470	-18.021	1.00	21.09	C
[7427]	ATOM	650	N	SER	A	106	26.656	-31.218	-15.062	1.00	21.72	N
[7428]	ATOM	651	CA	SER	A	106	26.851	-30.839	-13.654	1.00	21.05	C
[7429]	ATOM	652	C	SER	A	106	25.706	-29.939	-13.261	1.00	20.83	C
[7430]	ATOM	653	O	SER	A	106	25.015	-29.450	-14.141	1.00	21.14	O
[7431]	ATOM	654	CB	SER	A	106	28.153	-30.044	-13.503	1.00	21.27	C
[7432]	ATOM	655	OG	SER	A	106	28.044	-28.800	-14.176	1.00	21.70	O
[7433]	ATOM	656	N	LEU	A	107	25.516	-29.674	-11.966	1.00	20.66	N
[7434]	ATOM	657	CA	LEU	A	107	24.458	-28.729	-11.530	1.00	21.18	C
[7435]	ATOM	658	C	LEU	A	107	24.604	-27.334	-12.144	1.00	22.31	C
[7436]	ATOM	659	O	LEU	A	107	23.605	-26.653	-12.415	1.00	23.13	O

[7437]	ATOM	660	CB	LEU	A	107	24.390	-28.604	-10.000	1.00	20.22	C
[7438]	ATOM	661	CG	LEU	A	107	24.052	-29.871	-9.178	1.00	19.67	C
[7439]	ATOM	662	CD1	LEU	A	107	23.686	-29.565	-7.735	1.00	19.63	C
[7440]	ATOM	663	CD2	LEU	A	107	22.940	-30.671	-9.813	1.00	18.93	C
[7441]	ATOM	664	N	ASP	A	108	25.851	-26.899	-12.323	1.00	22.38	N
[7442]	ATOM	665	CA	ASP	A	108	26.149	-25.613	-12.929	1.00	23.21	C
[7443]	ATOM	666	C	ASP	A	108	25.693	-25.603	-14.392	1.00	22.62	C
[7444]	ATOM	667	O	ASP	A	108	25.146	-24.599	-14.885	1.00	22.88	O
[7445]	ATOM	668	CB	ASP	A	108	27.659	-25.334	-12.851	1.00	22.69	C
[7446]	ATOM	669	CG	ASP	A	108	28.125	-24.942	-11.450	1.00	25.78	C
[7447]	ATOM	670	OD1	ASP	A	108	27.283	-24.731	-10.537	1.00	25.23	O
[7448]	ATOM	671	OD2	ASP	A	108	29.365	-24.827	-11.265	1.00	29.21	O
[7449]	ATOM	672	N	GLN	A	109	25.919	-26.716	-15.086	1.00	22.26	N
[7450]	ATOM	673	CA	GLN	A	109	25.478	-26.849	-16.474	1.00	22.10	C
[7451]	ATOM	674	C	GLN	A	109	23.951	-26.888	-16.565	1.00	22.15	C
[7452]	ATOM	675	O	GLN	A	109	23.377	-26.323	-17.492	1.00	22.36	O
[7453]	ATOM	676	CB	GLN	A	109	26.148	-28.041	-17.149	1.00	21.74	C
[7454]	ATOM	677	CG	GLN	A	109	27.636	-27.786	-17.357	1.00	23.29	C
[7455]	ATOM	678	CD	GLN	A	109	28.444	-29.019	-17.728	1.00	25.00	C
[7456]	ATOM	679	OE1	GLN	A	109	28.046	-30.157	-17.472	1.00	26.27	O
[7457]	ATOM	680	NE2	GLN	A	109	29.596	-28.785	-18.330	1.00	22.71	N
[7458]	ATOM	681	N	LEU	A	110	23.302	-27.525	-15.587	1.00	22.71	N
[7459]	ATOM	682	CA	LEU	A	110	21.836	-27.494	-15.463	1.00	22.62	C
[7460]	ATOM	683	C	LEU	A	110	21.294	-26.074	-15.264	1.00	22.86	C
[7461]	ATOM	684	O	LEU	A	110	20.281	-25.734	-15.853	1.00	24.40	O
[7462]	ATOM	685	CB	LEU	A	110	21.315	-28.455	-14.359	1.00	22.09	C
[7463]	ATOM	686	CG	LEU	A	110	21.555	-29.970	-14.537	1.00	22.36	C
[7464]	ATOM	687	CD1	LEU	A	110	21.118	-30.775	-13.320	1.00	20.18	C
[7465]	ATOM	688	CD2	LEU	A	110	20.815	-30.485	-15.736	1.00	22.01	C
[7466]	ATOM	689	N	ALA	A	111	21.962	-25.244	-14.461	1.00	22.49	N
[7467]	ATOM	690	CA	ALA	A	111	21.555	-23.842	-14.304	1.00	22.05	C
[7468]	ATOM	691	C	ALA	A	111	21.727	-23.038	-15.598	1.00	22.10	C
[7469]	ATOM	692	O	ALA	A	111	20.975	-22.112	-15.860	1.00	21.79	O
[7470]	ATOM	693	CB	ALA	A	111	22.337	-23.183	-13.152	1.00	21.48	C
[7471]	ATOM	694	N	ASP	A	112	22.719	-23.414	-16.403	1.00	22.80	N
[7472]	ATOM	695	CA	ASP	A	112	22.990	-22.785	-17.697	1.00	23.87	C

[7473]	ATOM	696	C	ASP	A	112	21.994	-23.147	-18.813	1.00	24.27	C
[7474]	ATOM	697	O	ASP	A	112	22.087	-22.611	-19.920	1.00	25.04	O
[7475]	ATOM	698	CB	ASP	A	112	24.416	-23.132	-18.155	1.00	24.16	C
[7476]	ATOM	699	CG	ASP	A	112	25.481	-22.299	-17.464	1.00	27.29	C
[7477]	ATOM	700	OD1	ASP	A	112	25.124	-21.312	-16.784	1.00	29.44	O
[7478]	ATOM	701	OD2	ASP	A	112	26.691	-22.622	-17.615	1.00	31.58	O
[7479]	ATOM	702	N	MET	A	113	21.051	-24.044	-18.519	1.00	24.75	N
[7480]	ATOM	703	CA	MET	A	113	19.967	-24.420	-19.444	1.00	24.92	C
[7481]	ATOM	704	C	MET	A	113	18.783	-23.474	-19.316	1.00	24.24	C
[7482]	ATOM	705	O	MET	A	113	17.982	-23.344	-20.235	1.00	23.08	O
[7483]	ATOM	706	CB	MET	A	113	19.473	-25.841	-19.158	1.00	25.01	C
[7484]	ATOM	707	CG	MET	A	113	20.544	-26.917	-19.343	1.00	26.47	C
[7485]	ATOM	708	SD	MET	A	113	19.875	-28.587	-19.287	1.00	27.95	S
[7486]	ATOM	709	CE	MET	A	113	21.366	-29.447	-18.917	1.00	29.73	C
[7487]	ATOM	710	N	ILE	A	114	18.695	-22.810	-18.169	1.00	23.03	N
[7488]	ATOM	711	CA	ILE	A	114	17.552	-21.951	-17.834	1.00	22.53	C
[7489]	ATOM	712	C	ILE	A	114	17.400	-20.688	-18.720	1.00	22.58	C
[7490]	ATOM	713	O	ILE	A	114	16.287	-20.366	-19.099	1.00	23.06	O
[7491]	ATOM	714	CB	ILE	A	114	17.534	-21.609	-16.331	1.00	22.36	C
[7492]	ATOM	715	CG1	ILE	A	114	17.271	-22.887	-15.521	1.00	22.28	C
[7493]	ATOM	716	CG2	ILE	A	114	16.496	-20.504	-16.037	1.00	21.07	C
[7494]	ATOM	717	CD1	ILE	A	114	17.424	-22.711	-14.008	1.00	22.13	C
[7495]	ATOM	718	N	PRO	A	115	18.499	-19.976	-19.059	1.00	22.74	N
[7496]	ATOM	719	CA	PRO	A	115	18.318	-18.903	-20.062	1.00	22.73	C
[7497]	ATOM	720	C	PRO	A	115	17.611	-19.350	-21.350	1.00	23.00	C
[7498]	ATOM	721	O	PRO	A	115	16.806	-18.604	-21.904	1.00	23.36	O
[7499]	ATOM	722	CB	PRO	A	115	19.756	-18.482	-20.383	1.00	22.90	C
[7500]	ATOM	723	CG	PRO	A	115	20.512	-18.742	-19.111	1.00	22.43	C
[7501]	ATOM	724	CD	PRO	A	115	19.892	-20.028	-18.563	1.00	22.50	C
[7502]	ATOM	725	N	CYS	A	116	17.887	-20.558	-21.820	1.00	23.15	N
[7503]	ATOM	726	CA	CYS	A	116	17.238	-21.060	-23.042	1.00	23.87	C
[7504]	ATOM	727	C	CYS	A	116	15.730	-21.265	-22.840	1.00	23.18	C
[7505]	ATOM	728	O	CYS	A	116	14.930	-20.930	-23.705	1.00	22.47	O
[7506]	ATOM	729	CB	CYS	A	116	17.893	-22.372	-23.462	1.00	24.82	C
[7507]	ATOM	730	SG	CYS	A	116	19.426	-22.165	-24.439	1.00	30.66	S
[7508]	ATOM	731	N	VAL	A	117	15.361	-21.815	-21.688	1.00	21.82	N

[7509]	ATOM	732	CA	VAL	A	117	13.960	-21.936	-21.304	1.00	21.93	C
[7510]	ATOM	733	C	VAL	A	117	13.274	-20.565	-21.292	1.00	21.31	C
[7511]	ATOM	734	O	VAL	A	117	12.217	-20.401	-21.886	1.00	22.10	O
[7512]	ATOM	735	CB	VAL	A	117	13.805	-22.605	-19.918	1.00	21.99	C
[7513]	ATOM	736	CG1	VAL	A	117	12.335	-22.598	-19.463	1.00	22.79	C
[7514]	ATOM	737	CG2	VAL	A	117	14.388	-24.046	-19.943	1.00	21.70	C
[7515]	ATOM	738	N	LEU	A	118	13.876	-19.585	-20.630	1.00	21.18	N
[7516]	ATOM	739	CA	LEU	A	118	13.236	-18.277	-20.472	1.00	20.73	C
[7517]	ATOM	740	C	LEU	A	118	13.125	-17.516	-21.781	1.00	20.78	C
[7518]	ATOM	741	O	LEU	A	118	12.117	-16.855	-22.017	1.00	20.17	O
[7519]	ATOM	742	CB	LEU	A	118	13.935	-17.435	-19.385	1.00	20.99	C
[7520]	ATOM	743	CG	LEU	A	118	13.912	-18.013	-17.953	1.00	20.57	C
[7521]	ATOM	744	CD1	LEU	A	118	14.548	-17.085	-16.930	1.00	21.29	C
[7522]	ATOM	745	CD2	LEU	A	118	12.474	-18.346	-17.509	1.00	19.58	C
[7523]	ATOM	746	N	GLN	A	119	14.149	-17.605	-22.633	1.00	20.68	N
[7524]	ATOM	747	CA	GLN	A	119	14.124	-16.904	-23.912	1.00	21.97	C
[7525]	ATOM	748	C	GLN	A	119	13.172	-17.558	-24.909	1.00	22.13	C
[7526]	ATOM	749	O	GLN	A	119	12.543	-16.865	-25.718	1.00	21.70	O
[7527]	ATOM	750	CB	GLN	A	119	15.535	-16.814	-24.512	1.00	22.11	C
[7528]	ATOM	751	CG	GLN	A	119	16.507	-16.090	-23.536	1.00	22.49	C
[7529]	ATOM	752	CD	GLN	A	119	17.911	-15.953	-24.069	1.00	23.53	C
[7530]	ATOM	753	OE1	GLN	A	119	18.200	-16.330	-25.213	1.00	27.56	O
[7531]	ATOM	754	NE2	GLN	A	119	18.800	-15.387	-23.248	1.00	23.57	N
[7532]	ATOM	755	N	TYR	A	120	13.099	-18.890	-24.874	1.00	21.60	N
[7533]	ATOM	756	CA	TYR	A	120	12.104	-19.620	-25.656	1.00	21.25	C
[7534]	ATOM	757	C	TYR	A	120	10.721	-19.086	-25.294	1.00	21.03	C
[7535]	ATOM	758	O	TYR	A	120	9.889	-18.886	-26.166	1.00	20.42	O
[7536]	ATOM	759	CB	TYR	A	120	12.200	-21.126	-25.383	1.00	21.76	C
[7537]	ATOM	760	CG	TYR	A	120	11.060	-21.995	-25.924	1.00	22.16	C
[7538]	ATOM	761	CD1	TYR	A	120	9.889	-22.181	-25.186	1.00	22.91	C
[7539]	ATOM	762	CD2	TYR	A	120	11.177	-22.661	-27.140	1.00	22.77	C
[7540]	ATOM	763	CE1	TYR	A	120	8.857	-22.981	-25.645	1.00	22.52	C
[7541]	ATOM	764	CE2	TYR	A	120	10.147	-23.487	-27.618	1.00	21.71	C
[7542]	ATOM	765	CZ	TYR	A	120	9.000	-23.643	-26.863	1.00	23.70	C
[7543]	ATOM	766	OH	TYR	A	120	7.980	-24.438	-27.316	1.00	23.89	O
[7544]	ATOM	767	N	LEU	A	121	10.500	-18.822	-24.006	1.00	21.06	N



[7545]	ATOM	768	CA	LEU	A	121	9.209	-18.341	-23.526	1.00	21.68	C
[7546]	ATOM	769	C	LEU	A	121	9.071	-16.818	-23.617	1.00	22.40	C
[7547]	ATOM	770	O	LEU	A	121	7.987	-16.294	-23.485	1.00	22.20	O
[7548]	ATOM	771	CB	LEU	A	121	8.964	-18.811	-22.081	1.00	20.71	C
[7549]	ATOM	772	CG	LEU	A	121	8.829	-20.318	-21.832	1.00	20.36	C
[7550]	ATOM	773	CD1	LEU	A	121	8.753	-20.613	-20.330	1.00	17.97	C
[7551]	ATOM	774	CD2	LEU	A	121	7.609	-20.880	-22.556	1.00	20.07	C
[7552]	ATOM	775	N	ASN	A	122	10.174	-16.121	-23.882	1.00	24.34	N
[7553]	ATOM	776	CA	ASN	A	122	10.226	-14.654	-23.819	1.00	25.58	C
[7554]	ATOM	777	C	ASN	A	122	9.824	-14.084	-22.471	1.00	25.45	C
[7555]	ATOM	778	O	ASN	A	122	9.103	-13.099	-22.411	1.00	25.38	O
[7556]	ATOM	779	CB	ASN	A	122	9.388	-14.018	-24.930	1.00	27.05	C
[7557]	ATOM	780	CG	ASN	A	122	9.958	-14.292	-26.310	1.00	31.31	C
[7558]	ATOM	781	OD1	ASN	A	122	11.117	-13.944	-26.600	1.00	35.70	O
[7559]	ATOM	782	ND2	ASN	A	122	9.150	-14.927	-27.176	1.00	33.45	N
[7560]	ATOM	783	N	PHE	A	123	10.302	-14.707	-21.397	1.00	24.81	N
[7561]	ATOM	784	CA	PHE	A	123	10.043	-14.242	-20.042	1.00	25.18	C
[7562]	ATOM	785	C	PHE	A	123	11.291	-13.572	-19.530	1.00	25.16	C
[7563]	ATOM	786	O	PHE	A	123	12.388	-14.058	-19.764	1.00	25.77	O
[7564]	ATOM	787	CB	PHE	A	123	9.718	-15.406	-19.115	1.00	24.21	C
[7565]	ATOM	788	CG	PHE	A	123	8.386	-16.053	-19.372	1.00	24.23	C
[7566]	ATOM	789	CD1	PHE	A	123	7.479	-15.512	-20.279	1.00	24.30	C
[7567]	ATOM	790	CD2	PHE	A	123	8.030	-17.211	-18.692	1.00	24.11	C
[7568]	ATOM	791	CE1	PHE	A	123	6.254	-16.120	-20.507	1.00	24.03	C
[7569]	ATOM	792	CE2	PHE	A	123	6.792	-17.822	-18.920	1.00	23.86	C
[7570]	ATOM	793	CZ	PHE	A	123	5.910	-17.263	-19.830	1.00	23.22	C
[7571]	ATOM	794	N	SER	A	124	11.152	-12.471	-18.812	1.00	24.91	N
[7572]	ATOM	795	CA	SER	A	124	12.350	-11.773	-18.390	1.00	24.92	C
[7573]	ATOM	796	C	SER	A	124	12.693	-11.918	-16.906	1.00	24.14	C
[7574]	ATOM	797	O	SER	A	124	13.856	-11.760	-16.563	1.00	23.61	O
[7575]	ATOM	798	CB	SER	A	124	12.310	-10.308	-18.809	1.00	25.77	C
[7576]	ATOM	799	OG	SER	A	124	11.069	-9.741	-18.429	1.00	29.23	O
[7577]	ATOM	800	N	THR	A	125	11.713	-12.198	-16.036	1.00	22.66	N
[7578]	ATOM	801	CA	THR	A	125	12.018	-12.426	-14.597	1.00	22.04	C
[7579]	ATOM	802	C	THR	A	125	11.269	-13.620	-14.010	1.00	21.07	C
[7580]	ATOM	803	O	THR	A	125	10.231	-14.007	-14.523	1.00	19.30	O

[7581]	ATOM	804	CB	THR	A	125	11.736	-11.194	-13.667	1.00	21.89	C
[7582]	ATOM	805	OG1	THR	A	125	10.331	-10.902	-13.656	1.00	24.56	O
[7583]	ATOM	806	CG2	THR	A	125	12.510	-9.968	-14.103	1.00	21.20	C
[7584]	ATOM	807	N	ILE	A	126	11.800	-14.166	-12.915	1.00	19.48	N
[7585]	ATOM	808	CA	ILE	A	126	11.230	-15.335	-12.250	1.00	19.24	C
[7586]	ATOM	809	C	ILE	A	126	11.265	-15.230	-10.727	1.00	19.07	C
[7587]	ATOM	810	O	ILE	A	126	12.036	-14.474	-10.159	1.00	19.34	O
[7588]	ATOM	811	CB	ILE	A	126	11.968	-16.685	-12.647	1.00	18.84	C
[7589]	ATOM	812	CG1	ILE	A	126	13.413	-16.713	-12.103	1.00	17.62	C
[7590]	ATOM	813	CG2	ILE	A	126	11.912	-16.936	-14.165	1.00	20.97	C
[7591]	ATOM	814	CD1	ILE	A	126	14.054	-18.069	-12.103	1.00	18.65	C
[7592]	ATOM	815	N	ILE	A	127	10.380	-15.979	-10.087	1.00	19.42	N
[7593]	ATOM	816	CA	ILE	A	127	10.554	-16.381	-8.702	0.80	18.53	C
[7594]	ATOM	817	C	ILE	A	127	10.865	-17.866	-8.799	1.00	19.56	C
[7595]	ATOM	818	O	ILE	A	127	10.062	-18.645	-9.332	1.00	19.38	O
[7596]	ATOM	819	CB	ILE	A	127	9.295	-16.166	-7.829	0.80	17.82	C
[7597]	ATOM	820	CG1	ILE	A	127	8.991	-14.666	-7.705	0.80	18.03	C
[7598]	ATOM	821	CG2	ILE	A	127	9.520	-16.783	-6.440	0.80	16.44	C
[7599]	ATOM	822	CD1	ILE	A	127	7.575	-14.319	-7.184	0.80	17.71	C
[7600]	ATOM	823	N	GLY	A	128	12.041	-18.262	-8.321	1.00	19.69	N
[7601]	ATOM	824	CA	GLY	A	128	12.433	-19.680	-8.398	1.00	19.46	C
[7602]	ATOM	825	C	GLY	A	128	11.991	-20.426	-7.157	1.00	19.43	C
[7603]	ATOM	826	O	GLY	A	128	12.139	-19.915	-6.048	1.00	19.15	O
[7604]	ATOM	827	N	VAL	A	129	11.409	-21.612	-7.344	1.00	19.77	N
[7605]	ATOM	828	CA	VAL	A	129	11.039	-22.493	-6.237	1.00	19.15	C
[7606]	ATOM	829	C	VAL	A	129	11.716	-23.841	-6.475	1.00	19.80	C
[7607]	ATOM	830	O	VAL	A	129	11.462	-24.496	-7.485	1.00	19.79	O
[7608]	ATOM	831	CB	VAL	A	129	9.504	-22.659	-6.132	1.00	19.31	C
[7609]	ATOM	832	CG1	VAL	A	129	9.141	-23.627	-5.004	1.00	20.37	C
[7610]	ATOM	833	CG2	VAL	A	129	8.809	-21.297	-5.896	1.00	18.85	C
[7611]	ATOM	834	N	GLY	A	130	12.607	-24.254	-5.576	1.00	20.18	N
[7612]	ATOM	835	CA	GLY	A	130	13.391	-25.476	-5.821	1.00	20.65	C
[7613]	ATOM	836	C	GLY	A	130	13.497	-26.319	-4.570	1.00	20.39	C
[7614]	ATOM	837	O	GLY	A	130	13.421	-25.777	-3.479	1.00	21.18	O
[7615]	ATOM	838	N	VAL	A	131	13.652	-27.634	-4.731	1.00	20.20	N
[7616]	ATOM	839	CA	VAL	A	131	13.917	-28.552	-3.601	1.00	21.36	C

[7617]	ATOM	840	C	VAL	A	131	15.245	-29.271	-3.786	1.00	21.57	C
[7618]	ATOM	841	O	VAL	A	131	15.512	-29.796	-4.866	1.00	23.09	O
[7619]	ATOM	842	CB	VAL	A	131	12.816	-29.630	-3.454	1.00	20.70	C
[7620]	ATOM	843	CG1	VAL	A	131	13.114	-30.552	-2.242	1.00	20.61	C
[7621]	ATOM	844	CG2	VAL	A	131	11.512	-28.983	-3.276	1.00	21.58	C
[7622]	ATOM	845	N	GLY	A	132	16.072	-29.307	-2.745	1.00	21.94	N
[7623]	ATOM	846	CA	GLY	A	132	17.388	-29.969	-2.809	1.00	20.30	C
[7624]	ATOM	847	C	GLY	A	132	18.266	-29.573	-3.981	1.00	20.93	C
[7625]	ATOM	848	O	GLY	A	132	18.682	-28.397	-4.110	1.00	20.26	O
[7626]	ATOM	849	N	ALA	A	133	18.582	-30.562	-4.822	1.00	19.69	N
[7627]	ATOM	850	CA	ALA	A	133	19.328	-30.327	-6.052	1.00	19.79	C
[7628]	ATOM	851	C	ALA	A	133	18.708	-29.179	-6.817	1.00	19.45	C
[7629]	ATOM	852	O	ALA	A	133	19.425	-28.328	-7.319	1.00	20.94	O
[7630]	ATOM	853	CB	ALA	A	133	19.383	-31.586	-6.915	1.00	19.24	C
[7631]	ATOM	854	N	GLY	A	134	17.374	-29.138	-6.890	1.00	19.74	N
[7632]	ATOM	855	CA	GLY	A	134	16.694	-28.037	-7.572	1.00	17.76	C
[7633]	ATOM	856	C	GLY	A	134	16.911	-26.670	-6.941	1.00	17.08	C
[7634]	ATOM	857	O	GLY	A	134	16.924	-25.660	-7.644	1.00	16.84	O
[7635]	ATOM	858	N	ALA	A	135	17.019	-26.624	-5.615	1.00	16.51	N
[7636]	ATOM	859	CA	ALA	A	135	17.265	-25.376	-4.903	1.00	16.74	C
[7637]	ATOM	860	C	ALA	A	135	18.671	-24.866	-5.230	1.00	17.78	C
[7638]	ATOM	861	O	ALA	A	135	18.862	-23.658	-5.415	1.00	18.85	O
[7639]	ATOM	862	CB	ALA	A	135	17.108	-25.576	-3.362	1.00	15.70	C
[7640]	ATOM	863	N	TYR	A	136	19.655	-25.776	-5.315	1.00	18.40	N
[7641]	ATOM	864	CA	TYR	A	136	21.035	-25.387	-5.676	1.00	19.22	C
[7642]	ATOM	865	C	TYR	A	136	21.053	-24.790	-7.076	1.00	19.36	C
[7643]	ATOM	866	O	TYR	A	136	21.551	-23.699	-7.269	1.00	19.52	O
[7644]	ATOM	867	CB	TYR	A	136	22.009	-26.579	-5.581	1.00	20.41	C
[7645]	ATOM	868	CG	TYR	A	136	23.448	-26.251	-5.940	1.00	19.59	C
[7646]	ATOM	869	CD1	TYR	A	136	23.831	-26.069	-7.283	1.00	20.11	C
[7647]	ATOM	870	CD2	TYR	A	136	24.417	-26.124	-4.956	1.00	20.22	C
[7648]	ATOM	871	CE1	TYR	A	136	25.133	-25.753	-7.630	1.00	20.11	C
[7649]	ATOM	872	CE2	TYR	A	136	25.758	-25.821	-5.301	1.00	21.38	C
[7650]	ATOM	873	CZ	TYR	A	136	26.090	-25.636	-6.648	1.00	21.11	C
[7651]	ATOM	874	OH	TYR	A	136	27.364	-25.326	-7.034	1.00	22.89	O
[7652]	ATOM	875	N	ILE	A	137	20.494	-25.520	-8.035	1.00	19.34	N

[7653]	ATOM	876	CA	ILE A 137	20.405	-25.087	-9.440	1.00	19.05	C
[7654]	ATOM	877	C	ILE A 137	19.820	-23.680	-9.613	1.00	19.49	C
[7655]	ATOM	878	O	ILE A 137	20.370	-22.871	-10.336	1.00	20.97	O
[7656]	ATOM	879	CB	ILE A 137	19.603	-26.112	-10.289	1.00	18.53	C
[7657]	ATOM	880	CG1	ILE A 137	20.410	-27.405	-10.467	1.00	18.77	C
[7658]	ATOM	881	CG2	ILE A 137	19.292	-25.532	-11.680	1.00	18.48	C
[7659]	ATOM	882	CD1	ILE A 137	19.558	-28.648	-10.814	1.00	18.06	C
[7660]	ATOM	883	N	LEU A 138	18.708	-23.388	-8.936	1.00	19.91	N
[7661]	ATOM	884	CA	LEU A 138	18.071	-22.059	-9.013	1.00	19.80	C
[7662]	ATOM	885	C	LEU A 138	18.908	-20.952	-8.351	1.00	19.75	C
[7663]	ATOM	886	O	LEU A 138	19.005	-19.844	-8.890	1.00	19.61	O
[7664]	ATOM	887	CB	LEU A 138	16.649	-22.096	-8.428	1.00	19.27	C
[7665]	ATOM	888	CG	LEU A 138	15.692	-22.974	-9.247	1.00	20.59	C
[7666]	ATOM	889	CD1	LEU A 138	14.360	-22.959	-8.620	1.00	20.14	C
[7667]	ATOM	890	CD2	LEU A 138	15.607	-22.474	-10.706	1.00	20.98	C
[7668]	ATOM	891	N	ALA A 139	19.501	-21.248	-7.193	1.00	19.20	N
[7669]	ATOM	892	CA	ALA A 139	20.450	-20.316	-6.542	1.00	18.54	C
[7670]	ATOM	893	C	ALA A 139	21.694	-20.006	-7.391	1.00	19.02	C
[7671]	ATOM	894	O	ALA A 139	22.159	-18.858	-7.443	1.00	19.08	O
[7672]	ATOM	895	CB	ALA A 139	20.839	-20.848	-5.161	1.00	18.61	C
[7673]	ATOM	896	N	ARG A 140	22.213	-21.017	-8.086	1.00	19.11	N
[7674]	ATOM	897	CA	ARG A 140	23.330	-20.822	-9.017	1.00	19.37	C
[7675]	ATOM	898	C	ARG A 140	22.876	-19.987	-10.202	1.00	19.75	C
[7676]	ATOM	899	O	ARG A 140	23.611	-19.098	-10.684	1.00	19.10	O
[7677]	ATOM	900	CB	ARG A 140	23.891	-22.180	-9.479	1.00	19.32	C
[7678]	ATOM	901	CG	ARG A 140	24.873	-22.124	-10.688	1.00	21.61	C
[7679]	ATOM	902	CD	ARG A 140	26.192	-21.386	-10.376	1.00	22.75	C
[7680]	ATOM	903	NE	ARG A 140	26.928	-22.108	-9.352	1.00	25.82	N
[7681]	ATOM	904	CZ	ARG A 140	27.773	-21.548	-8.491	1.00	26.50	C
[7682]	ATOM	905	NH1	ARG A 140	28.010	-20.233	-8.522	1.00	22.99	N
[7683]	ATOM	906	NH2	ARG A 140	28.370	-22.318	-7.597	1.00	25.52	N
[7684]	ATOM	907	N	TYR A 141	21.666	-20.270	-10.682	1.00	19.84	N
[7685]	ATOM	908	CA	TYR A 141	21.095	-19.482	-11.768	1.00	19.53	C
[7686]	ATOM	909	C	TYR A 141	20.980	-18.013	-11.345	1.00	19.21	C
[7687]	ATOM	910	O	TYR A 141	21.318	-17.101	-12.104	1.00	18.62	O
[7688]	ATOM	911	CB	TYR A 141	19.732	-20.018	-12.230	1.00	19.14	C

[7689]	ATOM	912	CG	TYR	A	141	19.112	-19.037	-13.200	1.00	20.01	C
[7690]	ATOM	913	CD1	TYR	A	141	19.512	-19.005	-14.536	1.00	21.84	C
[7691]	ATOM	914	CD2	TYR	A	141	18.193	-18.071	-12.762	1.00	21.02	C
[7692]	ATOM	915	CE1	TYR	A	141	19.005	-18.051	-15.417	1.00	20.45	C
[7693]	ATOM	916	CE2	TYR	A	141	17.676	-17.106	-13.652	1.00	18.22	C
[7694]	ATOM	917	CZ	TYR	A	141	18.082	-17.117	-14.967	1.00	20.28	C
[7695]	ATOM	918	OH	TYR	A	141	17.568	-16.162	-15.829	1.00	21.64	O
[7696]	ATOM	919	N	ALA	A	142	20.517	-17.785	-10.123	1.00	18.95	N
[7697]	ATOM	920	CA	ALA	A	142	20.360	-16.430	-9.605	1.00	19.00	C
[7698]	ATOM	921	C	ALA	A	142	21.688	-15.682	-9.487	1.00	19.75	C
[7699]	ATOM	922	O	ALA	A	142	21.766	-14.476	-9.783	1.00	20.67	O
[7700]	ATOM	923	CB	ALA	A	142	19.654	-16.475	-8.259	1.00	18.98	C
[7701]	ATOM	924	N	LEU	A	143	22.726	-16.369	-9.007	1.00	20.15	N
[7702]	ATOM	925	CA	LEU	A	143	24.072	-15.779	-8.945	1.00	19.84	C
[7703]	ATOM	926	C	LEU	A	143	24.583	-15.369	-10.325	1.00	20.16	C
[7704]	ATOM	927	O	LEU	A	143	25.224	-14.333	-10.482	1.00	20.77	O
[7705]	ATOM	928	CB	LEU	A	143	25.037	-16.764	-8.304	1.00	19.49	C
[7706]	ATOM	929	CG	LEU	A	143	24.848	-16.999	-6.790	1.00	19.89	C
[7707]	ATOM	930	CD1	LEU	A	143	25.876	-17.969	-6.248	1.00	18.27	C
[7708]	ATOM	931	CD2	LEU	A	143	24.935	-15.693	-6.052	1.00	19.20	C
[7709]	ATOM	932	N	ASN	A	144	24.300	-16.199	-11.322	1.00	20.38	N
[7710]	ATOM	933	CA	ASN	A	144	24.706	-15.947	-12.712	1.00	21.01	C
[7711]	ATOM	934	C	ASN	A	144	23.947	-14.771	-13.309	1.00	21.07	C
[7712]	ATOM	935	O	ASN	A	144	24.525	-13.941	-14.024	1.00	21.36	O
[7713]	ATOM	936	CB	ASN	A	144	24.405	-17.181	-13.573	1.00	21.16	C
[7714]	ATOM	937	CG	ASN	A	144	25.329	-18.366	-13.289	1.00	21.98	C
[7715]	ATOM	938	OD1	ASN	A	144	26.356	-18.221	-12.642	1.00	21.45	O
[7716]	ATOM	939	ND2	ASN	A	144	24.973	-19.540	-13.825	1.00	21.76	N
[7717]	ATOM	940	N	HIS	A	145	22.642	-14.709	-13.015	1.00	20.84	N
[7718]	ATOM	941	CA	HIS	A	145	21.732	-13.763	-13.673	1.00	21.25	C
[7719]	ATOM	942	C	HIS	A	145	20.876	-13.060	-12.643	1.00	21.14	C
[7720]	ATOM	943	O	HIS	A	145	19.658	-13.240	-12.637	1.00	21.58	O
[7721]	ATOM	944	CB	HIS	A	145	20.837	-14.490	-14.680	1.00	20.91	C
[7722]	ATOM	945	CG	HIS	A	145	21.600	-15.236	-15.735	1.00	21.87	C
[7723]	ATOM	946	ND1	HIS	A	145	22.151	-14.613	-16.832	1.00	24.70	N
[7724]	ATOM	947	CD2	HIS	A	145	21.900	-16.553	-15.861	1.00	23.81	C

[7725]	ATOM	948	CE1	HIS	A	145	22.763	-15.511	-17.588	1.00	25.44	C
[7726]	ATOM	949	NE2	HIS	A	145	22.611	-16.699	-17.031	1.00	25.09	N
[7727]	ATOM	950	N	PRO	A	146	21.497	-12.255	-11.766	1.00	21.60	N
[7728]	ATOM	951	CA	PRO	A	146	20.693	-11.727	-10.650	1.00	22.23	C
[7729]	ATOM	952	C	PRO	A	146	19.615	-10.715	-11.030	1.00	22.97	C
[7730]	ATOM	953	O	PRO	A	146	18.642	-10.581	-10.284	1.00	22.75	O
[7731]	ATOM	954	CB	PRO	A	146	21.733	-11.095	-9.728	1.00	21.78	C
[7732]	ATOM	955	CG	PRO	A	146	22.874	-10.700	-10.675	1.00	21.08	C
[7733]	ATOM	956	CD	PRO	A	146	22.903	-11.819	-11.687	1.00	21.50	C
[7734]	ATOM	957	N	ASP	A	147	19.749	-10.006	-12.155	1.00	23.66	N
[7735]	ATOM	958	CA	ASP	A	147	18.645	-9.109	-12.551	1.00	25.05	C
[7736]	ATOM	959	C	ASP	A	147	17.382	-9.794	-13.043	1.00	24.17	C
[7737]	ATOM	960	O	ASP	A	147	16.364	-9.114	-13.238	1.00	24.20	O
[7738]	ATOM	961	CB	ASP	A	147	19.045	-8.024	-13.548	1.00	26.00	C
[7739]	ATOM	962	CG	ASP	A	147	20.265	-8.373	-14.319	1.00	32.58	C
[7740]	ATOM	963	OD1	ASP	A	147	20.176	-9.232	-15.273	1.00	35.69	O
[7741]	ATOM	964	OD2	ASP	A	147	21.323	-7.755	-13.958	1.00	37.72	O
[7742]	ATOM	965	N	THR	A	148	17.442	-11.110	-13.256	1.00	22.74	N
[7743]	ATOM	966	CA	THR	A	148	16.277	-11.846	-13.725	1.00	22.63	C
[7744]	ATOM	967	C	THR	A	148	15.489	-12.539	-12.601	1.00	22.16	C
[7745]	ATOM	968	O	THR	A	148	14.446	-13.154	-12.853	1.00	22.64	O
[7746]	ATOM	969	CB	THR	A	148	16.648	-12.873	-14.828	1.00	22.68	C
[7747]	ATOM	970	OG1	THR	A	148	17.251	-14.028	-14.236	1.00	24.06	O
[7748]	ATOM	971	CG2	THR	A	148	17.608	-12.256	-15.865	1.00	21.70	C
[7749]	ATOM	972	N	VAL	A	149	15.961	-12.428	-11.366	1.00	21.38	N
[7750]	ATOM	973	CA	VAL	A	149	15.373	-13.195	-10.275	1.00	21.07	C
[7751]	ATOM	974	C	VAL	A	149	14.870	-12.212	-9.249	1.00	20.96	C
[7752]	ATOM	975	O	VAL	A	149	15.647	-11.497	-8.642	1.00	21.39	O
[7753]	ATOM	976	CB	VAL	A	149	16.387	-14.210	-9.630	1.00	21.28	C
[7754]	ATOM	977	CG1	VAL	A	149	15.768	-14.915	-8.395	1.00	20.23	C
[7755]	ATOM	978	CG2	VAL	A	149	16.856	-15.257	-10.651	1.00	20.57	C
[7756]	ATOM	979	N	GLU	A	150	13.557	-12.192	-9.084	1.00	21.26	N
[7757]	ATOM	980	CA	GLU	A	150	12.873	-11.324	-8.147	1.00	21.31	C
[7758]	ATOM	981	C	GLU	A	150	12.788	-11.914	-6.735	1.00	20.91	C
[7759]	ATOM	982	O	GLU	A	150	12.680	-11.173	-5.759	1.00	21.66	O
[7760]	ATOM	983	CB	GLU	A	150	11.481	-11.004	-8.683	1.00	21.48	C

[7761]	ATOM	984	CG	GLU	A	150	11.480	-10.151	-9.960	1.00	20.85	C
[7762]	ATOM	985	CD	GLU	A	150	10.107	-9.572	-10.275	1.00	22.86	C
[7763]	ATOM	986	OE1	GLU	A	150	9.419	-9.026	-9.353	1.00	22.92	O
[7764]	ATOM	987	OE2	GLU	A	150	9.702	-9.658	-11.457	1.00	24.65	O
[7765]	ATOM	988	N	GLY	A	151	12.845	-13.239	-6.632	1.00	20.43	N
[7766]	ATOM	989	CA	GLY	A	151	12.791	-13.922	-5.353	1.00	19.85	C
[7767]	ATOM	990	C	GLY	A	151	13.105	-15.396	-5.502	1.00	20.07	C
[7768]	ATOM	991	O	GLY	A	151	13.061	-15.939	-6.606	1.00	19.78	O
[7769]	ATOM	992	N	LEU	A	152	13.428	-16.039	-4.388	1.00	19.90	N
[7770]	ATOM	993	CA	LEU	A	152	13.723	-17.470	-4.381	1.00	20.01	C
[7771]	ATOM	994	C	LEU	A	152	13.138	-18.137	-3.148	1.00	20.01	C
[7772]	ATOM	995	O	LEU	A	152	13.313	-17.636	-2.031	1.00	19.11	O
[7773]	ATOM	996	CB	LEU	A	152	15.239	-17.729	-4.377	1.00	20.07	C
[7774]	ATOM	997	CG	LEU	A	152	16.170	-17.447	-5.567	1.00	19.63	C
[7775]	ATOM	998	CD1	LEU	A	152	17.599	-17.537	-5.092	1.00	18.65	C
[7776]	ATOM	999	CD2	LEU	A	152	15.942	-18.384	-6.749	1.00	19.48	C
[7777]	ATOM	1000	N	VAL	A	153	12.476	-19.277	-3.369	1.00	20.56	N
[7778]	ATOM	1001	CA	VAL	A	153	12.115	-20.236	-2.305	1.00	20.65	C
[7779]	ATOM	1002	C	VAL	A	153	13.025	-21.469	-2.396	1.00	21.03	C
[7780]	ATOM	1003	O	VAL	A	153	13.049	-22.212	-3.396	1.00	22.09	O
[7781]	ATOM	1004	CB	VAL	A	153	10.610	-20.638	-2.314	1.00	20.50	C
[7782]	ATOM	1005	CG1	VAL	A	153	10.304	-21.635	-1.177	1.00	20.05	C
[7783]	ATOM	1006	CG2	VAL	A	153	9.740	-19.415	-2.198	1.00	18.33	C
[7784]	ATOM	1007	N	LEU	A	154	13.827	-21.661	-1.371	1.00	20.54	N
[7785]	ATOM	1008	CA	LEU	A	154	14.875	-22.672	-1.453	1.00	20.23	C
[7786]	ATOM	1009	C	LEU	A	154	14.665	-23.701	-0.348	1.00	20.41	C
[7787]	ATOM	1010	O	LEU	A	154	14.930	-23.449	0.826	1.00	20.67	O
[7788]	ATOM	1011	CB	LEU	A	154	16.267	-22.023	-1.376	1.00	19.13	C
[7789]	ATOM	1012	CG	LEU	A	154	16.614	-20.931	-2.406	1.00	19.15	C
[7790]	ATOM	1013	CD1	LEU	A	154	17.939	-20.263	-2.063	1.00	16.73	C
[7791]	ATOM	1014	CD2	LEU	A	154	16.673	-21.499	-3.801	1.00	16.28	C
[7792]	ATOM	1015	N	ILE	A	155	14.155	-24.855	-0.748	1.00	21.13	N
[7793]	ATOM	1016	CA	ILE	A	155	13.779	-25.927	0.181	1.00	22.03	C
[7794]	ATOM	1017	C	ILE	A	155	14.944	-26.912	0.210	1.00	22.16	C
[7795]	ATOM	1018	O	ILE	A	155	15.412	-27.354	-0.839	1.00	21.65	O
[7796]	ATOM	1019	CB	ILE	A	155	12.453	-26.618	-0.298	1.00	21.55	C

[7797]	ATOM	1020	CG1	ILE	A	155	11.291	-25.606	-0.364	1.00	21.60	C
[7798]	ATOM	1021	CG2	ILE	A	155	12.082	-27.827	0.580	1.00	22.29	C
[7799]	ATOM	1022	CD1	ILE	A	155	10.121	-26.057	-1.245	1.00	23.21	C
[7800]	ATOM	1023	N	ASN	A	156	15.441	-27.216	1.409	1.00	22.91	N
[7801]	ATOM	1024	CA	ASN	A	156	16.534	-28.173	1.581	1.00	23.36	C
[7802]	ATOM	1025	C	ASN	A	156	17.823	-27.838	0.824	1.00	24.13	C
[7803]	ATOM	1026	O	ASN	A	156	18.508	-28.756	0.371	1.00	24.80	O
[7804]	ATOM	1027	CB	ASN	A	156	16.107	-29.569	1.120	1.00	23.14	C
[7805]	ATOM	1028	CG	ASN	A	156	15.003	-30.177	1.946	1.00	23.72	C
[7806]	ATOM	1029	OD1	ASN	A	156	14.584	-29.646	2.985	1.00	22.58	O
[7807]	ATOM	1030	ND2	ASN	A	156	14.510	-31.323	1.474	1.00	24.23	N
[7808]	ATOM	1031	N	ILE	A	157	18.159	-26.557	0.654	1.00	24.58	N
[7809]	ATOM	1032	CA	ILE	A	157	19.407	-26.200	-0.046	1.00	24.53	C
[7810]	ATOM	1033	C	ILE	A	157	20.668	-26.533	0.778	1.00	25.00	C
[7811]	ATOM	1034	O	ILE	A	157	20.743	-26.239	1.980	1.00	25.06	O
[7812]	ATOM	1035	CB	ILE	A	157	19.439	-24.715	-0.583	1.00	24.08	C
[7813]	ATOM	1036	CG1	ILE	A	157	20.714	-24.492	-1.399	1.00	24.58	C
[7814]	ATOM	1037	CG2	ILE	A	157	19.287	-23.701	0.556	1.00	23.27	C
[7815]	ATOM	1038	CD1	ILE	A	157	20.794	-23.237	-2.218	1.00	24.91	C
[7816]	ATOM	1039	N	ASP	A	158	21.650	-27.148	0.125	1.00	25.12	N
[7817]	ATOM	1040	CA	ASP	A	158	22.989	-27.317	0.708	1.00	25.88	C
[7818]	ATOM	1041	C	ASP	A	158	23.956	-26.628	-0.237	1.00	26.03	C
[7819]	ATOM	1042	O	ASP	A	158	24.290	-27.179	-1.265	1.00	25.65	O
[7820]	ATOM	1043	CB	ASP	A	158	23.350	-28.789	0.828	1.00	25.52	C
[7821]	ATOM	1044	CG	ASP	A	158	24.599	-29.023	1.655	1.00	26.90	C
[7822]	ATOM	1045	OD1	ASP	A	158	25.507	-28.155	1.668	1.00	25.78	O
[7823]	ATOM	1046	OD2	ASP	A	158	24.663	-30.092	2.301	1.00	27.45	O
[7824]	ATOM	1047	N	PRO	A	159	24.391	-25.408	0.110	1.00	26.76	N
[7825]	ATOM	1048	CA	PRO	A	159	25.149	-24.583	-0.827	1.00	27.18	C
[7826]	ATOM	1049	C	PRO	A	159	26.649	-24.910	-0.803	1.00	27.96	C
[7827]	ATOM	1050	O	PRO	A	159	27.417	-24.298	-1.538	1.00	28.63	O
[7828]	ATOM	1051	CB	PRO	A	159	24.896	-23.172	-0.301	1.00	27.71	C
[7829]	ATOM	1052	CG	PRO	A	159	24.760	-23.353	1.187	1.00	26.78	C
[7830]	ATOM	1053	CD	PRO	A	159	24.194	-24.733	1.410	1.00	26.57	C
[7831]	ATOM	1054	N	ASN	A	160	27.052	-25.862	0.038	1.00	27.87	N
[7832]	ATOM	1055	CA	ASN	A	160	28.440	-26.301	0.111	1.00	28.25	C



[7833]	ATOM	1056	C	ASN	A	160	28.701	-27.572	-0.665	1.00	27.84	C
[7834]	ATOM	1057	O	ASN	A	160	27.851	-28.457	-0.707	1.00	27.94	O
[7835]	ATOM	1058	CB	ASN	A	160	28.835	-26.538	1.555	1.00	28.74	C
[7836]	ATOM	1059	CG	ASN	A	160	28.748	-25.281	2.386	1.00	30.98	C
[7837]	ATOM	1060	OD1	ASN	A	160	28.145	-25.281	3.454	1.00	36.29	O
[7838]	ATOM	1061	ND2	ASN	A	160	29.337	-24.201	1.898	1.00	30.96	N
[7839]	ATOM	1062	N	ALA	A	161	29.890	-27.666	-1.260	1.00	27.42	N
[7840]	ATOM	1063	CA	ALA	A	161	30.354	-28.924	-1.817	1.00	26.90	C
[7841]	ATOM	1064	C	ALA	A	161	30.423	-29.955	-0.698	1.00	26.71	C
[7842]	ATOM	1065	O	ALA	A	161	30.526	-29.611	0.487	1.00	26.49	O
[7843]	ATOM	1066	CB	ALA	A	161	31.717	-28.754	-2.483	1.00	26.33	C
[7844]	ATOM	1067	N	LYS	A	162	30.338	-31.218	-1.076	1.00	26.56	N
[7845]	ATOM	1068	CA	LYS	A	162	30.481	-32.311	-0.132	1.00	27.13	C
[7846]	ATOM	1069	C	LYS	A	162	31.915	-32.296	0.407	1.00	27.06	C
[7847]	ATOM	1070	O	LYS	A	162	32.865	-32.321	-0.375	1.00	26.56	O
[7848]	ATOM	1071	CB	LYS	A	162	30.185	-33.615	-0.872	1.00	27.69	C
[7849]	ATOM	1072	CG	LYS	A	162	29.492	-34.688	-0.068	1.00	28.52	C
[7850]	ATOM	1073	CD	LYS	A	162	28.981	-35.793	-0.998	1.00	29.24	C
[7851]	ATOM	1074	CE	LYS	A	162	28.223	-36.839	-0.226	1.00	28.19	C
[7852]	ATOM	1075	NZ	LYS	A	162	27.129	-36.228	0.575	1.00	28.26	N
[7853]	ATOM	1076	N	GLY	A	163	32.067	-32.219	1.730	1.00	26.82	N
[7854]	ATOM	1077	CA	GLY	A	163	33.389	-32.216	2.355	1.00	27.17	C
[7855]	ATOM	1078	C	GLY	A	163	33.967	-33.623	2.399	1.00	27.32	C
[7856]	ATOM	1079	O	GLY	A	163	33.225	-34.609	2.334	1.00	27.85	O
[7857]	ATOM	1080	N	TRP	A	164	35.287	-33.724	2.506	1.00	26.80	N
[7858]	ATOM	1081	CA	TRP	A	164	35.950	-35.019	2.463	1.00	26.31	C
[7859]	ATOM	1082	C	TRP	A	164	35.448	-35.995	3.521	1.00	26.59	C
[7860]	ATOM	1083	O	TRP	A	164	35.418	-37.185	3.265	1.00	26.26	O
[7861]	ATOM	1084	CB	TRP	A	164	37.471	-34.873	2.548	1.00	25.75	C
[7862]	ATOM	1085	CG	TRP	A	164	38.049	-34.144	3.760	1.00	25.27	C
[7863]	ATOM	1086	CD1	TRP	A	164	38.389	-32.814	3.829	1.00	24.53	C
[7864]	ATOM	1087	CD2	TRP	A	164	38.424	-34.710	5.030	1.00	24.78	C
[7865]	ATOM	1088	NE1	TRP	A	164	38.930	-32.518	5.053	1.00	23.72	N
[7866]	ATOM	1089	CE2	TRP	A	164	38.971	-33.660	5.811	1.00	24.68	C
[7867]	ATOM	1090	CE3	TRP	A	164	38.348	-35.994	5.587	1.00	25.75	C
[7868]	ATOM	1091	CZ2	TRP	A	164	39.420	-33.854	7.125	1.00	24.72	C

[7869]	ATOM	1092	CZ3	TRP	A	164	38.809	-36.189	6.884	1.00	23.49	C
[7870]	ATOM	1093	CH2	TRP	A	164	39.333	-35.120	7.643	1.00	24.41	C
[7871]	ATOM	1094	N	MET	A	165	35.065	-35.488	4.702	1.00	27.19	N
[7872]	ATOM	1095	CA	MET	A	165	34.534	-36.322	5.782	1.00	28.41	C
[7873]	ATOM	1096	C	MET	A	165	33.207	-36.915	5.349	1.00	27.66	C
[7874]	ATOM	1097	O	MET	A	165	32.974	-38.108	5.518	1.00	26.96	O
[7875]	ATOM	1098	CB	MET	A	165	34.323	-35.511	7.056	1.00	28.49	C
[7876]	ATOM	1099	CG	MET	A	165	35.533	-35.414	7.971	1.00	29.93	C
[7877]	ATOM	1100	SD	MET	A	165	35.145	-34.466	9.486	1.00	32.96	S
[7878]	ATOM	1101	CE	MET	A	165	36.662	-34.662	10.428	1.00	31.47	C
[7879]	ATOM	1102	N	ASP	A	166	32.348	-36.067	4.778	1.00	27.74	N
[7880]	ATOM	1103	CA	ASP	A	166	31.046	-36.500	4.286	1.00	28.15	C
[7881]	ATOM	1104	C	ASP	A	166	31.180	-37.471	3.117	1.00	27.74	C
[7882]	ATOM	1105	O	ASP	A	166	30.431	-38.438	3.057	1.00	28.59	O
[7883]	ATOM	1106	CB	ASP	A	166	30.159	-35.303	3.925	1.00	28.66	C
[7884]	ATOM	1107	CG	ASP	A	166	29.665	-34.523	5.169	1.00	31.33	C
[7885]	ATOM	1108	OD1	ASP	A	166	29.772	-35.024	6.325	1.00	32.73	O
[7886]	ATOM	1109	OD2	ASP	A	166	29.164	-33.392	4.980	1.00	35.22	O
[7887]	ATOM	1110	N	TRP	A	167	32.142	-37.240	2.217	1.00	27.09	N
[7888]	ATOM	1111	CA	TRP	A	167	32.418	-38.181	1.119	1.00	26.17	C
[7889]	ATOM	1112	C	TRP	A	167	32.793	-39.572	1.639	1.00	26.04	C
[7890]	ATOM	1113	O	TRP	A	167	32.283	-40.587	1.159	1.00	25.91	O
[7891]	ATOM	1114	CB	TRP	A	167	33.537	-37.667	0.222	1.00	26.49	C
[7892]	ATOM	1115	CG	TRP	A	167	33.064	-36.915	-0.986	1.00	26.37	C
[7893]	ATOM	1116	CD1	TRP	A	167	33.314	-35.614	-1.282	1.00	26.66	C
[7894]	ATOM	1117	CD2	TRP	A	167	32.268	-37.429	-2.058	1.00	27.68	C
[7895]	ATOM	1118	NE1	TRP	A	167	32.722	-35.274	-2.472	1.00	29.09	N
[7896]	ATOM	1119	CE2	TRP	A	167	32.070	-36.369	-2.974	1.00	27.75	C
[7897]	ATOM	1120	CE3	TRP	A	167	31.703	-38.680	-2.337	1.00	28.07	C
[7898]	ATOM	1121	CZ2	TRP	A	167	31.336	-36.518	-4.145	1.00	27.31	C
[7899]	ATOM	1122	CZ3	TRP	A	167	30.963	-38.833	-3.513	1.00	28.86	C
[7900]	ATOM	1123	CH2	TRP	A	167	30.789	-37.753	-4.401	1.00	27.64	C
[7901]	ATOM	1124	N	ALA	A	168	33.683	-39.619	2.625	1.00	25.22	N
[7902]	ATOM	1125	CA	ALA	A	168	34.083	-40.895	3.214	1.00	24.97	C
[7903]	ATOM	1126	C	ALA	A	168	32.906	-41.667	3.811	1.00	24.60	C
[7904]	ATOM	1127	O	ALA	A	168	32.812	-42.875	3.619	1.00	24.49	O

[7905]	ATOM	1128	CB	ALA	A	168	35.164	-40.697	4.252	1.00	24.84	C
[7906]	ATOM	1129	N	ALA	A	169	32.024	-40.966	4.527	1.00	24.35	N
[7907]	ATOM	1130	CA	ALA	A	169	30.857	-41.582	5.185	1.00	24.19	C
[7908]	ATOM	1131	C	ALA	A	169	29.840	-42.089	4.169	1.00	24.07	C
[7909]	ATOM	1132	O	ALA	A	169	29.212	-43.122	4.379	1.00	24.14	O
[7910]	ATOM	1133	CB	ALA	A	169	30.207	-40.600	6.171	1.00	23.98	C
[7911]	ATOM	1134	N	HIS	A	170	29.718	-41.350	3.071	1.00	23.59	N
[7912]	ATOM	1135	CA	HIS	A	170	28.854	-41.654	1.944	1.00	24.17	C
[7913]	ATOM	1136	C	HIS	A	170	29.313	-42.890	1.169	1.00	23.96	C
[7914]	ATOM	1137	O	HIS	A	170	28.489	-43.727	0.784	1.00	23.85	O
[7915]	ATOM	1138	CB	HIS	A	170	28.808	-40.422	1.032	1.00	24.55	C
[7916]	ATOM	1139	CG	HIS	A	170	28.110	-40.630	-0.279	1.00	26.17	C
[7917]	ATOM	1140	ND1	HIS	A	170	26.835	-40.161	-0.523	1.00	27.72	N
[7918]	ATOM	1141	CD2	HIS	A	170	28.527	-41.204	-1.434	1.00	28.01	C
[7919]	ATOM	1142	CE1	HIS	A	170	26.488	-40.470	-1.760	1.00	28.63	C
[7920]	ATOM	1143	NE2	HIS	A	170	27.496	-41.100	-2.335	1.00	28.12	N
[7921]	ATOM	1144	N	LYS	A	171	30.616	-42.991	0.920	1.00	23.18	N
[7922]	ATOM	1145	CA	LYS	A	171	31.185	-44.147	0.250	1.00	22.94	C
[7923]	ATOM	1146	C	LYS	A	171	31.046	-45.413	1.123	1.00	22.54	C
[7924]	ATOM	1147	O	LYS	A	171	30.751	-46.493	0.611	1.00	22.20	O
[7925]	ATOM	1148	CB	LYS	A	171	32.643	-43.883	-0.118	1.00	23.22	C
[7926]	ATOM	1149	CG	LYS	A	171	32.859	-42.936	-1.290	1.00	25.41	C
[7927]	ATOM	1150	CD	LYS	A	171	34.285	-42.349	-1.200	1.00	28.11	C
[7928]	ATOM	1151	CE	LYS	A	171	34.682	-41.509	-2.433	1.00	31.61	C
[7929]	ATOM	1152	NZ	LYS	A	171	36.047	-40.875	-2.247	1.00	31.14	N
[7930]	ATOM	1153	N	LEU	A	172	31.256	-45.269	2.434	1.00	22.11	N
[7931]	ATOM	1154	CA	LEU	A	172	30.998	-46.354	3.389	1.00	22.82	C
[7932]	ATOM	1155	C	LEU	A	172	29.553	-46.836	3.319	1.00	22.64	C
[7933]	ATOM	1156	O	LEU	A	172	29.315	-48.023	3.126	1.00	23.27	O
[7934]	ATOM	1157	CB	LEU	A	172	31.338	-45.942	4.833	1.00	22.36	C
[7935]	ATOM	1158	CG	LEU	A	172	32.778	-46.191	5.261	1.00	23.38	C
[7936]	ATOM	1159	CD1	LEU	A	172	33.107	-45.468	6.580	1.00	23.71	C
[7937]	ATOM	1160	CD2	LEU	A	172	33.056	-47.691	5.346	1.00	23.47	C
[7938]	ATOM	1161	N	THR	A	173	28.607	-45.908	3.466	1.00	22.48	N
[7939]	ATOM	1162	CA	THR	A	173	27.172	-46.189	3.348	1.00	22.54	C
[7940]	ATOM	1163	C	THR	A	173	26.811	-46.932	2.058	1.00	22.00	C

[7941]	ATOM	1164	O	THR	A	173	26.049	-47.887	2.092	1.00	21.90	O
[7942]	ATOM	1165	CB	THR	A	173	26.344	-44.894	3.473	1.00	22.63	C
[7943]	ATOM	1166	OG1	THR	A	173	26.561	-44.343	4.773	1.00	24.63	O
[7944]	ATOM	1167	CG2	THR	A	173	24.850	-45.174	3.328	1.00	22.70	C
[7945]	ATOM	1168	N	GLY	A	174	27.409	-46.511	0.946	1.00	21.69	N
[7946]	ATOM	1169	CA	GLY	A	174	27.191	-47.114	-0.356	1.00	21.58	C
[7947]	ATOM	1170	C	GLY	A	174	27.669	-48.550	-0.463	1.00	21.75	C
[7948]	ATOM	1171	O	GLY	A	174	27.355	-49.223	-1.431	1.00	21.38	O
[7949]	ATOM	1172	N	LEU	A	175	28.437	-49.024	0.515	1.00	21.61	N
[7950]	ATOM	1173	CA	LEU	A	175	28.878	-50.419	0.522	1.00	21.99	C
[7951]	ATOM	1174	C	LEU	A	175	27.777	-51.373	0.971	1.00	22.43	C
[7952]	ATOM	1175	O	LEU	A	175	27.803	-52.552	0.638	1.00	22.91	O
[7953]	ATOM	1176	CB	LEU	A	175	30.126	-50.612	1.400	1.00	21.96	C
[7954]	ATOM	1177	CG	LEU	A	175	31.460	-50.135	0.837	1.00	22.09	C
[7955]	ATOM	1178	CD1	LEU	A	175	32.543	-50.357	1.858	1.00	23.51	C
[7956]	ATOM	1179	CD2	LEU	A	175	31.813	-50.860	-0.465	1.00	22.15	C
[7957]	ATOM	1180	N	THR	A	176	26.820	-50.874	1.742	1.00	23.26	N
[7958]	ATOM	1181	CA	THR	A	176	25.727	-51.718	2.224	1.00	23.89	C
[7959]	ATOM	1182	C	THR	A	176	24.327	-51.189	1.883	1.00	24.51	C
[7960]	ATOM	1183	O	THR	A	176	23.342	-51.819	2.247	1.00	25.14	O
[7961]	ATOM	1184	CB	THR	A	176	25.837	-51.985	3.753	1.00	24.09	C
[7962]	ATOM	1185	OG1	THR	A	176	25.921	-50.736	4.455	1.00	25.29	O
[7963]	ATOM	1186	CG2	THR	A	176	27.056	-52.842	4.088	1.00	23.38	C
[7964]	ATOM	1187	N	SER	A	177	24.233	-50.037	1.214	1.00	24.82	N
[7965]	ATOM	1188	CA	SER	A	177	22.948	-49.476	0.779	1.00	24.96	C
[7966]	ATOM	1189	C	SER	A	177	22.914	-49.375	-0.731	1.00	24.91	C
[7967]	ATOM	1190	O	SER	A	177	23.903	-49.012	-1.341	1.00	24.89	O
[7968]	ATOM	1191	CB	SER	A	177	22.755	-48.056	1.311	1.00	25.54	C
[7969]	ATOM	1192	OG	SER	A	177	22.295	-48.033	2.648	1.00	27.93	O
[7970]	ATOM	1193	N	SER	A	178	21.768	-49.661	-1.331	1.00	24.42	N
[7971]	ATOM	1194	CA	SER	A	178	21.591	-49.482	-2.770	1.00	24.74	C
[7972]	ATOM	1195	C	SER	A	178	21.460	-47.992	-3.127	1.00	24.84	C
[7973]	ATOM	1196	O	SER	A	178	21.251	-47.149	-2.253	1.00	24.76	O
[7974]	ATOM	1197	CB	SER	A	178	20.334	-50.208	-3.212	1.00	24.25	C
[7975]	ATOM	1198	OG	SER	A	178	19.207	-49.571	-2.637	1.00	24.31	O
[7976]	ATOM	1199	N	ILE	A	179	21.558	-47.680	-4.412	1.00	25.45	N

[7977]	ATOM	1200	CA	ILE A 179	21.346	-46.321	-4.892	1.00	26.23	C
[7978]	ATOM	1201	C	ILE A 179	19.933	-45.792	-4.557	1.00	26.00	C
[7979]	ATOM	1202	O	ILE A 179	19.819	-44.681	-4.032	1.00	26.48	O
[7980]	ATOM	1203	CB	ILE A 179	21.743	-46.181	-6.393	1.00	26.66	C
[7981]	ATOM	1204	CG1	ILE A 179	23.269	-46.215	-6.531	1.00	28.14	C
[7982]	ATOM	1205	CG2	ILE A 179	21.201	-44.896	-6.994	1.00	28.41	C
[7983]	ATOM	1206	CD1	ILE A 179	23.742	-47.166	-7.605	1.00	30.07	C
[7984]	ATOM	1207	N	PRO A 180	18.857	-46.570	-4.831	1.00	25.66	N
[7985]	ATOM	1208	CA	PRO A 180	17.554	-46.111	-4.334	1.00	25.42	C
[7986]	ATOM	1209	C	PRO A 180	17.485	-45.831	-2.817	1.00	25.43	C
[7987]	ATOM	1210	O	PRO A 180	16.894	-44.828	-2.413	1.00	25.57	O
[7988]	ATOM	1211	CB	PRO A 180	16.612	-47.259	-4.709	1.00	25.05	C
[7989]	ATOM	1212	CG	PRO A 180	17.236	-47.877	-5.890	1.00	25.19	C
[7990]	ATOM	1213	CD	PRO A 180	18.716	-47.818	-5.607	1.00	26.16	C
[7991]	ATOM	1214	N	GLU A 181	18.057	-46.697	-1.981	1.00	25.27	N
[7992]	ATOM	1215	CA	GLU A 181	18.022	-46.472	-0.537	1.00	26.04	C
[7993]	ATOM	1216	C	GLU A 181	18.766	-45.178	-0.204	1.00	25.09	C
[7994]	ATOM	1217	O	GLU A 181	18.381	-44.446	0.706	1.00	24.41	O
[7995]	ATOM	1218	CB	GLU A 181	18.662	-47.623	0.244	1.00	25.67	C
[7996]	ATOM	1219	CG	GLU A 181	18.011	-49.013	0.117	1.00	28.78	C
[7997]	ATOM	1220	CD	GLU A 181	18.799	-50.119	0.876	1.00	29.85	C
[7998]	ATOM	1221	OE1	GLU A 181	18.549	-50.299	2.094	1.00	36.14	O
[7999]	ATOM	1222	OE2	GLU A 181	19.662	-50.815	0.271	1.00	31.96	O
[8000]	ATOM	1223	N	MET A 182	19.834	-44.900	-0.942	1.00	25.02	N
[8001]	ATOM	1224	CA	MET A 182	20.632	-43.706	-0.681	1.00	26.40	C
[8002]	ATOM	1225	C	MET A 182	19.984	-42.418	-1.160	1.00	25.26	C
[8003]	ATOM	1226	O	MET A 182	20.106	-41.391	-0.499	1.00	25.31	O
[8004]	ATOM	1227	CB	MET A 182	22.032	-43.846	-1.248	1.00	26.20	C
[8005]	ATOM	1228	CG	MET A 182	22.870	-44.703	-0.338	1.00	26.99	C
[8006]	ATOM	1229	SD	MET A 182	24.525	-44.753	-0.909	1.00	31.78	S
[8007]	ATOM	1230	CE	MET A 182	25.228	-43.374	0.015	1.00	29.85	C
[8008]	ATOM	1231	N	ILE A 183	19.287	-42.479	-2.291	1.00	24.42	N
[8009]	ATOM	1232	CA	ILE A 183	18.512	-41.330	-2.759	1.00	23.66	C
[8010]	ATOM	1233	C	ILE A 183	17.387	-41.057	-1.773	1.00	23.08	C
[8011]	ATOM	1234	O	ILE A 183	17.118	-39.912	-1.423	1.00	23.16	O
[8012]	ATOM	1235	CB	ILE A 183	18.012	-41.547	-4.185	1.00	23.56	C

[8013]	ATOM	1236	CG1	ILE	A	183	19.210	-41.570	-5.138	1.00	23.29	C
[8014]	ATOM	1237	CG2	ILE	A	183	17.037	-40.445	-4.620	1.00	23.23	C
[8015]	ATOM	1238	CD1	ILE	A	183	18.875	-42.143	-6.524	1.00	23.32	C
[8016]	ATOM	1239	N	LEU	A	184	16.761	-42.113	-1.283	1.00	23.29	N
[8017]	ATOM	1240	CA	LEU	A	184	15.737	-41.975	-0.245	1.00	23.44	C
[8018]	ATOM	1241	C	LEU	A	184	16.212	-41.330	1.050	1.00	23.74	C
[8019]	ATOM	1242	O	LEU	A	184	15.461	-40.571	1.656	1.00	24.68	O
[8020]	ATOM	1243	CB	LEU	A	184	15.075	-43.320	0.044	1.00	24.00	C
[8021]	ATOM	1244	CG	LEU	A	184	14.090	-43.842	-0.996	1.00	24.75	C
[8022]	ATOM	1245	CD1	LEU	A	184	13.701	-45.254	-0.617	1.00	27.50	C
[8023]	ATOM	1246	CD2	LEU	A	184	12.852	-42.960	-1.120	1.00	26.69	C
[8024]	ATOM	1247	N	GLY	A	185	17.441	-41.611	1.479	1.00	23.92	N
[8025]	ATOM	1248	CA	GLY	A	185	18.042	-40.939	2.653	1.00	23.86	C
[8026]	ATOM	1249	C	GLY	A	185	18.431	-39.476	2.407	1.00	24.25	C
[8027]	ATOM	1250	O	GLY	A	185	18.679	-38.711	3.345	1.00	24.37	O
[8028]	ATOM	1251	N	HIS	A	186	18.487	-39.084	1.143	1.00	24.03	N
[8029]	ATOM	1252	CA	HIS	A	186	18.636	-37.670	0.747	1.00	24.01	C
[8030]	ATOM	1253	C	HIS	A	186	17.284	-36.949	0.821	1.00	23.88	C
[8031]	ATOM	1254	O	HIS	A	186	17.214	-35.779	1.181	1.00	24.18	O
[8032]	ATOM	1255	CB	HIS	A	186	19.213	-37.605	-0.682	1.00	24.11	C
[8033]	ATOM	1256	CG	HIS	A	186	19.074	-36.270	-1.362	1.00	23.77	C
[8034]	ATOM	1257	ND1	HIS	A	186	19.796	-35.157	-0.983	1.00	23.89	N
[8035]	ATOM	1258	CD2	HIS	A	186	18.340	-35.890	-2.433	1.00	22.75	C
[8036]	ATOM	1259	CE1	HIS	A	186	19.495	-34.143	-1.777	1.00	25.14	C
[8037]	ATOM	1260	NE2	HIS	A	186	18.607	-34.560	-2.664	1.00	25.34	N
[8038]	ATOM	1261	N	LEU	A	187	16.221	-37.659	0.457	1.00	23.71	N
[8039]	ATOM	1262	CA	LEU	A	187	14.878	-37.093	0.383	1.00	23.86	C
[8040]	ATOM	1263	C	LEU	A	187	14.163	-37.040	1.738	1.00	24.66	C
[8041]	ATOM	1264	O	LEU	A	187	13.529	-36.029	2.057	1.00	24.57	O
[8042]	ATOM	1265	CB	LEU	A	187	14.025	-37.871	-0.622	1.00	22.72	C
[8043]	ATOM	1266	CG	LEU	A	187	14.436	-37.824	-2.089	1.00	23.27	C
[8044]	ATOM	1267	CD1	LEU	A	187	13.536	-38.744	-2.921	1.00	21.00	C
[8045]	ATOM	1268	CD2	LEU	A	187	14.401	-36.392	-2.631	1.00	21.16	C
[8046]	ATOM	1269	N	PHE	A	188	14.264	-38.114	2.535	1.00	25.69	N
[8047]	ATOM	1270	CA	PHE	A	188	13.494	-38.216	3.791	1.00	26.63	C
[8048]	ATOM	1271	C	PHE	A	188	14.388	-38.478	4.985	1.00	27.90	C

[8049]	ATOM	1272	O	PHE	A	188	15.486	-38.991	4.819	1.00	27.88	O
[8050]	ATOM	1273	CB	PHE	A	188	12.460	-39.336	3.705	1.00	26.64	C
[8051]	ATOM	1274	CG	PHE	A	188	11.512	-39.204	2.559	1.00	26.17	C
[8052]	ATOM	1275	CD1	PHE	A	188	10.388	-38.389	2.662	1.00	25.84	C
[8053]	ATOM	1276	CD2	PHE	A	188	11.728	-39.916	1.380	1.00	25.93	C
[8054]	ATOM	1277	CE1	PHE	A	188	9.497	-38.270	1.603	1.00	25.16	C
[8055]	ATOM	1278	CE2	PHE	A	188	10.844	-39.804	0.313	1.00	25.74	C
[8056]	ATOM	1279	CZ	PHE	A	188	9.724	-38.978	0.425	1.00	25.45	C
[8057]	ATOM	1280	N	SER	A	189	13.921	-38.134	6.185	1.00	28.94	N
[8058]	ATOM	1281	CA	SER	A	189	14.716	-38.352	7.385	1.00	31.24	C
[8059]	ATOM	1282	C	SER	A	189	14.811	-39.845	7.693	1.00	32.41	C
[8060]	ATOM	1283	O	SER	A	189	14.031	-40.647	7.177	1.00	32.32	O
[8061]	ATOM	1284	CB	SER	A	189	14.148	-37.582	8.587	1.00	31.57	C
[8062]	ATOM	1285	OG	SER	A	189	12.889	-38.097	9.008	1.00	32.05	O
[8063]	ATOM	1286	N	GLN	A	190	15.782	-40.222	8.516	1.00	34.15	N
[8064]	ATOM	1287	CA	GLN	A	190	15.952	-41.634	8.844	1.00	35.77	C
[8065]	ATOM	1288	C	GLN	A	190	14.807	-42.129	9.720	1.00	36.24	C
[8066]	ATOM	1289	O	GLN	A	190	14.357	-43.259	9.536	1.00	36.48	O
[8067]	ATOM	1290	CB	GLN	A	190	17.335	-41.936	9.444	1.00	36.39	C
[8068]	ATOM	1291	CG	GLN	A	190	18.512	-41.799	8.423	1.00	37.76	C
[8069]	ATOM	1292	CD	GLN	A	190	18.455	-42.788	7.238	1.00	40.41	C
[8070]	ATOM	1293	OE1	GLN	A	190	18.602	-42.391	6.078	1.00	40.82	O
[8071]	ATOM	1294	NE2	GLN	A	190	18.263	-44.076	7.533	1.00	41.11	N
[8072]	ATOM	1295	N	GLU	A	191	14.325	-41.279	10.636	1.00	36.63	N
[8073]	ATOM	1296	CA	GLU	A	191	13.077	-41.550	11.372	1.00	37.80	C
[8074]	ATOM	1297	C	GLU	A	191	11.922	-41.888	10.418	1.00	37.06	C
[8075]	ATOM	1298	O	GLU	A	191	11.234	-42.888	10.596	1.00	36.76	O
[8076]	ATOM	1299	CB	GLU	A	191	12.687	-40.375	12.290	1.00	37.51	C
[8077]	ATOM	1300	CG	GLU	A	191	11.473	-40.692	13.203	1.00	40.37	C
[8078]	ATOM	1301	CD	GLU	A	191	11.183	-39.634	14.297	1.00	40.60	C
[8079]	ATOM	1302	OE1	GLU	A	191	12.107	-39.271	15.062	1.00	44.23	O
[8080]	ATOM	1303	OE2	GLU	A	191	10.014	-39.186	14.408	1.00	43.65	O
[8081]	ATOM	1304	N	GLU	A	192	11.723	-41.058	9.402	1.00	36.69	N
[8082]	ATOM	1305	CA	GLU	A	192	10.680	-41.286	8.407	1.00	36.78	C
[8083]	ATOM	1306	C	GLU	A	192	10.781	-42.639	7.716	1.00	36.82	C
[8084]	ATOM	1307	O	GLU	A	192	9.776	-43.326	7.543	1.00	36.99	O

[8085]	ATOM	1308	CB	GLU	A	192	10.708	-40.191	7.343	1.00	36.50	C
[8086]	ATOM	1309	CG	GLU	A	192	9.980	-38.931	7.742	1.00	37.19	C
[8087]	ATOM	1310	CD	GLU	A	192	10.026	-37.882	6.644	1.00	36.57	C
[8088]	ATOM	1311	OE1	GLU	A	192	11.142	-37.414	6.315	1.00	34.46	O
[8089]	ATOM	1312	OE2	GLU	A	192	8.944	-37.543	6.121	1.00	35.99	O
[8090]	ATOM	1313	N	LEU	A	193	11.990	-43.011	7.313	1.00	37.05	N
[8091]	ATOM	1314	CA	LEU	A	193	12.186	-44.238	6.534	1.00	37.69	C
[8092]	ATOM	1315	C	LEU	A	193	11.998	-45.522	7.360	1.00	38.11	C
[8093]	ATOM	1316	O	LEU	A	193	11.539	-46.538	6.831	1.00	38.55	O
[8094]	ATOM	1317	CB	LEU	A	193	13.548	-44.232	5.826	1.00	37.34	C
[8095]	ATOM	1318	CG	LEU	A	193	13.770	-43.128	4.781	1.00	36.82	C
[8096]	ATOM	1319	CD1	LEU	A	193	15.254	-43.005	4.431	1.00	36.04	C
[8097]	ATOM	1320	CD2	LEU	A	193	12.891	-43.339	3.531	1.00	34.70	C
[8098]	ATOM	1321	N	SER	A	194	12.355	-45.476	8.640	1.00	38.51	N
[8099]	ATOM	1322	CA	SER	A	194	12.090	-46.599	9.557	1.00	39.22	C
[8100]	ATOM	1323	C	SER	A	194	10.630	-46.599	10.037	1.00	39.37	C
[8101]	ATOM	1324	O	SER	A	194	10.057	-47.648	10.317	1.00	39.06	O
[8102]	ATOM	1325	CB	SER	A	194	13.055	-46.575	10.746	1.00	39.32	C
[8103]	ATOM	1326	OG	SER	A	194	12.885	-45.395	11.516	1.00	40.65	O
[8104]	ATOM	1327	N	GLY	A	195	10.038	-45.408	10.119	1.00	39.88	N
[8105]	ATOM	1328	CA	GLY	A	195	8.608	-45.254	10.346	1.00	40.05	C
[8106]	ATOM	1329	C	GLY	A	195	7.763	-45.933	9.277	1.00	40.45	C
[8107]	ATOM	1330	O	GLY	A	195	6.710	-46.494	9.576	1.00	40.72	O
[8108]	ATOM	1331	N	ASN	A	196	8.215	-45.873	8.029	1.00	40.42	N
[8109]	ATOM	1332	CA	ASN	A	196	7.539	-46.546	6.914	1.00	40.68	C
[8110]	ATOM	1333	C	ASN	A	196	6.048	-46.199	6.748	1.00	40.41	C
[8111]	ATOM	1334	O	ASN	A	196	5.202	-47.084	6.618	1.00	40.08	O
[8112]	ATOM	1335	CB	ASN	A	196	7.745	-48.066	6.993	1.00	41.11	C
[8113]	ATOM	1336	CG	ASN	A	196	7.883	-48.715	5.617	1.00	42.35	C
[8114]	ATOM	1337	OD1	ASN	A	196	8.125	-48.035	4.611	1.00	43.18	O
[8115]	ATOM	1338	ND2	ASN	A	196	7.735	-50.044	5.570	1.00	42.71	N
[8116]	ATOM	1339	N	SER	A	197	5.738	-44.904	6.735	1.00	40.17	N
[8117]	ATOM	1340	CA	SER	A	197	4.381	-44.442	6.467	1.00	40.04	C
[8118]	ATOM	1341	C	SER	A	197	3.977	-44.798	5.038	1.00	40.02	C
[8119]	ATOM	1342	O	SER	A	197	4.784	-45.328	4.272	1.00	40.42	O
[8120]	ATOM	1343	CB	SER	A	197	4.282	-42.929	6.680	1.00	40.40	C



[8121]	ATOM	1344	OG	SER A 197	4.960	-42.221	5.652	1.00	39.61	O
[8122]	ATOM	1345	N	GLU A 198	2.738	-44.492	4.673	1.00	39.67	N
[8123]	ATOM	1346	CA	GLU A 198	2.241	-44.792	3.335	1.00	39.83	C
[8124]	ATOM	1347	C	GLU A 198	2.872	-43.901	2.254	1.00	38.96	C
[8125]	ATOM	1348	O	GLU A 198	3.029	-44.345	1.115	1.00	38.92	O
[8126]	ATOM	1349	CB	GLU A 198	0.713	-44.720	3.290	1.00	40.50	C
[8127]	ATOM	1350	CG	GLU A 198	0.091	-45.542	2.158	1.00	44.12	C
[8128]	ATOM	1351	CD	GLU A 198	-1.335	-46.004	2.463	1.00	48.72	C
[8129]	ATOM	1352	OE1	GLU A 198	-1.607	-46.388	3.630	1.00	49.92	O
[8130]	ATOM	1353	OE2	GLU A 198	-2.181	-45.993	1.530	1.00	50.46	O
[8131]	ATOM	1354	N	LEU A 199	3.233	-42.666	2.624	1.00	37.69	N
[8132]	ATOM	1355	CA	LEU A 199	4.007	-41.767	1.741	1.00	36.91	C
[8133]	ATOM	1356	C	LEU A 199	5.426	-42.274	1.471	1.00	35.73	C
[8134]	ATOM	1357	O	LEU A 199	5.928	-42.147	0.349	1.00	35.49	O
[8135]	ATOM	1358	CB	LEU A 199	4.063	-40.335	2.299	1.00	37.29	C
[8136]	ATOM	1359	CG	LEU A 199	4.765	-39.247	1.459	1.00	37.44	C
[8137]	ATOM	1360	CD1	LEU A 199	3.869	-38.734	0.350	1.00	37.23	C
[8138]	ATOM	1361	CD2	LEU A 199	5.198	-38.094	2.336	1.00	36.92	C
[8139]	ATOM	1362	N	ILE A 200	6.064	-42.828	2.503	1.00	34.27	N
[8140]	ATOM	1363	CA	ILE A 200	7.382	-43.442	2.366	1.00	33.13	C
[8141]	ATOM	1364	C	ILE A 200	7.339	-44.674	1.465	1.00	32.46	C
[8142]	ATOM	1365	O	ILE A 200	8.165	-44.815	0.561	1.00	31.84	O
[8143]	ATOM	1366	CB	ILE A 200	7.993	-43.830	3.744	1.00	33.26	C
[8144]	ATOM	1367	CG1	ILE A 200	8.140	-42.605	4.655	1.00	34.08	C
[8145]	ATOM	1368	CG2	ILE A 200	9.331	-44.536	3.578	1.00	33.12	C
[8146]	ATOM	1369	CD1	ILE A 200	9.016	-41.477	4.099	1.00	33.36	C
[8147]	ATOM	1370	N	GLN A 201	6.387	-45.569	1.717	1.00	31.62	N
[8148]	ATOM	1371	CA	GLN A 201	6.232	-46.766	0.895	1.00	31.43	C
[8149]	ATOM	1372	C	GLN A 201	5.966	-46.414	-0.560	1.00	30.52	C
[8150]	ATOM	1373	O	GLN A 201	6.482	-47.080	-1.469	1.00	30.83	O
[8151]	ATOM	1374	CB	GLN A 201	5.103	-47.654	1.407	1.00	31.39	C
[8152]	ATOM	1375	CG	GLN A 201	5.344	-48.247	2.766	1.00	33.08	C
[8153]	ATOM	1376	CD	GLN A 201	4.069	-48.814	3.352	1.00	35.60	C
[8154]	ATOM	1377	OE1	GLN A 201	3.279	-49.440	2.638	1.00	35.40	O
[8155]	ATOM	1378	NE2	GLN A 201	3.846	-48.579	4.652	1.00	34.29	N
[8156]	ATOM	1379	N	LYS A 202	5.153	-45.385	-0.769	1.00	29.91	N

[8157]	ATOM	1380	CA	LYS	A	202	4.812	-44.922	-2.119	1.00	29.44	C
[8158]	ATOM	1381	C	LYS	A	202	6.058	-44.419	-2.839	1.00	28.60	C
[8159]	ATOM	1382	O	LYS	A	202	6.303	-44.796	-3.982	1.00	28.09	O
[8160]	ATOM	1383	CB	LYS	A	202	3.744	-43.832	-2.055	1.00	29.68	C
[8161]	ATOM	1384	CG	LYS	A	202	3.255	-43.306	-3.410	1.00	31.25	C
[8162]	ATOM	1385	CD	LYS	A	202	2.666	-41.906	-3.261	1.00	32.93	C
[8163]	ATOM	1386	CE	LYS	A	202	2.166	-41.370	-4.575	1.00	35.57	C
[8164]	ATOM	1387	NZ	LYS	A	202	1.275	-40.182	-4.375	1.00	38.17	N
[8165]	ATOM	1388	N	TYR	A	203	6.844	-43.578	-2.160	1.00	28.55	N
[8166]	ATOM	1389	CA	TYR	A	203	8.074	-43.028	-2.746	1.00	27.96	C
[8167]	ATOM	1390	C	TYR	A	203	9.233	-44.029	-2.822	1.00	28.33	C
[8168]	ATOM	1391	O	TYR	A	203	10.038	-43.964	-3.746	1.00	27.86	O
[8169]	ATOM	1392	CB	TYR	A	203	8.481	-41.712	-2.078	1.00	28.11	C
[8170]	ATOM	1393	CG	TYR	A	203	7.680	-40.546	-2.611	1.00	28.10	C
[8171]	ATOM	1394	CD1	TYR	A	203	6.338	-40.370	-2.248	1.00	29.09	C
[8172]	ATOM	1395	CD2	TYR	A	203	8.238	-39.638	-3.502	1.00	26.56	C
[8173]	ATOM	1396	CE1	TYR	A	203	5.588	-39.315	-2.760	1.00	27.89	C
[8174]	ATOM	1397	CE2	TYR	A	203	7.495	-38.584	-4.015	1.00	26.39	C
[8175]	ATOM	1398	CZ	TYR	A	203	6.174	-38.437	-3.644	1.00	28.17	C
[8176]	ATOM	1399	OH	TYR	A	203	5.435	-37.400	-4.138	1.00	28.07	O
[8177]	ATOM	1400	N	ARG	A	204	9.321	-44.965	-1.879	1.00	28.54	N
[8178]	ATOM	1401	CA	ARG	A	204	10.274	-46.059	-2.031	1.00	29.69	C
[8179]	ATOM	1402	C	ARG	A	204	10.011	-46.792	-3.365	1.00	29.74	C
[8180]	ATOM	1403	O	ARG	A	204	10.928	-47.034	-4.152	1.00	30.18	O
[8181]	ATOM	1404	CB	ARG	A	204	10.241	-47.012	-0.816	1.00	29.09	C
[8182]	ATOM	1405	CG	ARG	A	204	11.056	-48.320	-1.023	1.00	31.42	C
[8183]	ATOM	1406	CD	ARG	A	204	11.705	-48.920	0.247	1.00	30.78	C
[8184]	ATOM	1407	NE	ARG	A	204	10.952	-48.643	1.465	1.00	32.55	N
[8185]	ATOM	1408	CZ	ARG	A	204	11.450	-48.039	2.537	1.00	33.06	C
[8186]	ATOM	1409	NH1	ARG	A	204	12.729	-47.666	2.576	1.00	33.18	N
[8187]	ATOM	1410	NH2	ARG	A	204	10.666	-47.834	3.585	1.00	34.09	N
[8188]	ATOM	1411	N	ASN	A	205	8.744	-47.101	-3.615	1.00	29.85	N
[8189]	ATOM	1412	CA	ASN	A	205	8.305	-47.806	-4.813	1.00	30.29	C
[8190]	ATOM	1413	C	ASN	A	205	8.556	-47.005	-6.076	1.00	29.73	C
[8191]	ATOM	1414	O	ASN	A	205	8.898	-47.557	-7.111	1.00	30.03	O
[8192]	ATOM	1415	CB	ASN	A	205	6.805	-48.025	-4.713	1.00	30.98	C

[8193]	ATOM	1416	CG	ASN	A	205	6.402	-49.436	-4.994	1.00	34.35	C
[8194]	ATOM	1417	OD1	ASN	A	205	6.419	-49.898	-6.144	1.00	37.54	O
[8195]	ATOM	1418	ND2	ASN	A	205	6.011	-50.143	-3.936	1.00	36.99	N
[8196]	ATOM	1419	N	ILE	A	206	8.317	-45.702	-5.995	1.00	28.98	N
[8197]	ATOM	1420	CA	ILE	A	206	8.460	-44.809	-7.139	1.00	28.38	C
[8198]	ATOM	1421	C	ILE	A	206	9.893	-44.851	-7.619	1.00	28.53	C
[8199]	ATOM	1422	O	ILE	A	206	10.158	-45.024	-8.808	1.00	29.00	O
[8200]	ATOM	1423	CB	ILE	A	206	8.064	-43.364	-6.767	1.00	28.27	C
[8201]	ATOM	1424	CG1	ILE	A	206	6.559	-43.168	-6.927	1.00	27.66	C
[8202]	ATOM	1425	CG2	ILE	A	206	8.795	-42.332	-7.625	1.00	28.14	C
[8203]	ATOM	1426	CD1	ILE	A	206	6.062	-41.815	-6.419	1.00	27.99	C
[8204]	ATOM	1427	N	ILE	A	207	10.820	-44.727	-6.679	1.00	27.96	N
[8205]	ATOM	1428	CA	ILE	A	207	12.214	-44.565	-7.023	1.00	27.73	C
[8206]	ATOM	1429	C	ILE	A	207	12.851	-45.906	-7.356	1.00	27.39	C
[8207]	ATOM	1430	O	ILE	A	207	13.458	-46.057	-8.416	1.00	27.80	O
[8208]	ATOM	1431	CB	ILE	A	207	12.954	-43.784	-5.908	1.00	27.98	C
[8209]	ATOM	1432	CG1	ILE	A	207	12.415	-42.350	-5.887	1.00	26.98	C
[8210]	ATOM	1433	CG2	ILE	A	207	14.483	-43.827	-6.114	1.00	28.09	C
[8211]	ATOM	1434	CD1	ILE	A	207	12.600	-41.628	-4.602	1.00	28.41	C
[8212]	ATOM	1435	N	THR	A	208	12.661	-46.876	-6.466	1.00	26.35	N
[8213]	ATOM	1436	CA	THR	A	208	13.182	-48.226	-6.629	1.00	26.30	C
[8214]	ATOM	1437	C	THR	A	208	12.800	-48.881	-7.947	1.00	25.99	C
[8215]	ATOM	1438	O	THR	A	208	13.616	-49.581	-8.558	1.00	25.42	O
[8216]	ATOM	1439	CB	THR	A	208	12.690	-49.107	-5.502	1.00	26.20	C
[8217]	ATOM	1440	OG1	THR	A	208	13.187	-48.577	-4.266	1.00	25.83	O
[8218]	ATOM	1441	CG2	THR	A	208	13.173	-50.516	-5.696	1.00	27.46	C
[8219]	ATOM	1442	N	HIS	A	209	11.566	-48.657	-8.385	1.00	25.41	N
[8220]	ATOM	1443	CA	HIS	A	209	11.120	-49.260	-9.621	1.00	25.46	C
[8221]	ATOM	1444	C	HIS	A	209	11.021	-48.271	-10.775	1.00	25.80	C
[8222]	ATOM	1445	O	HIS	A	209	10.470	-48.604	-11.810	1.00	26.13	O
[8223]	ATOM	1446	CB	HIS	A	209	9.794	-49.983	-9.387	1.00	25.85	C
[8224]	ATOM	1447	CG	HIS	A	209	9.864	-51.005	-8.294	1.00	25.86	C
[8225]	ATOM	1448	ND1	HIS	A	209	10.650	-52.133	-8.387	1.00	27.37	N
[8226]	ATOM	1449	CD2	HIS	A	209	9.271	-51.056	-7.077	1.00	26.52	C
[8227]	ATOM	1450	CE1	HIS	A	209	10.525	-52.844	-7.277	1.00	27.84	C
[8228]	ATOM	1451	NE2	HIS	A	209	9.690	-52.215	-6.468	1.00	25.00	N

[8229]	ATOM	1452	N	ALA	A	210	11.557	-47.064	-10.606	1.00	25.89	N
[8230]	ATOM	1453	CA	ALA	A	210	11.560	-46.089	-11.689	1.00	26.47	C
[8231]	ATOM	1454	C	ALA	A	210	12.131	-46.702	-12.973	1.00	26.86	C
[8232]	ATOM	1455	O	ALA	A	210	13.246	-47.242	-12.970	1.00	27.51	O
[8233]	ATOM	1456	CB	ALA	A	210	12.351	-44.853	-11.300	1.00	25.97	C
[8234]	ATOM	1457	N	PRO	A	211	11.382	-46.597	-14.084	1.00	27.15	N
[8235]	ATOM	1458	CA	PRO	A	211	11.879	-47.093	-15.375	1.00	27.09	C
[8236]	ATOM	1459	C	PRO	A	211	13.146	-46.343	-15.808	1.00	26.71	C
[8237]	ATOM	1460	O	PRO	A	211	14.004	-46.909	-16.494	1.00	26.72	O
[8238]	ATOM	1461	CB	PRO	A	211	10.731	-46.777	-16.339	1.00	27.30	C
[8239]	ATOM	1462	CG	PRO	A	211	9.543	-46.577	-15.476	1.00	27.87	C
[8240]	ATOM	1463	CD	PRO	A	211	10.060	-45.967	-14.212	1.00	27.06	C
[8241]	ATOM	1464	N	ASN	A	212	13.255	-45.076	-15.404	1.00	25.88	N
[8242]	ATOM	1465	CA	ASN	A	212	14.417	-44.250	-15.721	1.00	25.17	C
[8243]	ATOM	1466	C	ASN	A	212	15.408	-44.169	-14.553	1.00	24.84	C
[8244]	ATOM	1467	O	ASN	A	212	16.152	-43.198	-14.456	1.00	24.05	O
[8245]	ATOM	1468	CB	ASN	A	212	13.978	-42.826	-16.140	1.00	24.14	C
[8246]	ATOM	1469	CG	ASN	A	212	13.345	-42.035	-14.984	1.00	25.19	C
[8247]	ATOM	1470	OD1	ASN	A	212	12.750	-42.603	-14.065	1.00	25.19	O
[8248]	ATOM	1471	ND2	ASN	A	212	13.491	-40.721	-15.023	1.00	25.29	N
[8249]	ATOM	1472	N	LEU	A	213	15.430	-45.173	-13.675	1.00	24.56	N
[8250]	ATOM	1473	CA	LEU	A	213	16.331	-45.126	-12.515	1.00	24.95	C
[8251]	ATOM	1474	C	LEU	A	213	17.812	-44.867	-12.868	1.00	25.62	C
[8252]	ATOM	1475	O	LEU	A	213	18.534	-44.204	-12.109	1.00	26.08	O
[8253]	ATOM	1476	CB	LEU	A	213	16.194	-46.381	-11.629	1.00	25.15	C
[8254]	ATOM	1477	CG	LEU	A	213	17.088	-46.420	-10.375	1.00	24.61	C
[8255]	ATOM	1478	CD1	LEU	A	213	16.747	-45.309	-9.390	1.00	25.61	C
[8256]	ATOM	1479	CD2	LEU	A	213	16.980	-47.780	-9.698	1.00	24.69	C
[8257]	ATOM	1480	N	ASP	A	214	18.263	-45.347	-14.025	1.00	25.60	N
[8258]	ATOM	1481	CA	ASP	A	214	19.643	-45.079	-14.438	1.00	25.85	C
[8259]	ATOM	1482	C	ASP	A	214	19.937	-43.598	-14.680	1.00	24.76	C
[8260]	ATOM	1483	O	ASP	A	214	21.058	-43.155	-14.440	1.00	24.77	O
[8261]	ATOM	1484	CB	ASP	A	214	19.987	-45.924	-15.657	1.00	26.34	C
[8262]	ATOM	1485	CG	ASP	A	214	19.981	-47.409	-15.330	1.00	30.11	C
[8263]	ATOM	1486	OD1	ASP	A	214	19.528	-48.230	-16.175	1.00	35.69	O
[8264]	ATOM	1487	OD2	ASP	A	214	20.397	-47.744	-14.189	1.00	32.50	O

[8265]	ATOM	1488	N	ASN A 215	18.937	-42.855	-15.152	1.00	23.41	N
[8266]	ATOM	1489	CA	ASN A 215	19.053	-41.415	-15.378	1.00	22.60	C
[8267]	ATOM	1490	C	ASN A 215	19.068	-40.707	-14.039	1.00	22.15	C
[8268]	ATOM	1491	O	ASN A 215	19.801	-39.751	-13.844	1.00	21.92	O
[8269]	ATOM	1492	CB	ASN A 215	17.836	-40.883	-16.133	1.00	22.15	C
[8270]	ATOM	1493	CG	ASN A 215	17.776	-41.330	-17.575	1.00	22.71	C
[8271]	ATOM	1494	OD1	ASN A 215	18.653	-42.058	-18.079	1.00	22.54	O
[8272]	ATOM	1495	ND2	ASN A 215	16.717	-40.913	-18.248	1.00	19.01	N
[8273]	ATOM	1496	N	ILE A 216	18.226	-41.170	-13.128	1.00	21.54	N
[8274]	ATOM	1497	CA	ILE A 216	18.177	-40.613	-11.771	1.00	22.16	C
[8275]	ATOM	1498	C	ILE A 216	19.559	-40.682	-11.125	1.00	22.61	C
[8276]	ATOM	1499	O	ILE A 216	20.021	-39.693	-10.549	1.00	23.26	O
[8277]	ATOM	1500	CB	ILE A 216	17.102	-41.341	-10.900	1.00	21.61	C
[8278]	ATOM	1501	CG1	ILE A 216	15.693	-41.028	-11.421	1.00	21.88	C
[8279]	ATOM	1502	CG2	ILE A 216	17.258	-40.988	-9.435	1.00	22.10	C
[8280]	ATOM	1503	CD1	ILE A 216	14.582	-41.902	-10.859	1.00	20.51	C
[8281]	ATOM	1504	N	GLU A 217	20.223	-41.840	-11.230	1.00	22.67	N
[8282]	ATOM	1505	CA	GLU A 217	21.582	-42.015	-10.691	1.00	22.99	C
[8283]	ATOM	1506	C	GLU A 217	22.592	-40.979	-11.200	1.00	22.13	C
[8284]	ATOM	1507	O	GLU A 217	23.452	-40.522	-10.439	1.00	21.02	O
[8285]	ATOM	1508	CB	GLU A 217	22.131	-43.418	-10.979	1.00	22.69	C
[8286]	ATOM	1509	CG	GLU A 217	23.563	-43.601	-10.441	1.00	24.30	C
[8287]	ATOM	1510	CD	GLU A 217	24.073	-45.028	-10.519	1.00	25.75	C
[8288]	ATOM	1511	OE1	GLU A 217	23.297	-45.923	-10.946	1.00	28.06	O
[8289]	ATOM	1512	OE2	GLU A 217	25.264	-45.246	-10.152	1.00	30.86	O
[8290]	ATOM	1513	N	LEU A 218	22.500	-40.635	-12.488	1.00	22.02	N
[8291]	ATOM	1514	CA	LEU A 218	23.355	-39.611	-13.081	1.00	21.81	C
[8292]	ATOM	1515	C	LEU A 218	23.152	-38.269	-12.376	1.00	21.32	C
[8293]	ATOM	1516	O	LEU A 218	24.104	-37.580	-12.035	1.00	21.06	O
[8294]	ATOM	1517	CB	LEU A 218	23.028	-39.458	-14.567	1.00	22.29	C
[8295]	ATOM	1518	CG	LEU A 218	23.688	-40.528	-15.454	1.00	25.80	C
[8296]	ATOM	1519	CD1	LEU A 218	24.507	-41.324	-15.001	1.00	29.41	C
[8297]	ATOM	1520	CD2	LEU A 218	23.332	-40.528	-16.737	1.00	28.08	C
[8298]	ATOM	1521	N	TYR A 219	21.898	-37.906	-12.152	1.00	21.21	N
[8299]	ATOM	1522	CA	TYR A 219	21.559	-36.634	-11.500	1.00	21.67	C
[8300]	ATOM	1523	C	TYR A 219	22.007	-36.668	-10.037	1.00	22.18	C

[8301]	ATOM	1524	O	TYR	A	219	22.528	-35.679	-9.512	1.00	22.49	O
[8302]	ATOM	1525	CB	TYR	A	219	20.034	-36.417	-11.616	1.00	22.56	C
[8303]	ATOM	1526	CG	TYR	A	219	19.442	-35.111	-11.100	1.00	21.14	C
[8304]	ATOM	1527	CD1	TYR	A	219	20.212	-33.955	-10.938	1.00	22.88	C
[8305]	ATOM	1528	CD2	TYR	A	219	18.080	-35.034	-10.818	1.00	21.35	C
[8306]	ATOM	1529	CE1	TYR	A	219	19.631	-32.745	-10.475	1.00	21.49	C
[8307]	ATOM	1530	CE2	TYR	A	219	17.494	-33.846	-10.371	1.00	23.14	C
[8308]	ATOM	1531	CZ	TYR	A	219	18.273	-32.710	-10.201	1.00	22.42	C
[8309]	ATOM	1532	OH	TYR	A	219	17.665	-31.557	-9.724	1.00	24.27	O
[8310]	ATOM	1533	N	TRP	A	220	21.820	-37.819	-9.393	1.00	21.68	N
[8311]	ATOM	1534	CA	TRP	A	220	22.315	-38.056	-8.038	1.00	22.30	C
[8312]	ATOM	1535	C	TRP	A	220	23.818	-37.752	-7.996	1.00	22.58	C
[8313]	ATOM	1536	O	TRP	A	220	24.270	-37.002	-7.122	1.00	22.56	O
[8314]	ATOM	1537	CB	TRP	A	220	21.987	-39.519	-7.648	1.00	21.52	C
[8315]	ATOM	1538	CG	TRP	A	220	22.546	-40.053	-6.356	1.00	22.16	C
[8316]	ATOM	1539	CD1	TRP	A	220	23.276	-41.191	-6.199	1.00	21.22	C
[8317]	ATOM	1540	CD2	TRP	A	220	22.363	-39.509	-5.040	1.00	22.31	C
[8318]	ATOM	1541	NE1	TRP	A	220	23.577	-41.380	-4.874	1.00	21.76	N
[8319]	ATOM	1542	CE2	TRP	A	220	23.027	-40.368	-4.140	1.00	21.57	C
[8320]	ATOM	1543	CE3	TRP	A	220	21.706	-38.376	-4.537	1.00	22.39	C
[8321]	ATOM	1544	CZ2	TRP	A	220	23.056	-40.139	-2.764	1.00	21.08	C
[8322]	ATOM	1545	CZ3	TRP	A	220	21.739	-38.143	-3.164	1.00	22.75	C
[8323]	ATOM	1546	CH2	TRP	A	220	22.407	-39.024	-2.293	1.00	21.66	C
[8324]	ATOM	1547	N	ASN	A	221	24.578	-38.302	-8.963	1.00	22.38	N
[8325]	ATOM	1548	CA	ASN	A	221	26.026	-38.065	-9.064	1.00	21.97	C
[8326]	ATOM	1549	C	ASN	A	221	26.403	-36.614	-9.286	1.00	21.61	C
[8327]	ATOM	1550	O	ASN	A	221	27.374	-36.130	-8.685	1.00	21.60	O
[8328]	ATOM	1551	CB	ASN	A	221	26.662	-38.886	-10.191	1.00	22.15	C
[8329]	ATOM	1552	CG	ASN	A	221	26.586	-40.362	-9.951	1.00	24.37	C
[8330]	ATOM	1553	OD1	ASN	A	221	26.345	-40.823	-8.822	1.00	22.49	O
[8331]	ATOM	1554	ND2	ASN	A	221	26.794	-41.137	-11.025	1.00	25.75	N
[8332]	ATOM	1555	N	SER	A	222	25.674	-35.923	-10.162	1.00	21.42	N
[8333]	ATOM	1556	CA	SER	A	222	25.892	-34.477	-10.321	1.00	21.52	C
[8334]	ATOM	1557	C	SER	A	222	25.650	-33.757	-9.019	1.00	20.95	C
[8335]	ATOM	1558	O	SER	A	222	26.455	-32.903	-8.646	1.00	21.97	O
[8336]	ATOM	1559	CB	SER	A	222	25.009	-33.872	-11.402	1.00	21.35	C

[8337]	ATOM	1560	OG	SER	A	222	25.578	-34.185	-12.648	1.00	26.61	O
[8338]	ATOM	1561	N	TYR	A	223	24.549	-34.091	-8.339	1.00	19.96	N
[8339]	ATOM	1562	CA	TYR	A	223	24.232	-33.474	-7.047	1.00	20.51	C
[8340]	ATOM	1563	C	TYR	A	223	25.525	-33.550	-6.216	1.00	20.49	C
[8341]	ATOM	1564	O	TYR	A	223	25.834	-32.592	-5.533	1.00	20.91	O
[8342]	ATOM	1565	CB	TYR	A	223	22.928	-33.932	-6.419	1.00	20.20	C
[8343]	ATOM	1566	CG	TYR	A	223	22.770	-33.397	-5.012	1.00	20.52	C
[8344]	ATOM	1567	CD1	TYR	A	223	22.384	-32.076	-4.777	1.00	21.24	C
[8345]	ATOM	1568	CD2	TYR	A	223	22.999	-34.222	-3.916	1.00	21.62	C
[8346]	ATOM	1569	CE1	TYR	A	223	22.250	-31.581	-3.484	1.00	19.23	C
[8347]	ATOM	1570	CE2	TYR	A	223	22.875	-33.731	-2.606	1.00	22.24	C
[8348]	ATOM	1571	CZ	TYR	A	223	22.507	-32.399	-2.415	1.00	21.83	C
[8349]	ATOM	1572	OH	TYR	A	223	22.369	-31.909	-1.128	1.00	24.11	O
[8350]	ATOM	1573	N	ASN	A	224	26.248	-34.675	-6.198	1.00	21.28	N
[8351]	ATOM	1574	CA	ASN	A	224	26.962	-35.155	-5.009	1.00	21.95	C
[8352]	ATOM	1575	C	ASN	A	224	28.259	-34.284	-5.227	1.00	22.31	C
[8353]	ATOM	1576	O	ASN	A	224	29.102	-34.133	-4.344	1.00	22.85	O
[8354]	ATOM	1577	CB	ASN	A	224	27.197	-36.642	-4.944	1.00	21.76	C
[8355]	ATOM	1578	CG	ASN	A	224	26.134	-37.334	-4.127	1.00	21.68	C
[8356]	ATOM	1579	OD1	ASN	A	224	25.779	-38.477	-4.392	1.00	23.66	O
[8357]	ATOM	1580	ND2	ASN	A	224	25.602	-36.629	-3.139	1.00	18.91	N
[8358]	ATOM	1581	N	ASN	A	225	28.464	-33.754	-6.443	1.00	23.27	N
[8359]	ATOM	1582	CA	ASN	A	225	29.776	-33.609	-7.112	1.00	23.70	C
[8360]	ATOM	1583	C	ASN	A	225	29.780	-32.057	-7.328	1.00	23.94	C
[8361]	ATOM	1584	O	ASN	A	225	30.692	-31.470	-7.904	1.00	23.04	O
[8362]	ATOM	1585	CB	ASN	A	225	29.929	-34.342	-8.422	1.00	24.40	C
[8363]	ATOM	1586	CG	ASN	A	225	30.582	-35.664	-8.234	1.00	26.71	C
[8364]	ATOM	1587	OD1	ASN	A	225	31.673	-35.749	-7.669	1.00	30.50	O
[8365]	ATOM	1588	ND2	ASN	A	225	29.915	-36.714	-8.661	1.00	30.54	N
[8366]	ATOM	1589	N	ARG	A	226	28.723	-31.414	-6.824	1.00	24.58	N
[8367]	ATOM	1590	CA	ARG	A	226	28.520	-29.959	-6.880	1.00	25.42	C
[8368]	ATOM	1591	C	ARG	A	226	29.633	-29.165	-6.173	1.00	26.06	C
[8369]	ATOM	1592	O	ARG	A	226	30.245	-29.669	-5.240	1.00	25.96	O
[8370]	ATOM	1593	CB	ARG	A	226	27.160	-29.614	-6.261	1.00	24.83	C
[8371]	ATOM	1594	CG	ARG	A	226	27.121	-29.649	-4.715	1.00	24.17	C
[8372]	ATOM	1595	CD	ARG	A	226	25.692	-29.540	-4.140	1.00	25.18	C

[8373]	ATOM	1596	NE	ARG	A	226	25.705	-29.568	-2.667	1.00	24.62	N
[8374]	ATOM	1597	CZ	ARG	A	226	25.876	-30.671	-1.932	1.00	23.08	C
[8375]	ATOM	1598	NH1	ARG	A	226	26.033	-31.847	-2.508	1.00	20.88	N
[8376]	ATOM	1599	NH2	ARG	A	226	25.886	-30.602	-0.606	1.00	22.13	N
[8377]	ATOM	1600	N	ARG	A	227	29.875	-27.926	-6.612	1.00	26.96	N
[8378]	ATOM	1601	CA	ARG	A	227	30.862	-27.040	-5.953	1.00	28.46	C
[8379]	ATOM	1602	C	ARG	A	227	30.179	-26.051	-5.003	1.00	28.54	C
[8380]	ATOM	1603	O	ARG	A	227	28.965	-25.949	-5.001	1.00	28.34	O
[8381]	ATOM	1604	CB	ARG	A	227	31.700	-26.279	-7.000	1.00	28.23	C
[8382]	ATOM	1605	CG	ARG	A	227	30.930	-25.248	-7.821	1.00	28.38	C
[8383]	ATOM	1606	CD	ARG	A	227	31.843	-24.670	-8.924	1.00	30.52	C
[8384]	ATOM	1607	NE	ARG	A	227	31.095	-23.845	-9.877	1.00	33.34	N
[8385]	ATOM	1608	CZ	ARG	A	227	31.012	-22.515	-9.846	1.00	35.78	C
[8386]	ATOM	1609	NH1	ARG	A	227	31.635	-21.822	-8.899	1.00	36.10	N
[8387]	ATOM	1610	NH2	ARG	A	227	30.286	-21.873	-10.764	1.00	36.54	N
[8388]	ATOM	1611	N	ASP	A	228	30.957	-25.312	-4.220	1.00	29.87	N
[8389]	ATOM	1612	CA	ASP	A	228	30.410	-24.275	-3.337	1.00	31.43	C
[8390]	ATOM	1613	C	ASP	A	228	29.657	-23.196	-4.124	1.00	32.33	C
[8391]	ATOM	1614	O	ASP	A	228	30.116	-22.786	-5.192	1.00	31.64	O
[8392]	ATOM	1615	CB	ASP	A	228	31.537	-23.564	-2.576	1.00	31.27	C
[8393]	ATOM	1616	CG	ASP	A	228	32.211	-24.437	-1.523	1.00	32.53	C
[8394]	ATOM	1617	OD1	ASP	A	228	31.633	-25.452	-1.075	1.00	31.10	O
[8395]	ATOM	1618	OD2	ASP	A	228	33.345	-24.069	-1.119	1.00	35.67	O
[8396]	ATOM	1619	N	LEU	A	229	28.529	-22.725	-3.581	1.00	33.88	N
[8397]	ATOM	1620	CA	LEU	A	229	27.885	-21.494	-4.062	1.00	36.21	C
[8398]	ATOM	1621	C	LEU	A	229	28.605	-20.269	-3.504	1.00	38.42	C
[8399]	ATOM	1622	O	LEU	A	229	28.655	-19.221	-4.148	1.00	38.87	O
[8400]	ATOM	1623	CB	LEU	A	229	26.397	-21.438	-3.692	1.00	35.50	C
[8401]	ATOM	1624	CG	LEU	A	229	25.418	-22.320	-4.462	1.00	34.65	C
[8402]	ATOM	1625	CD1	LEU	A	229	24.097	-22.376	-3.766	1.00	34.87	C
[8403]	ATOM	1626	CD2	LEU	A	229	25.243	-21.859	-5.894	1.00	32.43	C
[8404]	ATOM	1627	N	ASN	A	230	29.158	-20.403	-2.302	1.00	41.43	N
[8405]	ATOM	1628	CA	ASN	A	230	30.111	-19.409	-1.744	1.00	44.46	C
[8406]	ATOM	1629	C	ASN	A	230	29.541	-18.087	-1.234	1.00	46.35	C
[8407]	ATOM	1630	O	ASN	A	230	30.219	-17.043	-1.296	1.00	46.68	O
[8408]	ATOM	1631	CB	ASN	A	230	31.273	-19.126	-2.705	1.00	44.10	C



[8409]	ATOM	1632	CG	ASN	A	230	32.406	-20.075	-2.516	1.00	44.59	C
[8410]	ATOM	1633	OD1	ASN	A	230	32.640	-20.577	-1.412	1.00	45.20	O
[8411]	ATOM	1634	ND2	ASN	A	230	33.126	-20.343	-3.592	1.00	45.31	N
[8412]	ATOM	1635	N	PHE	A	231	28.319	-18.140	-0.704	1.00	48.38	N
[8413]	ATOM	1636	CA	PHE	A	231	27.742	-16.991	-0.019	1.00	50.29	C
[8414]	ATOM	1637	C	PHE	A	231	28.690	-16.517	1.095	1.00	51.87	C
[8415]	ATOM	1638	O	PHE	A	231	29.395	-17.321	1.733	1.00	52.36	O
[8416]	ATOM	1639	CB	PHE	A	231	26.364	-17.328	0.559	1.00	49.84	C
[8417]	ATOM	1640	CG	PHE	A	231	25.404	-17.933	-0.437	1.00	49.15	C
[8418]	ATOM	1641	CD1	PHE	A	231	25.198	-17.342	-1.680	1.00	47.48	C
[8419]	ATOM	1642	CD2	PHE	A	231	24.680	-19.076	-0.108	1.00	48.09	C
[8420]	ATOM	1643	CE1	PHE	A	231	24.303	-17.891	-2.584	1.00	47.01	C
[8421]	ATOM	1644	CE2	PHE	A	231	23.782	-19.628	-1.010	1.00	47.39	C
[8422]	ATOM	1645	CZ	PHE	A	231	23.596	-19.034	-2.250	1.00	47.36	C
[8423]	ATOM	1646	N	GLU	A	232	28.721	-15.206	1.299	1.00	53.61	N
[8424]	ATOM	1647	CA	GLU	A	232	29.522	-14.598	2.351	1.00	55.46	C
[8425]	ATOM	1648	C	GLU	A	232	28.727	-13.370	2.782	1.00	56.18	C
[8426]	ATOM	1649	O	GLU	A	232	28.341	-12.564	1.928	1.00	56.26	O
[8427]	ATOM	1650	CB	GLU	A	232	30.900	-14.197	1.796	1.00	55.73	C
[8428]	ATOM	1651	CG	GLU	A	232	31.965	-13.864	2.850	1.00	57.57	C
[8429]	ATOM	1652	CD	GLU	A	232	32.811	-12.631	2.484	1.00	59.69	C
[8430]	ATOM	1653	OE1	GLU	A	232	32.963	-12.323	1.275	1.00	60.24	O
[8431]	ATOM	1654	OE2	GLU	A	232	33.319	-11.964	3.418	1.00	59.67	O
[8432]	ATOM	1655	N	ARG	A	233	28.451	-13.232	4.083	1.00	57.23	N
[8433]	ATOM	1656	CA	ARG	A	233	27.633	-12.100	4.548	1.00	58.05	C
[8434]	ATOM	1657	C	ARG	A	233	28.400	-10.775	4.476	1.00	58.33	C
[8435]	ATOM	1658	O	ARG	A	233	29.464	-10.618	5.091	1.00	58.32	O
[8436]	ATOM	1659	CB	ARG	A	233	27.024	-12.333	5.936	1.00	58.16	C
[8437]	ATOM	1660	CG	ARG	A	233	25.630	-11.702	6.062	1.00	59.56	C
[8438]	ATOM	1661	CD	ARG	A	233	25.186	-11.504	7.506	1.00	62.16	C
[8439]	ATOM	1662	NE	ARG	A	233	24.742	-12.746	8.141	1.00	64.65	N
[8440]	ATOM	1663	CZ	ARG	A	233	24.473	-12.881	9.442	1.00	65.69	C
[8441]	ATOM	1664	NH1	ARG	A	233	24.595	-11.846	10.269	1.00	65.73	N
[8442]	ATOM	1665	NH2	ARG	A	233	24.080	-14.058	9.920	1.00	66.27	N
[8443]	ATOM	1666	N	GLY	A	234	27.847	-9.841	3.700	1.00	58.69	N
[8444]	ATOM	1667	CA	GLY	A	234	28.521	-8.584	3.363	1.00	59.03	C

[8445]	ATOM	1668	C	GLY A 234	29.504	-8.765	2.216	1.00	59.12	C
[8446]	ATOM	1669	O	GLY A 234	30.312	-7.874	1.921	1.00	59.13	O
[8447]	ATOM	1670	N	GLY A 235	29.437	-9.928	1.574	1.00	59.05	N
[8448]	ATOM	1671	CA	GLY A 235	30.334	-10.254	0.481	1.00	59.07	C
[8449]	ATOM	1672	C	GLY A 235	29.806	-9.747	-0.842	1.00	59.09	C
[8450]	ATOM	1673	O	GLY A 235	28.720	-9.156	-0.917	1.00	59.23	O
[8451]	ATOM	1674	N	ASP A 236	30.589	-9.979	-1.888	1.00	59.00	N
[8452]	ATOM	1675	CA	ASP A 236	30.188	-9.636	-3.246	1.00	58.88	C
[8453]	ATOM	1676	C	ASP A 236	29.747	-10.904	-4.008	1.00	58.38	C
[8454]	ATOM	1677	O	ASP A 236	29.419	-10.841	-5.198	1.00	58.74	O
[8455]	ATOM	1678	CB	ASP A 236	31.314	-8.873	-3.972	1.00	59.16	C
[8456]	ATOM	1679	CG	ASP A 236	32.004	-7.823	-3.075	1.00	60.22	C
[8457]	ATOM	1680	OD1	ASP A 236	31.308	-6.990	-2.437	1.00	60.78	O
[8458]	ATOM	1681	OD2	ASP A 236	33.258	-7.834	-3.011	1.00	60.89	O
[8459]	ATOM	1682	N	ILE A 237	29.757	-12.053	-3.322	1.00	57.23	N
[8460]	ATOM	1683	CA	ILE A 237	29.023	-13.236	-3.796	1.00	56.11	C
[8461]	ATOM	1684	C	ILE A 237	27.779	-13.440	-2.916	1.00	55.12	C
[8462]	ATOM	1685	O	ILE A 237	27.772	-14.227	-1.964	1.00	55.11	O
[8463]	ATOM	1686	CB	ILE A 237	29.900	-14.518	-3.933	1.00	56.09	C
[8464]	ATOM	1687	CG1	ILE A 237	31.064	-14.261	-4.902	1.00	55.96	C
[8465]	ATOM	1688	CG2	ILE A 237	29.038	-15.718	-4.408	1.00	56.13	C
[8466]	ATOM	1689	CD1	ILE A 237	32.149	-15.341	-4.916	1.00	56.08	C
[8467]	ATOM	1690	N	THR A 238	26.738	-12.678	-3.242	1.00	53.77	N
[8468]	ATOM	1691	CA	THR A 238	25.472	-12.733	-2.526	1.00	52.52	C
[8469]	ATOM	1692	C	THR A 238	24.290	-12.813	-3.479	1.00	51.04	C
[8470]	ATOM	1693	O	THR A 238	24.380	-12.418	-4.661	1.00	50.95	O
[8471]	ATOM	1694	CB	THR A 238	25.237	-11.488	-1.600	1.00	52.93	C
[8472]	ATOM	1695	OG1	THR A 238	25.514	-10.272	-2.317	1.00	53.11	O
[8473]	ATOM	1696	CG2	THR A 238	26.083	-11.563	-0.329	1.00	53.34	C
[8474]	ATOM	1697	N	LEU A 239	23.185	-13.326	-2.940	1.00	48.96	N
[8475]	ATOM	1698	CA	LEU A 239	21.883	-13.209	-3.582	1.00	47.15	C
[8476]	ATOM	1699	C	LEU A 239	21.371	-11.785	-3.361	1.00	45.61	C
[8477]	ATOM	1700	O	LEU A 239	21.576	-11.188	-2.299	1.00	45.27	O
[8478]	ATOM	1701	CB	LEU A 239	20.905	-14.272	-3.044	1.00	47.04	C
[8479]	ATOM	1702	CG	LEU A 239	21.289	-15.737	-3.338	1.00	46.84	C
[8480]	ATOM	1703	CD1	LEU A 239	20.545	-16.737	-2.452	1.00	45.21	C

[8481]	ATOM	1704	CD2	LEU	A	239	21.089	-16.071	-4.811	1.00	45.22	C
[8482]	ATOM	1705	N	ARG	A	240	20.720	-11.239	-4.375	1.00	43.92	N
[8483]	ATOM	1706	CA	ARG	A	240	20.323	-9.837	-4.342	1.00	42.33	C
[8484]	ATOM	1707	C	ARG	A	240	18.803	-9.592	-4.287	1.00	39.96	C
[8485]	ATOM	1708	O	ARG	A	240	18.334	-8.464	-4.505	1.00	40.57	O
[8486]	ATOM	1709	CB	ARG	A	240	20.988	-9.122	-5.518	1.00	43.18	C
[8487]	ATOM	1710	CG	ARG	A	240	22.443	-8.774	-5.204	1.00	46.32	C
[8488]	ATOM	1711	CD	ARG	A	240	23.459	-9.364	-6.197	1.00	50.57	C
[8489]	ATOM	1712	NE	ARG	A	240	24.835	-9.407	-5.660	1.00	54.57	N
[8490]	ATOM	1713	CZ	ARG	A	240	25.374	-8.538	-4.791	1.00	55.83	C
[8491]	ATOM	1714	NH1	ARG	A	240	24.682	-7.502	-4.322	1.00	56.94	N
[8492]	ATOM	1715	NH2	ARG	A	240	26.629	-8.701	-4.385	1.00	56.18	N
[8493]	ATOM	1716	N	CYS	A	241	18.051	-10.643	-3.965	1.00	36.02	N
[8494]	ATOM	1717	CA	CYS	A	241	16.584	-10.626	-3.953	1.00	32.46	C
[8495]	ATOM	1718	C	CYS	A	241	16.104	-11.247	-2.632	1.00	30.40	C
[8496]	ATOM	1719	O	CYS	A	241	16.917	-11.857	-1.922	1.00	30.47	O
[8497]	ATOM	1720	CB	CYS	A	241	16.054	-11.469	-5.120	1.00	32.04	C
[8498]	ATOM	1721	SG	CYS	A	241	16.672	-13.188	-5.048	1.00	29.86	S
[8499]	ATOM	1722	N	PRO	A	242	14.800	-11.090	-2.289	1.00	28.30	N
[8500]	ATOM	1723	CA	PRO	A	242	14.223	-11.865	-1.168	1.00	27.06	C
[8501]	ATOM	1724	C	PRO	A	242	14.395	-13.382	-1.336	1.00	26.42	C
[8502]	ATOM	1725	O	PRO	A	242	14.342	-13.900	-2.458	1.00	25.41	O
[8503]	ATOM	1726	CB	PRO	A	242	12.741	-11.517	-1.220	1.00	26.25	C
[8504]	ATOM	1727	CG	PRO	A	242	12.674	-10.186	-1.927	1.00	27.31	C
[8505]	ATOM	1728	CD	PRO	A	242	13.817	-10.158	-2.884	1.00	27.96	C
[8506]	ATOM	1729	N	VAL	A	243	14.593	-14.086	-0.227	1.00	25.53	N
[8507]	ATOM	1730	CA	VAL	A	243	14.814	-15.527	-0.268	1.00	24.65	C
[8508]	ATOM	1731	C	VAL	A	243	14.109	-16.116	0.929	1.00	24.33	C
[8509]	ATOM	1732	O	VAL	A	243	14.253	-15.591	2.040	1.00	24.08	O
[8510]	ATOM	1733	CB	VAL	A	243	16.326	-15.898	-0.178	1.00	24.88	C
[8511]	ATOM	1734	CG1	VAL	A	243	16.524	-17.404	-0.071	1.00	24.39	C
[8512]	ATOM	1735	CG2	VAL	A	243	17.122	-15.352	-1.360	1.00	24.48	C
[8513]	ATOM	1736	N	MET	A	244	13.336	-17.182	0.706	1.00	23.94	N
[8514]	ATOM	1737	CA	MET	A	244	12.759	-17.966	1.808	1.00	24.03	C
[8515]	ATOM	1738	C	MET	A	244	13.407	-19.333	1.846	1.00	23.82	C
[8516]	ATOM	1739	O	MET	A	244	13.288	-20.121	0.893	1.00	24.36	O

[8517]	ATOM	1740	CB	MET	A	244	11.244	-18.114	1.673	1.00	24.55	C
[8518]	ATOM	1741	CG	MET	A	244	10.635	-18.881	2.836	1.00	24.02	C
[8519]	ATOM	1742	SD	MET	A	244	8.859	-18.665	3.045	1.00	25.83	S
[8520]	ATOM	1743	CE	MET	A	244	8.269	-19.635	1.645	1.00	23.13	C
[8521]	ATOM	1744	N	LEU	A	245	14.137	-19.582	2.925	1.00	23.37	N
[8522]	ATOM	1745	CA	LEU	A	245	14.827	-20.834	3.140	1.00	23.64	C
[8523]	ATOM	1746	C	LEU	A	245	13.860	-21.743	3.898	1.00	23.40	C
[8524]	ATOM	1747	O	LEU	A	245	13.280	-21.311	4.897	1.00	23.17	O
[8525]	ATOM	1748	CB	LEU	A	245	16.117	-20.584	3.960	1.00	23.81	C
[8526]	ATOM	1749	CG	LEU	A	245	17.302	-19.872	3.274	1.00	24.63	C
[8527]	ATOM	1750	CD1	LEU	A	245	18.324	-19.453	4.286	1.00	24.34	C
[8528]	ATOM	1751	CD2	LEU	A	245	17.964	-20.782	2.248	1.00	24.78	C
[8529]	ATOM	1752	N	VAL	A	246	13.651	-22.975	3.406	1.00	22.71	N
[8530]	ATOM	1753	CA	VAL	A	246	12.711	-23.910	4.050	1.00	22.63	C
[8531]	ATOM	1754	C	VAL	A	246	13.398	-25.230	4.367	1.00	22.85	C
[8532]	ATOM	1755	O	VAL	A	246	14.155	-25.744	3.539	1.00	22.02	O
[8533]	ATOM	1756	CB	VAL	A	246	11.465	-24.198	3.179	1.00	22.59	C
[8534]	ATOM	1757	CG1	VAL	A	246	10.575	-25.257	3.817	1.00	22.83	C
[8535]	ATOM	1758	CG2	VAL	A	246	10.658	-22.932	2.951	1.00	22.15	C
[8536]	ATOM	1759	N	VAL	A	247	13.142	-25.766	5.569	1.00	22.48	N
[8537]	ATOM	1760	CA	VAL	A	247	13.654	-27.083	5.941	1.00	22.87	C
[8538]	ATOM	1761	C	VAL	A	247	12.848	-27.712	7.093	1.00	23.42	C
[8539]	ATOM	1762	O	VAL	A	247	12.268	-27.003	7.919	1.00	23.16	O
[8540]	ATOM	1763	CB	VAL	A	247	15.181	-27.017	6.288	1.00	22.26	C
[8541]	ATOM	1764	CG1	VAL	A	247	15.413	-26.512	7.732	1.00	22.95	C
[8542]	ATOM	1765	CG2	VAL	A	247	15.853	-28.369	6.083	1.00	23.35	C
[8543]	ATOM	1766	N	GLY	A	248	12.813	-29.043	7.144	1.00	23.66	N
[8544]	ATOM	1767	CA	GLY	A	248	12.213	-29.739	8.294	1.00	24.14	C
[8545]	ATOM	1768	C	GLY	A	248	13.161	-29.831	9.468	1.00	23.75	C
[8546]	ATOM	1769	O	GLY	A	248	14.342	-30.093	9.293	1.00	23.41	O
[8547]	ATOM	1770	N	ASP	A	249	12.654	-29.611	10.678	1.00	25.11	N
[8548]	ATOM	1771	CA	ASP	A	249	13.448	-29.849	11.882	1.00	26.40	C
[8549]	ATOM	1772	C	ASP	A	249	13.878	-31.318	11.859	1.00	26.69	C
[8550]	ATOM	1773	O	ASP	A	249	13.083	-32.197	11.491	1.00	26.37	O
[8551]	ATOM	1774	CB	ASP	A	249	12.628	-29.551	13.143	1.00	27.29	C
[8552]	ATOM	1775	CG	ASP	A	249	13.489	-29.403	14.399	1.00	30.61	C

[8553]	ATOM	1776	OD1	ASP	A	249	14.736	-29.225	14.311	1.00	33.49	O
[8554]	ATOM	1777	OD2	ASP	A	249	12.902	-29.464	15.504	1.00	36.74	O
[8555]	ATOM	1778	N	GLN	A	250	15.148	-31.563	12.185	1.00	27.19	N
[8556]	ATOM	1779	CA	GLN	A	250	15.731	-32.908	12.243	1.00	27.76	C
[8557]	ATOM	1780	C	GLN	A	250	15.799	-33.664	10.893	1.00	27.57	C
[8558]	ATOM	1781	O	GLN	A	250	16.032	-34.871	10.856	1.00	28.14	O
[8559]	ATOM	1782	CB	GLN	A	250	15.023	-33.745	13.323	1.00	28.51	C
[8560]	ATOM	1783	CG	GLN	A	250	14.942	-33.047	14.710	1.00	30.49	C
[8561]	ATOM	1784	CD	GLN	A	250	16.320	-32.734	15.287	1.00	34.67	C
[8562]	ATOM	1785	OE1	GLN	A	250	16.771	-31.576	15.285	1.00	35.99	O
[8563]	ATOM	1786	NE2	GLN	A	250	17.009	-33.772	15.761	1.00	35.30	N
[8564]	ATOM	1787	N	ALA	A	251	15.610	-32.955	9.786	1.00	26.96	N
[8565]	ATOM	1788	CA	ALA	A	251	15.670	-33.583	8.473	1.00	26.07	C
[8566]	ATOM	1789	C	ALA	A	251	17.135	-33.544	8.013	1.00	26.34	C
[8567]	ATOM	1790	O	ALA	A	251	17.943	-32.795	8.597	1.00	26.28	O
[8568]	ATOM	1791	CB	ALA	A	251	14.764	-32.854	7.517	1.00	25.66	C
[8569]	ATOM	1792	N	PRO	A	252	17.499	-34.361	6.999	1.00	25.84	N
[8570]	ATOM	1793	CA	PRO	A	252	18.908	-34.494	6.576	1.00	25.78	C
[8571]	ATOM	1794	C	PRO	A	252	19.629	-33.173	6.275	1.00	25.71	C
[8572]	ATOM	1795	O	PRO	A	252	20.845	-33.055	6.515	1.00	25.86	O
[8573]	ATOM	1796	CB	PRO	A	252	18.818	-35.330	5.292	1.00	26.18	C
[8574]	ATOM	1797	CG	PRO	A	252	17.513	-36.080	5.395	1.00	25.37	C
[8575]	ATOM	1798	CD	PRO	A	252	16.589	-35.227	6.216	1.00	26.06	C
[8576]	ATOM	1799	N	HIS	A	253	18.898	-32.192	5.754	1.00	25.02	N
[8577]	ATOM	1800	CA	HIS	A	253	19.514	-30.939	5.318	1.00	24.58	C
[8578]	ATOM	1801	C	HIS	A	253	19.359	-29.778	6.278	1.00	24.63	C
[8579]	ATOM	1802	O	HIS	A	253	19.773	-28.663	5.970	1.00	24.95	O
[8580]	ATOM	1803	CB	HIS	A	253	19.032	-30.577	3.909	1.00	24.54	C
[8581]	ATOM	1804	CG	HIS	A	253	19.255	-31.674	2.923	1.00	24.71	C
[8582]	ATOM	1805	ND1	HIS	A	253	20.513	-32.096	2.564	1.00	26.43	N
[8583]	ATOM	1806	CD2	HIS	A	253	18.386	-32.475	2.260	1.00	25.09	C
[8584]	ATOM	1807	CE1	HIS	A	253	20.414	-33.105	1.712	1.00	26.45	C
[8585]	ATOM	1808	NE2	HIS	A	253	19.133	-33.353	1.509	1.00	25.72	N
[8586]	ATOM	1809	N	GLU	A	254	18.803	-30.029	7.457	1.00	25.21	N
[8587]	ATOM	1810	CA	GLU	A	254	18.637	-28.957	8.456	1.00	25.30	C
[8588]	ATOM	1811	C	GLU	A	254	19.902	-28.108	8.717	1.00	25.96	C

[8589]	ATOM	1812	O	GLU	A	254	19.843	-26.870	8.669	1.00	25.47	O
[8590]	ATOM	1813	CB	GLU	A	254	18.070	-29.503	9.770	1.00	25.57	C
[8591]	ATOM	1814	CG	GLU	A	254	17.734	-28.389	10.761	1.00	26.10	C
[8592]	ATOM	1815	CD	GLU	A	254	17.636	-28.861	12.200	1.00	31.01	C
[8593]	ATOM	1816	OE1	GLU	A	254	17.413	-30.070	12.434	1.00	31.46	O
[8594]	ATOM	1817	OE2	GLU	A	254	17.773	-28.011	13.113	1.00	31.79	O
[8595]	ATOM	1818	N	ASP	A	255	21.024	-28.775	9.007	1.00	26.24	N
[8596]	ATOM	1819	CA	ASP	A	255	22.291	-28.110	9.303	1.00	27.31	C
[8597]	ATOM	1820	C	ASP	A	255	22.763	-27.239	8.156	1.00	27.26	C
[8598]	ATOM	1821	O	ASP	A	255	23.217	-26.124	8.374	1.00	27.40	O
[8599]	ATOM	1822	CB	ASP	A	255	23.385	-29.131	9.595	1.00	27.77	C
[8600]	ATOM	1823	CG	ASP	A	255	23.329	-29.678	11.019	1.00	30.44	C
[8601]	ATOM	1824	OD1	ASP	A	255	22.398	-29.325	11.783	1.00	30.92	O
[8602]	ATOM	1825	OD2	ASP	A	255	24.234	-30.479	11.367	1.00	32.68	O
[8603]	ATOM	1826	N	ALA	A	256	22.672	-27.771	6.938	1.00	27.46	N
[8604]	ATOM	1827	CA	ALA	A	256	23.073	-27.061	5.732	1.00	27.20	C
[8605]	ATOM	1828	C	ALA	A	256	22.212	-25.816	5.508	1.00	27.39	C
[8606]	ATOM	1829	O	ALA	A	256	22.732	-24.755	5.137	1.00	27.44	O
[8607]	ATOM	1830	CB	ALA	A	256	22.957	-27.971	4.557	1.00	27.69	C
[8608]	ATOM	1831	N	VAL	A	257	20.902	-25.936	5.735	1.00	27.24	N
[8609]	ATOM	1832	CA	VAL	A	257	20.008	-24.783	5.563	1.00	27.16	C
[8610]	ATOM	1833	C	VAL	A	257	20.227	-23.728	6.669	1.00	28.16	C
[8611]	ATOM	1834	O	VAL	A	257	20.293	-22.518	6.376	1.00	27.82	O
[8612]	ATOM	1835	CB	VAL	A	257	18.518	-25.195	5.408	1.00	26.96	C
[8613]	ATOM	1836	CG1	VAL	A	257	17.657	-23.970	5.100	1.00	25.24	C
[8614]	ATOM	1837	CG2	VAL	A	257	18.364	-26.208	4.283	1.00	25.30	C
[8615]	ATOM	1838	N	VAL	A	258	20.386	-24.183	7.919	1.00	28.93	N
[8616]	ATOM	1839	CA	VAL	A	258	20.734	-23.277	9.034	1.00	30.27	C
[8617]	ATOM	1840	C	VAL	A	258	21.992	-22.494	8.685	1.00	31.60	C
[8618]	ATOM	1841	O	VAL	A	258	22.025	-21.277	8.842	1.00	31.89	O
[8619]	ATOM	1842	CB	VAL	A	258	20.883	-24.024	10.407	1.00	29.84	C
[8620]	ATOM	1843	CG1	VAL	A	258	21.413	-23.090	11.515	1.00	30.20	C
[8621]	ATOM	1844	CG2	VAL	A	258	19.564	-24.618	10.832	1.00	29.03	C
[8622]	ATOM	1845	N	GLU	A	259	22.998	-23.187	8.158	1.00	33.15	N
[8623]	ATOM	1846	CA	GLU	A	259	24.268	-22.556	7.811	1.00	35.16	C
[8624]	ATOM	1847	C	GLU	A	259	24.110	-21.564	6.670	1.00	35.30	C

[8625]	ATOM	1848	O	GLU	A	259	24.656	-20.459	6.722	1.00	35.80	O
[8626]	ATOM	1849	CB	GLU	A	259	25.325	-23.592	7.449	1.00	35.80	C
[8627]	ATOM	1850	CG	GLU	A	259	26.745	-23.037	7.530	1.00	41.23	C
[8628]	ATOM	1851	CD	GLU	A	259	27.741	-23.880	6.759	1.00	47.30	C
[8629]	ATOM	1852	OE1	GLU	A	259	27.713	-25.126	6.934	1.00	49.55	O
[8630]	ATOM	1853	OE2	GLU	A	259	28.546	-23.300	5.982	1.00	49.24	O
[8631]	ATOM	1854	N	CYS	A	260	23.360	-21.961	5.649	1.00	35.19	N
[8632]	ATOM	1855	CA	CYS	A	260	23.044	-21.081	4.536	1.00	35.13	C
[8633]	ATOM	1856	C	CYS	A	260	22.422	-19.770	5.023	1.00	35.04	C
[8634]	ATOM	1857	O	CYS	A	260	22.826	-18.688	4.589	1.00	35.31	O
[8635]	ATOM	1858	CB	CYS	A	260	22.118	-21.794	3.553	1.00	34.68	C
[8636]	ATOM	1859	SG	CYS	A	260	21.916	-20.903	2.037	1.00	35.54	S
[8637]	ATOM	1860	N	ASN	A	261	21.465	-19.878	5.944	1.00	35.00	N
[8638]	ATOM	1861	CA	ASN	A	261	20.798	-18.721	6.537	1.00	35.40	C
[8639]	ATOM	1862	C	ASN	A	261	21.775	-17.710	7.135	1.00	36.31	C
[8640]	ATOM	1863	O	ASN	A	261	21.555	-16.491	7.074	1.00	36.79	O
[8641]	ATOM	1864	CB	ASN	A	261	19.800	-19.174	7.610	1.00	34.91	C
[8642]	ATOM	1865	CG	ASN	A	261	18.910	-18.033	8.102	1.00	34.94	C
[8643]	ATOM	1866	OD1	ASN	A	261	18.247	-17.367	7.321	1.00	33.98	O
[8644]	ATOM	1867	ND2	ASN	A	261	18.899	-17.813	9.410	1.00	37.03	N
[8645]	ATOM	1868	N	SER	A	262	22.861	-18.225	7.703	1.00	36.86	N
[8646]	ATOM	1869	CA	SER	A	262	23.845	-17.402	8.377	1.00	37.25	C
[8647]	ATOM	1870	C	SER	A	262	24.726	-16.647	7.380	1.00	37.56	C
[8648]	ATOM	1871	O	SER	A	262	25.471	-15.743	7.766	1.00	37.86	O
[8649]	ATOM	1872	CB	SER	A	262	24.699	-18.276	9.309	1.00	37.42	C
[8650]	ATOM	1873	OG	SER	A	262	25.565	-19.119	8.562	1.00	36.68	O
[8651]	ATOM	1874	N	LYS	A	263	24.633	-17.007	6.106	1.00	37.56	N
[8652]	ATOM	1875	CA	LYS	A	263	25.501	-16.433	5.082	1.00	38.13	C
[8653]	ATOM	1876	C	LYS	A	263	24.767	-15.453	4.152	1.00	38.15	C
[8654]	ATOM	1877	O	LYS	A	263	25.397	-14.775	3.316	1.00	38.22	O
[8655]	ATOM	1878	CB	LYS	A	263	26.148	-17.542	4.252	1.00	38.54	C
[8656]	ATOM	1879	CG	LYS	A	263	26.748	-18.693	5.068	1.00	39.78	C
[8657]	ATOM	1880	CD	LYS	A	263	28.163	-18.406	5.581	1.00	41.72	C
[8658]	ATOM	1881	CE	LYS	A	263	28.800	-19.657	6.215	1.00	42.19	C
[8659]	ATOM	1882	NZ	LYS	A	263	28.978	-20.778	5.226	1.00	44.76	N
[8660]	ATOM	1883	N	LEU	A	264	23.441	-15.395	4.289	1.00	37.49	N

[8661]	ATOM	1884	CA	LEU	A	264	22.618	-14.486	3.496	1.00	36.85	C
[8662]	ATOM	1885	C	LEU	A	264	22.279	-13.191	4.251	1.00	36.70	C
[8663]	ATOM	1886	O	LEU	A	264	22.450	-13.106	5.466	1.00	36.55	O
[8664]	ATOM	1887	CB	LEU	A	264	21.336	-15.194	3.012	1.00	36.70	C
[8665]	ATOM	1888	CG	LEU	A	264	21.489	-16.485	2.191	1.00	35.78	C
[8666]	ATOM	1889	CD1	LEU	A	264	20.138	-16.954	1.695	1.00	35.73	C
[8667]	ATOM	1890	CD2	LEU	A	264	22.426	-16.296	1.014	1.00	34.91	C
[8668]	ATOM	1891	N	ASP	A	265	21.812	-12.193	3.497	1.00	36.70	N
[8669]	ATOM	1892	CA	ASP	A	265	21.343	-10.900	4.007	1.00	36.49	C
[8670]	ATOM	1893	C	ASP	A	265	20.091	-11.101	4.866	1.00	35.87	C
[8671]	ATOM	1894	O	ASP	A	265	19.037	-11.454	4.329	1.00	36.02	O
[8672]	ATOM	1895	CB	ASP	A	265	21.016	-10.013	2.796	1.00	36.78	C
[8673]	ATOM	1896	CG	ASP	A	265	20.669	-8.568	3.162	1.00	38.04	C
[8674]	ATOM	1897	OD1	ASP	A	265	20.660	-8.182	4.357	1.00	35.46	O
[8675]	ATOM	1898	OD2	ASP	A	265	20.381	-7.820	2.197	1.00	41.29	O
[8676]	ATOM	1899	N	PRO	A	266	20.191	-10.886	6.198	1.00	35.47	N
[8677]	ATOM	1900	CA	PRO	A	266	19.050	-11.139	7.093	1.00	34.91	C
[8678]	ATOM	1901	C	PRO	A	266	17.849	-10.221	6.861	1.00	34.76	C
[8679]	ATOM	1902	O	PRO	A	266	16.737	-10.549	7.286	1.00	35.07	O
[8680]	ATOM	1903	CB	PRO	A	266	19.636	-10.897	8.484	1.00	35.35	C
[8681]	ATOM	1904	CG	PRO	A	266	20.772	-9.987	8.252	1.00	35.24	C
[8682]	ATOM	1905	CD	PRO	A	266	21.364	-10.404	6.947	1.00	35.23	C
[8683]	ATOM	1906	N	THR	A	267	18.055	-9.089	6.195	1.00	34.20	N
[8684]	ATOM	1907	CA	THR	A	267	16.944	-8.176	5.925	1.00	34.50	C
[8685]	ATOM	1908	C	THR	A	267	16.153	-8.596	4.690	1.00	34.41	C
[8686]	ATOM	1909	O	THR	A	267	15.048	-8.098	4.465	1.00	34.85	O
[8687]	ATOM	1910	CB	THR	A	267	17.403	-6.726	5.718	1.00	34.47	C
[8688]	ATOM	1911	OG1	THR	A	267	18.242	-6.650	4.559	1.00	34.28	O
[8689]	ATOM	1912	CG2	THR	A	267	18.135	-6.189	6.960	1.00	35.09	C
[8690]	ATOM	1913	N	GLN	A	268	16.740	-9.493	3.896	1.00	34.36	N
[8691]	ATOM	1914	CA	GLN	A	268	16.147	-9.993	2.649	1.00	34.44	C
[8692]	ATOM	1915	C	GLN	A	268	15.793	-11.479	2.761	1.00	33.78	C
[8693]	ATOM	1916	O	GLN	A	268	15.306	-12.070	1.805	1.00	33.61	O
[8694]	ATOM	1917	CB	GLN	A	268	17.149	-9.851	1.484	1.00	34.89	C
[8695]	ATOM	1918	CG	GLN	A	268	17.387	-8.451	0.935	1.00	37.40	C
[8696]	ATOM	1919	CD	GLN	A	268	16.171	-7.901	0.234	1.00	41.10	C



[8697]	ATOM	1920	OE1	GLN	A	268	15.179	-7.573	0.880	1.00	43.70	O
[8698]	ATOM	1921	NE2	GLN	A	268	16.238	-7.791	-1.093	1.00	41.08	N
[8699]	ATOM	1922	N	THR	A	269	16.055	-12.087	3.912	1.00	32.67	N
[8700]	ATOM	1923	CA	THR	A	269	15.968	-13.539	4.039	1.00	32.25	C
[8701]	ATOM	1924	C	THR	A	269	15.031	-13.959	5.160	1.00	31.92	C
[8702]	ATOM	1925	O	THR	A	269	15.124	-13.447	6.265	1.00	31.78	O
[8703]	ATOM	1926	CB	THR	A	269	17.374	-14.149	4.271	1.00	32.20	C
[8704]	ATOM	1927	OG1	THR	A	269	18.239	-13.741	3.207	1.00	33.43	O
[8705]	ATOM	1928	CG2	THR	A	269	17.345	-15.674	4.312	1.00	32.52	C
[8706]	ATOM	1929	N	SER	A	270	14.117	-14.877	4.875	1.00	31.27	N
[8707]	ATOM	1930	CA	SER	A	270	13.348	-15.495	5.950	1.00	31.34	C
[8708]	ATOM	1931	C	SER	A	270	13.589	-17.001	5.981	1.00	30.95	C
[8709]	ATOM	1932	O	SER	A	270	13.857	-17.622	4.952	1.00	30.85	O
[8710]	ATOM	1933	CB	SER	A	270	11.868	-15.134	5.862	1.00	31.52	C
[8711]	ATOM	1934	OG	SER	A	270	11.350	-15.442	4.593	1.00	31.92	O
[8712]	ATOM	1935	N	PHE	A	271	13.548	-17.577	7.176	1.00	30.91	N
[8713]	ATOM	1936	CA	PHE	A	271	13.900	-18.986	7.365	1.00	31.02	C
[8714]	ATOM	1937	C	PHE	A	271	12.702	-19.701	7.978	1.00	30.93	C
[8715]	ATOM	1938	O	PHE	A	271	12.278	-19.351	9.063	1.00	30.33	O
[8716]	ATOM	1939	CB	PHE	A	271	15.174	-19.096	8.236	1.00	31.49	C
[8717]	ATOM	1940	CG	PHE	A	271	15.606	-20.514	8.549	1.00	31.28	C
[8718]	ATOM	1941	CD1	PHE	A	271	15.413	-21.553	7.639	1.00	32.80	C
[8719]	ATOM	1942	CD2	PHE	A	271	16.225	-20.802	9.754	1.00	32.93	C
[8720]	ATOM	1943	CE1	PHE	A	271	15.810	-22.862	7.945	1.00	32.44	C
[8721]	ATOM	1944	CE2	PHE	A	271	16.631	-22.099	10.064	1.00	33.77	C
[8722]	ATOM	1945	CZ	PHE	A	271	16.425	-23.133	9.156	1.00	32.14	C
[8723]	ATOM	1946	N	LEU	A	272	12.124	-20.651	7.245	1.00	30.47	N
[8724]	ATOM	1947	CA	LEU	A	272	10.982	-21.416	7.735	1.00	30.36	C
[8725]	ATOM	1948	C	LEU	A	272	11.421	-22.846	8.109	1.00	30.80	C
[8726]	ATOM	1949	O	LEU	A	272	11.551	-23.727	7.241	1.00	30.46	O
[8727]	ATOM	1950	CB	LEU	A	272	9.846	-21.422	6.694	1.00	30.44	C
[8728]	ATOM	1951	CG	LEU	A	272	8.503	-22.098	7.007	1.00	30.88	C
[8729]	ATOM	1952	CD1	LEU	A	272	7.530	-21.149	7.685	1.00	32.08	C
[8730]	ATOM	1953	CD2	LEU	A	272	7.868	-22.661	5.731	1.00	29.95	C
[8731]	ATOM	1954	N	LYS	A	273	11.685	-23.057	9.397	1.00	30.62	N
[8732]	ATOM	1955	CA	LYS	A	273	12.059	-24.377	9.891	1.00	31.32	C

[8733]	ATOM	1956	C	LYS A 273	10.809	-25.000	10.468	1.00	32.00	C
[8734]	ATOM	1957	O	LYS A 273	10.315	-24.590	11.534	1.00	31.64	O
[8735]	ATOM	1958	CB	LYS A 273	13.181	-24.324	10.934	1.00	31.31	C
[8736]	ATOM	1959	CG	LYS A 273	13.664	-25.708	11.369	1.00	31.35	C
[8737]	ATOM	1960	CD	LYS A 273	14.392	-25.698	12.693	1.00	34.07	C
[8738]	ATOM	1961	CE	LYS A 273	15.844	-25.304	12.544	1.00	34.33	C
[8739]	ATOM	1962	NZ	LYS A 273	16.455	-25.018	13.870	1.00	36.44	N
[8740]	ATOM	1963	N	MET A 274	10.293	-25.981	9.745	1.00	32.69	N
[8741]	ATOM	1964	CA	MET A 274	9.020	-26.575	10.078	1.00	34.92	C
[8742]	ATOM	1965	C	MET A 274	9.203	-27.805	10.941	1.00	34.52	C
[8743]	ATOM	1966	O	MET A 274	9.877	-28.759	10.552	1.00	34.51	O
[8744]	ATOM	1967	CB	MET A 274	8.258	-26.911	8.797	1.00	34.60	C
[8745]	ATOM	1968	CG	MET A 274	8.042	-25.697	7.911	1.00	36.29	C
[8746]	ATOM	1969	SD	MET A 274	7.592	-26.090	6.220	1.00	39.82	S
[8747]	ATOM	1970	CE	MET A 274	5.876	-26.490	6.469	1.00	37.86	C
[8748]	ATOM	1971	N	ALA A 275	8.620	-27.771	12.132	1.00	34.90	N
[8749]	ATOM	1972	CA	ALA A 275	8.487	-28.971	12.933	1.00	35.23	C
[8750]	ATOM	1973	C	ALA A 275	7.491	-29.874	12.212	1.00	35.41	C
[8751]	ATOM	1974	O	ALA A 275	6.623	-29.385	11.484	1.00	36.45	O
[8752]	ATOM	1975	CB	ALA A 275	7.991	-28.619	14.317	1.00	35.00	C
[8753]	ATOM	1976	N	ASP A 276	7.625	-31.186	12.383	1.00	35.75	N
[8754]	ATOM	1977	CA	ASP A 276	6.630	-32.159	11.888	1.00	35.55	C
[8755]	ATOM	1978	C	ASP A 276	6.552	-32.309	10.372	1.00	34.44	C
[8756]	ATOM	1979	O	ASP A 276	5.647	-32.963	9.872	1.00	34.18	O
[8757]	ATOM	1980	CB	ASP A 276	5.217	-31.810	12.397	1.00	36.30	C
[8758]	ATOM	1981	CG	ASP A 276	5.209	-31.351	13.842	1.00	39.53	C
[8759]	ATOM	1982	OD1	ASP A 276	5.790	-32.074	14.690	1.00	42.10	O
[8760]	ATOM	1983	OD2	ASP A 276	4.625	-30.268	14.122	1.00	42.14	O
[8761]	ATOM	1984	N	SER A 277	7.466	-31.708	9.624	1.00	33.68	N
[8762]	ATOM	1985	CA	SER A 277	7.341	-31.769	8.162	1.00	32.99	C
[8763]	ATOM	1986	C	SER A 277	8.233	-32.830	7.521	1.00	32.63	C
[8764]	ATOM	1987	O	SER A 277	7.938	-33.296	6.421	1.00	33.30	O
[8765]	ATOM	1988	CB	SER A 277	7.615	-30.410	7.532	1.00	32.30	C
[8766]	ATOM	1989	OG	SER A 277	8.998	-30.147	7.541	1.00	32.49	O
[8767]	ATOM	1990	N	GLY A 278	9.329	-33.187	8.194	1.00	31.81	N
[8768]	ATOM	1991	CA	GLY A 278	10.294	-34.167	7.664	1.00	29.78	C

[8769]	ATOM	1992	C	GLY A 278	11.095	-33.708	6.457	1.00	28.64	C
[8770]	ATOM	1993	O	GLY A 278	11.252	-32.517	6.220	1.00	28.38	O
[8771]	ATOM	1994	N	GLY A 279	11.587	-34.670	5.681	1.00	27.70	N
[8772]	ATOM	1995	CA	GLY A 279	12.501	-34.401	4.586	1.00	26.71	C
[8773]	ATOM	1996	C	GLY A 279	11.911	-33.665	3.402	1.00	26.37	C
[8774]	ATOM	1997	O	GLY A 279	12.628	-32.958	2.702	1.00	27.04	O
[8775]	ATOM	1998	N	GLN A 280	10.615	-33.820	3.174	1.00	25.18	N
[8776]	ATOM	1999	CA	GLN A 280	9.963	-33.163	2.041	1.00	24.97	C
[8777]	ATOM	2000	C	GLN A 280	8.741	-32.311	2.484	1.00	24.74	C
[8778]	ATOM	2001	O	GLN A 280	7.592	-32.730	2.330	1.00	24.12	O
[8779]	ATOM	2002	CB	GLN A 280	9.571	-34.203	0.971	1.00	24.75	C
[8780]	ATOM	2003	CG	GLN A 280	10.728	-35.022	0.411	1.00	24.60	C
[8781]	ATOM	2004	CD	GLN A 280	11.627	-34.206	-0.519	1.00	25.63	C
[8782]	ATOM	2005	OE1	GLN A 280	12.809	-33.989	-0.227	1.00	28.09	O
[8783]	ATOM	2006	NE2	GLN A 280	11.067	-33.729	-1.625	1.00	19.71	N
[8784]	ATOM	2007	N	PRO A 281	8.987	-31.086	2.999	1.00	24.48	N
[8785]	ATOM	2008	CA	PRO A 281	7.910	-30.257	3.544	1.00	24.35	C
[8786]	ATOM	2009	C	PRO A 281	6.792	-30.010	2.523	1.00	24.98	C
[8787]	ATOM	2010	O	PRO A 281	5.629	-29.921	2.903	1.00	24.80	O
[8788]	ATOM	2011	CB	PRO A 281	8.611	-28.934	3.860	1.00	24.87	C
[8789]	ATOM	2012	CG	PRO A 281	10.064	-29.258	3.962	1.00	24.40	C
[8790]	ATOM	2013	CD	PRO A 281	10.296	-30.407	3.033	1.00	24.14	C
[8791]	ATOM	2014	N	GLN A 282	7.149	-29.894	1.239	1.00	24.52	N
[8792]	ATOM	2015	CA	GLN A 282	6.179	-29.590	0.178	1.00	25.00	C
[8793]	ATOM	2016	C	GLN A 282	5.224	-30.755	-0.089	1.00	25.36	C
[8794]	ATOM	2017	O	GLN A 282	4.183	-30.603	-0.748	1.00	25.76	O
[8795]	ATOM	2018	CB	GLN A 282	6.909	-29.152	-1.111	1.00	24.64	C
[8796]	ATOM	2019	CG	GLN A 282	7.424	-30.285	-2.050	1.00	24.59	C
[8797]	ATOM	2020	CD	GLN A 282	8.686	-30.981	-1.581	1.00	26.57	C
[8798]	ATOM	2021	OE1	GLN A 282	9.243	-31.810	-2.311	1.00	30.69	O
[8799]	ATOM	2022	NE2	GLN A 282	9.152	-30.665	-0.374	1.00	23.36	N
[8800]	ATOM	2023	N	LEU A 283	5.592	-31.928	0.406	1.00	25.13	N
[8801]	ATOM	2024	CA	LEU A 283	4.729	-33.093	0.291	1.00	25.23	C
[8802]	ATOM	2025	C	LEU A 283	3.888	-33.276	1.532	1.00	25.21	C
[8803]	ATOM	2026	O	LEU A 283	2.751	-33.667	1.420	1.00	24.82	O
[8804]	ATOM	2027	CB	LEU A 283	5.530	-34.380	-0.005	1.00	24.92	C

[8805]	ATOM	2028	CG	LEU	A	283	6.247	-34.421	-1.359	1.00	25.24	C
[8806]	ATOM	2029	CD1	LEU	A	283	7.133	-35.666	-1.531	1.00	26.07	C
[8807]	ATOM	2030	CD2	LEU	A	283	5.270	-34.298	-2.510	1.00	26.94	C
[8808]	ATOM	2031	N	THR	A	284	4.437	-32.986	2.709	1.00	26.63	N
[8809]	ATOM	2032	CA	THR	A	284	3.757	-33.327	3.979	1.00	27.47	C
[8810]	ATOM	2033	C	THR	A	284	2.992	-32.157	4.593	1.00	27.89	C
[8811]	ATOM	2034	O	THR	A	284	2.084	-32.362	5.402	1.00	28.64	O
[8812]	ATOM	2035	CB	THR	A	284	4.743	-33.849	5.052	1.00	28.06	C
[8813]	ATOM	2036	OG1	THR	A	284	5.598	-32.777	5.471	1.00	29.65	O
[8814]	ATOM	2037	CG2	THR	A	284	5.603	-34.999	4.514	1.00	27.61	C
[8815]	ATOM	2038	N	GLN	A	285	3.386	-30.933	4.239	1.00	28.20	N
[8816]	ATOM	2039	CA	GLN	A	285	2.782	-29.719	4.792	1.00	28.20	C
[8817]	ATOM	2040	C	GLN	A	285	2.527	-28.686	3.714	1.00	27.72	C
[8818]	ATOM	2041	O	GLN	A	285	2.983	-27.540	3.860	1.00	26.89	O
[8819]	ATOM	2042	CB	GLN	A	285	3.726	-29.086	5.799	1.00	28.81	C
[8820]	ATOM	2043	CG	GLN	A	285	4.287	-30.032	6.806	1.00	32.88	C
[8821]	ATOM	2044	CD	GLN	A	285	3.741	-29.818	8.156	1.00	37.64	C
[8822]	ATOM	2045	OE1	GLN	A	285	2.665	-30.305	8.484	1.00	40.74	O
[8823]	ATOM	2046	NE2	GLN	A	285	4.483	-29.085	8.980	1.00	40.80	N
[8824]	ATOM	2047	N	PRO	A	286	1.811	-29.069	2.633	1.00	27.04	N
[8825]	ATOM	2048	CA	PRO	A	286	1.547	-28.114	1.548	1.00	27.01	C
[8826]	ATOM	2049	C	PRO	A	286	0.803	-26.864	2.043	1.00	26.44	C
[8827]	ATOM	2050	O	PRO	A	286	1.077	-25.757	1.574	1.00	26.58	O
[8828]	ATOM	2051	CB	PRO	A	286	0.679	-28.913	0.562	1.00	26.79	C
[8829]	ATOM	2052	CG	PRO	A	286	0.138	-30.047	1.361	1.00	27.20	C
[8830]	ATOM	2053	CD	PRO	A	286	1.187	-30.378	2.367	1.00	27.47	C
[8831]	ATOM	2054	N	GLY	A	287	-0.081	-27.058	3.016	1.00	26.00	N
[8832]	ATOM	2055	CA	GLY	A	287	-0.907	-25.990	3.598	1.00	25.95	C
[8833]	ATOM	2056	C	GLY	A	287	-0.110	-24.902	4.286	1.00	25.74	C
[8834]	ATOM	2057	O	GLY	A	287	-0.328	-23.726	4.035	1.00	25.75	O
[8835]	ATOM	2058	N	LYS	A	288	0.813	-25.294	5.154	1.00	25.35	N
[8836]	ATOM	2059	CA	LYS	A	288	1.692	-24.330	5.812	1.00	26.07	C
[8837]	ATOM	2060	C	LYS	A	288	2.643	-23.692	4.812	1.00	25.29	C
[8838]	ATOM	2061	O	LYS	A	288	2.908	-22.491	4.881	1.00	25.05	O
[8839]	ATOM	2062	CB	LYS	A	288	2.514	-24.994	6.923	1.00	26.23	C
[8840]	ATOM	2063	CG	LYS	A	288	3.217	-23.995	7.832	1.00	27.99	C

[8841]	ATOM	2064	CD	LYS	A	288	3.964	-24.692	8.972	1.00	28.14	C
[8842]	ATOM	2065	CE	LYS	A	288	3.060	-25.013	10.112	1.00	31.02	C
[8843]	ATOM	2066	NZ	LYS	A	288	2.963	-23.872	11.049	1.00	33.66	N
[8844]	ATOM	2067	N	LEU	A	289	3.153	-24.499	3.883	1.00	24.74	N
[8845]	ATOM	2068	CA	LEU	A	289	4.103	-24.001	2.898	1.00	23.94	C
[8846]	ATOM	2069	C	LEU	A	289	3.419	-22.969	2.004	1.00	23.23	C
[8847]	ATOM	2070	O	LEU	A	289	4.034	-21.950	1.657	1.00	24.29	O
[8848]	ATOM	2071	CB	LEU	A	289	4.759	-25.132	2.094	1.00	23.85	C
[8849]	ATOM	2072	CG	LEU	A	289	5.831	-24.701	1.074	1.00	24.14	C
[8850]	ATOM	2073	CD1	LEU	A	289	6.949	-23.844	1.708	1.00	23.11	C
[8851]	ATOM	2074	CD2	LEU	A	289	6.440	-25.895	0.397	1.00	23.62	C
[8852]	ATOM	2075	N	THR	A	290	2.153	-23.219	1.660	1.00	22.47	N
[8853]	ATOM	2076	CA	THR	A	290	1.375	-22.301	0.816	1.00	21.83	C
[8854]	ATOM	2077	C	THR	A	290	1.133	-20.961	1.541	1.00	21.33	C
[8855]	ATOM	2078	O	THR	A	290	1.216	-19.878	0.934	1.00	20.77	O
[8856]	ATOM	2079	CB	THR	A	290	0.046	-22.958	0.338	1.00	22.00	C
[8857]	ATOM	2080	OG1	THR	A	290	0.338	-24.028	-0.583	1.00	21.97	O
[8858]	ATOM	2081	CG2	THR	A	290	-0.892	-21.943	-0.336	1.00	22.42	C
[8859]	ATOM	2082	N	GLU	A	291	0.881	-21.041	2.842	1.00	20.69	N
[8860]	ATOM	2083	CA	GLU	A	291	0.661	-19.842	3.664	1.00	20.91	C
[8861]	ATOM	2084	C	GLU	A	291	1.946	-19.002	3.786	1.00	20.18	C
[8862]	ATOM	2085	O	GLU	A	291	1.906	-17.781	3.674	1.00	20.11	O
[8863]	ATOM	2086	CB	GLU	A	291	0.098	-20.226	5.040	1.00	19.92	C
[8864]	ATOM	2087	CG	GLU	A	291	-0.852	-19.204	5.600	1.00	21.59	C
[8865]	ATOM	2088	CD	GLU	A	291	-1.260	-19.482	7.057	1.00	23.21	C
[8866]	ATOM	2089	OE1	GLU	A	291	-1.548	-20.656	7.404	1.00	24.80	O
[8867]	ATOM	2090	OE2	GLU	A	291	-1.282	-18.512	7.854	1.00	26.54	O
[8868]	ATOM	2091	N	ALA	A	292	3.078	-19.668	4.008	1.00	19.97	N
[8869]	ATOM	2092	CA	ALA	A	292	4.383	-19.017	4.014	1.00	20.19	C
[8870]	ATOM	2093	C	ALA	A	292	4.713	-18.353	2.674	1.00	20.67	C
[8871]	ATOM	2094	O	ALA	A	292	5.178	-17.210	2.642	1.00	20.30	O
[8872]	ATOM	2095	CB	ALA	A	292	5.456	-20.011	4.382	1.00	19.91	C
[8873]	ATOM	2096	N	PHE	A	293	4.474	-19.067	1.567	1.00	21.67	N
[8874]	ATOM	2097	CA	PHE	A	293	4.606	-18.481	0.220	1.00	21.28	C
[8875]	ATOM	2098	C	PHE	A	293	3.780	-17.200	0.054	1.00	21.29	C
[8876]	ATOM	2099	O	PHE	A	293	4.268	-16.185	-0.450	1.00	21.42	O

[8877]	ATOM	2100	CB	PHE	A	293	4.209	-19.492	-0.855	1.00	21.61	C
[8878]	ATOM	2101	CG	PHE	A	293	4.579	-19.073	-2.245	1.00	22.45	C
[8879]	ATOM	2102	CD1	PHE	A	293	5.908	-18.808	-2.573	1.00	23.11	C
[8880]	ATOM	2103	CD2	PHE	A	293	3.595	-18.976	-3.246	1.00	23.35	C
[8881]	ATOM	2104	CE1	PHE	A	293	6.278	-18.420	-3.887	1.00	24.08	C
[8882]	ATOM	2105	CE2	PHE	A	293	3.938	-18.602	-4.552	1.00	23.90	C
[8883]	ATOM	2106	CZ	PHE	A	293	5.303	-18.327	-4.884	1.00	23.88	C
[8884]	ATOM	2107	N	LYS	A	294	2.523	-17.253	0.479	1.00	21.14	N
[8885]	ATOM	2108	CA	LYS	A	294	1.676	-16.089	0.505	1.00	20.78	C
[8886]	ATOM	2109	C	LYS	A	294	2.366	-14.900	1.177	1.00	20.66	C
[8887]	ATOM	2110	O	LYS	A	294	2.436	-13.838	0.583	1.00	19.76	O
[8888]	ATOM	2111	CB	LYS	A	294	0.366	-16.400	1.247	1.00	20.86	C
[8889]	ATOM	2112	CG	LYS	A	294	-0.582	-15.251	1.233	1.00	22.28	C
[8890]	ATOM	2113	CD	LYS	A	294	-1.818	-15.605	2.034	1.00	26.86	C
[8891]	ATOM	2114	CE	LYS	A	294	-2.733	-14.439	2.097	1.00	31.84	C
[8892]	ATOM	2115	NZ	LYS	A	294	-4.161	-14.889	1.960	1.00	35.94	N
[8893]	ATOM	2116	N	TYR	A	295	2.852	-15.071	2.415	1.00	20.88	N
[8894]	ATOM	2117	CA	TYR	A	295	3.488	-13.946	3.144	1.00	20.44	C
[8895]	ATOM	2118	C	TYR	A	295	4.851	-13.600	2.562	1.00	20.99	C
[8896]	ATOM	2119	O	TYR	A	295	5.295	-12.443	2.650	1.00	21.22	O
[8897]	ATOM	2120	CB	TYR	A	295	3.609	-14.197	4.648	1.00	20.84	C
[8898]	ATOM	2121	CG	TYR	A	295	2.320	-14.642	5.301	1.00	21.56	C
[8899]	ATOM	2122	CD1	TYR	A	295	1.130	-13.942	5.098	1.00	21.84	C
[8900]	ATOM	2123	CD2	TYR	A	295	2.289	-15.773	6.106	1.00	22.05	C
[8901]	ATOM	2124	CE1	TYR	A	295	-0.058	-14.368	5.679	1.00	22.11	C
[8902]	ATOM	2125	CE2	TYR	A	295	1.105	-16.196	6.707	1.00	22.01	C
[8903]	ATOM	2126	CZ	TYR	A	295	-0.053	-15.489	6.484	1.00	21.97	C
[8904]	ATOM	2127	OH	TYR	A	295	-1.209	-15.914	7.085	1.00	24.10	O
[8905]	ATOM	2128	N	PHE	A	296	5.525	-14.590	1.991	1.00	20.11	N
[8906]	ATOM	2129	CA	PHE	A	296	6.783	-14.299	1.267	1.00	21.04	C
[8907]	ATOM	2130	C	PHE	A	296	6.509	-13.324	0.126	1.00	20.79	C
[8908]	ATOM	2131	O	PHE	A	296	7.212	-12.335	-0.015	1.00	20.42	O
[8909]	ATOM	2132	CB	PHE	A	296	7.424	-15.573	0.720	1.00	20.99	C
[8910]	ATOM	2133	CG	PHE	A	296	8.674	-15.331	-0.116	1.00	21.01	C
[8911]	ATOM	2134	CD1	PHE	A	296	9.826	-14.782	0.460	1.00	21.48	C
[8912]	ATOM	2135	CD2	PHE	A	296	8.705	-15.677	-1.468	1.00	21.43	C

[8913]	ATOM	2136	CE1	PHE	A	296	10.996	-14.573	-0.319	1.00	19.02	C
[8914]	ATOM	2137	CE2	PHE	A	296	9.872	-15.479	-2.249	1.00	21.15	C
[8915]	ATOM	2138	CZ	PHE	A	296	11.013	-14.916	-1.656	1.00	20.59	C
[8916]	ATOM	2139	N	LEU	A	297	5.488	-13.604	-0.682	1.00	20.73	N
[8917]	ATOM	2140	CA	LEU	A	297	5.122	-12.712	-1.802	1.00	20.79	C
[8918]	ATOM	2141	C	LEU	A	297	4.713	-11.319	-1.345	1.00	21.65	C
[8919]	ATOM	2142	O	LEU	A	297	5.075	-10.332	-1.986	1.00	22.73	O
[8920]	ATOM	2143	CB	LEU	A	297	3.991	-13.311	-2.618	1.00	20.15	C
[8921]	ATOM	2144	CG	LEU	A	297	4.343	-14.542	-3.453	1.00	20.31	C
[8922]	ATOM	2145	CD1	LEU	A	297	3.073	-15.048	-4.065	1.00	19.76	C
[8923]	ATOM	2146	CD2	LEU	A	297	5.380	-14.219	-4.534	1.00	19.31	C
[8924]	ATOM	2147	N	GLN	A	298	3.958	-11.239	-0.250	1.00	21.96	N
[8925]	ATOM	2148	CA	GLN	A	298	3.585	-9.960	0.341	1.00	22.52	C
[8926]	ATOM	2149	C	GLN	A	298	4.809	-9.165	0.790	1.00	22.51	C
[8927]	ATOM	2150	O	GLN	A	298	4.893	-7.974	0.520	1.00	22.22	O
[8928]	ATOM	2151	CB	GLN	A	298	2.587	-10.137	1.494	1.00	21.91	C
[8929]	ATOM	2152	CG	GLN	A	298	1.274	-10.776	1.094	1.00	22.32	C
[8930]	ATOM	2153	CD	GLN	A	298	0.283	-10.919	2.257	1.00	24.40	C
[8931]	ATOM	2154	OE1	GLN	A	298	-0.845	-11.389	2.074	1.00	27.79	O
[8932]	ATOM	2155	NE2	GLN	A	298	0.697	-10.509	3.448	1.00	25.49	N
[8933]	ATOM	2156	N	GLY	A	299	5.741	-9.815	1.487	1.00	22.69	N
[8934]	ATOM	2157	CA	GLY	A	299	7.022	-9.197	1.820	1.00	23.45	C
[8935]	ATOM	2158	C	GLY	A	299	7.801	-8.707	0.597	1.00	24.03	C
[8936]	ATOM	2159	O	GLY	A	299	8.480	-7.693	0.662	1.00	24.41	O
[8937]	ATOM	2160	N	MET	A	300	7.689	-9.417	-0.520	1.00	24.19	N
[8938]	ATOM	2161	CA	MET	A	300	8.289	-9.012	-1.799	1.00	25.53	C
[8939]	ATOM	2162	C	MET	A	300	7.641	-7.757	-2.403	1.00	24.92	C
[8940]	ATOM	2163	O	MET	A	300	8.215	-7.122	-3.286	1.00	25.40	O
[8941]	ATOM	2164	CB	MET	A	300	8.153	-10.142	-2.825	1.00	25.18	C
[8942]	ATOM	2165	CG	MET	A	300	9.146	-11.282	-2.690	1.00	26.55	C
[8943]	ATOM	2166	SD	MET	A	300	9.019	-12.452	-4.087	1.00	30.39	S
[8944]	ATOM	2167	CE	MET	A	300	8.955	-11.319	-5.463	1.00	21.39	C
[8945]	ATOM	2168	N	GLY	A	301	6.431	-7.423	-1.965	1.00	24.78	N
[8946]	ATOM	2169	CA	GLY	A	301	5.718	-6.257	-2.474	1.00	23.87	C
[8947]	ATOM	2170	C	GLY	A	301	4.573	-6.627	-3.397	1.00	23.65	C
[8948]	ATOM	2171	O	GLY	A	301	4.029	-5.771	-4.058	1.00	23.83	O

[8949]	ATOM	2172	N	TYR	A	302	4.222	-7.908	-3.446	1.00	23.86	N
[8950]	ATOM	2173	CA	TYR	A	302	3.139	-8.391	-4.282	1.00	24.27	C
[8951]	ATOM	2174	C	TYR	A	302	1.918	-8.771	-3.457	1.00	24.96	C
[8952]	ATOM	2175	O	TYR	A	302	2.030	-9.509	-2.466	1.00	24.91	O
[8953]	ATOM	2176	CB	TYR	A	302	3.580	-9.597	-5.122	1.00	23.99	C
[8954]	ATOM	2177	CG	TYR	A	302	4.444	-9.224	-6.301	1.00	23.70	C
[8955]	ATOM	2178	CD1	TYR	A	302	3.942	-8.439	-7.331	1.00	23.94	C
[8956]	ATOM	2179	CD2	TYR	A	302	5.754	-9.644	-6.386	1.00	24.08	C
[8957]	ATOM	2180	CE1	TYR	A	302	4.720	-8.092	-8.416	1.00	23.52	C
[8958]	ATOM	2181	CE2	TYR	A	302	6.555	-9.293	-7.473	1.00	24.82	C
[8959]	ATOM	2182	CZ	TYR	A	302	6.024	-8.512	-8.483	1.00	24.01	C
[8960]	ATOM	2183	OH	TYR	A	302	6.794	-8.142	-9.570	1.00	24.72	O
[8961]	ATOM	2184	N	MET	A	303	0.751	-8.294	-3.892	1.00	25.51	N
[8962]	ATOM	2185	CA	MET	A	303	-0.522	-8.697	-3.290	1.00	26.01	C
[8963]	ATOM	2186	C	MET	A	303	-0.685	-10.190	-3.536	1.00	26.59	C
[8964]	ATOM	2187	O	MET	A	303	-0.457	-10.670	-4.649	1.00	26.33	O
[8965]	ATOM	2188	CB	MET	A	303	-1.691	-7.960	-3.924	1.00	25.62	C
[8966]	ATOM	2189	CG	MET	A	303	-1.687	-6.477	-3.756	1.00	26.67	C
[8967]	ATOM	2190	SD	MET	A	303	-1.975	-5.933	-2.076	1.00	31.21	S
[8968]	ATOM	2191	CE	MET	A	303	-3.534	-6.667	-1.705	1.00	28.46	C
[8969]	ATOM	2192	N	ALA	A	304	-1.041	-10.922	-2.488	1.00	27.40	N
[8970]	ATOM	2193	CA	ALA	A	304	-1.232	-12.369	-2.587	1.00	28.25	C
[8971]	ATOM	2194	C	ALA	A	304	-2.260	-12.783	-1.534	1.00	28.89	C
[8972]	ATOM	2195	O	ALA	A	304	-2.953	-13.787	-1.669	1.00	29.32	O
[8973]	ATOM	2196	CB	ALA	A	304	0.079	-13.097	-2.380	1.00	28.29	C
[8974]	ATOM	2197	OXT	ALA	A	304	-2.441	-12.094	-0.524	1.00	29.46	O
[8975]	TER	2198		ALA	A	304						
[8976]	ATOM	2199	N	ALA	B	24	39.091	-0.896	-12.963	1.00	49.70	N
[8977]	ATOM	2200	CA	ALA	B	24	39.068	0.565	-13.270	1.00	49.30	C
[8978]	ATOM	2201	C	ALA	B	24	40.492	1.148	-13.323	1.00	48.85	C
[8979]	ATOM	2202	O	ALA	B	24	40.794	2.138	-12.652	1.00	48.95	O
[8980]	ATOM	2203	CB	ALA	B	24	38.209	1.299	-12.228	1.00	49.43	C
[8981]	ATOM	2204	N	LYS	B	25	41.361	0.530	-14.123	1.00	47.92	N
[8982]	ATOM	2205	CA	LYS	B	25	42.785	0.899	-14.164	1.00	46.98	C
[8983]	ATOM	2206	C	LYS	B	25	43.276	1.226	-15.584	1.00	45.26	C
[8984]	ATOM	2207	O	LYS	B	25	43.062	0.434	-16.492	1.00	44.89	O



[8985]	ATOM	2208	CB	LYS	B	25	43.642	-0.232	-13.552	1.00	46.87	C
[8986]	ATOM	2209	CG	LYS	B	25	43.292	-0.580	-12.082	1.00	48.34	C
[8987]	ATOM	2210	CD	LYS	B	25	43.577	-2.052	-11.695	1.00	48.54	C
[8988]	ATOM	2211	CE	LYS	B	25	42.913	-3.086	-12.639	1.00	51.27	C
[8989]	ATOM	2212	NZ	LYS	B	25	41.407	-3.097	-12.633	1.00	52.53	N
[8990]	ATOM	2213	N	THR	B	26	43.942	2.377	-15.747	1.00	43.53	N
[8991]	ATOM	2214	CA	THR	B	26	44.602	2.776	-17.005	1.00	42.29	C
[8992]	ATOM	2215	C	THR	B	26	46.059	2.307	-17.096	1.00	40.78	C
[8993]	ATOM	2216	O	THR	B	26	46.868	2.576	-16.202	1.00	40.71	O
[8994]	ATOM	2217	CB	THR	B	26	44.573	4.322	-17.204	1.00	42.57	C
[8995]	ATOM	2218	OG1	THR	B	26	43.217	4.782	-17.191	1.00	44.67	O
[8996]	ATOM	2219	CG2	THR	B	26	45.211	4.730	-18.534	1.00	42.52	C
[8997]	ATOM	2220	N	HIS	B	27	46.398	1.621	-18.182	1.00	38.63	N
[8998]	ATOM	2221	CA	HIS	B	27	47.767	1.166	-18.398	1.00	36.69	C
[8999]	ATOM	2222	C	HIS	B	27	48.345	1.686	-19.710	1.00	35.73	C
[9000]	ATOM	2223	O	HIS	B	27	47.636	2.189	-20.579	1.00	34.63	O
[9001]	ATOM	2224	CB	HIS	B	27	47.831	-0.358	-18.421	1.00	36.66	C
[9002]	ATOM	2225	CG	HIS	B	27	47.318	-1.010	-17.181	1.00	37.55	C
[9003]	ATOM	2226	ND1	HIS	B	27	45.985	-1.310	-16.995	1.00	37.22	N
[9004]	ATOM	2227	CD2	HIS	B	27	47.961	-1.439	-16.070	1.00	37.14	C
[9005]	ATOM	2228	CE1	HIS	B	27	45.829	-1.891	-15.820	1.00	37.64	C
[9006]	ATOM	2229	NE2	HIS	B	27	47.011	-1.976	-15.236	1.00	38.11	N
[9007]	ATOM	2230	N	SER	B	28	49.648	1.517	-19.850	1.00	34.69	N
[9008]	ATOM	2231	CA	SER	B	28	50.351	1.872	-21.059	1.00	34.56	C
[9009]	ATOM	2232	C	SER	B	28	51.431	0.831	-21.276	1.00	33.43	C
[9010]	ATOM	2233	O	SER	B	28	52.087	0.421	-20.327	1.00	33.08	O
[9011]	ATOM	2234	CB	SER	B	28	50.962	3.257	-20.889	1.00	34.94	C
[9012]	ATOM	2235	OG	SER	B	28	52.161	3.376	-21.626	1.00	37.78	O
[9013]	ATOM	2236	N	VAL	B	29	51.593	0.368	-22.509	1.00	32.76	N
[9014]	ATOM	2237	CA	VAL	B	29	52.688	-0.561	-22.825	1.00	32.23	C
[9015]	ATOM	2238	C	VAL	B	29	53.510	-0.080	-24.020	1.00	31.92	C
[9016]	ATOM	2239	O	VAL	B	29	52.962	0.474	-24.974	1.00	31.22	O
[9017]	ATOM	2240	CB	VAL	B	29	52.220	-2.046	-23.072	1.00	32.44	C
[9018]	ATOM	2241	CG1	VAL	B	29	51.316	-2.513	-21.977	1.00	32.94	C
[9019]	ATOM	2242	CG2	VAL	B	29	51.538	-2.217	-24.418	1.00	31.90	C
[9020]	ATOM	2243	N	GLU	B	30	54.818	-0.311	-23.952	1.00	31.15	N

[9021]	ATOM	2244	CA	GLU	B	30	55.716	0.026	-25.046	1.00	31.83	C
[9022]	ATOM	2245	C	GLU	B	30	55.605	-1.058	-26.099	1.00	30.61	C
[9023]	ATOM	2246	O	GLU	B	30	55.387	-2.224	-25.774	1.00	30.40	O
[9024]	ATOM	2247	CB	GLU	B	30	57.175	0.100	-24.589	1.00	31.57	C
[9025]	ATOM	2248	CG	GLU	B	30	57.419	0.485	-23.136	1.00	33.83	C
[9026]	ATOM	2249	CD	GLU	B	30	58.834	0.075	-22.665	1.00	35.02	C
[9027]	ATOM	2250	OE1	GLU	B	30	59.826	0.666	-23.164	1.00	38.48	O
[9028]	ATOM	2251	OE2	GLU	B	30	58.954	-0.837	-21.804	1.00	37.83	O
[9029]	ATOM	2252	N	THR	B	31	55.753	-0.665	-27.360	1.00	29.86	N
[9030]	ATOM	2253	CA	THR	B	31	55.705	-1.599	-28.478	1.00	29.06	C
[9031]	ATOM	2254	C	THR	B	31	56.807	-1.232	-29.497	1.00	29.22	C
[9032]	ATOM	2255	O	THR	B	31	57.447	-0.175	-29.377	1.00	28.36	O
[9033]	ATOM	2256	CB	THR	B	31	54.296	-1.593	-29.163	1.00	28.79	C
[9034]	ATOM	2257	OG1	THR	B	31	54.227	-0.527	-30.118	1.00	28.96	O
[9035]	ATOM	2258	CG2	THR	B	31	53.160	-1.433	-28.147	1.00	27.34	C
[9036]	ATOM	2259	N	PRO	B	32	57.015	-2.081	-30.524	1.00	29.39	N
[9037]	ATOM	2260	CA	PRO	B	32	57.967	-1.685	-31.548	1.00	29.31	C
[9038]	ATOM	2261	C	PRO	B	32	57.529	-0.416	-32.283	1.00	29.71	C
[9039]	ATOM	2262	O	PRO	B	32	58.348	0.191	-32.980	1.00	29.39	O
[9040]	ATOM	2263	CB	PRO	B	32	57.950	-2.866	-32.522	1.00	29.67	C
[9041]	ATOM	2264	CG	PRO	B	32	57.396	-4.016	-31.751	1.00	29.93	C
[9042]	ATOM	2265	CD	PRO	B	32	56.416	-3.400	-30.806	1.00	29.95	C
[9043]	ATOM	2266	N	TYR	B	33	56.256	-0.020	-32.140	1.00	29.16	N
[9044]	ATOM	2267	CA	TYR	B	33	55.718	1.100	-32.912	1.00	29.08	C
[9045]	ATOM	2268	C	TYR	B	33	55.292	2.296	-32.066	1.00	29.39	C
[9046]	ATOM	2269	O	TYR	B	33	54.681	3.245	-32.577	1.00	29.55	O
[9047]	ATOM	2270	CB	TYR	B	33	54.570	0.635	-33.801	1.00	29.36	C
[9048]	ATOM	2271	CG	TYR	B	33	54.847	-0.685	-34.454	1.00	29.13	C
[9049]	ATOM	2272	CD1	TYR	B	33	55.663	-0.768	-35.590	1.00	28.49	C
[9050]	ATOM	2273	CD2	TYR	B	33	54.333	-1.859	-33.915	1.00	28.76	C
[9051]	ATOM	2274	CE1	TYR	B	33	55.937	-1.997	-36.188	1.00	29.71	C
[9052]	ATOM	2275	CE2	TYR	B	33	54.608	-3.094	-34.496	1.00	29.23	C
[9053]	ATOM	2276	CZ	TYR	B	33	55.399	-3.160	-35.632	1.00	29.27	C
[9054]	ATOM	2277	OH	TYR	B	33	55.655	-4.391	-36.199	1.00	30.09	O
[9055]	ATOM	2278	N	GLY	B	34	55.656	2.259	-30.789	1.00	28.85	N
[9056]	ATOM	2279	CA	GLY	B	34	55.351	3.326	-29.863	1.00	29.15	C

[9057]	ATOM	2280	C	GLY	B	34	54.528	2.812	-28.695	1.00	29.26	C
[9058]	ATOM	2281	O	GLY	B	34	54.229	1.614	-28.608	1.00	29.32	O
[9059]	ATOM	2282	N	SER	B	35	54.159	3.722	-27.801	1.00	29.12	N
[9060]	ATOM	2283	CA	SER	B	35	53.340	3.378	-26.638	1.00	29.26	C
[9061]	ATOM	2284	C	SER	B	35	51.864	3.290	-27.022	1.00	28.34	C
[9062]	ATOM	2285	O	SER	B	35	51.432	3.958	-27.961	1.00	28.14	O
[9063]	ATOM	2286	CB	SER	B	35	53.515	4.448	-25.573	1.00	29.65	C
[9064]	ATOM	2287	OG	SER	B	35	53.881	3.853	-24.354	1.00	32.65	O
[9065]	ATOM	2288	N	VAL	B	36	51.107	2.447	-26.313	1.00	27.21	N
[9066]	ATOM	2289	CA	VAL	B	36	49.660	2.352	-26.480	1.00	26.46	C
[9067]	ATOM	2290	C	VAL	B	36	49.025	2.293	-25.094	1.00	26.10	C
[9068]	ATOM	2291	O	VAL	B	36	49.581	1.695	-24.171	1.00	25.95	O
[9069]	ATOM	2292	CB	VAL	B	36	49.217	1.173	-27.444	1.00	26.43	C
[9070]	ATOM	2293	CG1	VAL	B	36	49.538	-0.200	-26.879	1.00	26.25	C
[9071]	ATOM	2294	CG2	VAL	B	36	47.746	1.260	-27.801	1.00	26.64	C
[9072]	ATOM	2295	N	THR	B	37	47.880	2.953	-24.965	1.00	25.86	N
[9073]	ATOM	2296	CA	THR	B	37	47.170	3.126	-23.706	1.00	25.44	C
[9074]	ATOM	2297	C	THR	B	37	45.840	2.347	-23.744	1.00	24.37	C
[9075]	ATOM	2298	O	THR	B	37	45.173	2.307	-24.774	1.00	23.55	O
[9076]	ATOM	2299	CB	THR	B	37	46.947	4.626	-23.488	1.00	25.78	C
[9077]	ATOM	2300	OG1	THR	B	37	48.195	5.242	-23.092	1.00	29.22	O
[9078]	ATOM	2301	CG2	THR	B	37	45.894	4.887	-22.460	1.00	28.33	C
[9079]	ATOM	2302	N	PHE	B	38	45.475	1.718	-22.630	1.00	22.90	N
[9080]	ATOM	2303	CA	PHE	B	38	44.208	0.985	-22.510	1.00	23.57	C
[9081]	ATOM	2304	C	PHE	B	38	43.686	1.018	-21.067	1.00	23.82	C
[9082]	ATOM	2305	O	PHE	B	38	44.423	1.381	-20.141	1.00	22.90	O
[9083]	ATOM	2306	CB	PHE	B	38	44.330	-0.471	-23.017	1.00	23.18	C
[9084]	ATOM	2307	CG	PHE	B	38	45.543	-1.199	-22.493	1.00	23.41	C
[9085]	ATOM	2308	CD1	PHE	B	38	46.784	-1.023	-23.089	1.00	23.31	C
[9086]	ATOM	2309	CD2	PHE	B	38	45.437	-2.042	-21.412	1.00	22.85	C
[9087]	ATOM	2310	CE1	PHE	B	38	47.903	-1.672	-22.606	1.00	25.29	C
[9088]	ATOM	2311	CE2	PHE	B	38	46.557	-2.704	-20.909	1.00	25.11	C
[9089]	ATOM	2312	CZ	PHE	B	38	47.790	-2.512	-21.497	1.00	24.77	C
[9090]	ATOM	2313	N	THR	B	39	42.412	0.669	-20.896	1.00	24.30	N
[9091]	ATOM	2314	CA	THR	B	39	41.797	0.607	-19.576	1.00	25.85	C
[9092]	ATOM	2315	C	THR	B	39	41.100	-0.739	-19.393	1.00	26.10	C

[9093]	ATOM	2316	O	THR	B	39	40.440	-1.238	-20.313	1.00	25.59	O
[9094]	ATOM	2317	CB	THR	B	39	40.822	1.768	-19.355	1.00	26.03	C
[9095]	ATOM	2318	OG1	THR	B	39	41.446	2.970	-19.805	1.00	29.01	O
[9096]	ATOM	2319	CG2	THR	B	39	40.517	1.942	-17.865	1.00	27.62	C
[9097]	ATOM	2320	N	VAL	B	40	41.286	-1.320	-18.210	1.00	25.99	N
[9098]	ATOM	2321	CA	VAL	B	40	40.828	-2.669	-17.897	1.00	26.81	C
[9099]	ATOM	2322	C	VAL	B	40	39.738	-2.585	-16.839	1.00	27.51	C
[9100]	ATOM	2323	O	VAL	B	40	39.933	-1.956	-15.793	1.00	27.63	O
[9101]	ATOM	2324	CB	VAL	B	40	41.996	-3.542	-17.374	1.00	26.65	C
[9102]	ATOM	2325	CG1	VAL	B	40	41.538	-4.966	-17.088	1.00	26.54	C
[9103]	ATOM	2326	CG2	VAL	B	40	43.143	-3.544	-18.362	1.00	25.78	C
[9104]	ATOM	2327	N	TYR	B	41	38.586	-3.186	-17.133	1.00	28.68	N
[9105]	ATOM	2328	CA	TYR	B	41	37.449	-3.207	-16.210	1.00	30.42	C
[9106]	ATOM	2329	C	TYR	B	41	37.012	-4.634	-15.914	1.00	31.37	C
[9107]	ATOM	2330	O	TYR	B	41	37.096	-5.509	-16.771	1.00	31.68	O
[9108]	ATOM	2331	CB	TYR	B	41	36.246	-2.514	-16.819	1.00	30.46	C
[9109]	ATOM	2332	CG	TYR	B	41	36.336	-1.028	-17.024	1.00	31.39	C
[9110]	ATOM	2333	CD1	TYR	B	41	36.891	-0.507	-18.187	1.00	30.09	C
[9111]	ATOM	2334	CD2	TYR	B	41	35.816	-0.136	-16.070	1.00	31.72	C
[9112]	ATOM	2335	CE1	TYR	B	41	36.952	0.857	-18.402	1.00	31.04	C
[9113]	ATOM	2336	CE2	TYR	B	41	35.861	1.244	-16.279	1.00	32.35	C
[9114]	ATOM	2337	CZ	TYR	B	41	36.430	1.727	-17.454	1.00	31.60	C
[9115]	ATOM	2338	OH	TYR	B	41	36.494	3.076	-17.697	1.00	32.72	O
[9116]	ATOM	2339	N	GLY	B	42	36.518	-4.857	-14.706	1.00	32.82	N
[9117]	ATOM	2340	CA	GLY	B	42	35.834	-6.098	-14.394	1.00	34.95	C
[9118]	ATOM	2341	C	GLY	B	42	36.684	-7.061	-13.600	1.00	36.99	C
[9119]	ATOM	2342	O	GLY	B	42	37.917	-7.049	-13.684	1.00	36.92	O
[9120]	ATOM	2343	N	THR	B	43	36.007	-7.895	-12.820	1.00	39.06	N
[9121]	ATOM	2344	CA	THR	B	43	36.674	-8.895	-12.000	1.00	41.25	C
[9122]	ATOM	2345	C	THR	B	43	37.294	-9.976	-12.904	1.00	42.17	C
[9123]	ATOM	2346	O	THR	B	43	36.715	-10.340	-13.941	1.00	42.19	O
[9124]	ATOM	2347	CB	THR	B	43	35.723	-9.480	-10.910	1.00	41.11	C
[9125]	ATOM	2348	OG1	THR	B	43	36.388	-10.524	-10.195	1.00	42.55	O
[9126]	ATOM	2349	CG2	THR	B	43	34.458	-10.049	-11.520	1.00	41.70	C
[9127]	ATOM	2350	N	PRO	B	44	38.492	-10.463	-12.526	1.00	43.30	N
[9128]	ATOM	2351	CA	PRO	B	44	39.215	-11.472	-13.299	1.00	43.65	C

[9129]	ATOM	2352	C	PRO B	44	38.324	-12.655	-13.688	1.00	43.86	C
[9130]	ATOM	2353	O	PRO B	44	37.644	-13.232	-12.818	1.00	43.58	O
[9131]	ATOM	2354	CB	PRO B	44	40.301	-11.932	-12.325	1.00	44.01	C
[9132]	ATOM	2355	CG	PRO B	44	40.570	-10.722	-11.482	1.00	44.18	C
[9133]	ATOM	2356	CD	PRO B	44	39.235	-10.058	-11.313	1.00	43.39	C
[9134]	ATOM	2357	N	ALA B	45	38.329	-12.999	-14.980	1.00	43.49	N
[9135]	ATOM	2358	CA	ALA B	45	37.529	-14.112	-15.500	1.00	43.35	C
[9136]	ATOM	2359	C	ALA B	45	38.387	-15.060	-16.361	1.00	43.00	C
[9137]	ATOM	2360	O	ALA B	45	38.289	-15.038	-17.591	1.00	43.23	O
[9138]	ATOM	2361	CB	ALA B	45	36.321	-13.580	-16.286	1.00	43.14	C
[9139]	ATOM	2362	N	PRO B	46	39.215	-15.915	-15.709	1.00	42.58	N
[9140]	ATOM	2363	CA	PRO B	46	40.309	-16.632	-16.391	1.00	41.75	C
[9141]	ATOM	2364	C	PRO B	46	39.832	-17.795	-17.261	1.00	40.74	C
[9142]	ATOM	2365	O	PRO B	46	40.590	-18.283	-18.110	1.00	40.57	O
[9143]	ATOM	2366	CB	PRO B	46	41.192	-17.138	-15.233	1.00	42.18	C
[9144]	ATOM	2367	CG	PRO B	46	40.576	-16.579	-13.955	1.00	42.68	C
[9145]	ATOM	2368	CD	PRO B	46	39.144	-16.283	-14.283	1.00	42.68	C
[9146]	ATOM	2369	N	ALA B	47	38.585	-18.213	-17.058	1.00	38.80	N
[9147]	ATOM	2370	CA	ALA B	47	37.941	-19.212	-17.896	1.00	37.38	C
[9148]	ATOM	2371	C	ALA B	47	37.428	-18.633	-19.242	1.00	36.12	C
[9149]	ATOM	2372	O	ALA B	47	36.884	-19.364	-20.079	1.00	36.18	O
[9150]	ATOM	2373	CB	ALA B	47	36.792	-19.843	-17.121	1.00	37.51	C
[9151]	ATOM	2374	N	ARG B	48	37.600	-17.329	-19.450	1.00	34.21	N
[9152]	ATOM	2375	CA	ARG B	48	36.916	-16.629	-20.533	1.00	32.78	C
[9153]	ATOM	2376	C	ARG B	48	37.802	-15.618	-21.232	1.00	31.49	C
[9154]	ATOM	2377	O	ARG B	48	38.642	-15.012	-20.581	1.00	31.97	O
[9155]	ATOM	2378	CB	ARG B	48	35.711	-15.889	-19.966	1.00	32.86	C
[9156]	ATOM	2379	CG	ARG B	48	34.584	-16.805	-19.614	1.00	33.21	C
[9157]	ATOM	2380	CD	ARG B	48	33.425	-16.052	-19.062	1.00	31.68	C
[9158]	ATOM	2381	NE	ARG B	48	32.318	-16.972	-18.880	1.00	32.35	N
[9159]	ATOM	2382	CZ	ARG B	48	31.044	-16.620	-18.918	1.00	30.80	C
[9160]	ATOM	2383	NH1	ARG B	48	30.722	-15.357	-19.148	1.00	30.29	N
[9161]	ATOM	2384	NH2	ARG B	48	30.096	-17.535	-18.731	1.00	30.32	N
[9162]	ATOM	2385	N	PRO B	49	37.587	-15.393	-22.553	1.00	29.94	N
[9163]	ATOM	2386	CA	PRO B	49	38.363	-14.394	-23.278	1.00	28.58	C
[9164]	ATOM	2387	C	PRO B	49	38.048	-13.009	-22.737	1.00	27.55	C

[9165]	ATOM	2388	O	PRO	B	49	36.997	-12.830	-22.127	1.00	27.65	O
[9166]	ATOM	2389	CB	PRO	B	49	37.841	-14.522	-24.710	1.00	28.03	C
[9167]	ATOM	2390	CG	PRO	B	49	36.443	-15.039	-24.553	1.00	29.12	C
[9168]	ATOM	2391	CD	PRO	B	49	36.578	-16.022	-23.426	1.00	29.76	C
[9169]	ATOM	2392	N	ALA	B	50	38.964	-12.061	-22.921	1.00	26.44	N
[9170]	ATOM	2393	CA	ALA	B	50	38.697	-10.676	-22.596	1.00	25.44	C
[9171]	ATOM	2394	C	ALA	B	50	37.926	-10.068	-23.750	1.00	25.50	C
[9172]	ATOM	2395	O	ALA	B	50	38.152	-10.411	-24.920	1.00	25.42	O
[9173]	ATOM	2396	CB	ALA	B	50	39.987	-9.902	-22.369	1.00	25.27	C
[9174]	ATOM	2397	N	ILE	B	51	37.009	-9.169	-23.426	1.00	24.20	N
[9175]	ATOM	2398	CA	ILE	B	51	36.380	-8.360	-24.451	1.00	24.23	C
[9176]	ATOM	2399	C	ILE	B	51	37.281	-7.160	-24.677	1.00	23.65	C
[9177]	ATOM	2400	O	ILE	B	51	37.471	-6.349	-23.757	1.00	24.40	O
[9178]	ATOM	2401	CB	ILE	B	51	34.960	-7.948	-24.038	1.00	24.25	C
[9179]	ATOM	2402	CG1	ILE	B	51	34.117	-9.207	-23.812	1.00	24.43	C
[9180]	ATOM	2403	CG2	ILE	B	51	34.324	-7.039	-25.099	1.00	24.02	C
[9181]	ATOM	2404	CD1	ILE	B	51	32.830	-8.918	-23.070	1.00	28.36	C
[9182]	ATOM	2405	N	LEU	B	52	37.894	-7.088	-25.861	1.00	22.62	N
[9183]	ATOM	2406	CA	LEU	B	52	38.807	-5.993	-26.206	1.00	21.60	C
[9184]	ATOM	2407	C	LEU	B	52	38.168	-5.091	-27.270	1.00	21.42	C
[9185]	ATOM	2408	O	LEU	B	52	37.759	-5.582	-28.320	1.00	20.92	O
[9186]	ATOM	2409	CB	LEU	B	52	40.150	-6.556	-26.707	1.00	21.68	C
[9187]	ATOM	2410	CG	LEU	B	52	41.301	-5.577	-27.011	1.00	23.08	C
[9188]	ATOM	2411	CD1	LEU	B	52	42.661	-6.128	-26.615	1.00	22.82	C
[9189]	ATOM	2412	CD2	LEU	B	52	41.285	-5.194	-28.502	1.00	21.75	C
[9190]	ATOM	2413	N	THR	B	53	38.088	-3.783	-27.013	1.00	20.62	N
[9191]	ATOM	2414	CA	THR	B	53	37.474	-2.861	-27.976	1.00	19.57	C
[9192]	ATOM	2415	C	THR	B	53	38.507	-1.973	-28.655	1.00	19.72	C
[9193]	ATOM	2416	O	THR	B	53	39.544	-1.662	-28.079	1.00	19.81	O
[9194]	ATOM	2417	CB	THR	B	53	36.411	-1.967	-27.341	1.00	19.94	C
[9195]	ATOM	2418	OG1	THR	B	53	37.030	-1.092	-26.391	1.00	19.36	O
[9196]	ATOM	2419	CG2	THR	B	53	35.325	-2.795	-26.650	1.00	19.59	C
[9197]	ATOM	2420	N	TYR	B	54	38.248	-1.608	-29.908	1.00	19.04	N
[9198]	ATOM	2421	CA	TYR	B	54	39.146	-0.729	-30.644	1.00	19.11	C
[9199]	ATOM	2422	C	TYR	B	54	38.281	0.260	-31.439	1.00	19.25	C
[9200]	ATOM	2423	O	TYR	B	54	37.461	-0.144	-32.255	1.00	19.58	O

[9201]	ATOM	2424	CB	TYR	B	54	40.114	-1.523	-31.549	1.00	18.26	C
[9202]	ATOM	2425	CG	TYR	B	54	41.479	-0.819	-31.736	1.00	19.37	C
[9203]	ATOM	2426	CD1	TYR	B	54	41.566	0.404	-32.404	1.00	17.91	C
[9204]	ATOM	2427	CD2	TYR	B	54	42.660	-1.377	-31.232	1.00	21.22	C
[9205]	ATOM	2428	CE1	TYR	B	54	42.769	1.065	-32.586	1.00	19.14	C
[9206]	ATOM	2429	CE2	TYR	B	54	43.911	-0.717	-31.400	1.00	20.08	C
[9207]	ATOM	2430	CZ	TYR	B	54	43.944	0.501	-32.081	1.00	20.01	C
[9208]	ATOM	2431	OH	TYR	B	54	45.137	1.162	-32.265	1.00	20.47	O
[9209]	ATOM	2432	N	HIS	B	55	38.467	1.559	-31.168	1.00	19.48	N
[9210]	ATOM	2433	CA	HIS	B	55	37.566	2.620	-31.625	1.00	19.81	C
[9211]	ATOM	2434	C	HIS	B	55	37.896	3.121	-33.040	1.00	20.51	C
[9212]	ATOM	2435	O	HIS	B	55	38.960	2.800	-33.610	1.00	21.50	O
[9213]	ATOM	2436	CB	HIS	B	55	37.653	3.803	-30.638	1.00	19.33	C
[9214]	ATOM	2437	CG	HIS	B	55	39.031	4.378	-30.566	1.00	20.35	C
[9215]	ATOM	2438	ND1	HIS	B	55	39.510	5.273	-31.499	1.00	18.12	N
[9216]	ATOM	2439	CD2	HIS	B	55	40.072	4.094	-29.747	1.00	21.00	C
[9217]	ATOM	2440	CE1	HIS	B	55	40.773	5.546	-31.235	1.00	18.87	C
[9218]	ATOM	2441	NE2	HIS	B	55	41.130	4.868	-30.158	1.00	20.65	N
[9219]	ATOM	2442	N	ASP	B	56	36.999	3.954	-33.579	1.00	21.13	N
[9220]	ATOM	2443	CA	ASP	B	56	37.093	4.490	-34.949	1.00	20.82	C
[9221]	ATOM	2444	C	ASP	B	56	37.906	5.777	-35.012	1.00	20.82	C
[9222]	ATOM	2445	O	ASP	B	56	38.249	6.374	-33.984	1.00	19.70	O
[9223]	ATOM	2446	CB	ASP	B	56	35.684	4.721	-35.494	1.00	20.92	C
[9224]	ATOM	2447	CG	ASP	B	56	35.619	4.631	-37.021	1.00	23.13	C
[9225]	ATOM	2448	OD1	ASP	B	56	36.674	4.538	-37.694	1.00	22.17	O
[9226]	ATOM	2449	OD2	ASP	B	56	34.494	4.658	-37.546	1.00	23.27	O
[9227]	ATOM	2450	N	VAL	B	57	38.236	6.193	-36.234	1.00	21.48	N
[9228]	ATOM	2451	CA	VAL	B	57	38.953	7.448	-36.488	1.00	20.85	C
[9229]	ATOM	2452	C	VAL	B	57	38.104	8.649	-36.006	1.00	20.97	C
[9230]	ATOM	2453	O	VAL	B	57	36.948	8.772	-36.391	1.00	20.34	O
[9231]	ATOM	2454	CB	VAL	B	57	39.201	7.609	-38.032	1.00	20.94	C
[9232]	ATOM	2455	CG1	VAL	B	57	39.884	8.937	-38.319	1.00	20.64	C
[9233]	ATOM	2456	CG2	VAL	B	57	40.042	6.468	-38.554	1.00	19.46	C
[9234]	ATOM	2457	N	GLY	B	58	38.666	9.535	-35.182	1.00	21.34	N
[9235]	ATOM	2458	CA	GLY	B	58	37.935	10.736	-34.769	1.00	20.57	C
[9236]	ATOM	2459	C	GLY	B	58	37.517	10.587	-33.332	1.00	21.42	C

[9237]	ATOM	2460	O	GLY	B	58	37.238	11.581	-32.642	1.00	21.10	O
[9238]	ATOM	2461	N	LEU	B	59	37.529	9.331	-32.878	1.00	21.42	N
[9239]	ATOM	2462	CA	LEU	B	59	37.058	8.940	-31.551	1.00	21.42	C
[9240]	ATOM	2463	C	LEU	B	59	38.172	8.413	-30.628	1.00	21.39	C
[9241]	ATOM	2464	O	LEU	B	59	39.345	8.308	-31.019	1.00	21.01	O
[9242]	ATOM	2465	CB	LEU	B	59	35.951	7.896	-31.691	1.00	21.15	C
[9243]	ATOM	2466	CG	LEU	B	59	34.823	8.310	-32.654	1.00	23.25	C
[9244]	ATOM	2467	CD1	LEU	B	59	33.738	7.236	-32.732	1.00	24.32	C
[9245]	ATOM	2468	CD2	LEU	B	59	34.237	9.645	-32.241	1.00	20.49	C
[9246]	ATOM	2469	N	ASN	B	60	37.795	8.131	-29.393	1.00	20.52	N
[9247]	ATOM	2470	CA	ASN	B	60	38.602	7.305	-28.516	1.00	20.98	C
[9248]	ATOM	2471	C	ASN	B	60	37.648	6.353	-27.794	1.00	21.78	C
[9249]	ATOM	2472	O	ASN	B	60	36.451	6.313	-28.132	1.00	21.17	O
[9250]	ATOM	2473	CB	ASN	B	60	39.511	8.124	-27.582	1.00	19.86	C
[9251]	ATOM	2474	CG	ASN	B	60	38.750	9.041	-26.628	1.00	19.94	C
[9252]	ATOM	2475	OD1	ASN	B	60	37.525	8.998	-26.502	1.00	20.54	O
[9253]	ATOM	2476	ND2	ASN	B	60	39.499	9.889	-25.940	1.00	19.28	N
[9254]	ATOM	2477	N	TYR	B	61	38.142	5.570	-26.837	1.00	22.12	N
[9255]	ATOM	2478	CA	TYR	B	61	37.228	4.655	-26.175	1.00	22.92	C
[9256]	ATOM	2479	C	TYR	B	61	36.031	5.448	-25.643	1.00	23.28	C
[9257]	ATOM	2480	O	TYR	B	61	34.875	5.037	-25.838	1.00	23.10	O
[9258]	ATOM	2481	CB	TYR	B	61	37.889	3.908	-25.026	1.00	23.10	C
[9259]	ATOM	2482	CG	TYR	B	61	36.848	3.480	-24.019	1.00	23.92	C
[9260]	ATOM	2483	CD1	TYR	B	61	35.928	2.479	-24.326	1.00	23.08	C
[9261]	ATOM	2484	CD2	TYR	B	61	36.746	4.112	-22.768	1.00	24.50	C
[9262]	ATOM	2485	CE1	TYR	B	61	34.949	2.090	-23.406	1.00	20.92	C
[9263]	ATOM	2486	CE2	TYR	B	61	35.766	3.728	-21.860	1.00	24.27	C
[9264]	ATOM	2487	CZ	TYR	B	61	34.874	2.721	-22.185	1.00	23.53	C
[9265]	ATOM	2488	OH	TYR	B	61	33.886	2.344	-21.277	1.00	22.64	O
[9266]	ATOM	2489	N	LYS	B	62	36.303	6.575	-24.969	1.00	23.76	N
[9267]	ATOM	2490	CA	LYS	B	62	35.234	7.369	-24.344	1.00	24.66	C
[9268]	ATOM	2491	C	LYS	B	62	34.155	7.860	-25.313	1.00	24.17	C
[9269]	ATOM	2492	O	LYS	B	62	32.963	7.711	-25.029	1.00	23.85	O
[9270]	ATOM	2493	CB	LYS	B	62	35.800	8.539	-23.525	1.00	25.42	C
[9271]	ATOM	2494	CG	LYS	B	62	34.736	9.343	-22.772	1.00	27.14	C
[9272]	ATOM	2495	CD	LYS	B	62	35.346	10.478	-21.914	1.00	27.17	C



[9273]	ATOM	2496	CE	LYS	B	62	34.258	11.188	-21.113	1.00	32.24	C
[9274]	ATOM	2497	NZ	LYS	B	62	34.683	12.547	-20.602	1.00	37.20	N
[9275]	ATOM	2498	N	SER	B	63	34.546	8.448	-26.445	1.00	23.17	N
[9276]	ATOM	2499	CA	SER	B	63	33.546	8.929	-27.393	1.00	22.88	C
[9277]	ATOM	2500	C	SER	B	63	32.991	7.824	-28.302	1.00	23.25	C
[9278]	ATOM	2501	O	SER	B	63	31.999	8.046	-28.977	1.00	24.14	O
[9279]	ATOM	2502	CB	SER	B	63	34.086	10.075	-28.252	1.00	22.72	C
[9280]	ATOM	2503	OG	SER	B	63	35.317	9.718	-28.859	1.00	22.26	O
[9281]	ATOM	2504	N	CYS	B	64	33.608	6.648	-28.335	1.00	22.68	N
[9282]	ATOM	2505	CA	CYS	B	64	33.133	5.593	-29.250	1.00	22.36	C
[9283]	ATOM	2506	C	CYS	B	64	32.294	4.525	-28.549	1.00	22.45	C
[9284]	ATOM	2507	O	CYS	B	64	31.244	4.151	-29.050	1.00	21.74	O
[9285]	ATOM	2508	CB	CYS	B	64	34.314	4.926	-29.948	1.00	22.56	C
[9286]	ATOM	2509	SG	CYS	B	64	33.891	3.799	-31.301	1.00	22.99	S
[9287]	ATOM	2510	N	PHE	B	65	32.768	4.042	-27.395	1.00	22.93	N
[9288]	ATOM	2511	CA	PHE	B	65	32.228	2.834	-26.777	1.00	22.94	C
[9289]	ATOM	2512	C	PHE	B	65	31.726	3.018	-25.365	1.00	23.77	C
[9290]	ATOM	2513	O	PHE	B	65	30.948	2.194	-24.891	1.00	24.14	O
[9291]	ATOM	2514	CB	PHE	B	65	33.279	1.728	-26.726	1.00	22.53	C
[9292]	ATOM	2515	CG	PHE	B	65	33.488	1.001	-28.022	1.00	23.68	C
[9293]	ATOM	2516	CD1	PHE	B	65	32.446	0.324	-28.647	1.00	22.65	C
[9294]	ATOM	2517	CD2	PHE	B	65	34.752	0.985	-28.620	1.00	23.88	C
[9295]	ATOM	2518	CE1	PHE	B	65	32.653	-0.382	-29.830	1.00	23.95	C
[9296]	ATOM	2519	CE2	PHE	B	65	34.952	0.287	-29.796	1.00	22.27	C
[9297]	ATOM	2520	CZ	PHE	B	65	33.911	-0.405	-30.389	1.00	21.49	C
[9298]	ATOM	2521	N	GLN	B	66	32.165	4.069	-24.680	1.00	24.36	N
[9299]	ATOM	2522	CA	GLN	B	66	31.698	4.301	-23.309	1.00	25.07	C
[9300]	ATOM	2523	C	GLN	B	66	30.151	4.369	-23.154	1.00	24.93	C
[9301]	ATOM	2524	O	GLN	B	66	29.621	3.776	-22.228	1.00	26.21	O
[9302]	ATOM	2525	CB	GLN	B	66	32.362	5.523	-22.640	1.00	24.39	C
[9303]	ATOM	2526	CG	GLN	B	66	32.022	5.625	-21.144	1.00	26.05	C
[9304]	ATOM	2527	CD	GLN	B	66	32.771	6.729	-20.421	1.00	27.12	C
[9305]	ATOM	2528	OE1	GLN	B	66	32.415	7.905	-20.525	1.00	29.58	O
[9306]	ATOM	2529	NE2	GLN	B	66	33.813	6.356	-19.682	1.00	27.60	N
[9307]	ATOM	2530	N	PRO	B	67	29.431	5.103	-24.032	1.00	24.62	N
[9308]	ATOM	2531	CA	PRO	B	67	27.969	5.045	-23.885	1.00	24.04	C

[9309]	ATOM	2532	C	PRO	B	67	27.403	3.609	-23.987	1.00	24.19	C
[9310]	ATOM	2533	O	PRO	B	67	26.457	3.270	-23.269	1.00	24.73	O
[9311]	ATOM	2534	CB	PRO	B	67	27.471	5.909	-25.042	1.00	24.26	C
[9312]	ATOM	2535	CG	PRO	B	67	28.616	6.827	-25.351	1.00	25.05	C
[9313]	ATOM	2536	CD	PRO	B	67	29.847	6.022	-25.111	1.00	23.85	C
[9314]	ATOM	2537	N	LEU	B	68	27.983	2.775	-24.850	1.00	23.12	N
[9315]	ATOM	2538	CA	LEU	B	68	27.518	1.408	-25.022	1.00	22.60	C
[9316]	ATOM	2539	C	LEU	B	68	27.818	0.569	-23.787	1.00	22.63	C
[9317]	ATOM	2540	O	LEU	B	68	26.929	-0.089	-23.266	1.00	22.37	O
[9318]	ATOM	2541	CB	LEU	B	68	28.148	0.750	-26.259	1.00	22.01	C
[9319]	ATOM	2542	CG	LEU	B	68	27.785	-0.721	-26.495	1.00	20.61	C
[9320]	ATOM	2543	CD1	LEU	B	68	26.302	-0.869	-26.816	1.00	22.17	C
[9321]	ATOM	2544	CD2	LEU	B	68	28.587	-1.315	-27.610	1.00	21.34	C
[9322]	ATOM	2545	N	PHE	B	69	29.074	0.592	-23.337	1.00	22.85	N
[9323]	ATOM	2546	CA	PHE	B	69	29.505	-0.233	-22.226	1.00	23.27	C
[9324]	ATOM	2547	C	PHE	B	69	28.989	0.186	-20.849	1.00	24.14	C
[9325]	ATOM	2548	O	PHE	B	69	28.893	-0.645	-19.949	1.00	24.52	O
[9326]	ATOM	2549	CB	PHE	B	69	31.020	-0.475	-22.260	1.00	23.41	C
[9327]	ATOM	2550	CG	PHE	B	69	31.411	-1.561	-23.218	1.00	23.13	C
[9328]	ATOM	2551	CD1	PHE	B	69	31.428	-1.318	-24.587	1.00	23.79	C
[9329]	ATOM	2552	CD2	PHE	B	69	31.662	-2.852	-22.764	1.00	24.12	C
[9330]	ATOM	2553	CE1	PHE	B	69	31.751	-2.331	-25.499	1.00	24.35	C
[9331]	ATOM	2554	CE2	PHE	B	69	31.978	-3.871	-23.651	1.00	24.94	C
[9332]	ATOM	2555	CZ	PHE	B	69	32.034	-3.614	-25.034	1.00	24.94	C
[9333]	ATOM	2556	N	GLN	B	70	28.621	1.454	-20.698	1.00	24.46	N
[9334]	ATOM	2557	CA	GLN	B	70	27.985	1.934	-19.461	1.00	25.09	C
[9335]	ATOM	2558	C	GLN	B	70	26.458	1.754	-19.456	1.00	25.55	C
[9336]	ATOM	2559	O	GLN	B	70	25.824	1.910	-18.422	1.00	25.90	O
[9337]	ATOM	2560	CB	GLN	B	70	28.325	3.404	-19.226	1.00	25.01	C
[9338]	ATOM	2561	CG	GLN	B	70	29.777	3.640	-18.837	1.00	26.70	C
[9339]	ATOM	2562	CD	GLN	B	70	29.995	5.051	-18.304	1.00	30.03	C
[9340]	ATOM	2563	OE1	GLN	B	70	29.267	5.987	-18.661	1.00	28.38	O
[9341]	ATOM	2564	NE2	GLN	B	70	30.981	5.202	-17.422	1.00	29.43	N
[9342]	ATOM	2565	N	PHE	B	71	25.889	1.415	-20.612	1.00	25.51	N
[9343]	ATOM	2566	CA	PHE	B	71	24.483	1.056	-20.738	1.00	25.77	C
[9344]	ATOM	2567	C	PHE	B	71	24.136	-0.115	-19.808	1.00	25.97	C

[9345]	ATOM	2568	O	PHE	B	71	24.854	-1.124	-19.778	1.00	24.93	O
[9346]	ATOM	2569	CB	PHE	B	71	24.160	0.685	-22.192	1.00	25.27	C
[9347]	ATOM	2570	CG	PHE	B	71	22.678	0.541	-22.482	1.00	25.54	C
[9348]	ATOM	2571	CD1	PHE	B	71	21.798	1.596	-22.248	1.00	25.49	C
[9349]	ATOM	2572	CD2	PHE	B	71	22.175	-0.643	-23.014	1.00	25.54	C
[9350]	ATOM	2573	CE1	PHE	B	71	20.424	1.464	-22.538	1.00	26.87	C
[9351]	ATOM	2574	CE2	PHE	B	71	20.820	-0.791	-23.301	1.00	26.83	C
[9352]	ATOM	2575	CZ	PHE	B	71	19.936	0.260	-23.059	1.00	27.03	C
[9353]	ATOM	2576	N	GLU	B	72	23.041	0.021	-19.060	1.00	26.30	N
[9354]	ATOM	2577	CA	GLU	B	72	22.689	-0.975	-18.031	1.00	27.49	C
[9355]	ATOM	2578	C	GLU	B	72	22.612	-2.395	-18.560	1.00	26.57	C
[9356]	ATOM	2579	O	GLU	B	72	23.088	-3.315	-17.917	1.00	26.28	O
[9357]	ATOM	2580	CB	GLU	B	72	21.349	-0.656	-17.382	1.00	28.13	C
[9358]	ATOM	2581	CG	GLU	B	72	21.347	0.568	-16.525	1.00	34.01	C
[9359]	ATOM	2582	CD	GLU	B	72	19.940	0.944	-16.092	1.00	40.55	C
[9360]	ATOM	2583	OE1	GLU	B	72	19.776	2.049	-15.504	1.00	43.53	O
[9361]	ATOM	2584	OE2	GLU	B	72	19.007	0.128	-16.340	1.00	41.36	O
[9362]	ATOM	2585	N	ASP	B	73	21.980	-2.556	-19.717	1.00	26.04	N
[9363]	ATOM	2586	CA	ASP	B	73	21.775	-3.858	-20.310	1.00	26.35	C
[9364]	ATOM	2587	C	ASP	B	73	23.108	-4.511	-20.636	1.00	25.99	C
[9365]	ATOM	2588	O	ASP	B	73	23.252	-5.735	-20.512	1.00	25.97	O
[9366]	ATOM	2589	CB	ASP	B	73	20.969	-3.712	-21.593	1.00	26.62	C
[9367]	ATOM	2590	CG	ASP	B	73	19.473	-3.499	-21.350	1.00	30.00	C
[9368]	ATOM	2591	OD1	ASP	B	73	19.028	-3.237	-20.190	1.00	28.77	O
[9369]	ATOM	2592	OD2	ASP	B	73	18.734	-3.605	-22.362	1.00	31.96	O
[9370]	ATOM	2593	N	MET	B	74	24.065	-3.696	-21.081	1.00	25.07	N
[9371]	ATOM	2594	CA	MET	B	74	25.399	-4.183	-21.404	1.00	24.89	C
[9372]	ATOM	2595	C	MET	B	74	26.160	-4.569	-20.127	1.00	25.45	C
[9373]	ATOM	2596	O	MET	B	74	26.775	-5.640	-20.075	1.00	25.56	O
[9374]	ATOM	2597	CB	MET	B	74	26.176	-3.173	-22.261	1.00	23.99	C
[9375]	ATOM	2598	CG	MET	B	74	27.519	-3.682	-22.741	1.00	22.72	C
[9376]	ATOM	2599	SD	MET	B	74	27.450	-5.108	-23.873	1.00	25.03	S
[9377]	ATOM	2600	CE	MET	B	74	27.095	-4.330	-25.430	1.00	22.37	C
[9378]	ATOM	2601	N	GLN	B	75	26.108	-3.732	-19.095	1.00	26.05	N
[9379]	ATOM	2602	CA	GLN	B	75	26.725	-4.095	-17.805	1.00	26.94	C
[9380]	ATOM	2603	C	GLN	B	75	26.302	-5.498	-17.328	1.00	27.70	C

[9381]	ATOM	2604	O	GLN	B	75	27.149	-6.319	-16.941	1.00	27.26	O
[9382]	ATOM	2605	CB	GLN	B	75	26.443	-3.042	-16.727	1.00	26.83	C
[9383]	ATOM	2606	CG	GLN	B	75	27.278	-1.774	-16.873	1.00	28.30	C
[9384]	ATOM	2607	CD	GLN	B	75	28.779	-2.045	-16.744	1.00	30.48	C
[9385]	ATOM	2608	OE1	GLN	B	75	29.577	-1.766	-17.668	1.00	29.51	O
[9386]	ATOM	2609	NE2	GLN	B	75	29.168	-2.618	-15.604	1.00	27.98	N
[9387]	ATOM	2610	N	GLU	B	76	24.994	-5.751	-17.375	1.00	28.33	N
[9388]	ATOM	2611	CA	GLU	B	76	24.399	-7.040	-17.044	1.00	29.84	C
[9389]	ATOM	2612	C	GLU	B	76	25.061	-8.192	-17.818	1.00	29.62	C
[9390]	ATOM	2613	O	GLU	B	76	25.469	-9.191	-17.215	1.00	30.36	O
[9391]	ATOM	2614	CB	GLU	B	76	22.881	-7.011	-17.295	1.00	29.03	C
[9392]	ATOM	2615	CG	GLU	B	76	22.089	-6.028	-16.374	1.00	31.66	C
[9393]	ATOM	2616	CD	GLU	B	76	20.559	-5.942	-16.659	1.00	32.81	C
[9394]	ATOM	2617	OE1	GLU	B	76	20.061	-6.504	-17.673	1.00	35.62	O
[9395]	ATOM	2618	OE2	GLU	B	76	19.845	-5.293	-15.847	1.00	37.28	O
[9396]	ATOM	2619	N	ILE	B	77	25.205	-8.059	-19.134	1.00	29.15	N
[9397]	ATOM	2620	CA	ILE	B	77	25.680	-9.207	-19.912	1.00	29.64	C
[9398]	ATOM	2621	C	ILE	B	77	27.199	-9.464	-19.891	1.00	29.48	C
[9399]	ATOM	2622	O	ILE	B	77	27.635	-10.599	-20.126	1.00	29.48	O
[9400]	ATOM	2623	CB	ILE	B	77	25.082	-9.267	-21.347	1.00	29.84	C
[9401]	ATOM	2624	CG1	ILE	B	77	25.679	-8.212	-22.260	1.00	30.40	C
[9402]	ATOM	2625	CG2	ILE	B	77	23.552	-9.159	-21.296	1.00	30.89	C
[9403]	ATOM	2626	CD1	ILE	B	77	25.481	-8.527	-23.717	1.00	31.78	C
[9404]	ATOM	2627	N	ILE	B	78	27.982	-8.434	-19.566	1.00	29.14	N
[9405]	ATOM	2628	CA	ILE	B	78	29.460	-8.525	-19.541	1.00	29.39	C
[9406]	ATOM	2629	C	ILE	B	78	30.057	-8.718	-18.154	1.00	29.82	C
[9407]	ATOM	2630	O	ILE	B	78	31.297	-8.724	-18.000	1.00	29.88	O
[9408]	ATOM	2631	CB	ILE	B	78	30.151	-7.289	-20.183	1.00	28.82	C
[9409]	ATOM	2632	CG1	ILE	B	78	29.806	-6.016	-19.402	1.00	28.41	C
[9410]	ATOM	2633	CG2	ILE	B	78	29.812	-7.221	-21.667	1.00	28.34	C
[9411]	ATOM	2634	CD1	ILE	B	78	30.457	-4.776	-19.884	1.00	28.48	C
[9412]	ATOM	2635	N	GLN	B	79	29.183	-8.880	-17.161	1.00	30.00	N
[9413]	ATOM	2636	CA	GLN	B	79	29.576	-8.942	-15.745	1.00	30.53	C
[9414]	ATOM	2637	C	GLN	B	79	30.579	-10.054	-15.430	1.00	29.66	C
[9415]	ATOM	2638	O	GLN	B	79	31.374	-9.914	-14.514	1.00	29.77	O
[9416]	ATOM	2639	CB	GLN	B	79	28.340	-9.027	-14.830	1.00	30.43	C

[9417]	ATOM	2640	CG	GLN	B	79	27.406	-10.230	-15.132	1.00	32.21	C
[9418]	ATOM	2641	CD	GLN	B	79	26.194	-10.329	-14.188	1.00	32.69	C
[9419]	ATOM	2642	OE1	GLN	B	79	26.345	-10.478	-12.970	1.00	36.86	O
[9420]	ATOM	2643	NE2	GLN	B	79	24.992	-10.270	-14.756	1.00	34.74	N
[9421]	ATOM	2644	N	ASN	B	80	30.554	-11.144	-16.194	1.00	29.23	N
[9422]	ATOM	2645	CA	ASN	B	80	31.529	-12.238	-16.000	1.00	29.00	C
[9423]	ATOM	2646	C	ASN	B	80	32.692	-12.273	-17.010	1.00	28.08	C
[9424]	ATOM	2647	O	ASN	B	80	33.302	-13.322	-17.237	1.00	28.07	O
[9425]	ATOM	2648	CB	ASN	B	80	30.822	-13.600	-15.938	1.00	29.71	C
[9426]	ATOM	2649	CG	ASN	B	80	29.802	-13.687	-14.811	1.00	30.74	C
[9427]	ATOM	2650	OD1	ASN	B	80	30.034	-13.227	-13.683	1.00	29.85	O
[9428]	ATOM	2651	ND2	ASN	B	80	28.652	-14.286	-15.117	1.00	34.35	N
[9429]	ATOM	2652	N	PHE	B	81	32.991	-11.117	-17.600	1.00	26.73	N
[9430]	ATOM	2653	CA	PHE	B	81	34.132	-10.948	-18.517	1.00	26.05	C
[9431]	ATOM	2654	C	PHE	B	81	35.035	-9.808	-18.036	1.00	25.23	C
[9432]	ATOM	2655	O	PHE	B	81	34.576	-8.871	-17.381	1.00	24.46	O
[9433]	ATOM	2656	CB	PHE	B	81	33.656	-10.573	-19.922	1.00	25.49	C
[9434]	ATOM	2657	CG	PHE	B	81	32.924	-11.664	-20.665	1.00	25.55	C
[9435]	ATOM	2658	CD1	PHE	B	81	33.621	-12.562	-21.478	1.00	25.84	C
[9436]	ATOM	2659	CD2	PHE	B	81	31.534	-11.747	-20.612	1.00	23.64	C
[9437]	ATOM	2660	CE1	PHE	B	81	32.936	-13.552	-22.207	1.00	26.24	C
[9438]	ATOM	2661	CE2	PHE	B	81	30.842	-12.721	-21.318	1.00	24.34	C
[9439]	ATOM	2662	CZ	PHE	B	81	31.540	-13.628	-22.130	1.00	24.38	C
[9440]	ATOM	2663	N	VAL	B	82	36.315	-9.871	-18.374	1.00	24.87	N
[9441]	ATOM	2664	CA	VAL	B	82	37.159	-8.699	-18.194	1.00	24.26	C
[9442]	ATOM	2665	C	VAL	B	82	37.140	-7.947	-19.528	1.00	24.43	C
[9443]	ATOM	2666	O	VAL	B	82	37.072	-8.580	-20.605	1.00	24.62	O
[9444]	ATOM	2667	CB	VAL	B	82	38.600	-9.026	-17.653	1.00	24.82	C
[9445]	ATOM	2668	CG1	VAL	B	82	39.237	-10.158	-18.418	1.00	25.82	C
[9446]	ATOM	2669	CG2	VAL	B	82	39.504	-7.794	-17.723	1.00	23.58	C
[9447]	ATOM	2670	N	ARG	B	83	37.145	-6.611	-19.454	1.00	23.21	N
[9448]	ATOM	2671	CA	ARG	B	83	37.103	-5.744	-20.643	1.00	22.57	C
[9449]	ATOM	2672	C	ARG	B	83	38.394	-4.925	-20.734	1.00	21.74	C
[9450]	ATOM	2673	O	ARG	B	83	38.855	-4.396	-19.742	1.00	21.51	O
[9451]	ATOM	2674	CB	ARG	B	83	35.890	-4.802	-20.587	1.00	22.70	C
[9452]	ATOM	2675	CG	ARG	B	83	34.515	-5.472	-20.744	1.00	22.37	C

[9453]	ATOM	2676	CD	ARG	B	83	33.993	-6.048	-19.414	1.00	24.82	C
[9454]	ATOM	2677	NE	ARG	B	83	33.554	-4.994	-18.496	1.00	25.15	N
[9455]	ATOM	2678	CZ	ARG	B	83	33.166	-5.198	-17.235	1.00	25.82	C
[9456]	ATOM	2679	NH1	ARG	B	83	33.181	-6.425	-16.718	1.00	24.24	N
[9457]	ATOM	2680	NH2	ARG	B	83	32.780	-4.174	-16.483	1.00	24.75	N
[9458]	ATOM	2681	N	VAL	B	84	38.960	-4.828	-21.933	1.00	21.33	N
[9459]	ATOM	2682	CA	VAL	B	84	40.183	-4.083	-22.158	1.00	20.51	C
[9460]	ATOM	2683	C	VAL	B	84	39.834	-3.052	-23.219	1.00	20.72	C
[9461]	ATOM	2684	O	VAL	B	84	39.570	-3.400	-24.357	1.00	20.71	O
[9462]	ATOM	2685	CB	VAL	B	84	41.309	-5.022	-22.674	1.00	20.48	C
[9463]	ATOM	2686	CG1	VAL	B	84	42.591	-4.231	-22.925	1.00	20.36	C
[9464]	ATOM	2687	CG2	VAL	B	84	41.580	-6.154	-21.686	1.00	20.33	C
[9465]	ATOM	2688	N	HIS	B	85	39.805	-1.779	-22.870	1.00	20.37	N
[9466]	ATOM	2689	CA	HIS	B	85	39.322	-0.816	-23.860	1.00	19.87	C
[9467]	ATOM	2690	C	HIS	B	85	40.506	-0.036	-24.329	1.00	20.25	C
[9468]	ATOM	2691	O	HIS	B	85	41.104	0.690	-23.537	1.00	19.82	O
[9469]	ATOM	2692	CB	HIS	B	85	38.279	0.122	-23.274	1.00	19.30	C
[9470]	ATOM	2693	CG	HIS	B	85	37.019	-0.569	-22.880	1.00	18.30	C
[9471]	ATOM	2694	ND1	HIS	B	85	36.169	-1.141	-23.801	1.00	16.30	N
[9472]	ATOM	2695	CD2	HIS	B	85	36.478	-0.800	-21.660	1.00	16.78	C
[9473]	ATOM	2696	CE1	HIS	B	85	35.149	-1.686	-23.157	1.00	17.56	C
[9474]	ATOM	2697	NE2	HIS	B	85	35.319	-1.501	-21.859	1.00	16.47	N
[9475]	ATOM	2698	N	VAL	B	86	40.832	-0.192	-25.609	1.00	19.78	N
[9476]	ATOM	2699	CA	VAL	B	86	42.040	0.402	-26.165	1.00	20.66	C
[9477]	ATOM	2700	C	VAL	B	86	41.793	1.797	-26.750	1.00	22.09	C
[9478]	ATOM	2701	O	VAL	B	86	40.814	2.015	-27.484	1.00	22.32	O
[9479]	ATOM	2702	CB	VAL	B	86	42.658	-0.522	-27.257	1.00	20.54	C
[9480]	ATOM	2703	CG1	VAL	B	86	43.957	0.052	-27.830	1.00	21.05	C
[9481]	ATOM	2704	CG2	VAL	B	86	42.953	-1.905	-26.682	1.00	19.35	C
[9482]	ATOM	2705	N	ASP	B	87	42.723	2.713	-26.438	1.00	23.11	N
[9483]	ATOM	2706	CA	ASP	B	87	42.873	4.012	-27.101	1.00	23.39	C
[9484]	ATOM	2707	C	ASP	B	87	44.056	3.953	-28.069	1.00	23.25	C
[9485]	ATOM	2708	O	ASP	B	87	45.196	3.705	-27.647	1.00	23.15	O
[9486]	ATOM	2709	CB	ASP	B	87	43.136	5.104	-26.048	1.00	23.73	C
[9487]	ATOM	2710	CG	ASP	B	87	41.917	5.410	-25.198	1.00	25.55	C
[9488]	ATOM	2711	OD1	ASP	B	87	40.844	5.673	-25.785	1.00	27.75	O

[9489]	ATOM	2712	OD2	ASP	B	87	42.022	5.377	-23.947	1.00	28.63	O
[9490]	ATOM	2713	N	ALA	B	88	43.807	4.194	-29.353	1.00	22.35	N
[9491]	ATOM	2714	CA	ALA	B	88	44.881	4.192	-30.335	1.00	22.70	C
[9492]	ATOM	2715	C	ALA	B	88	45.950	5.234	-29.937	1.00	23.29	C
[9493]	ATOM	2716	O	ALA	B	88	45.630	6.206	-29.243	1.00	23.03	O
[9494]	ATOM	2717	CB	ALA	B	88	44.341	4.449	-31.721	1.00	21.74	C
[9495]	ATOM	2718	N	PRO	B	89	47.222	5.027	-30.358	1.00	23.75	N
[9496]	ATOM	2719	CA	PRO	B	89	48.281	5.999	-30.003	1.00	23.75	C
[9497]	ATOM	2720	C	PRO	B	89	47.885	7.468	-30.294	1.00	23.07	C
[9498]	ATOM	2721	O	PRO	B	89	47.440	7.788	-31.413	1.00	23.31	O
[9499]	ATOM	2722	CB	PRO	B	89	49.462	5.556	-30.880	1.00	23.41	C
[9500]	ATOM	2723	CG	PRO	B	89	49.267	4.078	-31.029	1.00	24.01	C
[9501]	ATOM	2724	CD	PRO	B	89	47.757	3.917	-31.173	1.00	23.70	C
[9502]	ATOM	2725	N	GLY	B	90	48.024	8.333	-29.295	1.00	21.90	N
[9503]	ATOM	2726	CA	GLY	B	90	47.683	9.753	-29.441	1.00	21.00	C
[9504]	ATOM	2727	C	GLY	B	90	46.209	10.129	-29.240	1.00	21.42	C
[9505]	ATOM	2728	O	GLY	B	90	45.863	11.297	-29.388	1.00	21.35	O
[9506]	ATOM	2729	N	MET	B	91	45.354	9.155	-28.902	1.00	20.83	N
[9507]	ATOM	2730	CA	MET	B	91	43.905	9.380	-28.786	1.00	21.90	C
[9508]	ATOM	2731	C	MET	B	91	43.350	9.387	-27.359	1.00	23.05	C
[9509]	ATOM	2732	O	MET	B	91	42.229	9.858	-27.136	1.00	23.33	O
[9510]	ATOM	2733	CB	MET	B	91	43.123	8.365	-29.614	1.00	21.52	C
[9511]	ATOM	2734	CG	MET	B	91	43.631	8.180	-31.048	1.00	20.43	C
[9512]	ATOM	2735	SD	MET	B	91	43.709	9.726	-31.974	1.00	23.20	S
[9513]	ATOM	2736	CE	MET	B	91	44.799	9.143	-33.279	1.00	21.61	C
[9514]	ATOM	2737	N	GLU	B	92	44.108	8.868	-26.404	1.00	24.21	N
[9515]	ATOM	2738	CA	GLU	B	92	43.635	8.797	-25.016	1.00	26.56	C
[9516]	ATOM	2739	C	GLU	B	92	43.439	10.194	-24.472	1.00	27.75	C
[9517]	ATOM	2740	O	GLU	B	92	44.032	11.146	-24.987	1.00	28.60	O
[9518]	ATOM	2741	CB	GLU	B	92	44.621	8.006	-24.148	1.00	26.52	C
[9519]	ATOM	2742	CG	GLU	B	92	45.996	8.653	-23.978	1.00	28.80	C
[9520]	ATOM	2743	CD	GLU	B	92	46.956	8.395	-25.140	1.00	32.71	C
[9521]	ATOM	2744	OE1	GLU	B	92	46.538	7.899	-26.214	1.00	34.09	O
[9522]	ATOM	2745	OE2	GLU	B	92	48.156	8.700	-24.974	1.00	34.93	O
[9523]	ATOM	2746	N	GLU	B	93	42.607	10.345	-23.444	1.00	29.62	N
[9524]	ATOM	2747	CA	GLU	B	93	42.446	11.658	-22.834	1.00	31.08	C

[9525]	ATOM	2748	C	GLU	B	93	43.792	12.213	-22.385	1.00	30.60	C
[9526]	ATOM	2749	O	GLU	B	93	44.588	11.504	-21.760	1.00	30.67	O
[9527]	ATOM	2750	CB	GLU	B	93	41.430	11.636	-21.691	1.00	32.17	C
[9528]	ATOM	2751	CG	GLU	B	93	39.972	11.500	-22.201	1.00	37.94	C
[9529]	ATOM	2752	CD	GLU	B	93	38.980	12.393	-21.439	1.00	45.46	C
[9530]	ATOM	2753	OE1	GLU	B	93	38.134	11.837	-20.686	1.00	47.58	O
[9531]	ATOM	2754	OE2	GLU	B	93	39.056	13.645	-21.594	1.00	46.82	O
[9532]	ATOM	2755	N	GLY	B	94	44.054	13.468	-22.750	1.00	30.40	N
[9533]	ATOM	2756	CA	GLY	B	94	45.299	14.146	-22.380	1.00	29.16	C
[9534]	ATOM	2757	C	GLY	B	94	46.553	13.645	-23.091	1.00	28.95	C
[9535]	ATOM	2758	O	GLY	B	94	47.662	13.852	-22.603	1.00	28.86	O
[9536]	ATOM	2759	N	ALA	B	95	46.397	12.993	-24.239	1.00	28.07	N
[9537]	ATOM	2760	CA	ALA	B	95	47.553	12.574	-25.045	1.00	27.94	C
[9538]	ATOM	2761	C	ALA	B	95	48.306	13.781	-25.570	1.00	27.51	C
[9539]	ATOM	2762	O	ALA	B	95	47.685	14.781	-25.937	1.00	28.37	O
[9540]	ATOM	2763	CB	ALA	B	95	47.114	11.744	-26.197	1.00	27.29	C
[9541]	ATOM	2764	N	PRO	B	96	49.644	13.688	-25.642	1.00	27.25	N
[9542]	ATOM	2765	CA	PRO	B	96	50.401	14.762	-26.284	1.00	26.26	C
[9543]	ATOM	2766	C	PRO	B	96	50.198	14.718	-27.797	1.00	25.31	C
[9544]	ATOM	2767	O	PRO	B	96	49.845	13.668	-28.355	1.00	24.50	O
[9545]	ATOM	2768	CB	PRO	B	96	51.847	14.429	-25.937	1.00	26.51	C
[9546]	ATOM	2769	CG	PRO	B	96	51.862	12.977	-25.765	1.00	28.08	C
[9547]	ATOM	2770	CD	PRO	B	96	50.526	12.608	-25.165	1.00	27.50	C
[9548]	ATOM	2771	N	VAL	B	97	50.386	15.869	-28.430	1.00	24.29	N
[9549]	ATOM	2772	CA	VAL	B	97	50.265	16.008	-29.869	1.00	24.25	C
[9550]	ATOM	2773	C	VAL	B	97	51.635	15.637	-30.434	1.00	23.46	C
[9551]	ATOM	2774	O	VAL	B	97	52.653	16.166	-29.993	1.00	22.42	O
[9552]	ATOM	2775	CB	VAL	B	97	49.868	17.447	-30.243	1.00	24.41	C
[9553]	ATOM	2776	CG1	VAL	B	97	49.790	17.616	-31.753	1.00	25.85	C
[9554]	ATOM	2777	CG2	VAL	B	97	48.539	17.795	-29.594	1.00	25.59	C
[9555]	ATOM	2778	N	PHE	B	98	51.653	14.687	-31.366	1.00	22.60	N
[9556]	ATOM	2779	CA	PHE	B	98	52.896	14.237	-31.958	1.00	22.54	C
[9557]	ATOM	2780	C	PHE	B	98	53.460	15.385	-32.757	1.00	22.36	C
[9558]	ATOM	2781	O	PHE	B	98	52.684	16.163	-33.332	1.00	22.69	O
[9559]	ATOM	2782	CB	PHE	B	98	52.656	13.031	-32.852	1.00	22.30	C
[9560]	ATOM	2783	CG	PHE	B	98	52.161	11.841	-32.112	1.00	22.38	C



[9561]	ATOM	2784	CD1	PHE	B	98	52.864	11.349	-31.019	1.00	23.97	C
[9562]	ATOM	2785	CD2	PHE	B	98	50.994	11.209	-32.497	1.00	21.85	C
[9563]	ATOM	2786	CE1	PHE	B	98	52.406	10.223	-30.321	1.00	23.83	C
[9564]	ATOM	2787	CE2	PHE	B	98	50.545	10.096	-31.823	1.00	22.18	C
[9565]	ATOM	2788	CZ	PHE	B	98	51.238	9.611	-30.723	1.00	23.24	C
[9566]	ATOM	2789	N	PRO	B	99	54.799	15.512	-32.781	1.00	22.01	N
[9567]	ATOM	2790	CA	PRO	B	99	55.432	16.609	-33.495	1.00	22.00	C
[9568]	ATOM	2791	C	PRO	B	99	55.380	16.416	-35.005	1.00	21.88	C
[9569]	ATOM	2792	O	PRO	B	99	55.148	15.304	-35.463	1.00	22.01	O
[9570]	ATOM	2793	CB	PRO	B	99	56.878	16.548	-32.994	1.00	21.54	C
[9571]	ATOM	2794	CG	PRO	B	99	57.093	15.120	-32.686	1.00	21.95	C
[9572]	ATOM	2795	CD	PRO	B	99	55.795	14.642	-32.117	1.00	22.26	C
[9573]	ATOM	2796	N	LEU	B	100	55.581	17.488	-35.769	1.00	21.72	N
[9574]	ATOM	2797	CA	LEU	B	100	55.783	17.342	-37.208	1.00	22.33	C
[9575]	ATOM	2798	C	LEU	B	100	56.864	16.281	-37.487	1.00	21.76	C
[9576]	ATOM	2799	O	LEU	B	100	57.919	16.241	-36.831	1.00	21.35	O
[9577]	ATOM	2800	CB	LEU	B	100	56.180	18.680	-37.850	1.00	23.06	C
[9578]	ATOM	2801	CG	LEU	B	100	56.614	18.599	-39.320	1.00	24.18	C
[9579]	ATOM	2802	CD1	LEU	B	100	55.394	18.484	-40.226	1.00	28.27	C
[9580]	ATOM	2803	CD2	LEU	B	100	57.443	19.802	-39.704	1.00	26.36	C
[9581]	ATOM	2804	N	GLY	B	101	56.586	15.409	-38.450	1.00	21.82	N
[9582]	ATOM	2805	CA	GLY	B	101	57.560	14.391	-38.853	1.00	21.04	C
[9583]	ATOM	2806	C	GLY	B	101	57.310	13.038	-38.204	1.00	21.20	C
[9584]	ATOM	2807	O	GLY	B	101	57.939	12.043	-38.570	1.00	20.46	O
[9585]	ATOM	2808	N	TYR	B	102	56.400	12.991	-37.229	1.00	20.89	N
[9586]	ATOM	2809	CA	TYR	B	102	56.088	11.736	-36.544	1.00	21.01	C
[9587]	ATOM	2810	C	TYR	B	102	55.597	10.659	-37.513	1.00	21.22	C
[9588]	ATOM	2811	O	TYR	B	102	54.776	10.914	-38.381	1.00	20.52	O
[9589]	ATOM	2812	CB	TYR	B	102	55.056	11.934	-35.427	1.00	21.94	C
[9590]	ATOM	2813	CG	TYR	B	102	54.984	10.741	-34.502	1.00	22.24	C
[9591]	ATOM	2814	CD1	TYR	B	102	55.952	10.550	-33.509	1.00	23.99	C
[9592]	ATOM	2815	CD2	TYR	B	102	53.968	9.788	-34.626	1.00	24.61	C
[9593]	ATOM	2816	CE1	TYR	B	102	55.893	9.456	-32.644	1.00	23.46	C
[9594]	ATOM	2817	CE2	TYR	B	102	53.900	8.679	-33.762	1.00	23.06	C
[9595]	ATOM	2818	CZ	TYR	B	102	54.871	8.525	-32.780	1.00	24.86	C
[9596]	ATOM	2819	OH	TYR	B	102	54.826	7.439	-31.928	1.00	25.45	O

[9597]	ATOM	2820	N	GLN	B	103	56.131	9.456	-37.368	1.00	21.74	N
[9598]	ATOM	2821	CA	GLN	B	103	55.702	8.361	-38.216	1.00	22.78	C
[9599]	ATOM	2822	C	GLN	B	103	54.607	7.603	-37.480	1.00	22.01	C
[9600]	ATOM	2823	O	GLN	B	103	54.909	6.780	-36.614	1.00	21.83	O
[9601]	ATOM	2824	CB	GLN	B	103	56.875	7.428	-38.496	1.00	23.24	C
[9602]	ATOM	2825	CG	GLN	B	103	58.196	8.160	-38.660	1.00	26.25	C
[9603]	ATOM	2826	CD	GLN	B	103	59.019	7.624	-39.802	1.00	27.26	C
[9604]	ATOM	2827	OE1	GLN	B	103	59.878	8.336	-40.352	1.00	29.79	O
[9605]	ATOM	2828	NE2	GLN	B	103	58.765	6.372	-40.179	1.00	22.47	N
[9606]	ATOM	2829	N	TYR	B	104	53.350	7.913	-37.790	1.00	22.01	N
[9607]	ATOM	2830	CA	TYR	B	104	52.223	7.243	-37.150	1.00	22.24	C
[9608]	ATOM	2831	C	TYR	B	104	52.155	5.785	-37.661	1.00	22.26	C
[9609]	ATOM	2832	O	TYR	B	104	52.410	5.544	-38.846	1.00	21.77	O
[9610]	ATOM	2833	CB	TYR	B	104	50.895	7.996	-37.383	1.00	21.93	C
[9611]	ATOM	2834	CG	TYR	B	104	49.827	7.619	-36.365	1.00	22.16	C
[9612]	ATOM	2835	CD1	TYR	B	104	49.850	8.149	-35.075	1.00	23.09	C
[9613]	ATOM	2836	CD2	TYR	B	104	48.820	6.699	-36.678	1.00	21.60	C
[9614]	ATOM	2837	CE1	TYR	B	104	48.887	7.784	-34.126	1.00	22.06	C
[9615]	ATOM	2838	CE2	TYR	B	104	47.867	6.325	-35.736	1.00	22.26	C
[9616]	ATOM	2839	CZ	TYR	B	104	47.910	6.870	-34.469	1.00	21.59	C
[9617]	ATOM	2840	OH	TYR	B	104	46.966	6.510	-33.545	1.00	22.90	O
[9618]	ATOM	2841	N	PRO	B	105	51.851	4.806	-36.768	1.00	22.35	N
[9619]	ATOM	2842	CA	PRO	B	105	51.731	3.410	-37.230	1.00	21.97	C
[9620]	ATOM	2843	C	PRO	B	105	50.681	3.259	-38.328	1.00	22.21	C
[9621]	ATOM	2844	O	PRO	B	105	49.672	3.969	-38.324	1.00	22.60	O
[9622]	ATOM	2845	CB	PRO	B	105	51.269	2.653	-35.979	1.00	22.33	C
[9623]	ATOM	2846	CG	PRO	B	105	51.636	3.504	-34.837	1.00	22.99	C
[9624]	ATOM	2847	CD	PRO	B	105	51.622	4.928	-35.311	1.00	23.15	C
[9625]	ATOM	2848	N	SER	B	106	50.909	2.338	-39.261	1.00	22.42	N
[9626]	ATOM	2849	CA	SER	B	106	49.898	1.958	-40.253	1.00	22.56	C
[9627]	ATOM	2850	C	SER	B	106	48.843	1.103	-39.535	1.00	22.87	C
[9628]	ATOM	2851	O	SER	B	106	49.054	0.735	-38.384	1.00	22.58	O
[9629]	ATOM	2852	CB	SER	B	106	50.560	1.130	-41.343	1.00	22.34	C
[9630]	ATOM	2853	OG	SER	B	106	51.047	-0.079	-40.774	1.00	24.07	O
[9631]	ATOM	2854	N	LEU	B	107	47.729	0.760	-40.193	1.00	22.83	N
[9632]	ATOM	2855	CA	LEU	B	107	46.723	-0.094	-39.525	1.00	23.43	C

[9633]	ATOM	2856	C	LEU B 107	47.290	-1.453	-39.164	1.00	23.50	C
[9634]	ATOM	2857	O	LEU B 107	46.957	-2.006	-38.104	1.00	22.85	O
[9635]	ATOM	2858	CB	LEU B 107	45.423	-0.247	-40.334	1.00	24.01	C
[9636]	ATOM	2859	CG	LEU B 107	44.573	1.017	-40.522	1.00	23.38	C
[9637]	ATOM	2860	CD1	LEU B 107	43.240	0.608	-41.041	1.00	22.24	C
[9638]	ATOM	2861	CD2	LEU B 107	44.431	1.849	-39.234	1.00	23.02	C
[9639]	ATOM	2862	N	ASP B 108	48.140	-1.985	-40.045	1.00	23.72	N
[9640]	ATOM	2863	CA	ASP B 108	48.812	-3.261	-39.811	1.00	23.91	C
[9641]	ATOM	2864	C	ASP B 108	49.702	-3.207	-38.563	1.00	23.84	C
[9642]	ATOM	2865	O	ASP B 108	49.647	-4.118	-37.739	1.00	24.38	O
[9643]	ATOM	2866	CB	ASP B 108	49.635	-3.665	-41.038	1.00	24.74	C
[9644]	ATOM	2867	CG	ASP B 108	48.768	-4.170	-42.217	1.00	26.36	C
[9645]	ATOM	2868	OD1	ASP B 108	47.511	-4.260	-42.125	1.00	25.66	O
[9646]	ATOM	2869	OD2	ASP B 108	49.378	-4.481	-43.276	1.00	31.88	O
[9647]	ATOM	2870	N	GLN B 109	50.509	-2.145	-38.410	1.00	22.91	N
[9648]	ATOM	2871	CA	GLN B 109	51.365	-2.008	-37.227	1.00	22.89	C
[9649]	ATOM	2872	C	GLN B 109	50.540	-1.774	-35.973	1.00	22.28	C
[9650]	ATOM	2873	O	GLN B 109	50.924	-2.179	-34.885	1.00	22.26	O
[9651]	ATOM	2874	CB	GLN B 109	52.411	-0.901	-37.391	1.00	21.89	C
[9652]	ATOM	2875	CG	GLN B 109	53.435	-1.191	-38.524	1.00	21.61	C
[9653]	ATOM	2876	CD	GLN B 109	54.256	0.031	-38.918	1.00	24.18	C
[9654]	ATOM	2877	OE1	GLN B 109	53.728	1.150	-38.984	1.00	25.69	O
[9655]	ATOM	2878	NE2	GLN B 109	55.555	-0.181	-39.223	1.00	21.64	N
[9656]	ATOM	2879	N	LEU B 110	49.409	-1.100	-36.118	1.00	22.78	N
[9657]	ATOM	2880	CA	LEU B 110	48.518	-0.886	-34.986	1.00	22.30	C
[9658]	ATOM	2881	C	LEU B 110	47.978	-2.227	-34.501	1.00	22.93	C
[9659]	ATOM	2882	O	LEU B 110	47.833	-2.431	-33.293	1.00	22.31	O
[9660]	ATOM	2883	CB	LEU B 110	47.370	0.082	-35.330	1.00	22.48	C
[9661]	ATOM	2884	CG	LEU B 110	47.641	1.608	-35.447	1.00	21.78	C
[9662]	ATOM	2885	CD1	LEU B 110	46.371	2.361	-35.793	1.00	21.89	C
[9663]	ATOM	2886	CD2	LEU B 110	48.213	2.198	-34.184	1.00	21.86	C
[9664]	ATOM	2887	N	ALA B 111	47.663	-3.126	-35.435	1.00	22.45	N
[9665]	ATOM	2888	CA	ALA B 111	47.216	-4.479	-35.087	1.00	22.56	C
[9666]	ATOM	2889	C	ALA B 111	48.345	-5.306	-34.422	1.00	23.25	C
[9667]	ATOM	2890	O	ALA B 111	48.092	-6.109	-33.512	1.00	22.91	O
[9668]	ATOM	2891	CB	ALA B 111	46.674	-5.185	-36.316	1.00	22.35	C

[9669]	ATOM	2892	N	ASP B 112	49.586	-5.068	-34.846	1.00	24.25	N
[9670]	ATOM	2893	CA	ASP B 112	50.763	-5.702	-34.228	1.00	26.29	C
[9671]	ATOM	2894	C	ASP B 112	51.080	-5.202	-32.815	1.00	26.39	C
[9672]	ATOM	2895	O	ASP B 112	51.975	-5.736	-32.170	1.00	27.00	O
[9673]	ATOM	2896	CB	ASP B 112	52.020	-5.493	-35.084	1.00	27.04	C
[9674]	ATOM	2897	CG	ASP B 112	52.037	-6.328	-36.347	1.00	32.55	C
[9675]	ATOM	2898	OD1	ASP B 112	51.268	-7.322	-36.432	1.00	38.23	O
[9676]	ATOM	2899	OD2	ASP B 112	52.851	-5.989	-37.263	1.00	38.03	O
[9677]	ATOM	2900	N	MET B 113	50.392	-4.168	-32.341	1.00	26.46	N
[9678]	ATOM	2901	CA	MET B 113	50.576	-3.685	-30.969	1.00	26.69	C
[9679]	ATOM	2902	C	MET B 113	49.777	-4.520	-29.970	1.00	26.36	C
[9680]	ATOM	2903	O	MET B 113	50.072	-4.536	-28.761	1.00	25.84	O
[9681]	ATOM	2904	CB	MET B 113	50.119	-2.237	-30.851	1.00	26.94	C
[9682]	ATOM	2905	CG	MET B 113	51.078	-1.228	-31.465	1.00	27.89	C
[9683]	ATOM	2906	SD	MET B 113	50.418	0.455	-31.363	1.00	28.42	S
[9684]	ATOM	2907	CE	MET B 113	51.896	1.402	-31.102	1.00	30.12	C
[9685]	ATOM	2908	N	ILE B 114	48.751	-5.197	-30.477	1.00	25.28	N
[9686]	ATOM	2909	CA	ILE B 114	47.815	-5.898	-29.622	1.00	24.89	C
[9687]	ATOM	2910	C	ILE B 114	48.470	-7.056	-28.867	1.00	24.70	C
[9688]	ATOM	2911	O	ILE B 114	48.192	-7.220	-27.687	1.00	24.48	O
[9689]	ATOM	2912	CB	ILE B 114	46.480	-6.280	-30.373	1.00	24.93	C
[9690]	ATOM	2913	CG1	ILE B 114	45.671	-5.011	-30.694	1.00	23.95	C
[9691]	ATOM	2914	CG2	ILE B 114	45.636	-7.255	-29.552	1.00	24.98	C
[9692]	ATOM	2915	CD1	ILE B 114	44.477	-5.253	-31.670	1.00	25.49	C
[9693]	ATOM	2916	N	PRO B 115	49.341	-7.857	-29.524	1.00	24.53	N
[9694]	ATOM	2917	CA	PRO B 115	50.039	-8.901	-28.754	1.00	24.78	C
[9695]	ATOM	2918	C	PRO B 115	50.761	-8.381	-27.499	1.00	25.47	C
[9696]	ATOM	2919	O	PRO B 115	50.684	-9.034	-26.440	1.00	25.67	O
[9697]	ATOM	2920	CB	PRO B 115	51.044	-9.468	-29.767	1.00	24.89	C
[9698]	ATOM	2921	CG	PRO B 115	50.344	-9.291	-31.085	1.00	23.95	C
[9699]	ATOM	2922	CD	PRO B 115	49.709	-7.919	-30.954	1.00	24.74	C
[9700]	ATOM	2923	N	CYS B 116	51.417	-7.218	-27.606	1.00	25.32	N
[9701]	ATOM	2924	CA	CYS B 116	52.072	-6.543	-26.461	1.00	25.80	C
[9702]	ATOM	2925	C	CYS B 116	51.104	-6.213	-25.311	1.00	25.55	C
[9703]	ATOM	2926	O	CYS B 116	51.471	-6.277	-24.121	1.00	24.72	O
[9704]	ATOM	2927	CB	CYS B 116	52.779	-5.259	-26.916	1.00	25.80	C

[9705]	ATOM	2928	SG	CYS	B	116	53.986	-5.463	-28.278	1.00	31.08	S
[9706]	ATOM	2929	N	VAL	B	117	49.868	-5.851	-25.675	1.00	24.84	N
[9707]	ATOM	2930	CA	VAL	B	117	48.793	-5.598	-24.706	1.00	24.08	C
[9708]	ATOM	2931	C	VAL	B	117	48.394	-6.886	-23.979	1.00	24.48	C
[9709]	ATOM	2932	O	VAL	B	117	48.296	-6.916	-22.750	1.00	23.66	O
[9710]	ATOM	2933	CB	VAL	B	117	47.560	-4.937	-25.379	1.00	24.74	C
[9711]	ATOM	2934	CG1	VAL	B	117	46.357	-4.856	-24.402	1.00	24.13	C
[9712]	ATOM	2935	CG2	VAL	B	117	47.928	-3.552	-25.884	1.00	22.90	C
[9713]	ATOM	2936	N	LEU	B	118	48.179	-7.957	-24.738	1.00	24.59	N
[9714]	ATOM	2937	CA	LEU	B	118	47.760	-9.221	-24.142	1.00	24.60	C
[9715]	ATOM	2938	C	LEU	B	118	48.889	-9.816	-23.296	1.00	25.43	C
[9716]	ATOM	2939	O	LEU	B	118	48.642	-10.309	-22.180	1.00	24.46	O
[9717]	ATOM	2940	CB	LEU	B	118	47.242	-10.177	-25.232	1.00	24.92	C
[9718]	ATOM	2941	CG	LEU	B	118	45.977	-9.692	-25.984	1.00	24.30	C
[9719]	ATOM	2942	CD1	LEU	B	118	45.521	-10.700	-27.016	1.00	25.31	C
[9720]	ATOM	2943	CD2	LEU	B	118	44.821	-9.393	-25.023	1.00	24.28	C
[9721]	ATOM	2944	N	GLN	B	119	50.127	-9.739	-23.807	1.00	25.67	N
[9722]	ATOM	2945	CA	GLN	B	119	51.307	-10.214	-23.071	1.00	27.15	C
[9723]	ATOM	2946	C	GLN	B	119	51.451	-9.490	-21.734	1.00	27.39	C
[9724]	ATOM	2947	O	GLN	B	119	51.691	-10.112	-20.715	1.00	27.24	O
[9725]	ATOM	2948	CB	GLN	B	119	52.575	-10.070	-23.911	1.00	27.22	C
[9726]	ATOM	2949	CG	GLN	B	119	52.726	-11.190	-24.942	1.00	30.59	C
[9727]	ATOM	2950	CD	GLN	B	119	53.642	-10.837	-26.112	1.00	34.98	C
[9728]	ATOM	2951	OE1	GLN	B	119	54.501	-9.950	-26.012	1.00	36.86	O
[9729]	ATOM	2952	NE2	GLN	B	119	53.454	-11.535	-27.240	1.00	34.88	N
[9730]	ATOM	2953	N	TYR	B	120	51.253	-8.175	-21.749	1.00	28.07	N
[9731]	ATOM	2954	CA	TYR	B	120	51.263	-7.357	-20.544	1.00	28.50	C
[9732]	ATOM	2955	C	TYR	B	120	50.231	-7.808	-19.525	1.00	28.66	C
[9733]	ATOM	2956	O	TYR	B	120	50.515	-7.827	-18.338	1.00	27.97	O
[9734]	ATOM	2957	CB	TYR	B	120	50.989	-5.896	-20.905	1.00	29.49	C
[9735]	ATOM	2958	CG	TYR	B	120	50.968	-4.946	-19.725	1.00	30.90	C
[9736]	ATOM	2959	CD1	TYR	B	120	49.770	-4.609	-19.087	1.00	30.96	C
[9737]	ATOM	2960	CD2	TYR	B	120	52.154	-4.382	-19.250	1.00	33.31	C
[9738]	ATOM	2961	CE1	TYR	B	120	49.750	-3.730	-18.003	1.00	32.58	C
[9739]	ATOM	2962	CE2	TYR	B	120	52.154	-3.502	-18.169	1.00	34.62	C
[9740]	ATOM	2963	CZ	TYR	B	120	50.950	-3.177	-17.554	1.00	33.88	C

[9741]	ATOM	2964	OH	TYR	B	120	50.971	-2.296	-16.496	1.00	34.38	O
[9742]	ATOM	2965	N	LEU	B	121	49.022	-8.122	-19.993	1.00	28.50	N
[9743]	ATOM	2966	CA	LEU	B	121	47.933	-8.496	-19.096	1.00	29.15	C
[9744]	ATOM	2967	C	LEU	B	121	47.950	-9.976	-18.755	1.00	29.32	C
[9745]	ATOM	2968	O	LEU	B	121	47.220	-10.409	-17.880	1.00	29.54	O
[9746]	ATOM	2969	CB	LEU	B	121	46.583	-8.128	-19.720	1.00	28.70	C
[9747]	ATOM	2970	CG	LEU	B	121	46.366	-6.634	-19.885	1.00	28.75	C
[9748]	ATOM	2971	CD1	LEU	B	121	45.213	-6.388	-20.811	1.00	31.16	C
[9749]	ATOM	2972	CD2	LEU	B	121	46.157	-5.956	-18.524	1.00	30.71	C
[9750]	ATOM	2973	N	ASN	B	122	48.790	-10.741	-19.449	1.00	29.87	N
[9751]	ATOM	2974	CA	ASN	B	122	48.792	-12.203	-19.364	1.00	30.28	C
[9752]	ATOM	2975	C	ASN	B	122	47.467	-12.806	-19.804	1.00	29.62	C
[9753]	ATOM	2976	O	ASN	B	122	47.004	-13.788	-19.227	1.00	29.14	O
[9754]	ATOM	2977	CB	ASN	B	122	49.214	-12.673	-17.964	1.00	30.84	C
[9755]	ATOM	2978	CG	ASN	B	122	50.633	-12.250	-17.626	1.00	34.23	C
[9756]	ATOM	2979	OD1	ASN	B	122	50.852	-11.325	-16.831	1.00	37.68	O
[9757]	ATOM	2980	ND2	ASN	B	122	51.612	-12.901	-18.261	1.00	36.41	N
[9758]	ATOM	2981	N	PHE	B	123	46.869	-12.209	-20.842	1.00	29.54	N
[9759]	ATOM	2982	CA	PHE	B	123	45.608	-12.707	-21.428	1.00	29.79	C
[9760]	ATOM	2983	C	PHE	B	123	45.919	-13.498	-22.684	1.00	30.05	C
[9761]	ATOM	2984	O	PHE	B	123	46.765	-13.093	-23.472	1.00	30.92	O
[9762]	ATOM	2985	CB	PHE	B	123	44.641	-11.568	-21.773	1.00	28.93	C
[9763]	ATOM	2986	CG	PHE	B	123	44.094	-10.844	-20.580	1.00	28.88	C
[9764]	ATOM	2987	CD1	PHE	B	123	44.329	-11.304	-19.279	1.00	27.39	C
[9765]	ATOM	2988	CD2	PHE	B	123	43.343	-9.688	-20.753	1.00	29.10	C
[9766]	ATOM	2989	CE1	PHE	B	123	43.810	-10.622	-18.175	1.00	28.70	C
[9767]	ATOM	2990	CE2	PHE	B	123	42.822	-8.994	-19.656	1.00	29.13	C
[9768]	ATOM	2991	CZ	PHE	B	123	43.043	-9.463	-18.371	1.00	28.47	C
[9769]	ATOM	2992	N	SER	B	124	45.247	-14.629	-22.875	1.00	30.20	N
[9770]	ATOM	2993	CA	SER	B	124	45.554	-15.471	-24.035	1.00	29.50	C
[9771]	ATOM	2994	C	SER	B	124	44.557	-15.361	-25.195	1.00	28.59	C
[9772]	ATOM	2995	O	SER	B	124	44.943	-15.546	-26.342	1.00	28.58	O
[9773]	ATOM	2996	CB	SER	B	124	45.842	-16.925	-23.638	1.00	29.67	C
[9774]	ATOM	2997	OG	SER	B	124	44.886	-17.429	-22.738	1.00	31.13	O
[9775]	ATOM	2998	N	THR	B	125	43.292	-15.055	-24.907	1.00	27.34	N
[9776]	ATOM	2999	CA	THR	B	125	42.271	-14.976	-25.960	1.00	25.99	C

[9777]	ATOM	3000	C	THR	B	125	41.343	-13.787	-25.724	1.00	25.00	C
[9778]	ATOM	3001	O	THR	B	125	41.196	-13.325	-24.588	1.00	24.31	O
[9779]	ATOM	3002	CB	THR	B	125	41.419	-16.267	-26.030	1.00	26.26	C
[9780]	ATOM	3003	OG1	THR	B	125	40.723	-16.440	-24.795	1.00	26.97	O
[9781]	ATOM	3004	CG2	THR	B	125	42.289	-17.515	-26.277	1.00	26.69	C
[9782]	ATOM	3005	N	ILE	B	126	40.735	-13.291	-26.801	1.00	23.89	N
[9783]	ATOM	3006	CA	ILE	B	126	39.822	-12.130	-26.754	1.00	23.11	C
[9784]	ATOM	3007	C	ILE	B	126	38.567	-12.368	-27.604	1.00	22.38	C
[9785]	ATOM	3008	O	ILE	B	126	38.550	-13.256	-28.445	1.00	22.50	O
[9786]	ATOM	3009	CB	ILE	B	126	40.518	-10.810	-27.256	1.00	23.31	C
[9787]	ATOM	3010	CG1	ILE	B	126	40.895	-10.921	-28.748	1.00	23.71	C
[9788]	ATOM	3011	CG2	ILE	B	126	41.722	-10.451	-26.349	1.00	23.29	C
[9789]	ATOM	3012	CD1	ILE	B	126	41.489	-9.626	-29.418	1.00	23.16	C
[9790]	ATOM	3013	N	ILE	B	127	37.521	-11.581	-27.343	1.00	20.89	N
[9791]	ATOM	3014	CA	ILE	B	127	36.442	-11.324	-28.280	0.80	19.91	C
[9792]	ATOM	3015	C	ILE	B	127	36.682	-9.856	-28.614	1.00	20.09	C
[9793]	ATOM	3016	O	ILE	B	127	36.717	-8.994	-27.725	1.00	19.60	O
[9794]	ATOM	3017	CB	ILE	B	127	35.037	-11.546	-27.636	0.80	19.76	C
[9795]	ATOM	3018	CG1	ILE	B	127	34.831	-13.028	-27.286	0.80	17.95	C
[9796]	ATOM	3019	CG2	ILE	B	127	33.899	-11.073	-28.566	0.80	19.08	C
[9797]	ATOM	3020	CD1	ILE	B	127	33.833	-13.268	-26.163	0.80	17.72	C
[9798]	ATOM	3021	N	GLY	B	128	36.921	-9.557	-29.882	1.00	19.94	N
[9799]	ATOM	3022	CA	GLY	B	128	37.178	-8.169	-30.248	1.00	18.92	C
[9800]	ATOM	3023	C	GLY	B	128	35.914	-7.468	-30.705	1.00	19.92	C
[9801]	ATOM	3024	O	GLY	B	128	35.088	-8.063	-31.409	1.00	18.27	O
[9802]	ATOM	3025	N	VAL	B	129	35.756	-6.202	-30.316	1.00	19.44	N
[9803]	ATOM	3026	CA	VAL	B	129	34.622	-5.394	-30.783	1.00	19.61	C
[9804]	ATOM	3027	C	VAL	B	129	35.248	-4.115	-31.359	1.00	19.35	C
[9805]	ATOM	3028	O	VAL	B	129	35.931	-3.381	-30.637	1.00	19.56	O
[9806]	ATOM	3029	CB	VAL	B	129	33.645	-5.027	-29.621	1.00	19.63	C
[9807]	ATOM	3030	CG1	VAL	B	129	32.406	-4.280	-30.115	1.00	18.90	C
[9808]	ATOM	3031	CG2	VAL	B	129	33.214	-6.276	-28.805	1.00	22.29	C
[9809]	ATOM	3032	N	GLY	B	130	35.027	-3.845	-32.639	1.00	19.02	N
[9810]	ATOM	3033	CA	GLY	B	130	35.644	-2.662	-33.281	1.00	19.29	C
[9811]	ATOM	3034	C	GLY	B	130	34.701	-1.884	-34.174	1.00	20.21	C
[9812]	ATOM	3035	O	GLY	B	130	33.725	-2.452	-34.696	1.00	19.57	O

[9813]	ATOM	3036	N	VAL	B	131	34.974	-0.578	-34.335	1.00	19.83	N
[9814]	ATOM	3037	CA	VAL	B	131	34.181	0.269	-35.212	1.00	19.71	C
[9815]	ATOM	3038	C	VAL	B	131	35.103	0.866	-36.258	1.00	19.91	C
[9816]	ATOM	3039	O	VAL	B	131	36.136	1.456	-35.909	1.00	19.89	O
[9817]	ATOM	3040	CB	VAL	B	131	33.495	1.421	-34.461	1.00	20.11	C
[9818]	ATOM	3041	CG1	VAL	B	131	32.694	2.315	-35.445	1.00	18.71	C
[9819]	ATOM	3042	CG2	VAL	B	131	32.573	0.872	-33.339	1.00	20.51	C
[9820]	ATOM	3043	N	GLY	B	132	34.748	0.689	-37.529	1.00	19.21	N
[9821]	ATOM	3044	CA	GLY	B	132	35.455	1.343	-38.646	1.00	19.48	C
[9822]	ATOM	3045	C	GLY	B	132	36.916	0.948	-38.743	1.00	20.16	C
[9823]	ATOM	3046	O	GLY	B	132	37.219	-0.214	-38.988	1.00	20.34	O
[9824]	ATOM	3047	N	ALA	B	133	37.826	1.911	-38.561	1.00	19.55	N
[9825]	ATOM	3048	CA	ALA	B	133	39.254	1.599	-38.529	1.00	19.31	C
[9826]	ATOM	3049	C	ALA	B	133	39.597	0.589	-37.418	1.00	20.34	C
[9827]	ATOM	3050	O	ALA	B	133	40.433	-0.297	-37.644	1.00	20.91	O
[9828]	ATOM	3051	CB	ALA	B	133	40.072	2.844	-38.364	1.00	20.25	C
[9829]	ATOM	3052	N	GLY	B	134	38.966	0.728	-36.241	1.00	19.08	N
[9830]	ATOM	3053	CA	GLY	B	134	39.035	-0.294	-35.189	1.00	19.12	C
[9831]	ATOM	3054	C	GLY	B	134	38.605	-1.698	-35.605	1.00	19.50	C
[9832]	ATOM	3055	O	GLY	B	134	39.232	-2.676	-35.217	1.00	19.77	O
[9833]	ATOM	3056	N	ALA	B	135	37.530	-1.822	-36.394	1.00	19.09	N
[9834]	ATOM	3057	CA	ALA	B	135	37.111	-3.145	-36.851	1.00	18.62	C
[9835]	ATOM	3058	C	ALA	B	135	38.148	-3.733	-37.805	1.00	18.76	C
[9836]	ATOM	3059	O	ALA	B	135	38.464	-4.920	-37.712	1.00	20.08	O
[9837]	ATOM	3060	CB	ALA	B	135	35.715	-3.110	-37.498	1.00	17.72	C
[9838]	ATOM	3061	N	TYR	B	136	38.667	-2.933	-38.727	1.00	18.37	N
[9839]	ATOM	3062	CA	TYR	B	136	39.741	-3.404	-39.624	1.00	18.99	C
[9840]	ATOM	3063	C	TYR	B	136	40.935	-3.917	-38.806	1.00	18.93	C
[9841]	ATOM	3064	O	TYR	B	136	41.458	-4.979	-39.083	1.00	19.68	O
[9842]	ATOM	3065	CB	TYR	B	136	40.210	-2.283	-40.558	1.00	18.70	C
[9843]	ATOM	3066	CG	TYR	B	136	41.291	-2.709	-41.554	1.00	19.58	C
[9844]	ATOM	3067	CD1	TYR	B	136	42.623	-2.892	-41.142	1.00	18.23	C
[9845]	ATOM	3068	CD2	TYR	B	136	40.981	-2.924	-42.892	1.00	17.57	C
[9846]	ATOM	3069	CE1	TYR	B	136	43.613	-3.267	-42.033	1.00	17.64	C
[9847]	ATOM	3070	CE2	TYR	B	136	41.985	-3.330	-43.828	1.00	18.86	C
[9848]	ATOM	3071	CZ	TYR	B	136	43.289	-3.488	-43.381	1.00	19.43	C



[9849]	ATOM	3072	OH	TYR	B	136	44.290	-3.859	-44.243	1.00	21.80	O
[9850]	ATOM	3073	N	ILE	B	137	41.344	-3.147	-37.802	1.00	18.88	N
[9851]	ATOM	3074	CA	ILE	B	137	42.470	-3.500	-36.929	1.00	18.57	C
[9852]	ATOM	3075	C	ILE	B	137	42.280	-4.853	-36.226	1.00	19.91	C
[9853]	ATOM	3076	O	ILE	B	137	43.196	-5.681	-36.178	1.00	19.02	O
[9854]	ATOM	3077	CB	ILE	B	137	42.748	-2.356	-35.942	1.00	18.34	C
[9855]	ATOM	3078	CG1	ILE	B	137	43.412	-1.190	-36.702	1.00	18.36	C
[9856]	ATOM	3079	CG2	ILE	B	137	43.647	-2.815	-34.766	1.00	16.04	C
[9857]	ATOM	3080	CD1	ILE	B	137	43.378	0.174	-35.964	1.00	17.68	C
[9858]	ATOM	3081	N	LEU	B	138	41.082	-5.096	-35.701	1.00	20.67	N
[9859]	ATOM	3082	CA	LEU	B	138	40.842	-6.354	-34.996	1.00	21.02	C
[9860]	ATOM	3083	C	LEU	B	138	40.734	-7.542	-35.964	1.00	21.13	C
[9861]	ATOM	3084	O	LEU	B	138	41.127	-8.652	-35.623	1.00	20.99	O
[9862]	ATOM	3085	CB	LEU	B	138	39.633	-6.223	-34.048	1.00	21.88	C
[9863]	ATOM	3086	CG	LEU	B	138	39.810	-5.191	-32.908	1.00	20.88	C
[9864]	ATOM	3087	CD1	LEU	B	138	38.476	-4.930	-32.248	1.00	20.49	C
[9865]	ATOM	3088	CD2	LEU	B	138	40.789	-5.739	-31.877	1.00	23.99	C
[9866]	ATOM	3089	N	ALA	B	139	40.251	-7.284	-37.180	1.00	21.27	N
[9867]	ATOM	3090	CA	ALA	B	139	40.180	-8.278	-38.239	1.00	20.88	C
[9868]	ATOM	3091	C	ALA	B	139	41.587	-8.626	-38.712	1.00	20.87	C
[9869]	ATOM	3092	O	ALA	B	139	41.916	-9.819	-38.832	1.00	20.27	O
[9870]	ATOM	3093	CB	ALA	B	139	39.312	-7.774	-39.401	1.00	21.14	C
[9871]	ATOM	3094	N	ARG	B	140	42.444	-7.617	-38.926	1.00	20.26	N
[9872]	ATOM	3095	CA	ARG	B	140	43.862	-7.901	-39.256	1.00	20.30	C
[9873]	ATOM	3096	C	ARG	B	140	44.553	-8.687	-38.125	1.00	20.69	C
[9874]	ATOM	3097	O	ARG	B	140	45.241	-9.684	-38.379	1.00	20.32	O
[9875]	ATOM	3098	CB	ARG	B	140	44.642	-6.616	-39.560	1.00	19.90	C
[9876]	ATOM	3099	CG	ARG	B	140	46.160	-6.802	-39.688	1.00	20.84	C
[9877]	ATOM	3100	CD	ARG	B	140	46.538	-7.603	-40.946	1.00	21.48	C
[9878]	ATOM	3101	NE	ARG	B	140	46.065	-6.900	-42.132	1.00	24.06	N
[9879]	ATOM	3102	CZ	ARG	B	140	45.836	-7.473	-43.313	1.00	25.51	C
[9880]	ATOM	3103	NH1	ARG	B	140	46.043	-8.784	-43.479	1.00	23.73	N
[9881]	ATOM	3104	NH2	ARG	B	140	45.400	-6.726	-44.334	1.00	22.85	N
[9882]	ATOM	3105	N	TYR	B	141	44.367	-8.244	-36.878	1.00	20.94	N
[9883]	ATOM	3106	CA	TYR	B	141	44.921	-8.961	-35.737	1.00	20.07	C
[9884]	ATOM	3107	C	TYR	B	141	44.436	-10.416	-35.750	1.00	20.15	C

[9885]	ATOM	3108	O	TYR	B	141	45.210	-11.338	-35.531	1.00	19.29	O
[9886]	ATOM	3109	CB	TYR	B	141	44.542	-8.277	-34.408	1.00	20.57	C
[9887]	ATOM	3110	CG	TYR	B	141	44.982	-9.133	-33.223	1.00	21.45	C
[9888]	ATOM	3111	CD1	TYR	B	141	46.309	-9.137	-32.802	1.00	23.08	C
[9889]	ATOM	3112	CD2	TYR	B	141	44.088	-9.972	-32.578	1.00	21.40	C
[9890]	ATOM	3113	CE1	TYR	B	141	46.723	-9.966	-31.743	1.00	24.86	C
[9891]	ATOM	3114	CE2	TYR	B	141	44.485	-10.777	-31.530	1.00	20.50	C
[9892]	ATOM	3115	CZ	TYR	B	141	45.794	-10.773	-31.126	1.00	21.30	C
[9893]	ATOM	3116	OH	TYR	B	141	46.182	-11.587	-30.110	1.00	23.56	O
[9894]	ATOM	3117	N	ALA	B	142	43.142	-10.615	-35.996	1.00	20.07	N
[9895]	ATOM	3118	CA	ALA	B	142	42.561	-11.966	-36.025	1.00	20.14	C
[9896]	ATOM	3119	C	ALA	B	142	43.122	-12.831	-37.131	1.00	20.29	C
[9897]	ATOM	3120	O	ALA	B	142	43.229	-14.038	-36.955	1.00	20.47	O
[9898]	ATOM	3121	CB	ALA	B	142	41.053	-11.914	-36.117	1.00	20.00	C
[9899]	ATOM	3122	N	LEU	B	143	43.477	-12.238	-38.270	1.00	20.59	N
[9900]	ATOM	3123	CA	LEU	B	143	44.131	-13.010	-39.337	1.00	22.01	C
[9901]	ATOM	3124	C	LEU	B	143	45.548	-13.422	-38.959	1.00	22.42	C
[9902]	ATOM	3125	O	LEU	B	143	45.996	-14.497	-39.344	1.00	23.88	O
[9903]	ATOM	3126	CB	LEU	B	143	44.163	-12.243	-40.666	1.00	21.95	C
[9904]	ATOM	3127	CG	LEU	B	143	42.803	-12.059	-41.321	1.00	22.50	C
[9905]	ATOM	3128	CD1	LEU	B	143	42.935	-11.203	-42.580	1.00	20.50	C
[9906]	ATOM	3129	CD2	LEU	B	143	42.244	-13.434	-41.643	1.00	23.69	C
[9907]	ATOM	3130	N	ASN	B	144	46.245	-12.558	-38.223	1.00	22.86	N
[9908]	ATOM	3131	CA	ASN	B	144	47.622	-12.811	-37.797	1.00	23.87	C
[9909]	ATOM	3132	C	ASN	B	144	47.702	-13.805	-36.634	1.00	24.02	C
[9910]	ATOM	3133	O	ASN	B	144	48.661	-14.545	-36.514	1.00	24.23	O
[9911]	ATOM	3134	CB	ASN	B	144	48.275	-11.504	-37.347	1.00	24.36	C
[9912]	ATOM	3135	CG	ASN	B	144	48.529	-10.521	-38.491	1.00	25.55	C
[9913]	ATOM	3136	OD1	ASN	B	144	48.622	-10.891	-39.663	1.00	25.62	O
[9914]	ATOM	3137	ND2	ASN	B	144	48.658	-9.241	-38.132	1.00	27.51	N
[9915]	ATOM	3138	N	HIS	B	145	46.707	-13.795	-35.753	1.00	23.69	N
[9916]	ATOM	3139	CA	HIS	B	145	46.765	-14.585	-34.524	1.00	24.02	C
[9917]	ATOM	3140	C	HIS	B	145	45.405	-15.240	-34.272	1.00	24.33	C
[9918]	ATOM	3141	O	HIS	B	145	44.768	-14.973	-33.244	1.00	23.61	O
[9919]	ATOM	3142	CB	HIS	B	145	47.178	-13.709	-33.327	1.00	23.88	C
[9920]	ATOM	3143	CG	HIS	B	145	48.499	-13.012	-33.498	1.00	24.76	C

[9921]	ATOM	3144	ND1	HIS	B	145	49.709	-13.662	-33.364	1.00	25.77	N
[9922]	ATOM	3145	CD2	HIS	B	145	48.798	-11.720	-33.772	1.00	24.38	C
[9923]	ATOM	3146	CE1	HIS	B	145	50.693	-12.802	-33.561	1.00	26.14	C
[9924]	ATOM	3147	NE2	HIS	B	145	50.168	-11.616	-33.799	1.00	24.63	N
[9925]	ATOM	3148	N	PRO	B	146	44.962	-16.116	-35.211	1.00	24.77	N
[9926]	ATOM	3149	CA	PRO	B	146	43.605	-16.655	-35.176	1.00	25.50	C
[9927]	ATOM	3150	C	PRO	B	146	43.338	-17.547	-33.963	1.00	26.05	C
[9928]	ATOM	3151	O	PRO	B	146	42.188	-17.675	-33.538	1.00	26.38	O
[9929]	ATOM	3152	CB	PRO	B	146	43.508	-17.461	-36.476	1.00	25.50	C
[9930]	ATOM	3153	CG	PRO	B	146	44.919	-17.805	-36.836	1.00	25.54	C
[9931]	ATOM	3154	CD	PRO	B	146	45.748	-16.669	-36.336	1.00	24.71	C
[9932]	ATOM	3155	N	ASP	B	147	44.395	-18.134	-33.403	1.00	25.89	N
[9933]	ATOM	3156	CA	ASP	B	147	44.275	-18.962	-32.212	1.00	26.14	C
[9934]	ATOM	3157	C	ASP	B	147	43.836	-18.162	-30.977	1.00	25.41	C
[9935]	ATOM	3158	O	ASP	B	147	43.291	-18.728	-30.031	1.00	25.50	O
[9936]	ATOM	3159	CB	ASP	B	147	45.589	-19.719	-31.957	1.00	26.39	C
[9937]	ATOM	3160	CG	ASP	B	147	46.775	-18.790	-31.772	1.00	29.19	C
[9938]	ATOM	3161	OD1	ASP	B	147	47.369	-18.851	-30.684	1.00	31.38	O
[9939]	ATOM	3162	OD2	ASP	B	147	47.110	-17.986	-32.685	1.00	30.09	O
[9940]	ATOM	3163	N	THR	B	148	44.052	-16.847	-30.998	1.00	24.27	N
[9941]	ATOM	3164	CA	THR	B	148	43.794	-16.004	-29.835	1.00	24.05	C
[9942]	ATOM	3165	C	THR	B	148	42.428	-15.308	-29.867	1.00	24.20	C
[9943]	ATOM	3166	O	THR	B	148	42.051	-14.638	-28.902	1.00	24.77	O
[9944]	ATOM	3167	CB	THR	B	148	44.858	-14.901	-29.668	1.00	24.04	C
[9945]	ATOM	3168	OG1	THR	B	148	44.746	-13.974	-30.758	1.00	24.33	O
[9946]	ATOM	3169	CG2	THR	B	148	46.274	-15.470	-29.577	1.00	23.02	C
[9947]	ATOM	3170	N	VAL	B	149	41.688	-15.454	-30.964	1.00	23.43	N
[9948]	ATOM	3171	CA	VAL	B	149	40.460	-14.676	-31.161	1.00	22.92	C
[9949]	ATOM	3172	C	VAL	B	149	39.261	-15.624	-31.169	1.00	23.37	C
[9950]	ATOM	3173	O	VAL	B	149	39.121	-16.458	-32.070	1.00	22.54	O
[9951]	ATOM	3174	CB	VAL	B	149	40.500	-13.801	-32.448	1.00	23.42	C
[9952]	ATOM	3175	CG1	VAL	B	149	39.113	-13.198	-32.739	1.00	22.76	C
[9953]	ATOM	3176	CG2	VAL	B	149	41.543	-12.670	-32.347	1.00	21.72	C
[9954]	ATOM	3177	N	GLU	B	150	38.416	-15.508	-30.149	1.00	23.39	N
[9955]	ATOM	3178	CA	GLU	B	150	37.237	-16.375	-30.025	1.00	24.63	C
[9956]	ATOM	3179	C	GLU	B	150	36.000	-15.896	-30.794	1.00	24.50	C

[9957]	ATOM	3180	O	GLU	B	150	35.113	-16.694	-31.104	1.00	25.53	O
[9958]	ATOM	3181	CB	GLU	B	150	36.893	-16.601	-28.548	1.00	25.20	C
[9959]	ATOM	3182	CG	GLU	B	150	38.047	-17.242	-27.796	1.00	29.26	C
[9960]	ATOM	3183	CD	GLU	B	150	37.634	-17.976	-26.526	1.00	36.49	C
[9961]	ATOM	3184	OE1	GLU	B	150	36.430	-18.360	-26.399	1.00	36.38	O
[9962]	ATOM	3185	OE2	GLU	B	150	38.538	-18.154	-25.652	1.00	37.89	O
[9963]	ATOM	3186	N	GLY	B	151	35.939	-14.602	-31.113	1.00	23.69	N
[9964]	ATOM	3187	CA	GLY	B	151	34.823	-14.041	-31.881	1.00	21.87	C
[9965]	ATOM	3188	C	GLY	B	151	35.091	-12.571	-32.136	1.00	21.49	C
[9966]	ATOM	3189	O	GLY	B	151	35.870	-11.958	-31.411	1.00	20.42	O
[9967]	ATOM	3190	N	LEU	B	152	34.460	-12.030	-33.178	1.00	20.14	N
[9968]	ATOM	3191	CA	LEU	B	152	34.597	-10.639	-33.585	1.00	21.00	C
[9969]	ATOM	3192	C	LEU	B	152	33.229	-10.005	-33.830	1.00	20.64	C
[9970]	ATOM	3193	O	LEU	B	152	32.364	-10.625	-34.427	1.00	20.34	O
[9971]	ATOM	3194	CB	LEU	B	152	35.424	-10.532	-34.895	1.00	20.22	C
[9972]	ATOM	3195	CG	LEU	B	152	36.925	-10.868	-34.829	1.00	21.09	C
[9973]	ATOM	3196	CD1	LEU	B	152	37.525	-11.037	-36.224	1.00	19.59	C
[9974]	ATOM	3197	CD2	LEU	B	152	37.733	-9.864	-34.000	1.00	19.56	C
[9975]	ATOM	3198	N	VAL	B	153	33.046	-8.783	-33.340	1.00	20.81	N
[9976]	ATOM	3199	CA	VAL	B	153	31.897	-7.940	-33.680	1.00	20.21	C
[9977]	ATOM	3200	C	VAL	B	153	32.526	-6.785	-34.461	1.00	20.67	C
[9978]	ATOM	3201	O	VAL	B	153	33.324	-6.010	-33.912	1.00	20.13	O
[9979]	ATOM	3202	CB	VAL	B	153	31.200	-7.403	-32.415	1.00	20.62	C
[9980]	ATOM	3203	CG1	VAL	B	153	30.007	-6.515	-32.778	1.00	19.38	C
[9981]	ATOM	3204	CG2	VAL	B	153	30.786	-8.561	-31.489	1.00	19.93	C
[9982]	ATOM	3205	N	LEU	B	154	32.227	-6.737	-35.758	1.00	20.20	N
[9983]	ATOM	3206	CA	LEU	B	154	32.850	-5.805	-36.674	1.00	20.57	C
[9984]	ATOM	3207	C	LEU	B	154	31.812	-4.781	-37.150	1.00	20.79	C
[9985]	ATOM	3208	O	LEU	B	154	30.987	-5.071	-38.038	1.00	21.23	O
[9986]	ATOM	3209	CB	LEU	B	154	33.468	-6.580	-37.845	1.00	20.20	C
[9987]	ATOM	3210	CG	LEU	B	154	34.551	-7.616	-37.455	1.00	21.29	C
[9988]	ATOM	3211	CD1	LEU	B	154	35.119	-8.350	-38.681	1.00	20.10	C
[9989]	ATOM	3212	CD2	LEU	B	154	35.693	-6.978	-36.682	1.00	20.11	C
[9990]	ATOM	3213	N	ILE	B	155	31.853	-3.582	-36.569	1.00	20.34	N
[9991]	ATOM	3214	CA	ILE	B	155	30.916	-2.506	-36.943	1.00	20.58	C
[9992]	ATOM	3215	C	ILE	B	155	31.569	-1.643	-38.046	1.00	20.70	C

[9993]	ATOM	3216	O	ILE B 155	32.679	-1.189	-37.870	1.00	20.49	O
[9994]	ATOM	3217	CB	ILE B 155	30.532	-1.673	-35.689	1.00	20.88	C
[9995]	ATOM	3218	CG1	ILE B 155	29.982	-2.611	-34.596	1.00	20.77	C
[9996]	ATOM	3219	CG2	ILE B 155	29.530	-0.544	-36.021	1.00	19.62	C
[9997]	ATOM	3220	CD1	ILE B 155	30.039	-2.052	-33.182	1.00	22.32	C
[9998]	ATOM	3221	N	ASN B 156	30.889	-1.455	-39.181	1.00	20.73	N
[9999]	ATOM	3222	CA	ASN B 156	31.336	-0.544	-40.264	1.00	21.13	C
[10000]	ATOM	3223	C	ASN B 156	32.676	-0.945	-40.891	1.00	21.77	C
[10001]	ATOM	3224	O	ASN B 156	33.434	-0.073	-41.351	1.00	21.97	O
[10002]	ATOM	3225	CB	ASN B 156	31.451	0.922	-39.821	1.00	19.77	C
[10003]	ATOM	3226	CG	ASN B 156	30.145	1.523	-39.340	1.00	21.04	C
[10004]	ATOM	3227	OD1	ASN B 156	29.079	0.927	-39.436	1.00	22.07	O
[10005]	ATOM	3228	ND2	ASN B 156	30.229	2.740	-38.831	1.00	19.96	N
[10006]	ATOM	3229	N	ILE B 157	32.983	-2.241	-40.902	1.00	21.73	N
[10007]	ATOM	3230	CA	ILE B 157	34.239	-2.698	-41.485	1.00	21.98	C
[10008]	ATOM	3231	C	ILE B 157	34.234	-2.515	-43.008	1.00	23.45	C
[10009]	ATOM	3232	O	ILE B 157	33.266	-2.865	-43.692	1.00	23.46	O
[10010]	ATOM	3233	CB	ILE B 157	34.509	-4.178	-41.149	1.00	22.87	C
[10011]	ATOM	3234	CG1	ILE B 157	35.798	-4.651	-41.836	1.00	22.63	C
[10012]	ATOM	3235	CG2	ILE B 157	33.282	-5.041	-41.553	1.00	21.06	C
[10013]	ATOM	3236	CD1	ILE B 157	36.721	-5.428	-41.000	1.00	26.68	C
[10014]	ATOM	3237	N	ASP B 158	35.322	-1.949	-43.520	1.00	23.81	N
[10015]	ATOM	3238	CA	ASP B 158	35.563	-1.890	-44.947	1.00	23.91	C
[10016]	ATOM	3239	C	ASP B 158	36.890	-2.591	-45.193	1.00	23.96	C
[10017]	ATOM	3240	O	ASP B 158	37.961	-2.018	-44.930	1.00	24.35	O
[10018]	ATOM	3241	CB	ASP B 158	35.569	-0.449	-45.455	1.00	22.96	C
[10019]	ATOM	3242	CG	ASP B 158	35.565	-0.379	-46.971	1.00	25.52	C
[10020]	ATOM	3243	OD1	ASP B 158	36.066	-1.343	-47.618	1.00	25.52	O
[10021]	ATOM	3244	OD2	ASP B 158	35.048	0.631	-47.507	1.00	23.94	O
[10022]	ATOM	3245	N	PRO B 159	36.827	-3.858	-45.641	1.00	23.98	N
[10023]	ATOM	3246	CA	PRO B 159	38.026	-4.676	-45.722	1.00	24.26	C
[10024]	ATOM	3247	C	PRO B 159	38.812	-4.509	-47.016	1.00	24.79	C
[10025]	ATOM	3248	O	PRO B 159	39.782	-5.252	-47.209	1.00	24.95	O
[10026]	ATOM	3249	CB	PRO B 159	37.457	-6.084	-45.657	1.00	24.58	C
[10027]	ATOM	3250	CG	PRO B 159	36.199	-5.973	-46.430	1.00	23.89	C
[10028]	ATOM	3251	CD	PRO B 159	35.636	-4.613	-46.071	1.00	23.99	C

[10029]	ATOM	3252	N	ASN B 160	38.362	-3.611	-47.904	1.00	24.47	N
[10030]	ATOM	3253	CA	ASN B 160	39.081	-3.291	-49.145	1.00	24.83	C
[10031]	ATOM	3254	C	ASN B 160	39.926	-2.014	-49.059	1.00	24.65	C
[10032]	ATOM	3255	O	ASN B 160	39.534	-1.030	-48.428	1.00	24.89	O
[10033]	ATOM	3256	CB	ASN B 160	38.134	-3.182	-50.343	1.00	25.41	C
[10034]	ATOM	3257	CG	ASN B 160	37.316	-4.432	-50.568	1.00	26.69	C
[10035]	ATOM	3258	OD1	ASN B 160	36.113	-4.361	-50.862	1.00	28.20	O
[10036]	ATOM	3259	ND2	ASN B 160	37.951	-5.581	-50.439	1.00	26.63	N
[10037]	ATOM	3260	N	ALA B 161	41.098	-2.054	-49.685	1.00	24.41	N
[10038]	ATOM	3261	CA	ALA B 161	41.871	-0.849	-49.954	1.00	24.67	C
[10039]	ATOM	3262	C	ALA B 161	41.033	0.042	-50.869	1.00	24.34	C
[10040]	ATOM	3263	O	ALA B 161	40.136	-0.457	-51.558	1.00	24.91	O
[10041]	ATOM	3264	CB	ALA B 161	43.197	-1.219	-50.635	1.00	24.49	C
[10042]	ATOM	3265	N	LYS B 162	41.302	1.352	-50.875	1.00	23.56	N
[10043]	ATOM	3266	CA	LYS B 162	40.632	2.237	-51.822	1.00	22.98	C
[10044]	ATOM	3267	C	LYS B 162	41.108	1.889	-53.227	1.00	22.48	C
[10045]	ATOM	3268	O	LYS B 162	42.294	1.733	-53.442	1.00	21.15	O
[10046]	ATOM	3269	CB	LYS B 162	40.944	3.700	-51.529	1.00	22.89	C
[10047]	ATOM	3270	CG	LYS B 162	40.081	4.335	-50.462	1.00	23.96	C
[10048]	ATOM	3271	CD	LYS B 162	40.647	5.717	-50.139	1.00	25.27	C
[10049]	ATOM	3272	CE	LYS B 162	39.589	6.718	-49.854	1.00	25.21	C
[10050]	ATOM	3273	NZ	LYS B 162	38.882	6.316	-48.654	1.00	22.50	N
[10051]	ATOM	3274	N	GLY B 163	40.173	1.747	-54.160	1.00	22.95	N
[10052]	ATOM	3275	CA	GLY B 163	40.483	1.527	-55.562	1.00	22.82	C
[10053]	ATOM	3276	C	GLY B 163	40.590	2.894	-56.222	1.00	23.50	C
[10054]	ATOM	3277	O	GLY B 163	40.535	3.925	-55.548	1.00	23.53	O
[10055]	ATOM	3278	N	TRP B 164	40.741	2.925	-57.535	1.00	23.82	N
[10056]	ATOM	3279	CA	TRP B 164	40.949	4.200	-58.209	1.00	24.35	C
[10057]	ATOM	3280	C	TRP B 164	39.730	5.148	-58.133	1.00	25.16	C
[10058]	ATOM	3281	O	TRP B 164	39.883	6.367	-57.988	1.00	25.07	O
[10059]	ATOM	3282	CB	TRP B 164	41.455	3.980	-59.636	1.00	23.60	C
[10060]	ATOM	3283	CG	TRP B 164	40.593	3.119	-60.523	1.00	23.26	C
[10061]	ATOM	3284	CD1	TRP B 164	40.742	1.777	-60.764	1.00	22.46	C
[10062]	ATOM	3285	CD2	TRP B 164	39.469	3.550	-61.315	1.00	21.94	C
[10063]	ATOM	3286	NE1	TRP B 164	39.776	1.350	-61.651	1.00	21.47	N
[10064]	ATOM	3287	CE2	TRP B 164	38.981	2.413	-61.999	1.00	22.10	C

[10065]	ATOM	3288	CE3	TRP	B	164	38.819	4.785	-61.503	1.00	22.34	C
[10066]	ATOM	3289	CZ2	TRP	B	164	37.874	2.478	-62.880	1.00	23.12	C
[10067]	ATOM	3290	CZ3	TRP	B	164	37.716	4.848	-62.372	1.00	21.84	C
[10068]	ATOM	3291	CH2	TRP	B	164	37.258	3.697	-63.048	1.00	22.30	C
[10069]	ATOM	3292	N	MET	B	165	38.528	4.581	-58.187	1.00	26.26	N
[10070]	ATOM	3293	CA	MET	B	165	37.295	5.358	-58.109	1.00	28.63	C
[10071]	ATOM	3294	C	MET	B	165	37.123	6.022	-56.735	1.00	27.35	C
[10072]	ATOM	3295	O	MET	B	165	36.781	7.199	-56.644	1.00	27.24	O
[10073]	ATOM	3296	CB	MET	B	165	36.103	4.454	-58.399	1.00	28.24	C
[10074]	ATOM	3297	CG	MET	B	165	35.009	5.129	-59.202	1.00	31.81	C
[10075]	ATOM	3298	SD	MET	B	165	33.748	3.996	-59.861	1.00	35.67	S
[10076]	ATOM	3299	CE	MET	B	165	34.575	2.386	-59.919	1.00	37.09	C
[10077]	ATOM	3300	N	ASP	B	166	37.365	5.250	-55.678	1.00	26.68	N
[10078]	ATOM	3301	CA	ASP	B	166	37.336	5.739	-54.296	1.00	26.52	C
[10079]	ATOM	3302	C	ASP	B	166	38.319	6.872	-54.060	1.00	25.21	C
[10080]	ATOM	3303	O	ASP	B	166	37.975	7.850	-53.420	1.00	25.29	O
[10081]	ATOM	3304	CB	ASP	B	166	37.653	4.600	-53.324	1.00	26.30	C
[10082]	ATOM	3305	CG	ASP	B	166	36.714	3.405	-53.485	1.00	30.21	C
[10083]	ATOM	3306	OD1	ASP	B	166	35.473	3.603	-53.556	1.00	30.37	O
[10084]	ATOM	3307	OD2	ASP	B	166	37.226	2.252	-53.531	1.00	35.09	O
[10085]	ATOM	3308	N	TRP	B	167	39.539	6.730	-54.571	1.00	24.75	N
[10086]	ATOM	3309	CA	TRP	B	167	40.585	7.740	-54.382	1.00	23.70	C
[10087]	ATOM	3310	C	TRP	B	167	40.240	9.031	-55.115	1.00	22.98	C
[10088]	ATOM	3311	O	TRP	B	167	40.418	10.105	-54.562	1.00	22.32	O
[10089]	ATOM	3312	CB	TRP	B	167	41.949	7.229	-54.848	1.00	23.34	C
[10090]	ATOM	3313	CG	TRP	B	167	42.749	6.513	-53.787	1.00	24.11	C
[10091]	ATOM	3314	CD1	TRP	B	167	43.285	5.252	-53.864	1.00	23.72	C
[10092]	ATOM	3315	CD2	TRP	B	167	43.134	7.041	-52.508	1.00	22.94	C
[10093]	ATOM	3316	NE1	TRP	B	167	43.976	4.969	-52.707	1.00	23.54	N
[10094]	ATOM	3317	CE2	TRP	B	167	43.887	6.043	-51.855	1.00	23.13	C
[10095]	ATOM	3318	CE3	TRP	B	167	42.909	8.263	-51.853	1.00	22.83	C
[10096]	ATOM	3319	CZ2	TRP	B	167	44.413	6.220	-50.564	1.00	22.71	C
[10097]	ATOM	3320	CZ3	TRP	B	167	43.434	8.445	-50.572	1.00	23.27	C
[10098]	ATOM	3321	CH2	TRP	B	167	44.184	7.418	-49.944	1.00	23.25	C
[10099]	ATOM	3322	N	ALA	B	168	39.760	8.901	-56.353	1.00	22.11	N
[10100]	ATOM	3323	CA	ALA	B	168	39.230	10.023	-57.134	1.00	22.07	C

[10101]	ATOM	3324	C	ALA B 168	38.196	10.847	-56.352	1.00	21.96	C
[10102]	ATOM	3325	O	ALA B 168	38.322	12.056	-56.225	1.00	21.23	O
[10103]	ATOM	3326	CB	ALA B 168	38.616	9.508	-58.448	1.00	22.05	C
[10104]	ATOM	3327	N	ALA B 169	37.179	10.176	-55.830	1.00	22.21	N
[10105]	ATOM	3328	CA	ALA B 169	36.093	10.845	-55.127	1.00	23.06	C
[10106]	ATOM	3329	C	ALA B 169	36.594	11.431	-53.820	1.00	23.14	C
[10107]	ATOM	3330	O	ALA B 169	36.197	12.528	-53.440	1.00	23.35	O
[10108]	ATOM	3331	CB	ALA B 169	34.935	9.874	-54.875	1.00	23.37	C
[10109]	ATOM	3332	N	HIS B 170	37.483	10.706	-53.148	1.00	23.35	N
[10110]	ATOM	3333	CA	HIS B 170	38.088	11.170	-51.895	1.00	23.81	C
[10111]	ATOM	3334	C	HIS B 170	38.837	12.497	-52.065	1.00	23.89	C
[10112]	ATOM	3335	O	HIS B 170	38.650	13.425	-51.273	1.00	24.19	O
[10113]	ATOM	3336	CB	HIS B 170	39.028	10.104	-51.319	1.00	24.21	C
[10114]	ATOM	3337	CG	HIS B 170	39.799	10.559	-50.117	1.00	24.42	C
[10115]	ATOM	3338	ND1	HIS B 170	39.338	10.392	-48.830	1.00	27.26	N
[10116]	ATOM	3339	CD2	HIS B 170	40.995	11.184	-50.007	1.00	26.83	C
[10117]	ATOM	3340	CE1	HIS B 170	40.219	10.887	-47.976	1.00	26.06	C
[10118]	ATOM	3341	NE2	HIS B 170	41.231	11.383	-48.665	1.00	26.43	N
[10119]	ATOM	3342	N	LYS B 171	39.683	12.569	-53.089	1.00	23.46	N
[10120]	ATOM	3343	CA	LYS B 171	40.482	13.755	-53.387	1.00	22.92	C
[10121]	ATOM	3344	C	LYS B 171	39.631	14.925	-53.858	1.00	22.73	C
[10122]	ATOM	3345	O	LYS B 171	39.906	16.067	-53.516	1.00	22.97	O
[10123]	ATOM	3346	CB	LYS B 171	41.557	13.422	-54.419	1.00	23.06	C
[10124]	ATOM	3347	CG	LYS B 171	42.637	12.477	-53.875	1.00	23.56	C
[10125]	ATOM	3348	CD	LYS B 171	43.663	12.129	-54.939	1.00	26.38	C
[10126]	ATOM	3349	CE	LYS B 171	44.599	11.010	-54.496	1.00	27.81	C
[10127]	ATOM	3350	NZ	LYS B 171	45.503	10.603	-55.640	1.00	28.66	N
[10128]	ATOM	3351	N	LEU B 172	38.572	14.629	-54.600	1.00	21.83	N
[10129]	ATOM	3352	CA	LEU B 172	37.635	15.638	-55.051	1.00	21.40	C
[10130]	ATOM	3353	C	LEU B 172	36.906	16.243	-53.860	1.00	21.41	C
[10131]	ATOM	3354	O	LEU B 172	36.813	17.455	-53.765	1.00	21.60	O
[10132]	ATOM	3355	CB	LEU B 172	36.670	15.040	-56.080	1.00	20.72	C
[10133]	ATOM	3356	CG	LEU B 172	35.636	15.859	-56.845	1.00	20.58	C
[10134]	ATOM	3357	CD1	LEU B 172	36.141	17.200	-57.226	1.00	19.77	C
[10135]	ATOM	3358	CD2	LEU B 172	35.292	15.094	-58.110	1.00	21.02	C
[10136]	ATOM	3359	N	THR B 173	36.412	15.401	-52.957	1.00	21.45	N



[10137]	ATOM	3360	CA	THR	B	173	35.752	15.842	-51.715	1.00	21.99	C
[10138]	ATOM	3361	C	THR	B	173	36.685	16.701	-50.861	1.00	21.86	C
[10139]	ATOM	3362	O	THR	B	173	36.279	17.728	-50.326	1.00	21.30	O
[10140]	ATOM	3363	CB	THR	B	173	35.219	14.622	-50.909	1.00	22.71	C
[10141]	ATOM	3364	OG1	THR	B	173	34.249	13.936	-51.713	1.00	23.12	O
[10142]	ATOM	3365	CG2	THR	B	173	34.563	15.039	-49.572	1.00	21.89	C
[10143]	ATOM	3366	N	GLY	B	174	37.947	16.286	-50.779	1.00	21.73	N
[10144]	ATOM	3367	CA	GLY	B	174	38.955	16.996	-50.008	1.00	22.30	C
[10145]	ATOM	3368	C	GLY	B	174	39.238	18.410	-50.484	1.00	22.57	C
[10146]	ATOM	3369	O	GLY	B	174	39.830	19.209	-49.754	1.00	23.01	O
[10147]	ATOM	3370	N	LEU	B	175	38.828	18.724	-51.712	1.00	22.55	N
[10148]	ATOM	3371	CA	LEU	B	175	39.056	20.052	-52.265	1.00	22.66	C
[10149]	ATOM	3372	C	LEU	B	175	38.165	21.095	-51.594	1.00	23.52	C
[10150]	ATOM	3373	O	LEU	B	175	38.526	22.278	-51.552	1.00	23.19	O
[10151]	ATOM	3374	CB	LEU	B	175	38.829	20.073	-53.785	1.00	21.84	C
[10152]	ATOM	3375	CG	LEU	B	175	39.853	19.367	-54.675	1.00	21.17	C
[10153]	ATOM	3376	CD1	LEU	B	175	39.470	19.646	-56.139	1.00	19.15	C
[10154]	ATOM	3377	CD2	LEU	B	175	41.294	19.853	-54.392	1.00	20.76	C
[10155]	ATOM	3378	N	THR	B	176	36.999	20.671	-51.104	1.00	23.77	N
[10156]	ATOM	3379	CA	THR	B	176	36.105	21.607	-50.442	1.00	25.34	C
[10157]	ATOM	3380	C	THR	B	176	35.692	21.227	-49.013	1.00	25.50	C
[10158]	ATOM	3381	O	THR	B	176	35.058	22.024	-48.334	1.00	26.41	O
[10159]	ATOM	3382	CB	THR	B	176	34.862	21.937	-51.298	1.00	25.39	C
[10160]	ATOM	3383	OG1	THR	B	176	34.141	20.735	-51.586	1.00	27.69	O
[10161]	ATOM	3384	CG2	THR	B	176	35.273	22.590	-52.594	1.00	26.12	C
[10162]	ATOM	3385	N	SER	B	177	36.061	20.032	-48.553	1.00	25.60	N
[10163]	ATOM	3386	CA	SER	B	177	35.757	19.586	-47.191	1.00	25.64	C
[10164]	ATOM	3387	C	SER	B	177	36.994	19.619	-46.315	1.00	25.73	C
[10165]	ATOM	3388	O	SER	B	177	38.050	19.121	-46.723	1.00	26.46	O
[10166]	ATOM	3389	CB	SER	B	177	35.245	18.150	-47.189	1.00	25.79	C
[10167]	ATOM	3390	OG	SER	B	177	33.845	18.091	-47.383	1.00	27.01	O
[10168]	ATOM	3391	N	SER	B	178	36.857	20.149	-45.094	1.00	24.86	N
[10169]	ATOM	3392	CA	SER	B	178	37.949	20.160	-44.145	1.00	23.88	C
[10170]	ATOM	3393	C	SER	B	178	38.173	18.733	-43.674	1.00	23.98	C
[10171]	ATOM	3394	O	SER	B	178	37.369	17.835	-43.942	1.00	23.34	O
[10172]	ATOM	3395	CB	SER	B	178	37.633	21.071	-42.969	1.00	24.13	C

[10173]	ATOM	3396	OG	SER	B	178	36.562	20.540	-42.204	1.00	24.17	O
[10174]	ATOM	3397	N	ILE	B	179	39.273	18.502	-42.981	1.00	24.29	N
[10175]	ATOM	3398	CA	ILE	B	179	39.520	17.154	-42.476	1.00	25.04	C
[10176]	ATOM	3399	C	ILE	B	179	38.458	16.657	-41.443	1.00	24.59	C
[10177]	ATOM	3400	O	ILE	B	179	37.957	15.527	-41.578	1.00	25.67	O
[10178]	ATOM	3401	CB	ILE	B	179	41.003	16.943	-42.055	1.00	25.27	C
[10179]	ATOM	3402	CG1	ILE	B	179	41.846	16.749	-43.310	1.00	25.53	C
[10180]	ATOM	3403	CG2	ILE	B	179	41.165	15.681	-41.179	1.00	24.47	C
[10181]	ATOM	3404	CD1	ILE	B	179	43.133	17.423	-43.235	1.00	30.88	C
[10182]	ATOM	3405	N	PRO	B	180	38.096	17.494	-40.445	1.00	24.47	N
[10183]	ATOM	3406	CA	PRO	B	180	37.028	17.102	-39.522	1.00	23.73	C
[10184]	ATOM	3407	C	PRO	B	180	35.708	16.808	-40.256	1.00	23.71	C
[10185]	ATOM	3408	O	PRO	B	180	35.003	15.874	-39.890	1.00	23.14	O
[10186]	ATOM	3409	CB	PRO	B	180	36.868	18.339	-38.640	1.00	23.80	C
[10187]	ATOM	3410	CG	PRO	B	180	38.179	19.061	-38.726	1.00	23.38	C
[10188]	ATOM	3411	CD	PRO	B	180	38.643	18.832	-40.111	1.00	24.20	C
[10189]	ATOM	3412	N	GLU	B	181	35.372	17.606	-41.271	1.00	23.45	N
[10190]	ATOM	3413	CA	GLU	B	181	34.179	17.366	-42.091	1.00	24.38	C
[10191]	ATOM	3414	C	GLU	B	181	34.282	15.983	-42.765	1.00	24.20	C
[10192]	ATOM	3415	O	GLU	B	181	33.304	15.229	-42.822	1.00	23.33	O
[10193]	ATOM	3416	CB	GLU	B	181	33.994	18.478	-43.142	1.00	24.50	C
[10194]	ATOM	3417	CG	GLU	B	181	33.362	19.764	-42.628	1.00	26.20	C
[10195]	ATOM	3418	CD	GLU	B	181	33.407	20.980	-43.630	1.00	27.96	C
[10196]	ATOM	3419	OE1	GLU	B	181	34.270	21.049	-44.559	1.00	29.32	O
[10197]	ATOM	3420	OE2	GLU	B	181	32.575	21.906	-43.445	1.00	33.07	O
[10198]	ATOM	3421	N	MET	B	182	35.480	15.634	-43.233	1.00	23.73	N
[10199]	ATOM	3422	CA	MET	B	182	35.664	14.333	-43.871	1.00	24.99	C
[10200]	ATOM	3423	C	MET	B	182	35.580	13.166	-42.906	1.00	23.67	C
[10201]	ATOM	3424	O	MET	B	182	34.948	12.150	-43.205	1.00	23.57	O
[10202]	ATOM	3425	CB	MET	B	182	36.935	14.317	-44.692	1.00	24.52	C
[10203]	ATOM	3426	CG	MET	B	182	36.693	15.145	-45.981	1.00	26.34	C
[10204]	ATOM	3427	SD	MET	B	182	38.042	15.093	-47.116	1.00	29.56	S
[10205]	ATOM	3428	CE	MET	B	182	37.865	13.476	-47.854	1.00	27.10	C
[10206]	ATOM	3429	N	ILE	B	183	36.190	13.327	-41.738	1.00	23.36	N
[10207]	ATOM	3430	CA	ILE	B	183	36.057	12.342	-40.666	1.00	22.05	C
[10208]	ATOM	3431	C	ILE	B	183	34.597	12.199	-40.257	1.00	21.84	C

[10209]	ATOM	3432	O	ILE B 183	34.099	11.087	-40.085	1.00	21.37	O
[10210]	ATOM	3433	CB	ILE B 183	36.967	12.699	-39.491	1.00	22.54	C
[10211]	ATOM	3434	CG1	ILE B 183	38.438	12.565	-39.965	1.00	23.24	C
[10212]	ATOM	3435	CG2	ILE B 183	36.675	11.808	-38.265	1.00	22.33	C
[10213]	ATOM	3436	CD1	ILE B 183	39.432	13.145	-39.052	1.00	25.71	C
[10214]	ATOM	3437	N	LEU B 184	33.896	13.314	-40.115	1.00	20.91	N
[10215]	ATOM	3438	CA	LEU B 184	32.472	13.237	-39.784	1.00	21.49	C
[10216]	ATOM	3439	C	LEU B 184	31.667	12.449	-40.834	1.00	21.78	C
[10217]	ATOM	3440	O	LEU B 184	30.785	11.673	-40.474	1.00	22.61	O
[10218]	ATOM	3441	CB	LEU B 184	31.894	14.619	-39.575	1.00	21.38	C
[10219]	ATOM	3442	CG	LEU B 184	32.275	15.221	-38.238	1.00	21.94	C
[10220]	ATOM	3443	CD1	LEU B 184	31.899	16.664	-38.293	1.00	22.81	C
[10221]	ATOM	3444	CD2	LEU B 184	31.569	14.493	-37.050	1.00	22.86	C
[10222]	ATOM	3445	N	GLY B 185	32.001	12.629	-42.109	1.00	21.98	N
[10223]	ATOM	3446	CA	GLY B 185	31.358	11.903	-43.210	1.00	22.57	C
[10224]	ATOM	3447	C	GLY B 185	31.709	10.422	-43.236	1.00	23.08	C
[10225]	ATOM	3448	O	GLY B 185	30.987	9.620	-43.856	1.00	23.91	O
[10226]	ATOM	3449	N	HIS B 186	32.829	10.060	-42.598	1.00	22.49	N
[10227]	ATOM	3450	CA	HIS B 186	33.211	8.647	-42.366	1.00	22.40	C
[10228]	ATOM	3451	C	HIS B 186	32.416	7.999	-41.213	1.00	22.50	C
[10229]	ATOM	3452	O	HIS B 186	32.140	6.790	-41.220	1.00	23.33	O
[10230]	ATOM	3453	CB	HIS B 186	34.721	8.558	-42.092	1.00	22.44	C
[10231]	ATOM	3454	CG	HIS B 186	35.157	7.269	-41.467	1.00	22.07	C
[10232]	ATOM	3455	ND1	HIS B 186	35.387	6.128	-42.204	1.00	22.93	N
[10233]	ATOM	3456	CD2	HIS B 186	35.424	6.946	-40.179	1.00	22.98	C
[10234]	ATOM	3457	CE1	HIS B 186	35.768	5.154	-41.396	1.00	23.98	C
[10235]	ATOM	3458	NE2	HIS B 186	35.793	5.622	-40.159	1.00	24.18	N
[10236]	ATOM	3459	N	LEU B 187	32.049	8.816	-40.235	1.00	22.52	N
[10237]	ATOM	3460	CA	LEU B 187	31.351	8.369	-39.028	1.00	22.64	C
[10238]	ATOM	3461	C	LEU B 187	29.807	8.416	-39.125	1.00	22.82	C
[10239]	ATOM	3462	O	LEU B 187	29.120	7.581	-38.557	1.00	22.55	O
[10240]	ATOM	3463	CB	LEU B 187	31.836	9.202	-37.814	1.00	22.41	C
[10241]	ATOM	3464	CG	LEU B 187	33.303	9.134	-37.374	1.00	21.55	C
[10242]	ATOM	3465	CD1	LEU B 187	33.613	10.212	-36.392	1.00	20.45	C
[10243]	ATOM	3466	CD2	LEU B 187	33.677	7.751	-36.752	1.00	20.11	C
[10244]	ATOM	3467	N	PHE B 188	29.266	9.399	-39.834	1.00	23.03	N

[10245]	ATOM	3468	CA	PHE	B	188	27.822	9.593	-39.893	1.00	23.02	C
[10246]	ATOM	3469	C	PHE	B	188	27.348	9.727	-41.331	1.00	23.95	C
[10247]	ATOM	3470	O	PHE	B	188	28.117	10.140	-42.192	1.00	23.96	O
[10248]	ATOM	3471	CB	PHE	B	188	27.454	10.844	-39.094	1.00	22.86	C
[10249]	ATOM	3472	CG	PHE	B	188	27.870	10.782	-37.642	1.00	22.89	C
[10250]	ATOM	3473	CD1	PHE	B	188	27.136	10.024	-36.711	1.00	23.07	C
[10251]	ATOM	3474	CD2	PHE	B	188	28.992	11.480	-37.189	1.00	22.59	C
[10252]	ATOM	3475	CE1	PHE	B	188	27.515	9.980	-35.357	1.00	22.30	C
[10253]	ATOM	3476	CE2	PHE	B	188	29.372	11.434	-35.826	1.00	23.62	C
[10254]	ATOM	3477	CZ	PHE	B	188	28.644	10.675	-34.921	1.00	22.07	C
[10255]	ATOM	3478	N	SER	B	189	26.090	9.364	-41.593	1.00	25.42	N
[10256]	ATOM	3479	CA	SER	B	189	25.465	9.559	-42.895	1.00	27.16	C
[10257]	ATOM	3480	C	SER	B	189	25.303	11.048	-43.201	1.00	28.62	C
[10258]	ATOM	3481	O	SER	B	189	25.287	11.883	-42.286	1.00	28.22	O
[10259]	ATOM	3482	CB	SER	B	189	24.101	8.879	-42.941	1.00	27.34	C
[10260]	ATOM	3483	OG	SER	B	189	23.159	9.565	-42.128	1.00	28.66	O
[10261]	ATOM	3484	N	GLN	B	190	25.202	11.387	-44.485	1.00	30.12	N
[10262]	ATOM	3485	CA	GLN	B	190	24.990	12.776	-44.886	1.00	31.64	C
[10263]	ATOM	3486	C	GLN	B	190	23.643	13.289	-44.383	1.00	32.24	C
[10264]	ATOM	3487	O	GLN	B	190	23.525	14.455	-43.978	1.00	32.44	O
[10265]	ATOM	3488	CB	GLN	B	190	25.140	12.962	-46.400	1.00	32.05	C
[10266]	ATOM	3489	CG	GLN	B	190	26.600	12.834	-46.881	1.00	34.45	C
[10267]	ATOM	3490	CD	GLN	B	190	27.554	13.833	-46.217	1.00	35.98	C
[10268]	ATOM	3491	OE1	GLN	B	190	27.299	15.041	-46.190	1.00	37.76	O
[10269]	ATOM	3492	NE2	GLN	B	190	28.662	13.326	-45.688	1.00	35.25	N
[10270]	ATOM	3493	N	GLU	B	191	22.646	12.408	-44.369	1.00	32.67	N
[10271]	ATOM	3494	CA	GLU	B	191	21.344	12.728	-43.795	1.00	33.72	C
[10272]	ATOM	3495	C	GLU	B	191	21.454	13.131	-42.320	1.00	32.66	C
[10273]	ATOM	3496	O	GLU	B	191	20.875	14.141	-41.910	1.00	32.66	O
[10274]	ATOM	3497	CB	GLU	B	191	20.389	11.547	-43.945	1.00	33.84	C
[10275]	ATOM	3498	CG	GLU	B	191	18.975	11.825	-43.447	1.00	36.41	C
[10276]	ATOM	3499	CD	GLU	B	191	18.025	10.652	-43.668	1.00	37.02	C
[10277]	ATOM	3500	OE1	GLU	B	191	16.843	10.900	-44.014	1.00	42.20	O
[10278]	ATOM	3501	OE2	GLU	B	191	18.455	9.484	-43.499	1.00	41.64	O
[10279]	ATOM	3502	N	GLU	B	192	22.181	12.340	-41.531	1.00	31.24	N
[10280]	ATOM	3503	CA	GLU	B	192	22.424	12.664	-40.125	1.00	30.35	C

[10281]	ATOM	3504	C	GLU	B	192	23.104	14.023	-39.981	1.00	29.68	C
[10282]	ATOM	3505	O	GLU	B	192	22.749	14.811	-39.108	1.00	29.02	O
[10283]	ATOM	3506	CB	GLU	B	192	23.325	11.615	-39.472	1.00	29.90	C
[10284]	ATOM	3507	CG	GLU	B	192	22.670	10.292	-39.202	1.00	30.54	C
[10285]	ATOM	3508	CD	GLU	B	192	23.603	9.349	-38.458	1.00	31.29	C
[10286]	ATOM	3509	OE1	GLU	B	192	24.561	8.869	-39.097	1.00	29.46	O
[10287]	ATOM	3510	OE2	GLU	B	192	23.373	9.095	-37.248	1.00	29.55	O
[10288]	ATOM	3511	N	LEU	B	193	24.098	14.279	-40.829	1.00	29.07	N
[10289]	ATOM	3512	CA	LEU	B	193	24.879	15.506	-40.726	1.00	29.47	C
[10290]	ATOM	3513	C	LEU	B	193	24.058	16.770	-41.003	1.00	30.10	C
[10291]	ATOM	3514	O	LEU	B	193	24.197	17.764	-40.285	1.00	30.13	O
[10292]	ATOM	3515	CB	LEU	B	193	26.145	15.447	-41.596	1.00	29.16	C
[10293]	ATOM	3516	CG	LEU	B	193	27.205	14.454	-41.105	1.00	27.41	C
[10294]	ATOM	3517	CD1	LEU	B	193	28.192	14.131	-42.198	1.00	27.27	C
[10295]	ATOM	3518	CD2	LEU	B	193	27.913	14.969	-39.864	1.00	25.82	C
[10296]	ATOM	3519	N	SER	B	194	23.202	16.734	-42.022	1.00	30.74	N
[10297]	ATOM	3520	CA	SER	B	194	22.372	17.904	-42.323	1.00	31.86	C
[10298]	ATOM	3521	C	SER	B	194	21.160	17.974	-41.382	1.00	31.87	C
[10299]	ATOM	3522	O	SER	B	194	20.627	19.052	-41.134	1.00	32.03	O
[10300]	ATOM	3523	CB	SER	B	194	21.981	17.985	-43.805	1.00	32.10	C
[10301]	ATOM	3524	OG	SER	B	194	21.553	16.732	-44.277	1.00	33.03	O
[10302]	ATOM	3525	N	GLY	B	195	20.773	16.830	-40.824	1.00	31.90	N
[10303]	ATOM	3526	CA	GLY	B	195	19.784	16.790	-39.743	1.00	31.89	C
[10304]	ATOM	3527	C	GLY	B	195	20.165	17.594	-38.497	1.00	31.79	C
[10305]	ATOM	3528	O	GLY	B	195	19.298	18.165	-37.822	1.00	31.49	O
[10306]	ATOM	3529	N	ASN	B	196	21.457	17.630	-38.176	1.00	31.50	N
[10307]	ATOM	3530	CA	ASN	B	196	21.951	18.366	-37.001	1.00	31.45	C
[10308]	ATOM	3531	C	ASN	B	196	21.224	18.046	-35.672	1.00	30.43	C
[10309]	ATOM	3532	O	ASN	B	196	20.850	18.942	-34.928	1.00	30.34	O
[10310]	ATOM	3533	CB	ASN	B	196	21.914	19.874	-37.281	1.00	31.93	C
[10311]	ATOM	3534	CG	ASN	B	196	23.100	20.604	-36.703	1.00	33.67	C
[10312]	ATOM	3535	OD1	ASN	B	196	24.227	20.099	-36.727	1.00	35.56	O
[10313]	ATOM	3536	ND2	ASN	B	196	22.862	21.813	-36.194	1.00	36.09	N
[10314]	ATOM	3537	N	SER	B	197	21.011	16.764	-35.384	1.00	29.65	N
[10315]	ATOM	3538	CA	SER	B	197	20.514	16.355	-34.068	1.00	28.81	C
[10316]	ATOM	3539	C	SER	B	197	21.526	16.726	-32.986	1.00	28.42	C

[10317]	ATOM	3540	O	SER B 197	22.666	17.060	-33.289	1.00	27.36	O
[10318]	ATOM	3541	CB	SER B 197	20.266	14.849	-34.043	1.00	28.76	C
[10319]	ATOM	3542	OG	SER B 197	21.485	14.148	-33.987	1.00	28.21	O
[10320]	ATOM	3543	N	GLU B 198	21.102	16.642	-31.730	1.00	28.27	N
[10321]	ATOM	3544	CA	GLU B 198	21.958	16.862	-30.563	1.00	28.88	C
[10322]	ATOM	3545	C	GLU B 198	23.277	16.077	-30.602	1.00	27.53	C
[10323]	ATOM	3546	O	GLU B 198	24.344	16.595	-30.279	1.00	27.09	O
[10324]	ATOM	3547	CB	GLU B 198	21.200	16.407	-29.324	1.00	30.29	C
[10325]	ATOM	3548	CG	GLU B 198	21.390	17.254	-28.115	1.00	35.42	C
[10326]	ATOM	3549	CD	GLU B 198	20.337	18.324	-28.042	1.00	41.47	C
[10327]	ATOM	3550	OE1	GLU B 198	20.621	19.447	-28.541	1.00	44.45	O
[10328]	ATOM	3551	OE2	GLU B 198	19.225	18.035	-27.521	1.00	43.91	O
[10329]	ATOM	3552	N	LEU B 199	23.177	14.807	-30.964	1.00	26.39	N
[10330]	ATOM	3553	CA	LEU B 199	24.320	13.935	-31.039	1.00	25.51	C
[10331]	ATOM	3554	C	LEU B 199	25.298	14.415	-32.110	1.00	24.24	C
[10332]	ATOM	3555	O	LEU B 199	26.498	14.431	-31.874	1.00	23.84	O
[10333]	ATOM	3556	CB	LEU B 199	23.856	12.510	-31.330	1.00	25.66	C
[10334]	ATOM	3557	CG	LEU B 199	24.941	11.446	-31.404	1.00	27.79	C
[10335]	ATOM	3558	CD1	LEU B 199	25.308	10.980	-30.001	1.00	29.94	C
[10336]	ATOM	3559	CD2	LEU B 199	24.460	10.286	-32.270	1.00	28.00	C
[10337]	ATOM	3560	N	ILE B 200	24.782	14.813	-33.273	1.00	23.45	N
[10338]	ATOM	3561	CA	ILE B 200	25.623	15.327	-34.371	1.00	23.26	C
[10339]	ATOM	3562	C	ILE B 200	26.318	16.646	-33.989	1.00	22.57	C
[10340]	ATOM	3563	O	ILE B 200	27.499	16.820	-34.268	1.00	22.14	O
[10341]	ATOM	3564	CB	ILE B 200	24.811	15.505	-35.700	1.00	23.44	C
[10342]	ATOM	3565	CG1	ILE B 200	24.328	14.154	-36.237	1.00	24.44	C
[10343]	ATOM	3566	CG2	ILE B 200	25.609	16.250	-36.774	1.00	23.47	C
[10344]	ATOM	3567	CD1	ILE B 200	25.414	13.178	-36.560	1.00	25.27	C
[10345]	ATOM	3568	N	GLN B 201	25.587	17.558	-33.347	1.00	22.05	N
[10346]	ATOM	3569	CA	GLN B 201	26.151	18.829	-32.874	1.00	22.09	C
[10347]	ATOM	3570	C	GLN B 201	27.286	18.582	-31.901	1.00	22.22	C
[10348]	ATOM	3571	O	GLN B 201	28.312	19.238	-31.959	1.00	21.69	O
[10349]	ATOM	3572	CB	GLN B 201	25.090	19.666	-32.162	1.00	21.38	C
[10350]	ATOM	3573	CG	GLN B 201	23.979	20.175	-33.060	1.00	23.28	C
[10351]	ATOM	3574	CD	GLN B 201	22.891	20.868	-32.276	1.00	25.51	C
[10352]	ATOM	3575	OE1	GLN B 201	23.169	21.734	-31.440	1.00	26.52	O

[10353]	ATOM	3576	NE2	GLN	B	201	21.639	20.498	-32.543	1.00	24.80	N
[10354]	ATOM	3577	N	LYS	B	202	27.071	17.650	-30.979	1.00	22.67	N
[10355]	ATOM	3578	CA	LYS	B	202	28.088	17.279	-30.011	1.00	23.83	C
[10356]	ATOM	3579	C	LYS	B	202	29.338	16.722	-30.699	1.00	23.54	C
[10357]	ATOM	3580	O	LYS	B	202	30.462	17.173	-30.435	1.00	23.72	O
[10358]	ATOM	3581	CB	LYS	B	202	27.514	16.249	-29.043	1.00	24.00	C
[10359]	ATOM	3582	CG	LYS	B	202	28.474	15.768	-28.010	1.00	26.70	C
[10360]	ATOM	3583	CD	LYS	B	202	27.833	14.681	-27.192	1.00	29.12	C
[10361]	ATOM	3584	CE	LYS	B	202	28.775	14.219	-26.107	1.00	32.01	C
[10362]	ATOM	3585	NZ	LYS	B	202	28.167	13.094	-25.352	1.00	32.04	N
[10363]	ATOM	3586	N	TYR	B	203	29.143	15.747	-31.587	1.00	23.09	N
[10364]	ATOM	3587	CA	TYR	B	203	30.259	15.078	-32.229	1.00	22.48	C
[10365]	ATOM	3588	C	TYR	B	203	31.003	15.964	-33.231	1.00	22.86	C
[10366]	ATOM	3589	O	TYR	B	203	32.224	15.832	-33.407	1.00	22.92	O
[10367]	ATOM	3590	CB	TYR	B	203	29.827	13.731	-32.818	1.00	22.80	C
[10368]	ATOM	3591	CG	TYR	B	203	29.894	12.651	-31.752	1.00	23.13	C
[10369]	ATOM	3592	CD1	TYR	B	203	28.973	12.630	-30.697	1.00	24.49	C
[10370]	ATOM	3593	CD2	TYR	B	203	30.903	11.693	-31.762	1.00	23.91	C
[10371]	ATOM	3594	CE1	TYR	B	203	29.044	11.678	-29.694	1.00	24.78	C
[10372]	ATOM	3595	CE2	TYR	B	203	30.987	10.722	-30.756	1.00	23.42	C
[10373]	ATOM	3596	CZ	TYR	B	203	30.052	10.733	-29.728	1.00	24.50	C
[10374]	ATOM	3597	OH	TYR	B	203	30.102	9.796	-28.728	1.00	23.56	O
[10375]	ATOM	3598	N	ARG	B	204	30.277	16.867	-33.879	1.00	22.35	N
[10376]	ATOM	3599	CA	ARG	B	204	30.914	17.870	-34.717	1.00	22.88	C
[10377]	ATOM	3600	C	ARG	B	204	31.867	18.735	-33.878	1.00	23.17	C
[10378]	ATOM	3601	O	ARG	B	204	33.010	18.954	-34.288	1.00	23.50	O
[10379]	ATOM	3602	CB	ARG	B	204	29.864	18.683	-35.477	1.00	22.53	C
[10380]	ATOM	3603	CG	ARG	B	204	30.348	19.976	-36.077	1.00	25.22	C
[10381]	ATOM	3604	CD	ARG	B	204	29.823	20.133	-37.509	1.00	27.24	C
[10382]	ATOM	3605	NE	ARG	B	204	28.383	19.907	-37.582	1.00	30.98	N
[10383]	ATOM	3606	CZ	ARG	B	204	27.730	19.401	-38.625	1.00	31.12	C
[10384]	ATOM	3607	NH1	ARG	B	204	28.373	19.022	-39.736	1.00	29.84	N
[10385]	ATOM	3608	NH2	ARG	B	204	26.410	19.282	-38.545	1.00	30.92	N
[10386]	ATOM	3609	N	ASN	B	205	31.426	19.182	-32.700	1.00	23.83	N
[10387]	ATOM	3610	CA	ASN	B	205	32.292	19.944	-31.769	1.00	24.57	C
[10388]	ATOM	3611	C	ASN	B	205	33.487	19.169	-31.206	1.00	24.45	C

[10389]	ATOM	3612	O	ASN B 205	34.604	19.667	-31.196	1.00	24.07	O
[10390]	ATOM	3613	CB	ASN B 205	31.472	20.537	-30.625	1.00	24.83	C
[10391]	ATOM	3614	CG	ASN B 205	30.557	21.658	-31.089	1.00	28.50	C
[10392]	ATOM	3615	OD1	ASN B 205	30.708	22.181	-32.209	1.00	33.91	O
[10393]	ATOM	3616	ND2	ASN B 205	29.586	22.029	-30.242	1.00	30.62	N
[10394]	ATOM	3617	N	ILE B 206	33.237	17.954	-30.729	1.00	24.28	N
[10395]	ATOM	3618	CA	ILE B 206	34.289	17.044	-30.262	1.00	24.28	C
[10396]	ATOM	3619	C	ILE B 206	35.432	16.866	-31.278	1.00	24.25	C
[10397]	ATOM	3620	O	ILE B 206	36.605	16.947	-30.913	1.00	24.70	O
[10398]	ATOM	3621	CB	ILE B 206	33.692	15.675	-29.891	1.00	23.93	C
[10399]	ATOM	3622	CG1	ILE B 206	33.006	15.768	-28.530	1.00	25.11	C
[10400]	ATOM	3623	CG2	ILE B 206	34.745	14.578	-29.863	1.00	25.36	C
[10401]	ATOM	3624	CD1	ILE B 206	32.371	14.447	-28.106	1.00	25.98	C
[10402]	ATOM	3625	N	ILE B 207	35.085	16.647	-32.544	1.00	23.26	N
[10403]	ATOM	3626	CA	ILE B 207	36.081	16.361	-33.568	1.00	23.62	C
[10404]	ATOM	3627	C	ILE B 207	36.724	17.653	-34.082	1.00	23.17	C
[10405]	ATOM	3628	O	ILE B 207	37.945	17.768	-34.080	1.00	23.32	O
[10406]	ATOM	3629	CB	ILE B 207	35.495	15.458	-34.704	1.00	23.25	C
[10407]	ATOM	3630	CG1	ILE B 207	35.222	14.052	-34.145	1.00	24.27	C
[10408]	ATOM	3631	CG2	ILE B 207	36.437	15.381	-35.890	1.00	23.07	C
[10409]	ATOM	3632	CD1	ILE B 207	34.367	13.198	-35.037	1.00	26.96	C
[10410]	ATOM	3633	N	THR B 208	35.900	18.625	-34.467	1.00	22.77	N
[10411]	ATOM	3634	CA	THR B 208	36.370	19.905	-34.994	1.00	22.85	C
[10412]	ATOM	3635	C	THR B 208	37.311	20.662	-34.036	1.00	23.77	C
[10413]	ATOM	3636	O	THR B 208	38.341	21.196	-34.460	1.00	24.14	O
[10414]	ATOM	3637	CB	THR B 208	35.199	20.797	-35.439	1.00	22.38	C
[10415]	ATOM	3638	OG1	THR B 208	34.378	20.050	-36.336	1.00	19.88	O
[10416]	ATOM	3639	CG2	THR B 208	35.704	22.008	-36.217	1.00	23.29	C
[10417]	ATOM	3640	N	HIS B 209	36.991	20.665	-32.749	1.00	23.52	N
[10418]	ATOM	3641	CA	HIS B 209	37.785	21.413	-31.791	1.00	24.04	C
[10419]	ATOM	3642	C	HIS B 209	38.660	20.538	-30.884	1.00	23.95	C
[10420]	ATOM	3643	O	HIS B 209	39.040	20.964	-29.795	1.00	23.51	O
[10421]	ATOM	3644	CB	HIS B 209	36.854	22.305	-30.967	1.00	24.65	C
[10422]	ATOM	3645	CG	HIS B 209	35.967	23.167	-31.807	1.00	26.64	C
[10423]	ATOM	3646	ND1	HIS B 209	34.612	23.267	-31.599	1.00	30.72	N
[10424]	ATOM	3647	CD2	HIS B 209	36.240	23.944	-32.883	1.00	28.76	C



[10425]	ATOM	3648	CE1	HIS	B	209	34.089	24.084	-32.502	1.00	31.33	C
[10426]	ATOM	3649	NE2	HIS	B	209	35.057	24.513	-33.289	1.00	30.14	N
[10427]	ATOM	3650	N	ALA	B	210	38.987	19.329	-31.349	1.00	23.63	N
[10428]	ATOM	3651	CA	ALA	B	210	39.749	18.348	-30.554	1.00	23.54	C
[10429]	ATOM	3652	C	ALA	B	210	41.186	18.840	-30.350	1.00	23.57	C
[10430]	ATOM	3653	O	ALA	B	210	41.817	19.312	-31.303	1.00	22.81	O
[10431]	ATOM	3654	CB	ALA	B	210	39.739	16.991	-31.242	1.00	23.79	C
[10432]	ATOM	3655	N	PRO	B	211	41.694	18.770	-29.099	1.00	23.57	N
[10433]	ATOM	3656	CA	PRO	B	211	43.035	19.318	-28.853	1.00	23.32	C
[10434]	ATOM	3657	C	PRO	B	211	44.091	18.501	-29.553	1.00	23.19	C
[10435]	ATOM	3658	O	PRO	B	211	45.182	19.007	-29.807	1.00	23.35	O
[10436]	ATOM	3659	CB	PRO	B	211	43.220	19.208	-27.336	1.00	22.83	C
[10437]	ATOM	3660	CG	PRO	B	211	41.905	18.800	-26.795	1.00	24.63	C
[10438]	ATOM	3661	CD	PRO	B	211	41.070	18.233	-27.881	1.00	23.44	C
[10439]	ATOM	3662	N	ASN	B	212	43.758	17.245	-29.859	1.00	22.56	N
[10440]	ATOM	3663	CA	ASN	B	212	44.671	16.330	-30.540	1.00	22.33	C
[10441]	ATOM	3664	C	ASN	B	212	44.198	16.065	-31.948	1.00	21.95	C
[10442]	ATOM	3665	O	ASN	B	212	44.379	14.976	-32.434	1.00	21.46	O
[10443]	ATOM	3666	CB	ASN	B	212	44.756	14.985	-29.805	1.00	21.62	C
[10444]	ATOM	3667	CG	ASN	B	212	43.434	14.250	-29.816	1.00	22.70	C
[10445]	ATOM	3668	OD1	ASN	B	212	42.387	14.877	-29.861	1.00	25.19	O
[10446]	ATOM	3669	ND2	ASN	B	212	43.472	12.925	-29.783	1.00	23.56	N
[10447]	ATOM	3670	N	LEU	B	213	43.576	17.046	-32.596	1.00	22.68	N
[10448]	ATOM	3671	CA	LEU	B	213	43.127	16.866	-33.981	1.00	23.01	C
[10449]	ATOM	3672	C	LEU	B	213	44.264	16.467	-34.937	1.00	23.15	C
[10450]	ATOM	3673	O	LEU	B	213	44.033	15.764	-35.937	1.00	23.22	O
[10451]	ATOM	3674	CB	LEU	B	213	42.396	18.117	-34.507	1.00	23.12	C
[10452]	ATOM	3675	CG	LEU	B	213	41.840	18.064	-35.949	1.00	23.85	C
[10453]	ATOM	3676	CD1	LEU	B	213	40.938	16.838	-36.201	1.00	25.16	C
[10454]	ATOM	3677	CD2	LEU	B	213	41.124	19.379	-36.372	1.00	23.50	C
[10455]	ATOM	3678	N	ASP	B	214	45.482	16.923	-34.655	1.00	22.83	N
[10456]	ATOM	3679	CA	ASP	B	214	46.643	16.576	-35.513	1.00	23.07	C
[10457]	ATOM	3680	C	ASP	B	214	46.991	15.079	-35.474	1.00	21.93	C
[10458]	ATOM	3681	O	ASP	B	214	47.413	14.514	-36.484	1.00	21.42	O
[10459]	ATOM	3682	CB	ASP	B	214	47.881	17.396	-35.134	1.00	23.55	C
[10460]	ATOM	3683	CG	ASP	B	214	47.793	18.863	-35.585	1.00	28.51	C

[10461]	ATOM	3684	OD1	ASP	B	214	48.364	19.706	-34.868	1.00	33.73	O
[10462]	ATOM	3685	OD2	ASP	B	214	47.181	19.180	-36.636	1.00	31.74	O
[10463]	ATOM	3686	N	ASN	B	215	46.855	14.471	-34.292	1.00	21.35	N
[10464]	ATOM	3687	CA	ASN	B	215	46.932	13.017	-34.111	1.00	20.70	C
[10465]	ATOM	3688	C	ASN	B	215	45.810	12.283	-34.845	1.00	20.72	C
[10466]	ATOM	3689	O	ASN	B	215	46.055	11.280	-35.530	1.00	21.37	O
[10467]	ATOM	3690	CB	ASN	B	215	46.873	12.638	-32.633	1.00	19.71	C
[10468]	ATOM	3691	CG	ASN	B	215	47.986	13.245	-31.833	1.00	21.00	C
[10469]	ATOM	3692	OD1	ASN	B	215	48.893	13.872	-32.387	1.00	18.86	O
[10470]	ATOM	3693	ND2	ASN	B	215	47.934	13.069	-30.519	1.00	20.56	N
[10471]	ATOM	3694	N	ILE	B	216	44.578	12.764	-34.682	1.00	21.25	N
[10472]	ATOM	3695	CA	ILE	B	216	43.405	12.171	-35.369	1.00	20.91	C
[10473]	ATOM	3696	C	ILE	B	216	43.678	12.134	-36.858	1.00	21.69	C
[10474]	ATOM	3697	O	ILE	B	216	43.430	11.128	-37.519	1.00	23.02	O
[10475]	ATOM	3698	CB	ILE	B	216	42.094	12.955	-35.091	1.00	21.01	C
[10476]	ATOM	3699	CG1	ILE	B	216	41.654	12.798	-33.635	1.00	21.13	C
[10477]	ATOM	3700	CG2	ILE	B	216	40.962	12.505	-36.051	1.00	20.13	C
[10478]	ATOM	3701	CD1	ILE	B	216	40.530	13.787	-33.216	1.00	19.22	C
[10479]	ATOM	3702	N	GLU	B	217	44.209	13.226	-37.405	1.00	21.90	N
[10480]	ATOM	3703	CA	GLU	B	217	44.472	13.263	-38.833	1.00	21.87	C
[10481]	ATOM	3704	C	GLU	B	217	45.474	12.183	-39.287	1.00	21.11	C
[10482]	ATOM	3705	O	GLU	B	217	45.372	11.672	-40.390	1.00	21.60	O
[10483]	ATOM	3706	CB	GLU	B	217	44.973	14.638	-39.257	1.00	22.72	C
[10484]	ATOM	3707	CG	GLU	B	217	45.089	14.704	-40.797	1.00	26.63	C
[10485]	ATOM	3708	CD	GLU	B	217	45.760	15.974	-41.303	1.00	33.20	C
[10486]	ATOM	3709	OE1	GLU	B	217	45.939	16.931	-40.485	1.00	35.57	O
[10487]	ATOM	3710	OE2	GLU	B	217	46.087	15.997	-42.522	1.00	33.04	O
[10488]	ATOM	3711	N	LEU	B	218	46.454	11.856	-38.455	1.00	20.79	N
[10489]	ATOM	3712	CA	LEU	B	218	47.405	10.759	-38.750	1.00	21.11	C
[10490]	ATOM	3713	C	LEU	B	218	46.740	9.377	-38.811	1.00	21.45	C
[10491]	ATOM	3714	O	LEU	B	218	47.012	8.577	-39.726	1.00	23.38	O
[10492]	ATOM	3715	CB	LEU	B	218	48.535	10.725	-37.717	1.00	20.69	C
[10493]	ATOM	3716	CG	LEU	B	218	49.440	11.954	-37.613	1.00	21.67	C
[10494]	ATOM	3717	CD1	LEU	B	218	50.482	11.772	-36.521	1.00	21.58	C
[10495]	ATOM	3718	CD2	LEU	B	218	50.103	12.250	-38.955	1.00	23.87	C
[10496]	ATOM	3719	N	TYR	B	219	45.887	9.093	-37.834	1.00	21.25	N

[10497]	ATOM	3720	CA	TYR	B	219	45.087	7.869	-37.805	1.00	21.35	C
[10498]	ATOM	3721	C	TYR	B	219	44.221	7.800	-39.080	1.00	21.02	C
[10499]	ATOM	3722	O	TYR	B	219	44.109	6.747	-39.698	1.00	21.54	O
[10500]	ATOM	3723	CB	TYR	B	219	44.221	7.876	-36.536	1.00	21.41	C
[10501]	ATOM	3724	CG	TYR	B	219	43.452	6.594	-36.183	1.00	21.72	C
[10502]	ATOM	3725	CD1	TYR	B	219	43.792	5.348	-36.737	1.00	23.46	C
[10503]	ATOM	3726	CD2	TYR	B	219	42.384	6.638	-35.263	1.00	21.84	C
[10504]	ATOM	3727	CE1	TYR	B	219	43.061	4.163	-36.379	1.00	22.42	C
[10505]	ATOM	3728	CE2	TYR	B	219	41.662	5.462	-34.900	1.00	21.97	C
[10506]	ATOM	3729	CZ	TYR	B	219	42.016	4.239	-35.461	1.00	22.15	C
[10507]	ATOM	3730	OH	TYR	B	219	41.318	3.093	-35.126	1.00	20.20	O
[10508]	ATOM	3731	N	TRP	B	220	43.639	8.937	-39.468	1.00	20.34	N
[10509]	ATOM	3732	CA	TRP	B	220	42.810	9.060	-40.673	1.00	20.35	C
[10510]	ATOM	3733	C	TRP	B	220	43.623	8.665	-41.909	1.00	20.69	C
[10511]	ATOM	3734	O	TRP	B	220	43.160	7.898	-42.743	1.00	21.61	O
[10512]	ATOM	3735	CB	TRP	B	220	42.263	10.509	-40.745	1.00	19.75	C
[10513]	ATOM	3736	CG	TRP	B	220	41.499	10.913	-41.975	1.00	20.89	C
[10514]	ATOM	3737	CD1	TRP	B	220	41.833	11.928	-42.847	1.00	22.15	C
[10515]	ATOM	3738	CD2	TRP	B	220	40.264	10.370	-42.459	1.00	20.45	C
[10516]	ATOM	3739	NE1	TRP	B	220	40.916	12.009	-43.852	1.00	22.03	N
[10517]	ATOM	3740	CE2	TRP	B	220	39.933	11.077	-43.637	1.00	21.80	C
[10518]	ATOM	3741	CE3	TRP	B	220	39.420	9.338	-42.029	1.00	21.82	C
[10519]	ATOM	3742	CZ2	TRP	B	220	38.779	10.801	-44.385	1.00	21.11	C
[10520]	ATOM	3743	CZ3	TRP	B	220	38.273	9.064	-42.772	1.00	21.63	C
[10521]	ATOM	3744	CH2	TRP	B	220	37.967	9.788	-43.942	1.00	22.67	C
[10522]	ATOM	3745	N	ASN	B	221	44.843	9.181	-42.013	1.00	21.16	N
[10523]	ATOM	3746	CA	ASN	B	221	45.780	8.797	-43.087	1.00	21.95	C
[10524]	ATOM	3747	C	ASN	B	221	46.093	7.318	-43.120	1.00	21.70	C
[10525]	ATOM	3748	O	ASN	B	221	46.086	6.722	-44.187	1.00	21.47	O
[10526]	ATOM	3749	CB	ASN	B	221	47.069	9.607	-42.990	1.00	21.86	C
[10527]	ATOM	3750	CG	ASN	B	221	46.819	11.060	-43.261	1.00	25.34	C
[10528]	ATOM	3751	OD1	ASN	B	221	45.822	11.393	-43.909	1.00	27.23	O
[10529]	ATOM	3752	ND2	ASN	B	221	47.682	11.943	-42.746	1.00	27.17	N
[10530]	ATOM	3753	N	SER	B	222	46.349	6.724	-41.954	1.00	21.86	N
[10531]	ATOM	3754	CA	SER	B	222	46.540	5.267	-41.873	1.00	22.05	C
[10532]	ATOM	3755	C	SER	B	222	45.326	4.507	-42.379	1.00	21.61	C

[10533]	ATOM	3756	O	SER B 222	45.457	3.539	-43.154	1.00	21.76	O
[10534]	ATOM	3757	CB	SER B 222	46.873	4.842	-40.449	1.00	22.10	C
[10535]	ATOM	3758	OG	SER B 222	48.159	5.339	-40.092	1.00	26.60	O
[10536]	ATOM	3759	N	TYR B 223	44.136	4.925	-41.943	1.00	21.65	N
[10537]	ATOM	3760	CA	TYR B 223	42.917	4.270	-42.392	1.00	21.77	C
[10538]	ATOM	3761	C	TYR B 223	42.764	4.330	-43.915	1.00	22.70	C
[10539]	ATOM	3762	O	TYR B 223	42.495	3.317	-44.567	1.00	22.93	O
[10540]	ATOM	3763	CB	TYR B 223	41.674	4.843	-41.692	1.00	22.04	C
[10541]	ATOM	3764	CG	TYR B 223	40.389	4.285	-42.270	1.00	21.73	C
[10542]	ATOM	3765	CD1	TYR B 223	39.992	2.967	-41.996	1.00	19.83	C
[10543]	ATOM	3766	CD2	TYR B 223	39.574	5.071	-43.088	1.00	21.45	C
[10544]	ATOM	3767	CE1	TYR B 223	38.812	2.446	-42.505	1.00	21.94	C
[10545]	ATOM	3768	CE2	TYR B 223	38.414	4.551	-43.652	1.00	23.04	C
[10546]	ATOM	3769	CZ	TYR B 223	38.030	3.238	-43.346	1.00	23.82	C
[10547]	ATOM	3770	OH	TYR B 223	36.863	2.739	-43.873	1.00	24.77	O
[10548]	ATOM	3771	N	ASN B 224	42.960	5.513	-44.488	1.00	22.98	N
[10549]	ATOM	3772	CA	ASN B 224	42.791	5.694	-45.926	1.00	23.12	C
[10550]	ATOM	3773	C	ASN B 224	43.786	4.891	-46.741	1.00	23.89	C
[10551]	ATOM	3774	O	ASN B 224	43.476	4.490	-47.864	1.00	24.16	O
[10552]	ATOM	3775	CB	ASN B 224	42.904	7.169	-46.280	1.00	22.34	C
[10553]	ATOM	3776	CG	ASN B 224	41.730	7.976	-45.772	1.00	23.32	C
[10554]	ATOM	3777	OD1	ASN B 224	40.615	7.482	-45.708	1.00	22.38	O
[10555]	ATOM	3778	ND2	ASN B 224	41.969	9.244	-45.467	1.00	25.26	N
[10556]	ATOM	3779	N	ASN B 225	44.973	4.662	-46.175	1.00	24.51	N
[10557]	ATOM	3780	CA	ASN B 225	46.054	3.958	-46.868	1.00	25.50	C
[10558]	ATOM	3781	C	ASN B 225	46.110	2.457	-46.613	1.00	25.40	C
[10559]	ATOM	3782	O	ASN B 225	47.065	1.800	-47.029	1.00	24.90	O
[10560]	ATOM	3783	CB	ASN B 225	47.398	4.584	-46.509	1.00	26.18	C
[10561]	ATOM	3784	CG	ASN B 225	47.591	5.945	-47.153	1.00	28.06	C
[10562]	ATOM	3785	OD1	ASN B 225	47.818	6.931	-46.470	1.00	31.96	O
[10563]	ATOM	3786	ND2	ASN B 225	47.506	5.998	-48.464	1.00	29.23	N
[10564]	ATOM	3787	N	ARG B 226	45.083	1.922	-45.952	1.00	24.98	N
[10565]	ATOM	3788	CA	ARG B 226	45.051	0.514	-45.559	1.00	25.23	C
[10566]	ATOM	3789	C	ARG B 226	45.071	-0.379	-46.802	1.00	25.71	C
[10567]	ATOM	3790	O	ARG B 226	44.662	0.057	-47.888	1.00	25.02	O
[10568]	ATOM	3791	CB	ARG B 226	43.815	0.238	-44.675	1.00	24.68	C

[10569]	ATOM	3792	CG	ARG	B	226	42.529	0.112	-45.445	1.00	24.72	C
[10570]	ATOM	3793	CD	ARG	B	226	41.316	0.304	-44.565	1.00	25.67	C
[10571]	ATOM	3794	NE	ARG	B	226	40.074	0.167	-45.322	1.00	24.47	N
[10572]	ATOM	3795	CZ	ARG	B	226	39.501	1.122	-46.060	1.00	25.26	C
[10573]	ATOM	3796	NH1	ARG	B	226	40.025	2.332	-46.175	1.00	23.97	N
[10574]	ATOM	3797	NH2	ARG	B	226	38.375	0.856	-46.697	1.00	28.36	N
[10575]	ATOM	3798	N	ARG	B	227	45.593	-1.598	-46.652	1.00	26.33	N
[10576]	ATOM	3799	CA	ARG	B	227	45.584	-2.584	-47.737	1.00	27.20	C
[10577]	ATOM	3800	C	ARG	B	227	44.384	-3.532	-47.593	1.00	27.06	C
[10578]	ATOM	3801	O	ARG	B	227	43.729	-3.511	-46.565	1.00	26.03	O
[10579]	ATOM	3802	CB	ARG	B	227	46.903	-3.369	-47.762	1.00	27.68	C
[10580]	ATOM	3803	CG	ARG	B	227	47.195	-4.187	-46.486	1.00	29.37	C
[10581]	ATOM	3804	CD	ARG	B	227	48.600	-4.764	-46.589	1.00	32.30	C
[10582]	ATOM	3805	NE	ARG	B	227	48.963	-5.658	-45.497	1.00	34.05	N
[10583]	ATOM	3806	CZ	ARG	B	227	48.736	-6.972	-45.474	1.00	36.43	C
[10584]	ATOM	3807	NH1	ARG	B	227	48.097	-7.575	-46.475	1.00	36.50	N
[10585]	ATOM	3808	NH2	ARG	B	227	49.139	-7.685	-44.426	1.00	35.17	N
[10586]	ATOM	3809	N	ASP	B	228	44.099	-4.334	-48.626	1.00	27.37	N
[10587]	ATOM	3810	CA	ASP	B	228	43.025	-5.342	-48.581	1.00	28.50	C
[10588]	ATOM	3811	C	ASP	B	228	43.207	-6.349	-47.441	1.00	29.72	C
[10589]	ATOM	3812	O	ASP	B	228	44.336	-6.749	-47.159	1.00	29.27	O
[10590]	ATOM	3813	CB	ASP	B	228	43.027	-6.178	-49.868	1.00	27.63	C
[10591]	ATOM	3814	CG	ASP	B	228	42.593	-5.398	-51.092	1.00	27.56	C
[10592]	ATOM	3815	OD1	ASP	B	228	41.847	-4.413	-50.974	1.00	24.67	O
[10593]	ATOM	3816	OD2	ASP	B	228	42.999	-5.796	-52.201	1.00	29.27	O
[10594]	ATOM	3817	N	LEU	B	229	42.110	-6.795	-46.830	1.00	32.02	N
[10595]	ATOM	3818	CA	LEU	B	229	42.155	-7.979	-45.945	1.00	34.81	C
[10596]	ATOM	3819	C	LEU	B	229	42.091	-9.288	-46.752	1.00	37.12	C
[10597]	ATOM	3820	O	LEU	B	229	42.655	-10.311	-46.346	1.00	37.31	O
[10598]	ATOM	3821	CB	LEU	B	229	41.061	-7.939	-44.872	1.00	34.29	C
[10599]	ATOM	3822	CG	LEU	B	229	41.267	-6.986	-43.691	1.00	34.02	C
[10600]	ATOM	3823	CD1	LEU	B	229	39.954	-6.709	-42.948	1.00	33.64	C
[10601]	ATOM	3824	CD2	LEU	B	229	42.322	-7.498	-42.733	1.00	32.61	C
[10602]	ATOM	3825	N	ASN	B	230	41.418	-9.244	-47.904	1.00	40.26	N
[10603]	ATOM	3826	CA	ASN	B	230	41.440	-10.356	-48.883	1.00	43.01	C
[10604]	ATOM	3827	C	ASN	B	230	40.754	-11.642	-48.446	1.00	44.73	C

[10605]	ATOM	3828	O	ASN B 230	41.142	-12.731	-48.909	1.00	45.14	O
[10606]	ATOM	3829	CB	ASN B 230	42.870	-10.685	-49.340	1.00	43.03	C
[10607]	ATOM	3830	CG	ASN B 230	43.299	-9.878	-50.539	1.00	45.08	C
[10608]	ATOM	3831	OD1	ASN B 230	44.468	-9.501	-50.657	1.00	47.54	O
[10609]	ATOM	3832	ND2	ASN B 230	42.358	-9.603	-51.444	1.00	46.92	N
[10610]	ATOM	3833	N	PHE B 231	39.749	-11.523	-47.568	1.00	46.50	N
[10611]	ATOM	3834	CA	PHE B 231	38.849	-12.640	-47.263	1.00	48.19	C
[10612]	ATOM	3835	C	PHE B 231	38.348	-13.268	-48.561	1.00	49.77	C
[10613]	ATOM	3836	O	PHE B 231	37.920	-12.567	-49.480	1.00	49.94	O
[10614]	ATOM	3837	CB	PHE B 231	37.617	-12.203	-46.466	1.00	47.64	C
[10615]	ATOM	3838	CG	PHE B 231	37.920	-11.498	-45.182	1.00	46.76	C
[10616]	ATOM	3839	CD1	PHE B 231	38.787	-12.053	-44.247	1.00	45.31	C
[10617]	ATOM	3840	CD2	PHE B 231	37.292	-10.284	-44.892	1.00	45.82	C
[10618]	ATOM	3841	CE1	PHE B 231	39.048	-11.396	-43.047	1.00	45.58	C
[10619]	ATOM	3842	CE2	PHE B 231	37.531	-9.622	-43.694	1.00	45.52	C
[10620]	ATOM	3843	CZ	PHE B 231	38.413	-10.178	-42.767	1.00	45.98	C
[10621]	ATOM	3844	N	GLU B 232	38.415	-14.591	-48.624	1.00	51.81	N
[10622]	ATOM	3845	CA	GLU B 232	37.865	-15.330	-49.740	1.00	53.91	C
[10623]	ATOM	3846	C	GLU B 232	37.121	-16.532	-49.145	1.00	55.02	C
[10624]	ATOM	3847	O	GLU B 232	37.653	-17.229	-48.265	1.00	55.27	O
[10625]	ATOM	3848	CB	GLU B 232	38.990	-15.740	-50.715	1.00	54.13	C
[10626]	ATOM	3849	CG	GLU B 232	38.539	-16.111	-52.157	1.00	55.62	C
[10627]	ATOM	3850	CD	GLU B 232	38.153	-14.906	-53.047	1.00	57.01	C
[10628]	ATOM	3851	OE1	GLU B 232	37.765	-13.829	-52.521	1.00	56.93	O
[10629]	ATOM	3852	OE2	GLU B 232	38.227	-15.059	-54.292	1.00	57.19	O
[10630]	ATOM	3853	N	ARG B 233	35.881	-16.744	-49.590	1.00	56.32	N
[10631]	ATOM	3854	CA	ARG B 233	35.071	-17.864	-49.101	1.00	57.75	C
[10632]	ATOM	3855	C	ARG B 233	35.629	-19.230	-49.564	1.00	58.31	C
[10633]	ATOM	3856	O	ARG B 233	35.557	-19.586	-50.750	1.00	58.44	O
[10634]	ATOM	3857	CB	ARG B 233	33.603	-17.686	-49.505	1.00	57.91	C
[10635]	ATOM	3858	CG	ARG B 233	32.680	-18.803	-49.021	1.00	59.10	C
[10636]	ATOM	3859	CD	ARG B 233	31.253	-18.572	-49.471	1.00	60.78	C
[10637]	ATOM	3860	NE	ARG B 233	30.712	-17.337	-48.907	1.00	62.00	N
[10638]	ATOM	3861	CZ	ARG B 233	29.415	-17.077	-48.773	1.00	63.12	C
[10639]	ATOM	3862	NH1	ARG B 233	28.501	-17.971	-49.158	1.00	62.74	N
[10640]	ATOM	3863	NH2	ARG B 233	29.031	-15.919	-48.243	1.00	63.04	N

[10641]	ATOM	3864	N	GLY B 234	36.197	-19.975	-48.614	1.00	58.88	N
[10642]	ATOM	3865	CA	GLY B 234	36.821	-21.271	-48.895	1.00	59.52	C
[10643]	ATOM	3866	C	GLY B 234	38.335	-21.211	-49.033	1.00	59.99	C
[10644]	ATOM	3867	O	GLY B 234	39.012	-22.247	-48.988	1.00	59.90	O
[10645]	ATOM	3868	N	GLY B 235	38.863	-19.995	-49.194	1.00	60.27	N
[10646]	ATOM	3869	CA	GLY B 235	40.299	-19.776	-49.397	1.00	60.42	C
[10647]	ATOM	3870	C	GLY B 235	41.113	-19.887	-48.120	1.00	60.43	C
[10648]	ATOM	3871	O	GLY B 235	40.562	-20.105	-47.030	1.00	60.57	O
[10649]	ATOM	3872	N	ASP B 236	42.431	-19.742	-48.259	1.00	60.27	N
[10650]	ATOM	3873	CA	ASP B 236	43.345	-19.751	-47.110	1.00	59.86	C
[10651]	ATOM	3874	C	ASP B 236	43.097	-18.542	-46.196	1.00	59.24	C
[10652]	ATOM	3875	O	ASP B 236	43.003	-18.696	-44.970	1.00	59.32	O
[10653]	ATOM	3876	CB	ASP B 236	44.814	-19.794	-47.565	1.00	60.20	C
[10654]	ATOM	3877	CG	ASP B 236	45.158	-21.060	-48.359	1.00	61.26	C
[10655]	ATOM	3878	OD1	ASP B 236	44.739	-22.171	-47.949	1.00	61.94	O
[10656]	ATOM	3879	OD2	ASP B 236	45.866	-20.942	-49.390	1.00	61.67	O
[10657]	ATOM	3880	N	ILE B 237	42.973	-17.352	-46.793	1.00	58.04	N
[10658]	ATOM	3881	CA	ILE B 237	42.750	-16.122	-46.027	1.00	56.91	C
[10659]	ATOM	3882	C	ILE B 237	41.269	-15.953	-45.648	1.00	55.78	C
[10660]	ATOM	3883	O	ILE B 237	40.429	-15.579	-46.472	1.00	55.68	O
[10661]	ATOM	3884	CB	ILE B 237	43.334	-14.872	-46.742	1.00	57.16	C
[10662]	ATOM	3885	CG1	ILE B 237	44.837	-15.074	-46.996	1.00	57.46	C
[10663]	ATOM	3886	CG2	ILE B 237	43.070	-13.581	-45.915	1.00	56.98	C
[10664]	ATOM	3887	CD1	ILE B 237	45.357	-14.478	-48.316	1.00	58.05	C
[10665]	ATOM	3888	N	THR B 238	40.981	-16.263	-44.384	1.00	54.28	N
[10666]	ATOM	3889	CA	THR B 238	39.630	-16.237	-43.820	1.00	52.82	C
[10667]	ATOM	3890	C	THR B 238	39.659	-16.216	-42.279	1.00	51.40	C
[10668]	ATOM	3891	O	THR B 238	40.607	-16.719	-41.659	1.00	51.66	O
[10669]	ATOM	3892	CB	THR B 238	38.774	-17.440	-44.310	1.00	53.02	C
[10670]	ATOM	3893	OG1	THR B 238	37.432	-17.300	-43.815	1.00	53.66	O
[10671]	ATOM	3894	CG2	THR B 238	39.379	-18.803	-43.860	1.00	52.63	C
[10672]	ATOM	3895	N	LEU B 239	38.624	-15.630	-41.669	1.00	49.31	N
[10673]	ATOM	3896	CA	LEU B 239	38.473	-15.651	-40.212	1.00	47.10	C
[10674]	ATOM	3897	C	LEU B 239	37.890	-16.995	-39.814	1.00	45.75	C
[10675]	ATOM	3898	O	LEU B 239	36.905	-17.441	-40.412	1.00	45.55	O
[10676]	ATOM	3899	CB	LEU B 239	37.573	-14.509	-39.727	1.00	46.81	C

[10677]	ATOM	3900	CG	LEU	B	239	38.111	-13.119	-40.043	1.00	46.24	C
[10678]	ATOM	3901	CD1	LEU	B	239	37.027	-12.067	-39.941	1.00	45.54	C
[10679]	ATOM	3902	CD2	LEU	B	239	39.284	-12.799	-39.141	1.00	45.14	C
[10680]	ATOM	3903	N	ARG	B	240	38.506	-17.638	-38.822	1.00	43.85	N
[10681]	ATOM	3904	CA	ARG	B	240	38.074	-18.967	-38.356	1.00	42.32	C
[10682]	ATOM	3905	C	ARG	B	240	37.160	-18.922	-37.101	1.00	39.80	C
[10683]	ATOM	3906	O	ARG	B	240	36.849	-19.957	-36.504	1.00	40.28	O
[10684]	ATOM	3907	CB	ARG	B	240	39.299	-19.877	-38.122	1.00	42.67	C
[10685]	ATOM	3908	CG	ARG	B	240	40.324	-19.914	-39.296	1.00	44.08	C
[10686]	ATOM	3909	CD	ARG	B	240	41.610	-20.729	-38.961	1.00	44.34	C
[10687]	ATOM	3910	NE	ARG	B	240	41.874	-20.791	-37.512	1.00	46.96	N
[10688]	ATOM	3911	CZ	ARG	B	240	43.039	-21.118	-36.953	1.00	47.51	C
[10689]	ATOM	3912	NH1	ARG	B	240	44.091	-21.410	-37.719	1.00	46.66	N
[10690]	ATOM	3913	NH2	ARG	B	240	43.151	-21.143	-35.618	1.00	45.68	N
[10691]	ATOM	3914	N	CYS	B	241	36.716	-17.725	-36.721	1.00	36.16	N
[10692]	ATOM	3915	CA	CYS	B	241	35.865	-17.546	-35.544	1.00	32.72	C
[10693]	ATOM	3916	C	CYS	B	241	34.492	-16.995	-35.948	1.00	30.95	C
[10694]	ATOM	3917	O	CYS	B	241	34.328	-16.517	-37.075	1.00	30.44	O
[10695]	ATOM	3918	CB	CYS	B	241	36.533	-16.566	-34.584	1.00	32.17	C
[10696]	ATOM	3919	SG	CYS	B	241	36.817	-14.973	-35.338	1.00	30.15	S
[10697]	ATOM	3920	N	PRO	B	242	33.505	-17.074	-35.036	1.00	28.89	N
[10698]	ATOM	3921	CA	PRO	B	242	32.226	-16.392	-35.170	1.00	27.69	C
[10699]	ATOM	3922	C	PRO	B	242	32.424	-14.887	-35.360	1.00	26.66	C
[10700]	ATOM	3923	O	PRO	B	242	33.163	-14.245	-34.604	1.00	25.85	O
[10701]	ATOM	3924	CB	PRO	B	242	31.567	-16.625	-33.806	1.00	27.85	C
[10702]	ATOM	3925	CG	PRO	B	242	32.202	-17.832	-33.284	1.00	27.81	C
[10703]	ATOM	3926	CD	PRO	B	242	33.572	-17.882	-33.802	1.00	28.52	C
[10704]	ATOM	3927	N	VAL	B	243	31.762	-14.333	-36.363	1.00	25.21	N
[10705]	ATOM	3928	CA	VAL	B	243	31.864	-12.914	-36.666	1.00	24.25	C
[10706]	ATOM	3929	C	VAL	B	243	30.439	-12.368	-36.708	1.00	24.20	C
[10707]	ATOM	3930	O	VAL	B	243	29.545	-13.005	-37.264	1.00	23.78	O
[10708]	ATOM	3931	CB	VAL	B	243	32.586	-12.682	-38.039	1.00	24.58	C
[10709]	ATOM	3932	CG1	VAL	B	243	32.523	-11.220	-38.472	1.00	22.78	C
[10710]	ATOM	3933	CG2	VAL	B	243	34.040	-13.150	-37.988	1.00	22.84	C
[10711]	ATOM	3934	N	MET	B	244	30.216	-11.219	-36.078	1.00	23.35	N
[10712]	ATOM	3935	CA	MET	B	244	28.955	-10.494	-36.241	1.00	23.12	C



[10713]	ATOM	3936	C	MET B 244	29.242	-9.158	-36.899	1.00	21.79	C
[10714]	ATOM	3937	O	MET B 244	29.921	-8.311	-36.308	1.00	20.65	O
[10715]	ATOM	3938	CB	MET B 244	28.282	-10.251	-34.892	1.00	22.85	C
[10716]	ATOM	3939	CG	MET B 244	27.038	-9.352	-35.025	1.00	23.53	C
[10717]	ATOM	3940	SD	MET B 244	25.932	-9.443	-33.630	1.00	26.09	S
[10718]	ATOM	3941	CE	MET B 244	26.731	-8.430	-32.409	1.00	22.67	C
[10719]	ATOM	3942	N	LEU B 245	28.770	-8.991	-38.130	1.00	21.39	N
[10720]	ATOM	3943	CA	LEU B 245	28.937	-7.741	-38.863	1.00	20.96	C
[10721]	ATOM	3944	C	LEU B 245	27.766	-6.819	-38.582	1.00	21.02	C
[10722]	ATOM	3945	O	LEU B 245	26.626	-7.281	-38.449	1.00	19.94	O
[10723]	ATOM	3946	CB	LEU B 245	29.025	-8.011	-40.364	1.00	21.62	C
[10724]	ATOM	3947	CG	LEU B 245	30.151	-8.915	-40.841	1.00	22.13	C
[10725]	ATOM	3948	CD1	LEU B 245	29.935	-9.212	-42.313	1.00	22.72	C
[10726]	ATOM	3949	CD2	LEU B 245	31.497	-8.226	-40.619	1.00	22.30	C
[10727]	ATOM	3950	N	VAL B 246	28.040	-5.519	-38.485	1.00	20.12	N
[10728]	ATOM	3951	CA	VAL B 246	27.030	-4.566	-38.054	1.00	20.41	C
[10729]	ATOM	3952	C	VAL B 246	27.214	-3.298	-38.858	1.00	21.09	C
[10730]	ATOM	3953	O	VAL B 246	28.320	-2.780	-38.960	1.00	20.97	O
[10731]	ATOM	3954	CB	VAL B 246	27.188	-4.220	-36.527	1.00	20.40	C
[10732]	ATOM	3955	CG1	VAL B 246	26.101	-3.248	-36.065	1.00	19.78	C
[10733]	ATOM	3956	CG2	VAL B 246	27.120	-5.482	-35.676	1.00	20.29	C
[10734]	ATOM	3957	N	VAL B 247	26.128	-2.795	-39.424	1.00	22.17	N
[10735]	ATOM	3958	CA	VAL B 247	26.140	-1.518	-40.122	1.00	22.57	C
[10736]	ATOM	3959	C	VAL B 247	24.738	-0.936	-39.995	1.00	23.64	C
[10737]	ATOM	3960	O	VAL B 247	23.781	-1.662	-39.723	1.00	24.46	O
[10738]	ATOM	3961	CB	VAL B 247	26.591	-1.690	-41.602	1.00	22.14	C
[10739]	ATOM	3962	CG1	VAL B 247	25.431	-2.156	-42.501	1.00	22.14	C
[10740]	ATOM	3963	CG2	VAL B 247	27.186	-0.401	-42.135	1.00	21.96	C
[10741]	ATOM	3964	N	GLY B 248	24.614	0.373	-40.143	1.00	24.16	N
[10742]	ATOM	3965	CA	GLY B 248	23.296	0.996	-40.165	1.00	25.30	C
[10743]	ATOM	3966	C	GLY B 248	22.749	0.989	-41.571	1.00	26.04	C
[10744]	ATOM	3967	O	GLY B 248	23.503	1.042	-42.541	1.00	25.56	O
[10745]	ATOM	3968	N	ASP B 249	21.433	0.893	-41.691	1.00	27.30	N
[10746]	ATOM	3969	CA	ASP B 249	20.810	0.908	-42.999	1.00	29.07	C
[10747]	ATOM	3970	C	ASP B 249	20.987	2.291	-43.613	1.00	29.37	C
[10748]	ATOM	3971	O	ASP B 249	20.793	3.307	-42.931	1.00	29.71	O

[10749]	ATOM	3972	CB	ASP	B	249	19.339	0.527	-42.884	1.00	29.46	C
[10750]	ATOM	3973	CG	ASP	B	249	18.697	0.233	-44.236	1.00	32.70	C
[10751]	ATOM	3974	OD1	ASP	B	249	19.401	0.092	-45.275	1.00	35.48	O
[10752]	ATOM	3975	OD2	ASP	B	249	17.455	0.147	-44.256	1.00	36.34	O
[10753]	ATOM	3976	N	GLN	B	250	21.425	2.315	-44.869	1.00	30.03	N
[10754]	ATOM	3977	CA	GLN	B	250	21.710	3.557	-45.603	1.00	31.20	C
[10755]	ATOM	3978	C	GLN	B	250	22.931	4.362	-45.090	1.00	30.60	C
[10756]	ATOM	3979	O	GLN	B	250	23.164	5.497	-45.532	1.00	31.11	O
[10757]	ATOM	3980	CB	GLN	B	250	20.450	4.436	-45.684	1.00	31.97	C
[10758]	ATOM	3981	CG	GLN	B	250	19.270	3.783	-46.435	1.00	35.84	C
[10759]	ATOM	3982	CD	GLN	B	250	19.621	3.421	-47.885	1.00	40.89	C
[10760]	ATOM	3983	OE1	GLN	B	250	19.461	2.269	-48.304	1.00	43.72	O
[10761]	ATOM	3984	NE2	GLN	B	250	20.115	4.402	-48.648	1.00	41.27	N
[10762]	ATOM	3985	N	ALA	B	251	23.700	3.790	-44.161	1.00	29.62	N
[10763]	ATOM	3986	CA	ALA	B	251	24.908	4.446	-43.637	1.00	28.51	C
[10764]	ATOM	3987	C	ALA	B	251	26.074	4.401	-44.656	1.00	27.92	C
[10765]	ATOM	3988	O	ALA	B	251	26.018	3.629	-45.611	1.00	27.99	O
[10766]	ATOM	3989	CB	ALA	B	251	25.310	3.816	-42.303	1.00	28.57	C
[10767]	ATOM	3990	N	PRO	B	252	27.127	5.241	-44.475	1.00	27.53	N
[10768]	ATOM	3991	CA	PRO	B	252	28.238	5.277	-45.454	1.00	27.02	C
[10769]	ATOM	3992	C	PRO	B	252	28.894	3.922	-45.766	1.00	26.53	C
[10770]	ATOM	3993	O	PRO	B	252	29.292	3.700	-46.907	1.00	25.96	O
[10771]	ATOM	3994	CB	PRO	B	252	29.269	6.218	-44.806	1.00	27.44	C
[10772]	ATOM	3995	CG	PRO	B	252	28.510	7.036	-43.843	1.00	27.77	C
[10773]	ATOM	3996	CD	PRO	B	252	27.329	6.220	-43.386	1.00	27.87	C
[10774]	ATOM	3997	N	HIS	B	253	28.987	3.023	-44.782	1.00	25.53	N
[10775]	ATOM	3998	CA	HIS	B	253	29.699	1.757	-44.985	1.00	24.85	C
[10776]	ATOM	3999	C	HIS	B	253	28.826	0.568	-45.298	1.00	24.71	C
[10777]	ATOM	4000	O	HIS	B	253	29.329	-0.543	-45.389	1.00	24.63	O
[10778]	ATOM	4001	CB	HIS	B	253	30.618	1.463	-43.801	1.00	24.87	C
[10779]	ATOM	4002	CG	HIS	B	253	31.543	2.594	-43.505	1.00	26.07	C
[10780]	ATOM	4003	ND1	HIS	B	253	32.646	2.870	-44.282	1.00	26.43	N
[10781]	ATOM	4004	CD2	HIS	B	253	31.490	3.564	-42.563	1.00	27.59	C
[10782]	ATOM	4005	CE1	HIS	B	253	33.254	3.942	-43.811	1.00	29.59	C
[10783]	ATOM	4006	NE2	HIS	B	253	32.574	4.383	-42.767	1.00	29.07	N
[10784]	ATOM	4007	N	GLU	B	254	27.531	0.793	-45.509	1.00	25.25	N

[10785]	ATOM	4008	CA	GLU	B	254	26.627	-0.309	-45.842	1.00	25.57	C
[10786]	ATOM	4009	C	GLU	B	254	27.143	-1.262	-46.930	1.00	25.86	C
[10787]	ATOM	4010	O	GLU	B	254	27.188	-2.469	-46.715	1.00	26.19	O
[10788]	ATOM	4011	CB	GLU	B	254	25.220	0.177	-46.194	1.00	25.46	C
[10789]	ATOM	4012	CG	GLU	B	254	24.249	-0.999	-46.374	1.00	26.71	C
[10790]	ATOM	4013	CD	GLU	B	254	22.912	-0.604	-46.974	1.00	29.37	C
[10791]	ATOM	4014	OE1	GLU	B	254	22.497	0.571	-46.858	1.00	30.83	O
[10792]	ATOM	4015	OE2	GLU	B	254	22.262	-1.483	-47.567	1.00	32.85	O
[10793]	ATOM	4016	N	ASP	B	255	27.529	-0.735	-48.088	1.00	26.18	N
[10794]	ATOM	4017	CA	ASP	B	255	27.980	-1.587	-49.208	1.00	26.51	C
[10795]	ATOM	4018	C	ASP	B	255	29.214	-2.400	-48.839	1.00	26.05	C
[10796]	ATOM	4019	O	ASP	B	255	29.295	-3.598	-49.154	1.00	26.01	O
[10797]	ATOM	4020	CB	ASP	B	255	28.284	-0.755	-50.451	1.00	26.73	C
[10798]	ATOM	4021	CG	ASP	B	255	27.055	-0.085	-51.018	1.00	29.45	C
[10799]	ATOM	4022	OD1	ASP	B	255	25.928	-0.512	-50.680	1.00	31.21	O
[10800]	ATOM	4023	OD2	ASP	B	255	27.221	0.879	-51.802	1.00	31.93	O
[10801]	ATOM	4024	N	ALA	B	256	30.166	-1.748	-48.165	1.00	25.89	N
[10802]	ATOM	4025	CA	ALA	B	256	31.371	-2.420	-47.674	1.00	25.23	C
[10803]	ATOM	4026	C	ALA	B	256	31.037	-3.593	-46.755	1.00	25.53	C
[10804]	ATOM	4027	O	ALA	B	256	31.552	-4.688	-46.954	1.00	26.17	O
[10805]	ATOM	4028	CB	ALA	B	256	32.289	-1.435	-46.985	1.00	25.61	C
[10806]	ATOM	4029	N	VAL	B	257	30.176	-3.377	-45.760	1.00	25.78	N
[10807]	ATOM	4030	CA	VAL	B	257	29.825	-4.454	-44.820	1.00	25.26	C
[10808]	ATOM	4031	C	VAL	B	257	29.016	-5.546	-45.510	1.00	26.93	C
[10809]	ATOM	4032	O	VAL	B	257	29.229	-6.728	-45.239	1.00	26.18	O
[10810]	ATOM	4033	CB	VAL	B	257	29.080	-3.956	-43.568	1.00	25.50	C
[10811]	ATOM	4034	CG1	VAL	B	257	28.903	-5.101	-42.590	1.00	23.34	C
[10812]	ATOM	4035	CG2	VAL	B	257	29.861	-2.840	-42.907	1.00	21.37	C
[10813]	ATOM	4036	N	VAL	B	258	28.105	-5.140	-46.401	1.00	27.66	N
[10814]	ATOM	4037	CA	VAL	B	258	27.373	-6.076	-47.256	1.00	29.02	C
[10815]	ATOM	4038	C	VAL	B	258	28.343	-6.946	-48.070	1.00	30.48	C
[10816]	ATOM	4039	O	VAL	B	258	28.230	-8.170	-48.058	1.00	30.02	O
[10817]	ATOM	4040	CB	VAL	B	258	26.320	-5.357	-48.173	1.00	28.76	C
[10818]	ATOM	4041	CG1	VAL	B	258	25.818	-6.278	-49.299	1.00	28.44	C
[10819]	ATOM	4042	CG2	VAL	B	258	25.127	-4.854	-47.347	1.00	27.05	C
[10820]	ATOM	4043	N	GLU	B	259	29.316	-6.324	-48.735	1.00	32.32	N

[10821]	ATOM	4044	CA	GLU	B	259	30.323	-7.091	-49.469	1.00	34.21	C
[10822]	ATOM	4045	C	GLU	B	259	31.130	-8.032	-48.574	1.00	34.24	C
[10823]	ATOM	4046	O	GLU	B	259	31.400	-9.173	-48.951	1.00	34.05	O
[10824]	ATOM	4047	CB	GLU	B	259	31.272	-6.188	-50.254	1.00	35.27	C
[10825]	ATOM	4048	CG	GLU	B	259	31.809	-6.883	-51.515	1.00	39.90	C
[10826]	ATOM	4049	CD	GLU	B	259	33.057	-6.223	-52.092	1.00	45.51	C
[10827]	ATOM	4050	OE1	GLU	B	259	33.093	-4.964	-52.167	1.00	47.90	O
[10828]	ATOM	4051	OE2	GLU	B	259	33.994	-6.971	-52.482	1.00	46.81	O
[10829]	ATOM	4052	N	CYS	B	260	31.514	-7.543	-47.398	1.00	34.26	N
[10830]	ATOM	4053	CA	CYS	B	260	32.293	-8.314	-46.437	1.00	34.15	C
[10831]	ATOM	4054	C	CYS	B	260	31.544	-9.592	-46.075	1.00	34.15	C
[10832]	ATOM	4055	O	CYS	B	260	32.138	-10.673	-45.992	1.00	34.05	O
[10833]	ATOM	4056	CB	CYS	B	260	32.546	-7.477	-45.182	1.00	34.53	C
[10834]	ATOM	4057	SG	CYS	B	260	33.856	-8.140	-44.142	1.00	34.36	S
[10835]	ATOM	4058	N	ASN	B	261	30.233	-9.465	-45.907	1.00	34.02	N
[10836]	ATOM	4059	CA	ASN	B	261	29.377	-10.589	-45.540	1.00	35.03	C
[10837]	ATOM	4060	C	ASN	B	261	29.373	-11.761	-46.547	1.00	35.89	C
[10838]	ATOM	4061	O	ASN	B	261	29.253	-12.934	-46.152	1.00	36.29	O
[10839]	ATOM	4062	CB	ASN	B	261	27.952	-10.100	-45.314	1.00	34.72	C
[10840]	ATOM	4063	CG	ASN	B	261	27.061	-11.181	-44.762	1.00	34.61	C
[10841]	ATOM	4064	OD1	ASN	B	261	27.384	-11.818	-43.752	1.00	34.28	O
[10842]	ATOM	4065	ND2	ASN	B	261	25.933	-11.404	-45.421	1.00	32.42	N
[10843]	ATOM	4066	N	SER	B	262	29.497	-11.432	-47.835	1.00	36.09	N
[10844]	ATOM	4067	CA	SER	B	262	29.534	-12.418	-48.918	1.00	36.17	C
[10845]	ATOM	4068	C	SER	B	262	30.897	-13.103	-49.016	1.00	36.48	C
[10846]	ATOM	4069	O	SER	B	262	31.003	-14.188	-49.572	1.00	36.90	O
[10847]	ATOM	4070	CB	SER	B	262	29.205	-11.742	-50.245	1.00	35.96	C
[10848]	ATOM	4071	OG	SER	B	262	30.298	-10.946	-50.680	1.00	36.23	O
[10849]	ATOM	4072	N	LYS	B	263	31.941	-12.465	-48.492	1.00	36.79	N
[10850]	ATOM	4073	CA	LYS	B	263	33.279	-13.054	-48.513	1.00	37.21	C
[10851]	ATOM	4074	C	LYS	B	263	33.634	-13.907	-47.277	1.00	37.36	C
[10852]	ATOM	4075	O	LYS	B	263	34.705	-14.536	-47.236	1.00	37.27	O
[10853]	ATOM	4076	CB	LYS	B	263	34.336	-11.981	-48.806	1.00	37.61	C
[10854]	ATOM	4077	CG	LYS	B	263	34.283	-11.440	-50.275	1.00	39.62	C
[10855]	ATOM	4078	CD	LYS	B	263	34.890	-12.435	-51.286	1.00	43.19	C
[10856]	ATOM	4079	CE	LYS	B	263	34.217	-12.384	-52.671	1.00	46.61	C

[10857]	ATOM	4080	NZ	LYS	B	263	34.274	-11.032	-53.318	1.00	47.50	N
[10858]	ATOM	4081	N	LEU	B	264	32.725	-13.949	-46.296	1.00	37.22	N
[10859]	ATOM	4082	CA	LEU	B	264	32.909	-14.717	-45.055	1.00	36.62	C
[10860]	ATOM	4083	C	LEU	B	264	32.050	-15.993	-44.967	1.00	37.07	C
[10861]	ATOM	4084	O	LEU	B	264	31.038	-16.138	-45.668	1.00	36.53	O
[10862]	ATOM	4085	CB	LEU	B	264	32.651	-13.829	-43.824	1.00	36.09	C
[10863]	ATOM	4086	CG	LEU	B	264	33.624	-12.690	-43.495	1.00	34.95	C
[10864]	ATOM	4087	CD1	LEU	B	264	33.061	-11.840	-42.372	1.00	35.23	C
[10865]	ATOM	4088	CD2	LEU	B	264	35.015	-13.199	-43.114	1.00	34.04	C
[10866]	ATOM	4089	N	ASP	B	265	32.472	-16.896	-44.074	1.00	37.35	N
[10867]	ATOM	4090	CA	ASP	B	265	31.830	-18.190	-43.803	1.00	37.65	C
[10868]	ATOM	4091	C	ASP	B	265	30.392	-18.016	-43.311	1.00	37.28	C
[10869]	ATOM	4092	O	ASP	B	265	30.172	-17.612	-42.162	1.00	37.08	O
[10870]	ATOM	4093	CB	ASP	B	265	32.660	-18.956	-42.755	1.00	38.09	C
[10871]	ATOM	4094	CG	ASP	B	265	32.279	-20.442	-42.643	1.00	40.45	C
[10872]	ATOM	4095	OD1	ASP	B	265	31.076	-20.797	-42.767	1.00	40.25	O
[10873]	ATOM	4096	OD2	ASP	B	265	33.206	-21.257	-42.408	1.00	42.70	O
[10874]	ATOM	4097	N	PRO	B	266	29.407	-18.326	-44.176	1.00	36.93	N
[10875]	ATOM	4098	CA	PRO	B	266	27.980	-18.189	-43.848	1.00	36.80	C
[10876]	ATOM	4099	C	PRO	B	266	27.533	-18.818	-42.530	1.00	36.48	C
[10877]	ATOM	4100	O	PRO	B	266	26.637	-18.280	-41.874	1.00	37.07	O
[10878]	ATOM	4101	CB	PRO	B	266	27.275	-18.882	-45.023	1.00	36.67	C
[10879]	ATOM	4102	CG	PRO	B	266	28.361	-19.574	-45.801	1.00	36.85	C
[10880]	ATOM	4103	CD	PRO	B	266	29.598	-18.818	-45.551	1.00	36.81	C
[10881]	ATOM	4104	N	THR	B	267	28.151	-19.929	-42.143	1.00	36.05	N
[10882]	ATOM	4105	CA	THR	B	267	27.691	-20.703	-40.988	1.00	36.12	C
[10883]	ATOM	4106	C	THR	B	267	28.280	-20.191	-39.678	1.00	35.70	C
[10884]	ATOM	4107	O	THR	B	267	27.998	-20.741	-38.620	1.00	35.96	O
[10885]	ATOM	4108	CB	THR	B	267	28.037	-22.210	-41.123	1.00	36.37	C
[10886]	ATOM	4109	OG1	THR	B	267	29.454	-22.380	-41.044	1.00	37.13	O
[10887]	ATOM	4110	CG2	THR	B	267	27.557	-22.774	-42.450	1.00	37.07	C
[10888]	ATOM	4111	N	GLN	B	268	29.104	-19.150	-39.765	1.00	35.12	N
[10889]	ATOM	4112	CA	GLN	B	268	29.816	-18.585	-38.620	1.00	34.92	C
[10890]	ATOM	4113	C	GLN	B	268	29.634	-17.072	-38.576	1.00	33.86	C
[10891]	ATOM	4114	O	GLN	B	268	30.105	-16.405	-37.666	1.00	33.77	O
[10892]	ATOM	4115	CB	GLN	B	268	31.313	-18.896	-38.734	1.00	35.26	C

[10893]	ATOM	4116	CG	GLN	B 268	31.687	-20.321	-38.389	1.00	37.85	C
[10894]	ATOM	4117	CD	GLN	B 268	31.775	-20.526	-36.890	1.00	41.48	C
[10895]	ATOM	4118	OE1	GLN	B 268	30.760	-20.736	-36.208	1.00	42.83	O
[10896]	ATOM	4119	NE2	GLN	B 268	32.999	-20.455	-36.362	1.00	41.22	N
[10897]	ATOM	4120	N	THR	B 269	28.954	-16.537	-39.575	1.00	33.01	N
[10898]	ATOM	4121	CA	THR	B 269	28.832	-15.099	-39.724	1.00	32.14	C
[10899]	ATOM	4122	C	THR	B 269	27.388	-14.659	-39.582	1.00	31.58	C
[10900]	ATOM	4123	O	THR	B 269	26.491	-15.222	-40.214	1.00	30.81	O
[10901]	ATOM	4124	CB	THR	B 269	29.379	-14.664	-41.078	1.00	32.28	C
[10902]	ATOM	4125	OG1	THR	B 269	30.760	-15.037	-41.145	1.00	32.60	O
[10903]	ATOM	4126	CG2	THR	B 269	29.238	-13.150	-41.274	1.00	32.08	C
[10904]	ATOM	4127	N	SER	B 270	27.166	-13.669	-38.727	1.00	30.72	N
[10905]	ATOM	4128	CA	SER	B 270	25.865	-13.007	-38.667	1.00	30.73	C
[10906]	ATOM	4129	C	SER	B 270	25.989	-11.551	-39.149	1.00	29.99	C
[10907]	ATOM	4130	O	SER	B 270	27.066	-10.946	-39.096	1.00	29.28	O
[10908]	ATOM	4131	CB	SER	B 270	25.225	-13.144	-37.271	1.00	31.05	C
[10909]	ATOM	4132	OG	SER	B 270	26.173	-12.884	-36.242	1.00	33.40	O
[10910]	ATOM	4133	N	PHE	B 271	24.895	-11.010	-39.664	1.00	29.85	N
[10911]	ATOM	4134	CA	PHE	B 271	24.923	-9.696	-40.282	1.00	30.03	C
[10912]	ATOM	4135	C	PHE	B 271	23.712	-8.907	-39.831	1.00	30.19	C
[10913]	ATOM	4136	O	PHE	B 271	22.581	-9.256	-40.153	1.00	29.53	O
[10914]	ATOM	4137	CB	PHE	B 271	24.994	-9.832	-41.805	1.00	30.43	C
[10915]	ATOM	4138	CG	PHE	B 271	24.865	-8.531	-42.548	1.00	30.96	C
[10916]	ATOM	4139	CD1	PHE	B 271	25.636	-7.428	-42.207	1.00	32.13	C
[10917]	ATOM	4140	CD2	PHE	B 271	23.981	-8.416	-43.603	1.00	32.67	C
[10918]	ATOM	4141	CE1	PHE	B 271	25.524	-6.220	-42.899	1.00	33.40	C
[10919]	ATOM	4142	CE2	PHE	B 271	23.856	-7.218	-44.302	1.00	32.75	C
[10920]	ATOM	4143	CZ	PHE	B 271	24.636	-6.118	-43.952	1.00	31.97	C
[10921]	ATOM	4144	N	LEU	B 272	23.971	-7.850	-39.068	1.00	30.23	N
[10922]	ATOM	4145	CA	LEU	B 272	22.947	-7.061	-38.401	1.00	30.32	C
[10923]	ATOM	4146	C	LEU	B 272	22.863	-5.661	-39.038	1.00	30.34	C
[10924]	ATOM	4147	O	LEU	B 272	23.589	-4.743	-38.646	1.00	30.77	O
[10925]	ATOM	4148	CB	LEU	B 272	23.335	-6.969	-36.926	1.00	30.68	C
[10926]	ATOM	4149	CG	LEU	B 272	22.397	-6.469	-35.832	1.00	32.47	C
[10927]	ATOM	4150	CD1	LEU	B 272	21.543	-7.604	-35.302	1.00	33.90	C
[10928]	ATOM	4151	CD2	LEU	B 272	23.253	-5.913	-34.707	1.00	32.74	C

[10929]	ATOM	4152	N	LYS B 273	21.999	-5.499	-40.034	1.00	29.70	N
[10930]	ATOM	4153	CA	LYS B 273	21.796	-4.211	-40.675	1.00	30.08	C
[10931]	ATOM	4154	C	LYS B 273	20.656	-3.502	-39.938	1.00	30.24	C
[10932]	ATOM	4155	O	LYS B 273	19.501	-3.874	-40.067	1.00	29.47	O
[10933]	ATOM	4156	CB	LYS B 273	21.483	-4.372	-42.166	1.00	29.76	C
[10934]	ATOM	4157	CG	LYS B 273	21.771	-3.125	-42.992	1.00	31.19	C
[10935]	ATOM	4158	CD	LYS B 273	21.025	-3.092	-44.311	1.00	34.05	C
[10936]	ATOM	4159	CE	LYS B 273	21.424	-4.247	-45.212	1.00	36.62	C
[10937]	ATOM	4160	NZ	LYS B 273	20.731	-4.200	-46.541	1.00	38.46	N
[10938]	ATOM	4161	N	MET B 274	21.006	-2.483	-39.162	1.00	30.53	N
[10939]	ATOM	4162	CA	MET B 274	20.092	-1.862	-38.226	1.00	31.85	C
[10940]	ATOM	4163	C	MET B 274	19.408	-0.666	-38.867	1.00	31.91	C
[10941]	ATOM	4164	O	MET B 274	20.068	0.233	-39.404	1.00	31.91	O
[10942]	ATOM	4165	CB	MET B 274	20.837	-1.439	-36.952	1.00	31.76	C
[10943]	ATOM	4166	CG	MET B 274	21.544	-2.589	-36.227	1.00	31.63	C
[10944]	ATOM	4167	SD	MET B 274	22.412	-2.053	-34.749	1.00	35.82	S
[10945]	ATOM	4168	CE	MET B 274	21.053	-1.418	-33.792	1.00	33.88	C
[10946]	ATOM	4169	N	ALA B 275	18.081	-0.665	-38.805	1.00	31.85	N
[10947]	ATOM	4170	CA	ALA B 275	17.282	0.439	-39.333	1.00	32.06	C
[10948]	ATOM	4171	C	ALA B 275	17.309	1.566	-38.323	1.00	32.03	C
[10949]	ATOM	4172	O	ALA B 275	17.415	1.311	-37.121	1.00	32.69	O
[10950]	ATOM	4173	CB	ALA B 275	15.863	-0.007	-39.596	1.00	31.99	C
[10951]	ATOM	4174	N	ASP B 276	17.258	2.800	-38.816	1.00	31.80	N
[10952]	ATOM	4175	CA	ASP B 276	17.222	4.005	-37.967	1.00	32.06	C
[10953]	ATOM	4176	C	ASP B 276	18.352	4.111	-36.951	1.00	31.44	C
[10954]	ATOM	4177	O	ASP B 276	18.146	4.608	-35.849	1.00	31.46	O
[10955]	ATOM	4178	CB	ASP B 276	15.883	4.108	-37.231	1.00	32.75	C
[10956]	ATOM	4179	CG	ASP B 276	14.700	4.065	-38.171	1.00	35.38	C
[10957]	ATOM	4180	OD1	ASP B 276	14.732	4.780	-39.203	1.00	36.99	O
[10958]	ATOM	4181	OD2	ASP B 276	13.738	3.316	-37.868	1.00	38.08	O
[10959]	ATOM	4182	N	SER B 277	19.544	3.646	-37.318	1.00	30.51	N
[10960]	ATOM	4183	CA	SER B 277	20.679	3.658	-36.394	1.00	29.71	C
[10961]	ATOM	4184	C	SER B 277	21.734	4.627	-36.898	1.00	29.10	C
[10962]	ATOM	4185	O	SER B 277	22.456	5.238	-36.096	1.00	29.09	O
[10963]	ATOM	4186	CB	SER B 277	21.276	2.263	-36.261	1.00	29.60	C
[10964]	ATOM	4187	OG	SER B 277	22.001	1.959	-37.430	1.00	29.57	O

[10965]	ATOM	4188	N	GLY B 278	21.806	4.761	-38.226	1.00	27.92	N
[10966]	ATOM	4189	CA	GLY B 278	22.723	5.685	-38.878	1.00	26.85	C
[10967]	ATOM	4190	C	GLY B 278	24.158	5.191	-38.833	1.00	25.90	C
[10968]	ATOM	4191	O	GLY B 278	24.406	3.989	-38.791	1.00	26.29	O
[10969]	ATOM	4192	N	GLY B 279	25.106	6.120	-38.833	1.00	25.31	N
[10970]	ATOM	4193	CA	GLY B 279	26.524	5.770	-38.981	1.00	23.81	C
[10971]	ATOM	4194	C	GLY B 279	27.181	5.167	-37.759	1.00	23.15	C
[10972]	ATOM	4195	O	GLY B 279	28.174	4.442	-37.881	1.00	23.38	O
[10973]	ATOM	4196	N	GLN B 280	26.687	5.500	-36.576	1.00	22.93	N
[10974]	ATOM	4197	CA	GLN B 280	27.262	4.936	-35.337	1.00	22.60	C
[10975]	ATOM	4198	C	GLN B 280	26.180	4.217	-34.505	1.00	22.57	C
[10976]	ATOM	4199	O	GLN B 280	25.644	4.788	-33.542	1.00	22.16	O
[10977]	ATOM	4200	CB	GLN B 280	28.000	6.006	-34.516	1.00	22.73	C
[10978]	ATOM	4201	CG	GLN B 280	29.101	6.769	-35.267	1.00	21.37	C
[10979]	ATOM	4202	CD	GLN B 280	30.363	5.953	-35.476	1.00	24.24	C
[10980]	ATOM	4203	OE1	GLN B 280	30.780	5.728	-36.611	1.00	25.50	O
[10981]	ATOM	4204	NE2	GLN B 280	30.956	5.465	-34.387	1.00	23.76	N
[10982]	ATOM	4205	N	PRO B 281	25.856	2.960	-34.877	1.00	22.59	N
[10983]	ATOM	4206	CA	PRO B 281	24.797	2.186	-34.221	1.00	22.31	C
[10984]	ATOM	4207	C	PRO B 281	25.047	1.969	-32.745	1.00	22.94	C
[10985]	ATOM	4208	O	PRO B 281	24.097	1.825	-31.977	1.00	22.51	O
[10986]	ATOM	4209	CB	PRO B 281	24.840	0.826	-34.936	1.00	22.21	C
[10987]	ATOM	4210	CG	PRO B 281	25.556	1.049	-36.190	1.00	22.50	C
[10988]	ATOM	4211	CD	PRO B 281	26.510	2.193	-35.960	1.00	22.76	C
[10989]	ATOM	4212	N	GLN B 282	26.316	1.926	-32.339	1.00	23.27	N
[10990]	ATOM	4213	CA	GLN B 282	26.648	1.793	-30.912	1.00	24.30	C
[10991]	ATOM	4214	C	GLN B 282	26.371	3.086	-30.103	1.00	25.49	C
[10992]	ATOM	4215	O	GLN B 282	26.408	3.080	-28.851	1.00	26.17	O
[10993]	ATOM	4216	CB	GLN B 282	28.101	1.310	-30.736	1.00	23.83	C
[10994]	ATOM	4217	CG	GLN B 282	29.174	2.394	-30.695	1.00	22.90	C
[10995]	ATOM	4218	CD	GLN B 282	29.507	3.037	-32.039	1.00	21.74	C
[10996]	ATOM	4219	OE1	GLN B 282	30.332	3.953	-32.099	1.00	25.47	O
[10997]	ATOM	4220	NE2	GLN B 282	28.887	2.577	-33.103	1.00	18.33	N
[10998]	ATOM	4221	N	LEU B 283	26.096	4.189	-30.807	1.00	25.78	N
[10999]	ATOM	4222	CA	LEU B 283	25.742	5.452	-30.139	1.00	25.93	C
[11000]	ATOM	4223	C	LEU B 283	24.241	5.702	-30.121	1.00	27.01	C



[11001]	ATOM	4224	O	LEU	B	283	23.708	6.253	-29.151	1.00	27.86	O
[11002]	ATOM	4225	CB	LEU	B	283	26.469	6.635	-30.776	1.00	26.05	C
[11003]	ATOM	4226	CG	LEU	B	283	27.979	6.654	-30.571	1.00	25.43	C
[11004]	ATOM	4227	CD1	LEU	B	283	28.593	7.783	-31.358	1.00	24.33	C
[11005]	ATOM	4228	CD2	LEU	B	283	28.332	6.770	-29.092	1.00	28.35	C
[11006]	ATOM	4229	N	THR	B	284	23.541	5.264	-31.163	1.00	26.67	N
[11007]	ATOM	4230	CA	THR	B	284	22.122	5.560	-31.306	1.00	26.30	C
[11008]	ATOM	4231	C	THR	B	284	21.175	4.438	-30.853	1.00	26.50	C
[11009]	ATOM	4232	O	THR	B	284	20.012	4.703	-30.558	1.00	25.39	O
[11010]	ATOM	4233	CB	THR	B	284	21.797	5.841	-32.762	1.00	26.84	C
[11011]	ATOM	4234	OG1	THR	B	284	22.226	4.723	-33.541	1.00	25.46	O
[11012]	ATOM	4235	CG2	THR	B	284	22.517	7.107	-33.233	1.00	26.14	C
[11013]	ATOM	4236	N	GLN	B	285	21.666	3.197	-30.827	1.00	26.51	N
[11014]	ATOM	4237	CA	GLN	B	285	20.844	2.029	-30.473	1.00	26.84	C
[11015]	ATOM	4238	C	GLN	B	285	21.603	1.025	-29.621	1.00	26.55	C
[11016]	ATOM	4239	O	GLN	B	285	21.722	-0.138	-30.016	1.00	26.17	O
[11017]	ATOM	4240	CB	GLN	B	285	20.369	1.312	-31.735	1.00	27.34	C
[11018]	ATOM	4241	CG	GLN	B	285	19.975	2.244	-32.848	1.00	30.99	C
[11019]	ATOM	4242	CD	GLN	B	285	18.625	1.939	-33.390	1.00	37.97	C
[11020]	ATOM	4243	OE1	GLN	B	285	17.607	2.307	-32.795	1.00	39.89	O
[11021]	ATOM	4244	NE2	GLN	B	285	18.588	1.269	-34.542	1.00	41.23	N
[11022]	ATOM	4245	N	PRO	B	286	22.127	1.463	-28.454	1.00	26.22	N
[11023]	ATOM	4246	CA	PRO	B	286	22.866	0.512	-27.637	1.00	25.99	C
[11024]	ATOM	4247	C	PRO	B	286	21.982	-0.628	-27.179	1.00	25.89	C
[11025]	ATOM	4248	O	PRO	B	286	22.468	-1.746	-27.030	1.00	26.44	O
[11026]	ATOM	4249	CB	PRO	B	286	23.343	1.358	-26.444	1.00	25.90	C
[11027]	ATOM	4250	CG	PRO	B	286	22.425	2.550	-26.414	1.00	26.06	C
[11028]	ATOM	4251	CD	PRO	B	286	22.096	2.809	-27.842	1.00	26.08	C
[11029]	ATOM	4252	N	GLY	B	287	20.699	-0.346	-26.962	1.00	25.20	N
[11030]	ATOM	4253	CA	GLY	B	287	19.723	-1.368	-26.591	1.00	24.12	C
[11031]	ATOM	4254	C	GLY	B	287	19.667	-2.564	-27.517	1.00	24.04	C
[11032]	ATOM	4255	O	GLY	B	287	19.812	-3.709	-27.074	1.00	23.57	O
[11033]	ATOM	4256	N	LYS	B	288	19.452	-2.301	-28.804	1.00	23.25	N
[11034]	ATOM	4257	CA	LYS	B	288	19.372	-3.351	-29.804	1.00	23.41	C
[11035]	ATOM	4258	C	LYS	B	288	20.716	-4.022	-30.048	1.00	23.10	C
[11036]	ATOM	4259	O	LYS	B	288	20.764	-5.235	-30.213	1.00	23.86	O

[11037]	ATOM	4260	CB	LYS	B	288	18.825	-2.809	-31.117	1.00	23.58	C
[11038]	ATOM	4261	CG	LYS	B	288	18.705	-3.871	-32.190	1.00	25.96	C
[11039]	ATOM	4262	CD	LYS	B	288	18.028	-3.319	-33.435	1.00	28.89	C
[11040]	ATOM	4263	CE	LYS	B	288	16.552	-3.428	-33.351	1.00	31.88	C
[11041]	ATOM	4264	NZ	LYS	B	288	15.969	-2.924	-34.611	1.00	34.61	N
[11042]	ATOM	4265	N	LEU	B	289	21.797	-3.240	-30.080	1.00	22.46	N
[11043]	ATOM	4266	CA	LEU	B	289	23.139	-3.799	-30.233	1.00	22.27	C
[11044]	ATOM	4267	C	LEU	B	289	23.547	-4.709	-29.063	1.00	21.87	C
[11045]	ATOM	4268	O	LEU	B	289	24.155	-5.766	-29.274	1.00	22.25	O
[11046]	ATOM	4269	CB	LEU	B	289	24.172	-2.676	-30.437	1.00	22.12	C
[11047]	ATOM	4270	CG	LEU	B	289	25.611	-3.094	-30.719	1.00	23.33	C
[11048]	ATOM	4271	CD1	LEU	B	289	25.693	-4.032	-31.900	1.00	23.04	C
[11049]	ATOM	4272	CD2	LEU	B	289	26.495	-1.858	-30.956	1.00	22.49	C
[11050]	ATOM	4273	N	THR	B	290	23.243	-4.291	-27.835	1.00	20.51	N
[11051]	ATOM	4274	CA	THR	B	290	23.489	-5.126	-26.665	1.00	20.43	C
[11052]	ATOM	4275	C	THR	B	290	22.730	-6.446	-26.781	1.00	20.83	C
[11053]	ATOM	4276	O	THR	B	290	23.273	-7.509	-26.478	1.00	21.63	O
[11054]	ATOM	4277	CB	THR	B	290	23.035	-4.413	-25.375	1.00	20.78	C
[11055]	ATOM	4278	OG1	THR	B	290	23.806	-3.222	-25.209	1.00	19.56	O
[11056]	ATOM	4279	CG2	THR	B	290	23.204	-5.307	-24.140	1.00	19.92	C
[11057]	ATOM	4280	N	GLU	B	291	21.467	-6.395	-27.207	1.00	20.23	N
[11058]	ATOM	4281	CA	GLU	B	291	20.672	-7.626	-27.288	1.00	20.56	C
[11059]	ATOM	4282	C	GLU	B	291	21.292	-8.526	-28.344	1.00	19.39	C
[11060]	ATOM	4283	O	GLU	B	291	21.401	-9.721	-28.148	1.00	19.39	O
[11061]	ATOM	4284	CB	GLU	B	291	19.197	-7.322	-27.600	1.00	20.16	C
[11062]	ATOM	4285	CG	GLU	B	291	18.282	-8.557	-27.525	1.00	22.04	C
[11063]	ATOM	4286	CD	GLU	B	291	16.804	-8.237	-27.719	1.00	23.90	C
[11064]	ATOM	4287	OE1	GLU	B	291	16.457	-7.032	-27.783	1.00	29.88	O
[11065]	ATOM	4288	OE2	GLU	B	291	15.984	-9.193	-27.799	1.00	26.22	O
[11066]	ATOM	4289	N	ALA	B	292	21.718	-7.938	-29.460	1.00	18.98	N
[11067]	ATOM	4290	CA	ALA	B	292	22.461	-8.668	-30.492	1.00	18.68	C
[11068]	ATOM	4291	C	ALA	B	292	23.739	-9.299	-29.931	1.00	18.78	C
[11069]	ATOM	4292	O	ALA	B	292	24.053	-10.480	-30.207	1.00	18.62	O
[11070]	ATOM	4293	CB	ALA	B	292	22.783	-7.735	-31.676	1.00	18.66	C
[11071]	ATOM	4294	N	PHE	B	293	24.460	-8.539	-29.114	1.00	18.54	N
[11072]	ATOM	4295	CA	PHE	B	293	25.702	-9.054	-28.502	1.00	19.29	C

[11073]	ATOM	4296	C	PHE B 293	25.411	-10.207	-27.532	1.00	20.11	C
[11074]	ATOM	4297	O	PHE B 293	26.198	-11.149	-27.422	1.00	20.31	O
[11075]	ATOM	4298	CB	PHE B 293	26.439	-7.940	-27.769	1.00	18.79	C
[11076]	ATOM	4299	CG	PHE B 293	27.855	-8.280	-27.384	1.00	20.46	C
[11077]	ATOM	4300	CD1	PHE B 293	28.749	-8.831	-28.316	1.00	21.16	C
[11078]	ATOM	4301	CD2	PHE B 293	28.317	-7.993	-26.102	1.00	21.51	C
[11079]	ATOM	4302	CE1	PHE B 293	30.070	-9.100	-27.955	1.00	21.64	C
[11080]	ATOM	4303	CE2	PHE B 293	29.628	-8.270	-25.716	1.00	20.70	C
[11081]	ATOM	4304	CZ	PHE B 293	30.512	-8.825	-26.644	1.00	22.78	C
[11082]	ATOM	4305	N	LYS B 294	24.277	-10.150	-26.841	1.00	20.35	N
[11083]	ATOM	4306	CA	LYS B 294	23.886	-11.266	-25.980	1.00	20.74	C
[11084]	ATOM	4307	C	LYS B 294	23.691	-12.548	-26.799	1.00	20.19	C
[11085]	ATOM	4308	O	LYS B 294	24.183	-13.598	-26.423	1.00	20.79	O
[11086]	ATOM	4309	CB	LYS B 294	22.634	-10.936	-25.182	1.00	20.42	C
[11087]	ATOM	4310	CG	LYS B 294	22.229	-12.057	-24.211	1.00	21.63	C
[11088]	ATOM	4311	CD	LYS B 294	20.989	-11.706	-23.387	1.00	22.78	C
[11089]	ATOM	4312	CE	LYS B 294	19.731	-11.981	-24.152	1.00	28.45	C
[11090]	ATOM	4313	NZ	LYS B 294	18.517	-11.740	-23.310	1.00	31.67	N
[11091]	ATOM	4314	N	TYR B 295	23.000	-12.461	-27.929	1.00	20.42	N
[11092]	ATOM	4315	CA	TYR B 295	22.756	-13.657	-28.755	1.00	19.97	C
[11093]	ATOM	4316	C	TYR B 295	24.029	-14.160	-29.403	1.00	19.67	C
[11094]	ATOM	4317	O	TYR B 295	24.197	-15.355	-29.604	1.00	19.86	O
[11095]	ATOM	4318	CB	TYR B 295	21.690	-13.411	-29.815	1.00	20.25	C
[11096]	ATOM	4319	CG	TYR B 295	20.358	-13.019	-29.243	1.00	20.75	C
[11097]	ATOM	4320	CD1	TYR B 295	19.841	-13.670	-28.132	1.00	20.37	C
[11098]	ATOM	4321	CD2	TYR B 295	19.626	-11.980	-29.806	1.00	19.65	C
[11099]	ATOM	4322	CE1	TYR B 295	18.624	-13.309	-27.609	1.00	22.48	C
[11100]	ATOM	4323	CE2	TYR B 295	18.420	-11.608	-29.285	1.00	22.32	C
[11101]	ATOM	4324	CZ	TYR B 295	17.924	-12.276	-28.187	1.00	22.67	C
[11102]	ATOM	4325	OH	TYR B 295	16.718	-11.905	-27.666	1.00	23.51	O
[11103]	ATOM	4326	N	PHE B 296	24.919	-13.234	-29.716	1.00	20.18	N
[11104]	ATOM	4327	CA	PHE B 296	26.227	-13.556	-30.271	1.00	20.29	C
[11105]	ATOM	4328	C	PHE B 296	27.042	-14.422	-29.301	1.00	20.45	C
[11106]	ATOM	4329	O	PHE B 296	27.503	-15.503	-29.674	1.00	20.93	O
[11107]	ATOM	4330	CB	PHE B 296	26.973	-12.280	-30.629	1.00	20.41	C
[11108]	ATOM	4331	CG	PHE B 296	28.293	-12.530	-31.277	1.00	20.67	C

[11109]	ATOM	4332	CD1	PHE	B	296	28.358	-13.137	-32.534	1.00	21.67	C
[11110]	ATOM	4333	CD2	PHE	B	296	29.473	-12.164	-30.642	1.00	22.76	C
[11111]	ATOM	4334	CE1	PHE	B	296	29.596	-13.386	-33.149	1.00	20.88	C
[11112]	ATOM	4335	CE2	PHE	B	296	30.715	-12.416	-31.254	1.00	19.48	C
[11113]	ATOM	4336	CZ	PHE	B	296	30.762	-13.005	-32.511	1.00	19.96	C
[11114]	ATOM	4337	N	LEU	B	297	27.154	-13.960	-28.055	1.00	20.61	N
[11115]	ATOM	4338	CA	LEU	B	297	27.812	-14.690	-26.974	1.00	21.86	C
[11116]	ATOM	4339	C	LEU	B	297	27.173	-16.037	-26.639	1.00	22.57	C
[11117]	ATOM	4340	O	LEU	B	297	27.864	-17.030	-26.402	1.00	22.91	O
[11118]	ATOM	4341	CB	LEU	B	297	27.819	-13.818	-25.727	1.00	21.60	C
[11119]	ATOM	4342	CG	LEU	B	297	28.709	-12.574	-25.801	1.00	22.17	C
[11120]	ATOM	4343	CD1	LEU	B	297	28.651	-11.830	-24.467	1.00	21.99	C
[11121]	ATOM	4344	CD2	LEU	B	297	30.131	-12.994	-26.119	1.00	20.91	C
[11122]	ATOM	4345	N	GLN	B	298	25.846	-16.068	-26.582	1.00	22.78	N
[11123]	ATOM	4346	CA	GLN	B	298	25.143	-17.319	-26.311	1.00	23.03	C
[11124]	ATOM	4347	C	GLN	B	298	25.402	-18.322	-27.426	1.00	23.19	C
[11125]	ATOM	4348	O	GLN	B	298	25.526	-19.512	-27.158	1.00	23.21	O
[11126]	ATOM	4349	CB	GLN	B	298	23.645	-17.065	-26.121	1.00	23.53	C
[11127]	ATOM	4350	CG	GLN	B	298	23.343	-16.287	-24.842	1.00	23.34	C
[11128]	ATOM	4351	CD	GLN	B	298	21.879	-16.004	-24.670	1.00	26.99	C
[11129]	ATOM	4352	OE1	GLN	B	298	21.106	-16.023	-25.640	1.00	27.77	O
[11130]	ATOM	4353	NE2	GLN	B	298	21.477	-15.739	-23.433	1.00	24.95	N
[11131]	ATOM	4354	N	GLY	B	299	25.473	-17.839	-28.670	1.00	23.19	N
[11132]	ATOM	4355	CA	GLY	B	299	25.806	-18.686	-29.815	1.00	24.62	C
[11133]	ATOM	4356	C	GLY	B	299	27.201	-19.287	-29.722	1.00	25.80	C
[11134]	ATOM	4357	O	GLY	B	299	27.465	-20.338	-30.299	1.00	25.94	O
[11135]	ATOM	4358	N	MET	B	300	28.090	-18.613	-28.995	1.00	26.98	N
[11136]	ATOM	4359	CA	MET	B	300	29.426	-19.108	-28.728	1.00	29.21	C
[11137]	ATOM	4360	C	MET	B	300	29.436	-20.053	-27.540	1.00	29.10	C
[11138]	ATOM	4361	O	MET	B	300	30.462	-20.644	-27.231	1.00	29.32	O
[11139]	ATOM	4362	CB	MET	B	300	30.384	-17.944	-28.469	1.00	28.97	C
[11140]	ATOM	4363	CG	MET	B	300	30.700	-17.120	-29.707	1.00	30.79	C
[11141]	ATOM	4364	SD	MET	B	300	31.739	-15.678	-29.360	1.00	33.54	S
[11142]	ATOM	4365	CE	MET	B	300	32.648	-16.313	-27.972	1.00	35.32	C
[11143]	ATOM	4366	N	GLY	B	301	28.287	-20.195	-26.883	1.00	29.33	N
[11144]	ATOM	4367	CA	GLY	B	301	28.168	-21.041	-25.696	1.00	29.57	C

[11145]	ATOM	4368	C	GLY B 301	28.242	-20.347	-24.342	1.00	29.88	C
[11146]	ATOM	4369	O	GLY B 301	28.225	-21.021	-23.304	1.00	29.83	O
[11147]	ATOM	4370	N	TYR B 302	28.324	-19.016	-24.327	1.00	30.06	N
[11148]	ATOM	4371	CA	TYR B 302	28.379	-18.293	-23.048	1.00	31.15	C
[11149]	ATOM	4372	C	TYR B 302	26.977	-18.058	-22.506	1.00	31.84	C
[11150]	ATOM	4373	O	TYR B 302	26.261	-17.156	-22.957	1.00	32.82	O
[11151]	ATOM	4374	CB	TYR B 302	29.208	-17.000	-23.146	1.00	30.42	C
[11152]	ATOM	4375	CG	TYR B 302	30.657	-17.290	-23.458	1.00	30.57	C
[11153]	ATOM	4376	CD1	TYR B 302	31.494	-17.905	-22.516	1.00	30.21	C
[11154]	ATOM	4377	CD2	TYR B 302	31.189	-16.995	-24.709	1.00	29.10	C
[11155]	ATOM	4378	CE1	TYR B 302	32.829	-18.194	-22.811	1.00	29.80	C
[11156]	ATOM	4379	CE2	TYR B 302	32.510	-17.285	-25.010	1.00	29.15	C
[11157]	ATOM	4380	CZ	TYR B 302	33.325	-17.871	-24.061	1.00	30.57	C
[11158]	ATOM	4381	OH	TYR B 302	34.631	-18.162	-24.387	1.00	32.44	O
[11159]	ATOM	4382	N	MET B 303	26.578	-18.913	-21.566	1.00	32.81	N
[11160]	ATOM	4383	CA	MET B 303	25.223	-18.888	-21.005	1.00	33.53	C
[11161]	ATOM	4384	C	MET B 303	25.120	-18.092	-19.691	1.00	34.33	C
[11162]	ATOM	4385	O	MET B 303	24.026	-17.946	-19.143	1.00	34.42	O
[11163]	ATOM	4386	CB	MET B 303	24.669	-20.314	-20.799	1.00	33.22	C
[11164]	ATOM	4387	CG	MET B 303	24.412	-21.140	-22.064	1.00	33.17	C
[11165]	ATOM	4388	SD	MET B 303	23.436	-20.313	-23.338	1.00	34.64	S
[11166]	ATOM	4389	CE	MET B 303	21.878	-20.055	-22.506	1.00	36.41	C
[11167]	ATOM	4390	N	ALA B 304	26.256	-17.600	-19.188	1.00	35.39	N
[11168]	ATOM	4391	CA	ALA B 304	26.303	-16.700	-18.019	1.00	35.95	C
[11169]	ATOM	4392	C	ALA B 304	27.349	-15.605	-18.248	1.00	36.64	C
[11170]	ATOM	4393	O	ALA B 304	28.080	-15.636	-19.245	1.00	36.66	O
[11171]	ATOM	4394	CB	ALA B 304	26.597	-17.477	-16.732	1.00	35.90	C
[11172]	ATOM	4395	OXT	ALA B 304	27.483	-14.651	-17.469	1.00	37.07	O
[11173]	TER	4396		ALA B 304						
[11174]	ATOM	4397	N	ALA C 24	-17.286	-30.546	-54.861	1.00	45.78	N
[11175]	ATOM	4398	CA	ALA C 24	-16.239	-29.487	-54.624	1.00	45.70	C
[11176]	ATOM	4399	C	ALA C 24	-16.546	-28.545	-53.437	1.00	45.22	C
[11177]	ATOM	4400	O	ALA C 24	-16.555	-27.317	-53.592	1.00	45.79	O
[11178]	ATOM	4401	CB	ALA C 24	-16.003	-28.682	-55.926	1.00	45.72	C
[11179]	ATOM	4402	N	LYS C 25	-16.764	-29.104	-52.244	1.00	44.49	N
[11180]	ATOM	4403	CA	LYS C 25	-17.202	-28.276	-51.094	1.00	43.81	C

[11181]	ATOM	4404	C	LYS	C	25	-16.229	-28.118	-49.914	1.00	42.00	C
[11182]	ATOM	4405	O	LYS	C	25	-15.348	-28.956	-49.695	1.00	41.08	O
[11183]	ATOM	4406	CB	LYS	C	25	-18.603	-28.687	-50.590	1.00	44.01	C
[11184]	ATOM	4407	CG	LYS	C	25	-18.810	-30.186	-50.343	1.00	44.76	C
[11185]	ATOM	4408	CD	LYS	C	25	-20.141	-30.420	-49.617	1.00	45.75	C
[11186]	ATOM	4409	CE	LYS	C	25	-20.610	-31.876	-49.737	1.00	48.93	C
[11187]	ATOM	4410	NZ	LYS	C	25	-21.211	-32.169	-51.084	1.00	48.88	N
[11188]	ATOM	4411	N	THR	C	26	-16.434	-27.029	-49.168	1.00	40.24	N
[11189]	ATOM	4412	CA	THR	C	26	-15.637	-26.668	-47.998	1.00	38.65	C
[11190]	ATOM	4413	C	THR	C	26	-16.302	-27.104	-46.687	1.00	37.36	C
[11191]	ATOM	4414	O	THR	C	26	-17.495	-26.865	-46.471	1.00	37.25	O
[11192]	ATOM	4415	CB	THR	C	26	-15.365	-25.142	-47.973	1.00	38.99	C
[11193]	ATOM	4416	OG1	THR	C	26	-14.453	-24.811	-49.030	1.00	40.24	O
[11194]	ATOM	4417	CG2	THR	C	26	-14.757	-24.695	-46.645	1.00	38.22	C
[11195]	ATOM	4418	N	HIS	C	27	-15.517	-27.722	-45.810	1.00	35.31	N
[11196]	ATOM	4419	CA	HIS	C	27	-16.018	-28.223	-44.540	1.00	33.46	C
[11197]	ATOM	4420	C	HIS	C	27	-15.192	-27.708	-43.363	1.00	32.17	C
[11198]	ATOM	4421	O	HIS	C	27	-14.079	-27.227	-43.536	1.00	31.45	O
[11199]	ATOM	4422	CB	HIS	C	27	-16.001	-29.746	-44.539	1.00	33.35	C
[11200]	ATOM	4423	CG	HIS	C	27	-16.851	-30.376	-45.606	1.00	34.43	C
[11201]	ATOM	4424	ND1	HIS	C	27	-16.410	-30.561	-46.898	1.00	35.37	N
[11202]	ATOM	4425	CD2	HIS	C	27	-18.099	-30.899	-45.558	1.00	35.92	C
[11203]	ATOM	4426	CE1	HIS	C	27	-17.351	-31.162	-47.603	1.00	36.31	C
[11204]	ATOM	4427	NE2	HIS	C	27	-18.389	-31.374	-46.815	1.00	36.93	N
[11205]	ATOM	4428	N	SER	C	28	-15.754	-27.829	-42.166	1.00	31.09	N
[11206]	ATOM	4429	CA	SER	C	28	-15.101	-27.449	-40.919	1.00	30.27	C
[11207]	ATOM	4430	C	SER	C	28	-15.400	-28.529	-39.876	1.00	29.55	C
[11208]	ATOM	4431	O	SER	C	28	-16.526	-29.012	-39.800	1.00	29.06	O
[11209]	ATOM	4432	CB	SER	C	28	-15.663	-26.113	-40.454	1.00	30.31	C
[11210]	ATOM	4433	OG	SER	C	28	-15.190	-25.787	-39.161	1.00	32.22	O
[11211]	ATOM	4434	N	VAL	C	29	-14.404	-28.925	-39.089	1.00	28.92	N
[11212]	ATOM	4435	CA	VAL	C	29	-14.639	-29.864	-37.975	1.00	28.83	C
[11213]	ATOM	4436	C	VAL	C	29	-14.076	-29.306	-36.687	1.00	28.24	C
[11214]	ATOM	4437	O	VAL	C	29	-13.052	-28.631	-36.707	1.00	27.98	O
[11215]	ATOM	4438	CB	VAL	C	29	-14.057	-31.320	-38.207	1.00	29.09	C
[11216]	ATOM	4439	CG1	VAL	C	29	-14.496	-31.881	-39.540	1.00	29.94	C

[11217]	ATOM	4440	CG2	VAL	C	29	-12.519	-31.368	-38.095	1.00	29.47	C
[11218]	ATOM	4441	N	GLU	C	30	-14.758	-29.588	-35.585	1.00	27.58	N
[11219]	ATOM	4442	CA	GLU	C	30	-14.263	-29.287	-34.244	1.00	27.86	C
[11220]	ATOM	4443	C	GLU	C	30	-13.282	-30.362	-33.801	1.00	27.93	C
[11221]	ATOM	4444	O	GLU	C	30	-13.429	-31.533	-34.168	1.00	28.04	O
[11222]	ATOM	4445	CB	GLU	C	30	-15.426	-29.244	-33.253	1.00	27.79	C
[11223]	ATOM	4446	CG	GLU	C	30	-16.435	-28.124	-33.500	1.00	26.82	C
[11224]	ATOM	4447	CD	GLU	C	30	-17.811	-28.494	-32.986	1.00	27.18	C
[11225]	ATOM	4448	OE1	GLU	C	30	-18.315	-29.568	-33.368	1.00	26.56	O
[11226]	ATOM	4449	OE2	GLU	C	30	-18.383	-27.729	-32.188	1.00	26.21	O
[11227]	ATOM	4450	N	THR	C	31	-12.277	-29.957	-33.025	1.00	27.64	N
[11228]	ATOM	4451	CA	THR	C	31	-11.275	-30.873	-32.469	1.00	27.69	C
[11229]	ATOM	4452	C	THR	C	31	-10.954	-30.410	-31.034	1.00	27.62	C
[11230]	ATOM	4453	O	THR	C	31	-11.385	-29.332	-30.625	1.00	26.75	O
[11231]	ATOM	4454	CB	THR	C	31	-9.944	-30.875	-33.288	1.00	27.82	C
[11232]	ATOM	4455	OG1	THR	C	31	-9.154	-29.736	-32.924	1.00	28.47	O
[11233]	ATOM	4456	CG2	THR	C	31	-10.189	-30.890	-34.805	1.00	28.52	C
[11234]	ATOM	4457	N	PRO	C	32	-10.170	-31.199	-30.276	1.00	27.56	N
[11235]	ATOM	4458	CA	PRO	C	32	-9.868	-30.718	-28.919	1.00	27.51	C
[11236]	ATOM	4459	C	PRO	C	32	-9.000	-29.454	-28.937	1.00	27.69	C
[11237]	ATOM	4460	O	PRO	C	32	-8.755	-28.863	-27.886	1.00	26.52	O
[11238]	ATOM	4461	CB	PRO	C	32	-9.105	-31.892	-28.293	1.00	27.60	C
[11239]	ATOM	4462	CG	PRO	C	32	-9.421	-33.097	-29.206	1.00	28.01	C
[11240]	ATOM	4463	CD	PRO	C	32	-9.532	-32.499	-30.559	1.00	27.39	C
[11241]	ATOM	4464	N	TYR	C	33	-8.551	-29.042	-30.130	1.00	27.59	N
[11242]	ATOM	4465	CA	TYR	C	33	-7.646	-27.898	-30.258	1.00	28.63	C
[11243]	ATOM	4466	C	TYR	C	33	-8.240	-26.786	-31.100	1.00	28.86	C
[11244]	ATOM	4467	O	TYR	C	33	-7.503	-25.960	-31.664	1.00	29.77	O
[11245]	ATOM	4468	CB	TYR	C	33	-6.266	-28.329	-30.823	1.00	28.98	C
[11246]	ATOM	4469	CG	TYR	C	33	-5.761	-29.610	-30.218	1.00	30.65	C
[11247]	ATOM	4470	CD1	TYR	C	33	-5.353	-29.666	-28.876	1.00	30.59	C
[11248]	ATOM	4471	CD2	TYR	C	33	-5.729	-30.779	-30.969	1.00	30.75	C
[11249]	ATOM	4472	CE1	TYR	C	33	-4.915	-30.849	-28.321	1.00	32.25	C
[11250]	ATOM	4473	CE2	TYR	C	33	-5.295	-31.967	-30.421	1.00	31.77	C
[11251]	ATOM	4474	CZ	TYR	C	33	-4.890	-32.001	-29.108	1.00	31.88	C
[11252]	ATOM	4475	OH	TYR	C	33	-4.464	-33.202	-28.581	1.00	33.81	O

[11253]	ATOM	4476	N	GLY	C	34	-9.562	-26.744	-31.186	1.00	28.61	N
[11254]	ATOM	4477	CA	GLY	C	34	-10.222	-25.727	-31.996	1.00	28.47	C
[11255]	ATOM	4478	C	GLY	C	34	-10.625	-26.317	-33.329	1.00	28.33	C
[11256]	ATOM	4479	O	GLY	C	34	-10.434	-27.504	-33.577	1.00	29.07	O
[11257]	ATOM	4480	N	SER	C	35	-11.175	-25.498	-34.206	1.00	28.12	N
[11258]	ATOM	4481	CA	SER	C	35	-11.712	-26.023	-35.446	1.00	27.82	C
[11259]	ATOM	4482	C	SER	C	35	-10.698	-25.958	-36.602	1.00	27.40	C
[11260]	ATOM	4483	O	SER	C	35	-9.778	-25.135	-36.595	1.00	26.30	O
[11261]	ATOM	4484	CB	SER	C	35	-13.010	-25.299	-35.801	1.00	28.86	C
[11262]	ATOM	4485	OG	SER	C	35	-12.756	-24.272	-36.745	1.00	31.56	O
[11263]	ATOM	4486	N	VAL	C	36	-10.863	-26.844	-37.580	1.00	26.80	N
[11264]	ATOM	4487	CA	VAL	C	36	-10.066	-26.799	-38.801	1.00	26.35	C
[11265]	ATOM	4488	C	VAL	C	36	-10.963	-26.924	-40.031	1.00	26.85	C
[11266]	ATOM	4489	O	VAL	C	36	-12.011	-27.567	-39.988	1.00	26.20	O
[11267]	ATOM	4490	CB	VAL	C	36	-8.910	-27.852	-38.815	1.00	26.14	C
[11268]	ATOM	4491	CG1	VAL	C	36	-9.444	-29.286	-38.869	1.00	25.43	C
[11269]	ATOM	4492	CG2	VAL	C	36	-7.933	-27.590	-39.978	1.00	26.52	C
[11270]	ATOM	4493	N	THR	C	37	-10.509	-26.303	-41.119	1.00	26.60	N
[11271]	ATOM	4494	CA	THR	C	37	-11.229	-26.198	-42.367	1.00	26.69	C
[11272]	ATOM	4495	C	THR	C	37	-10.474	-26.979	-43.436	1.00	26.31	C
[11273]	ATOM	4496	O	THR	C	37	-9.248	-27.122	-43.371	1.00	25.90	O
[11274]	ATOM	4497	CB	THR	C	37	-11.358	-24.705	-42.760	1.00	26.58	C
[11275]	ATOM	4498	OG1	THR	C	37	-12.199	-24.057	-41.798	1.00	29.05	O
[11276]	ATOM	4499	CG2	THR	C	37	-11.992	-24.527	-44.107	1.00	29.20	C
[11277]	ATOM	4500	N	PHE	C	38	-11.218	-27.506	-44.404	1.00	25.87	N
[11278]	ATOM	4501	CA	PHE	C	38	-10.644	-28.262	-45.513	1.00	25.68	C
[11279]	ATOM	4502	C	PHE	C	38	-11.641	-28.285	-46.650	1.00	25.78	C
[11280]	ATOM	4503	O	PHE	C	38	-12.841	-28.058	-46.446	1.00	25.54	O
[11281]	ATOM	4504	CB	PHE	C	38	-10.257	-29.705	-45.105	1.00	25.61	C
[11282]	ATOM	4505	CG	PHE	C	38	-11.354	-30.460	-44.383	1.00	25.35	C
[11283]	ATOM	4506	CD1	PHE	C	38	-11.522	-30.310	-43.005	1.00	25.45	C
[11284]	ATOM	4507	CD2	PHE	C	38	-12.195	-31.323	-45.071	1.00	23.50	C
[11285]	ATOM	4508	CE1	PHE	C	38	-12.533	-30.990	-42.311	1.00	26.54	C
[11286]	ATOM	4509	CE2	PHE	C	38	-13.203	-32.023	-44.386	1.00	25.39	C
[11287]	ATOM	4510	CZ	PHE	C	38	-13.371	-31.857	-43.000	1.00	24.42	C
[11288]	ATOM	4511	N	THR	C	39	-11.135	-28.540	-47.849	1.00	25.51	N



[11289]	ATOM	4512	CA	THR	C	39	-11.960	-28.653	-49.040	1.00	25.75	C
[11290]	ATOM	4513	C	THR	C	39	-11.684	-30.022	-49.665	1.00	25.72	C
[11291]	ATOM	4514	O	THR	C	39	-10.537	-30.479	-49.707	1.00	26.06	O
[11292]	ATOM	4515	CB	THR	C	39	-11.665	-27.486	-50.036	1.00	25.97	C
[11293]	ATOM	4516	OG1	THR	C	39	-11.855	-26.227	-49.369	1.00	28.85	O
[11294]	ATOM	4517	CG2	THR	C	39	-12.605	-27.526	-51.210	1.00	26.87	C
[11295]	ATOM	4518	N	VAL	C	40	-12.739	-30.667	-50.151	1.00	25.57	N
[11296]	ATOM	4519	CA	VAL	C	40	-12.704	-32.044	-50.636	1.00	25.79	C
[11297]	ATOM	4520	C	VAL	C	40	-13.043	-31.993	-52.133	1.00	26.24	C
[11298]	ATOM	4521	O	VAL	C	40	-14.052	-31.393	-52.515	1.00	25.56	O
[11299]	ATOM	4522	CB	VAL	C	40	-13.729	-32.933	-49.849	1.00	25.90	C
[11300]	ATOM	4523	CG1	VAL	C	40	-13.802	-34.335	-50.403	1.00	25.40	C
[11301]	ATOM	4524	CG2	VAL	C	40	-13.381	-32.980	-48.357	1.00	26.00	C
[11302]	ATOM	4525	N	TYR	C	41	-12.183	-32.569	-52.980	1.00	26.35	N
[11303]	ATOM	4526	CA	TYR	C	41	-12.434	-32.589	-54.419	1.00	26.82	C
[11304]	ATOM	4527	C	TYR	C	41	-12.474	-34.021	-54.861	1.00	27.53	C
[11305]	ATOM	4528	O	TYR	C	41	-11.789	-34.860	-54.291	1.00	27.27	O
[11306]	ATOM	4529	CB	TYR	C	41	-11.315	-31.894	-55.187	1.00	27.15	C
[11307]	ATOM	4530	CG	TYR	C	41	-11.236	-30.388	-55.039	1.00	27.83	C
[11308]	ATOM	4531	CD1	TYR	C	41	-10.605	-29.811	-53.943	1.00	28.28	C
[11309]	ATOM	4532	CD2	TYR	C	41	-11.759	-29.543	-56.015	1.00	27.91	C
[11310]	ATOM	4533	CE1	TYR	C	41	-10.516	-28.435	-53.805	1.00	29.21	C
[11311]	ATOM	4534	CE2	TYR	C	41	-11.683	-28.153	-55.881	1.00	29.07	C
[11312]	ATOM	4535	CZ	TYR	C	41	-11.062	-27.606	-54.770	1.00	29.19	C
[11313]	ATOM	4536	OH	TYR	C	41	-10.962	-26.233	-54.625	1.00	29.24	O
[11314]	ATOM	4537	N	GLY	C	42	-13.261	-34.315	-55.890	1.00	28.84	N
[11315]	ATOM	4538	CA	GLY	C	42	-13.206	-35.641	-56.493	1.00	30.24	C
[11316]	ATOM	4539	C	GLY	C	42	-14.355	-36.563	-56.173	1.00	31.48	C
[11317]	ATOM	4540	O	GLY	C	42	-15.085	-36.381	-55.197	1.00	31.41	O
[11318]	ATOM	4541	N	THR	C	43	-14.493	-37.560	-57.032	1.00	32.93	N
[11319]	ATOM	4542	CA	THR	C	43	-15.571	-38.531	-56.983	1.00	34.96	C
[11320]	ATOM	4543	C	THR	C	43	-15.180	-39.674	-56.006	1.00	35.30	C
[11321]	ATOM	4544	O	THR	C	43	-13.995	-40.018	-55.911	1.00	35.47	O
[11322]	ATOM	4545	CB	THR	C	43	-15.956	-38.993	-58.445	1.00	34.81	C
[11323]	ATOM	4546	OG1	THR	C	43	-16.813	-40.140	-58.404	1.00	37.85	O
[11324]	ATOM	4547	CG2	THR	C	43	-14.726	-39.317	-59.312	1.00	36.01	C

[11325]	ATOM	4548	N	PRO	C	44	-16.162	-40.253	-55.262	1.00	35.92	N
[11326]	ATOM	4549	CA	PRO	C	44	-15.756	-41.252	-54.246	1.00	36.01	C
[11327]	ATOM	4550	C	PRO	C	44	-14.891	-42.347	-54.882	1.00	35.88	C
[11328]	ATOM	4551	O	PRO	C	44	-15.185	-42.791	-56.001	1.00	36.30	O
[11329]	ATOM	4552	CB	PRO	C	44	-17.095	-41.844	-53.748	1.00	36.30	C
[11330]	ATOM	4553	CG	PRO	C	44	-18.145	-40.829	-54.107	1.00	36.41	C
[11331]	ATOM	4554	CD	PRO	C	44	-17.630	-40.074	-55.325	1.00	35.79	C
[11332]	ATOM	4555	N	ALA	C	45	-13.812	-42.741	-54.207	1.00	35.57	N
[11333]	ATOM	4556	CA	ALA	C	45	-12.941	-43.792	-54.730	1.00	35.17	C
[11334]	ATOM	4557	C	ALA	C	45	-12.732	-44.832	-53.638	1.00	35.01	C
[11335]	ATOM	4558	O	ALA	C	45	-11.766	-44.758	-52.885	1.00	35.18	O
[11336]	ATOM	4559	CB	ALA	C	45	-11.604	-43.206	-55.249	1.00	35.29	C
[11337]	ATOM	4560	N	PRO	C	46	-13.646	-45.817	-53.562	1.00	34.91	N
[11338]	ATOM	4561	CA	PRO	C	46	-13.846	-46.683	-52.384	1.00	34.49	C
[11339]	ATOM	4562	C	PRO	C	46	-12.600	-47.392	-51.804	1.00	33.32	C
[11340]	ATOM	4563	O	PRO	C	46	-12.435	-47.400	-50.568	1.00	34.12	O
[11341]	ATOM	4564	CB	PRO	C	46	-14.909	-47.701	-52.857	1.00	34.32	C
[11342]	ATOM	4565	CG	PRO	C	46	-14.932	-47.589	-54.366	1.00	34.84	C
[11343]	ATOM	4566	CD	PRO	C	46	-14.580	-46.157	-54.655	1.00	35.10	C
[11344]	ATOM	4567	N	ALA	C	47	-11.755	-47.964	-52.668	1.00	31.34	N
[11345]	ATOM	4568	CA	ALA	C	47	-10.587	-48.776	-52.257	1.00	29.10	C
[11346]	ATOM	4569	C	ALA	C	47	-9.250	-48.051	-52.474	1.00	28.01	C
[11347]	ATOM	4570	O	ALA	C	47	-8.222	-48.674	-52.765	1.00	27.25	O
[11348]	ATOM	4571	CB	ALA	C	47	-10.600	-50.103	-53.008	1.00	29.16	C
[11349]	ATOM	4572	N	ARG	C	48	-9.268	-46.727	-52.333	1.00	26.07	N
[11350]	ATOM	4573	CA	ARG	C	48	-8.090	-45.921	-52.592	1.00	24.96	C
[11351]	ATOM	4574	C	ARG	C	48	-7.894	-44.948	-51.439	1.00	24.00	C
[11352]	ATOM	4575	O	ARG	C	48	-8.872	-44.485	-50.845	1.00	23.10	O
[11353]	ATOM	4576	CB	ARG	C	48	-8.238	-45.143	-53.905	1.00	24.93	C
[11354]	ATOM	4577	CG	ARG	C	48	-8.346	-46.014	-55.181	1.00	25.83	C
[11355]	ATOM	4578	CD	ARG	C	48	-7.042	-46.774	-55.520	1.00	26.82	C
[11356]	ATOM	4579	NE	ARG	C	48	-7.156	-47.581	-56.751	1.00	29.11	N
[11357]	ATOM	4580	CZ	ARG	C	48	-7.638	-48.825	-56.826	1.00	27.72	C
[11358]	ATOM	4581	NH1	ARG	C	48	-8.078	-49.462	-55.749	1.00	27.53	N
[11359]	ATOM	4582	NH2	ARG	C	48	-7.710	-49.431	-58.003	1.00	27.96	N
[11360]	ATOM	4583	N	PRO	C	49	-6.628	-44.637	-51.107	1.00	23.07	N

[11361]	ATOM	4584	CA	PRO	C	49	-6.453	-43.626	-50.083	1.00	22.31	C
[11362]	ATOM	4585	C	PRO	C	49	-6.856	-42.253	-50.627	1.00	22.53	C
[11363]	ATOM	4586	O	PRO	C	49	-6.733	-41.998	-51.826	1.00	22.37	O
[11364]	ATOM	4587	CB	PRO	C	49	-4.956	-43.674	-49.807	1.00	22.50	C
[11365]	ATOM	4588	CG	PRO	C	49	-4.350	-44.167	-51.050	1.00	21.89	C
[11366]	ATOM	4589	CD	PRO	C	49	-5.337	-45.144	-51.614	1.00	22.89	C
[11367]	ATOM	4590	N	ALA	C	50	-7.374	-41.402	-49.756	1.00	22.45	N
[11368]	ATOM	4591	CA	ALA	C	50	-7.551	-39.995	-50.074	1.00	22.63	C
[11369]	ATOM	4592	C	ALA	C	50	-6.169	-39.381	-50.118	1.00	22.32	C
[11370]	ATOM	4593	O	ALA	C	50	-5.296	-39.727	-49.310	1.00	22.25	O
[11371]	ATOM	4594	CB	ALA	C	50	-8.416	-39.285	-48.991	1.00	22.23	C
[11372]	ATOM	4595	N	ILE	C	51	-5.968	-38.482	-51.071	1.00	22.38	N
[11373]	ATOM	4596	CA	ILE	C	51	-4.790	-37.618	-51.077	1.00	22.11	C
[11374]	ATOM	4597	C	ILE	C	51	-5.081	-36.392	-50.211	1.00	22.56	C
[11375]	ATOM	4598	O	ILE	C	51	-5.981	-35.628	-50.523	1.00	23.37	O
[11376]	ATOM	4599	CB	ILE	C	51	-4.422	-37.182	-52.517	1.00	22.24	C
[11377]	ATOM	4600	CG1	ILE	C	51	-4.216	-38.407	-53.413	1.00	20.52	C
[11378]	ATOM	4601	CG2	ILE	C	51	-3.175	-36.294	-52.486	1.00	20.65	C
[11379]	ATOM	4602	CD1	ILE	C	51	-3.933	-38.079	-54.914	1.00	21.31	C
[11380]	ATOM	4603	N	LEU	C	52	-4.310	-36.199	-49.145	1.00	22.65	N
[11381]	ATOM	4604	CA	LEU	C	52	-4.563	-35.154	-48.168	1.00	22.56	C
[11382]	ATOM	4605	C	LEU	C	52	-3.341	-34.213	-48.112	1.00	22.94	C
[11383]	ATOM	4606	O	LEU	C	52	-2.215	-34.658	-47.946	1.00	22.62	O
[11384]	ATOM	4607	CB	LEU	C	52	-4.865	-35.784	-46.796	1.00	22.22	C
[11385]	ATOM	4608	CG	LEU	C	52	-5.189	-34.823	-45.624	1.00	23.73	C
[11386]	ATOM	4609	CD1	LEU	C	52	-6.212	-35.363	-44.677	1.00	22.64	C
[11387]	ATOM	4610	CD2	LEU	C	52	-3.919	-34.418	-44.837	1.00	23.97	C
[11388]	ATOM	4611	N	THR	C	53	-3.563	-32.919	-48.309	1.00	23.18	N
[11389]	ATOM	4612	CA	THR	C	53	-2.455	-31.974	-48.344	1.00	22.98	C
[11390]	ATOM	4613	C	THR	C	53	-2.442	-31.049	-47.128	1.00	23.10	C
[11391]	ATOM	4614	O	THR	C	53	-3.494	-30.761	-46.552	1.00	23.01	O
[11392]	ATOM	4615	CB	THR	C	53	-2.462	-31.102	-49.621	1.00	23.57	C
[11393]	ATOM	4616	OG1	THR	C	53	-3.473	-30.094	-49.525	1.00	23.60	O
[11394]	ATOM	4617	CG2	THR	C	53	-2.677	-31.933	-50.885	1.00	23.45	C
[11395]	ATOM	4618	N	TYR	C	54	-1.244	-30.590	-46.756	1.00	22.60	N
[11396]	ATOM	4619	CA	TYR	C	54	-1.054	-29.684	-45.650	1.00	22.45	C

[11397]	ATOM	4620	C	TYR	C	54	0.095	-28.725	-46.015	1.00	22.70	C
[11398]	ATOM	4621	O	TYR	C	54	1.228	-29.127	-46.239	1.00	21.24	O
[11399]	ATOM	4622	CB	TYR	C	54	-0.767	-30.457	-44.361	1.00	22.38	C
[11400]	ATOM	4623	CG	TYR	C	54	-1.316	-29.779	-43.113	1.00	23.77	C
[11401]	ATOM	4624	CD1	TYR	C	54	-0.854	-28.519	-42.720	1.00	22.20	C
[11402]	ATOM	4625	CD2	TYR	C	54	-2.301	-30.391	-42.328	1.00	23.92	C
[11403]	ATOM	4626	CE1	TYR	C	54	-1.352	-27.897	-41.600	1.00	22.38	C
[11404]	ATOM	4627	CE2	TYR	C	54	-2.807	-29.754	-41.176	1.00	22.09	C
[11405]	ATOM	4628	CZ	TYR	C	54	-2.314	-28.506	-40.829	1.00	21.97	C
[11406]	ATOM	4629	OH	TYR	C	54	-2.775	-27.852	-39.715	1.00	22.29	O
[11407]	ATOM	4630	N	HIS	C	55	-0.242	-27.442	-46.098	1.00	23.19	N
[11408]	ATOM	4631	CA	HIS	C	55	0.645	-26.407	-46.616	1.00	23.33	C
[11409]	ATOM	4632	C	HIS	C	55	1.650	-25.903	-45.570	1.00	23.62	C
[11410]	ATOM	4633	O	HIS	C	55	1.583	-26.241	-44.386	1.00	24.46	O
[11411]	ATOM	4634	CB	HIS	C	55	-0.212	-25.225	-47.062	1.00	21.95	C
[11412]	ATOM	4635	CG	HIS	C	55	-1.040	-24.667	-45.950	1.00	22.71	C
[11413]	ATOM	4636	ND1	HIS	C	55	-0.533	-23.795	-45.018	1.00	21.09	N
[11414]	ATOM	4637	CD2	HIS	C	55	-2.325	-24.903	-45.590	1.00	22.30	C
[11415]	ATOM	4638	CE1	HIS	C	55	-1.478	-23.493	-44.140	1.00	20.40	C
[11416]	ATOM	4639	NE2	HIS	C	55	-2.571	-24.159	-44.462	1.00	20.97	N
[11417]	ATOM	4640	N	ASP	C	56	2.515	-25.011	-46.025	1.00	23.84	N
[11418]	ATOM	4641	CA	ASP	C	56	3.602	-24.488	-45.237	1.00	24.17	C
[11419]	ATOM	4642	C	ASP	C	56	3.193	-23.181	-44.575	1.00	25.03	C
[11420]	ATOM	4643	O	ASP	C	56	2.129	-22.609	-44.899	1.00	25.95	O
[11421]	ATOM	4644	CB	ASP	C	56	4.813	-24.252	-46.145	1.00	24.01	C
[11422]	ATOM	4645	CG	ASP	C	56	6.124	-24.326	-45.399	1.00	24.36	C
[11423]	ATOM	4646	OD1	ASP	C	56	6.119	-24.415	-44.143	1.00	23.89	O
[11424]	ATOM	4647	OD2	ASP	C	56	7.168	-24.300	-46.070	1.00	23.51	O
[11425]	ATOM	4648	N	VAL	C	57	4.032	-22.732	-43.639	1.00	25.24	N
[11426]	ATOM	4649	CA	VAL	C	57	3.864	-21.455	-42.934	1.00	25.33	C
[11427]	ATOM	4650	C	VAL	C	57	3.840	-20.301	-43.928	1.00	25.40	C
[11428]	ATOM	4651	O	VAL	C	57	4.694	-20.218	-44.806	1.00	25.23	O
[11429]	ATOM	4652	CB	VAL	C	57	5.000	-21.242	-41.913	1.00	25.44	C
[11430]	ATOM	4653	CG1	VAL	C	57	4.838	-19.915	-41.207	1.00	25.55	C
[11431]	ATOM	4654	CG2	VAL	C	57	4.991	-22.354	-40.904	1.00	24.24	C
[11432]	ATOM	4655	N	GLY	C	58	2.842	-19.433	-43.804	1.00	25.18	N

[11433]	ATOM	4656	CA	GLY	C	58	2.763	-18.233	-44.609	1.00	24.87	C
[11434]	ATOM	4657	C	GLY	C	58	1.802	-18.429	-45.750	1.00	25.00	C
[11435]	ATOM	4658	O	GLY	C	58	1.381	-17.465	-46.396	1.00	25.80	O
[11436]	ATOM	4659	N	LEU	C	59	1.448	-19.682	-45.997	1.00	24.62	N
[11437]	ATOM	4660	CA	LEU	C	59	0.588	-20.025	-47.116	1.00	24.39	C
[11438]	ATOM	4661	C	LEU	C	59	-0.710	-20.690	-46.622	1.00	24.56	C
[11439]	ATOM	4662	O	LEU	C	59	-0.870	-20.903	-45.417	1.00	24.14	O
[11440]	ATOM	4663	CB	LEU	C	59	1.346	-20.941	-48.073	1.00	24.47	C
[11441]	ATOM	4664	CG	LEU	C	59	2.756	-20.510	-48.534	1.00	24.06	C
[11442]	ATOM	4665	CD1	LEU	C	59	3.411	-21.628	-49.298	1.00	24.32	C
[11443]	ATOM	4666	CD2	LEU	C	59	2.743	-19.234	-49.379	1.00	20.12	C
[11444]	ATOM	4667	N	ASN	C	60	-1.632	-20.964	-47.552	1.00	24.14	N
[11445]	ATOM	4668	CA	ASN	C	60	-2.784	-21.855	-47.336	1.00	24.18	C
[11446]	ATOM	4669	C	ASN	C	60	-2.880	-22.827	-48.525	1.00	24.33	C
[11447]	ATOM	4670	O	ASN	C	60	-1.960	-22.848	-49.353	1.00	24.24	O
[11448]	ATOM	4671	CB	ASN	C	60	-4.089	-21.093	-47.057	1.00	23.46	C
[11449]	ATOM	4672	CG	ASN	C	60	-4.486	-20.131	-48.178	1.00	24.67	C
[11450]	ATOM	4673	OD1	ASN	C	60	-3.995	-20.222	-49.313	1.00	23.60	O
[11451]	ATOM	4674	ND2	ASN	C	60	-5.396	-19.205	-47.860	1.00	20.88	N
[11452]	ATOM	4675	N	TYR	C	61	-3.929	-23.640	-48.620	1.00	23.99	N
[11453]	ATOM	4676	CA	TYR	C	61	-3.998	-24.572	-49.759	1.00	25.11	C
[11454]	ATOM	4677	C	TYR	C	61	-3.806	-23.838	-51.093	1.00	25.70	C
[11455]	ATOM	4678	O	TYR	C	61	-3.027	-24.274	-51.946	1.00	26.16	O
[11456]	ATOM	4679	CB	TYR	C	61	-5.300	-25.370	-49.814	1.00	24.96	C
[11457]	ATOM	4680	CG	TYR	C	61	-5.589	-25.843	-51.239	1.00	24.59	C
[11458]	ATOM	4681	CD1	TYR	C	61	-4.911	-26.946	-51.785	1.00	21.87	C
[11459]	ATOM	4682	CD2	TYR	C	61	-6.498	-25.163	-52.045	1.00	24.33	C
[11460]	ATOM	4683	CE1	TYR	C	61	-5.143	-27.364	-53.092	1.00	23.31	C
[11461]	ATOM	4684	CE2	TYR	C	61	-6.734	-25.568	-53.359	1.00	23.46	C
[11462]	ATOM	4685	CZ	TYR	C	61	-6.055	-26.667	-53.871	1.00	24.43	C
[11463]	ATOM	4686	OH	TYR	C	61	-6.302	-27.075	-55.158	1.00	25.42	O
[11464]	ATOM	4687	N	LYS	C	62	-4.493	-22.714	-51.255	1.00	26.24	N
[11465]	ATOM	4688	CA	LYS	C	62	-4.516	-22.026	-52.540	1.00	26.71	C
[11466]	ATOM	4689	C	LYS	C	62	-3.145	-21.504	-52.952	1.00	26.39	C
[11467]	ATOM	4690	O	LYS	C	62	-2.744	-21.658	-54.111	1.00	27.19	O
[11468]	ATOM	4691	CB	LYS	C	62	-5.552	-20.893	-52.556	1.00	27.49	C

[11469]	ATOM	4692	CG	LYS	C	62	-5.563	-20.141	-53.894	1.00	30.48	C
[11470]	ATOM	4693	CD	LYS	C	62	-6.938	-19.629	-54.280	1.00	36.88	C
[11471]	ATOM	4694	CE	LYS	C	62	-6.985	-18.109	-54.287	1.00	39.97	C
[11472]	ATOM	4695	NZ	LYS	C	62	-8.115	-17.597	-55.132	1.00	42.27	N
[11473]	ATOM	4696	N	SER	C	63	-2.431	-20.869	-52.026	1.00	25.52	N
[11474]	ATOM	4697	CA	SER	C	63	-1.120	-20.292	-52.362	1.00	25.22	C
[11475]	ATOM	4698	C	SER	C	63	0.019	-21.312	-52.389	1.00	25.27	C
[11476]	ATOM	4699	O	SER	C	63	1.076	-21.049	-52.967	1.00	26.17	O
[11477]	ATOM	4700	CB	SER	C	63	-0.778	-19.113	-51.443	1.00	24.82	C
[11478]	ATOM	4701	OG	SER	C	63	-0.829	-19.489	-50.081	1.00	24.74	O
[11479]	ATOM	4702	N	CYS	C	64	-0.193	-22.476	-51.780	1.00	24.97	N
[11480]	ATOM	4703	CA	CYS	C	64	0.826	-23.528	-51.691	1.00	24.52	C
[11481]	ATOM	4704	C	CYS	C	64	0.693	-24.643	-52.763	1.00	25.05	C
[11482]	ATOM	4705	O	CYS	C	64	1.667	-24.996	-53.441	1.00	24.76	O
[11483]	ATOM	4706	CB	CYS	C	64	0.789	-24.152	-50.290	1.00	24.09	C
[11484]	ATOM	4707	SG	CYS	C	64	2.205	-25.241	-49.925	1.00	25.71	S
[11485]	ATOM	4708	N	PHE	C	65	-0.513	-25.182	-52.912	1.00	25.12	N
[11486]	ATOM	4709	CA	PHE	C	65	-0.722	-26.422	-53.663	1.00	25.84	C
[11487]	ATOM	4710	C	PHE	C	65	-1.618	-26.286	-54.907	1.00	26.57	C
[11488]	ATOM	4711	O	PHE	C	65	-1.592	-27.157	-55.780	1.00	26.43	O
[11489]	ATOM	4712	CB	PHE	C	65	-1.328	-27.486	-52.753	1.00	24.90	C
[11490]	ATOM	4713	CG	PHE	C	65	-0.348	-28.132	-51.833	1.00	24.69	C
[11491]	ATOM	4714	CD1	PHE	C	65	0.721	-28.862	-52.332	1.00	24.17	C
[11492]	ATOM	4715	CD2	PHE	C	65	-0.508	-28.038	-50.455	1.00	23.62	C
[11493]	ATOM	4716	CE1	PHE	C	65	1.642	-29.477	-51.469	1.00	23.20	C
[11494]	ATOM	4717	CE2	PHE	C	65	0.403	-28.657	-49.587	1.00	22.38	C
[11495]	ATOM	4718	CZ	PHE	C	65	1.460	-29.372	-50.092	1.00	23.57	C
[11496]	ATOM	4719	N	GLN	C	66	-2.424	-25.227	-54.976	1.00	27.53	N
[11497]	ATOM	4720	CA	GLN	C	66	-3.354	-25.085	-56.109	1.00	28.48	C
[11498]	ATOM	4721	C	GLN	C	66	-2.702	-25.059	-57.505	1.00	28.63	C
[11499]	ATOM	4722	O	GLN	C	66	-3.221	-25.702	-58.428	1.00	28.61	O
[11500]	ATOM	4723	CB	GLN	C	66	-4.334	-23.922	-55.926	1.00	28.99	C
[11501]	ATOM	4724	CG	GLN	C	66	-5.315	-23.819	-57.098	1.00	30.05	C
[11502]	ATOM	4725	CD	GLN	C	66	-6.302	-22.699	-56.938	1.00	32.39	C
[11503]	ATOM	4726	OE1	GLN	C	66	-5.986	-21.533	-57.214	1.00	34.17	O
[11504]	ATOM	4727	NE2	GLN	C	66	-7.509	-23.035	-56.493	1.00	29.68	N

[11505]	ATOM	4728	N	PRO	C	67	-1.591	-24.300	-57.687	1.00	28.75	N
[11506]	ATOM	4729	CA	PRO	C	67	-0.896	-24.381	-58.982	1.00	28.93	C
[11507]	ATOM	4730	C	PRO	C	67	-0.477	-25.815	-59.343	1.00	28.89	C
[11508]	ATOM	4731	O	PRO	C	67	-0.523	-26.183	-60.517	1.00	29.31	O
[11509]	ATOM	4732	CB	PRO	C	67	0.337	-23.495	-58.773	1.00	29.34	C
[11510]	ATOM	4733	CG	PRO	C	67	-0.113	-22.500	-57.755	1.00	28.79	C
[11511]	ATOM	4734	CD	PRO	C	67	-0.950	-23.312	-56.804	1.00	28.57	C
[11512]	ATOM	4735	N	LEU	C	68	-0.099	-26.619	-58.340	1.00	28.31	N
[11513]	ATOM	4736	CA	LEU	C	68	0.256	-28.028	-58.572	1.00	27.28	C
[11514]	ATOM	4737	C	LEU	C	68	-0.993	-28.847	-58.911	1.00	27.32	C
[11515]	ATOM	4738	O	LEU	C	68	-1.009	-29.566	-59.904	1.00	26.85	O
[11516]	ATOM	4739	CB	LEU	C	68	1.005	-28.644	-57.373	1.00	26.73	C
[11517]	ATOM	4740	CG	LEU	C	68	1.342	-30.138	-57.518	1.00	26.72	C
[11518]	ATOM	4741	CD1	LEU	C	68	2.359	-30.330	-58.620	1.00	27.09	C
[11519]	ATOM	4742	CD2	LEU	C	68	1.816	-30.781	-56.206	1.00	26.18	C
[11520]	ATOM	4743	N	PHE	C	69	-2.043	-28.711	-58.097	1.00	27.35	N
[11521]	ATOM	4744	CA	PHE	C	69	-3.213	-29.577	-58.246	1.00	27.19	C
[11522]	ATOM	4745	C	PHE	C	69	-4.091	-29.310	-59.446	1.00	27.88	C
[11523]	ATOM	4746	O	PHE	C	69	-4.743	-30.226	-59.934	1.00	28.49	O
[11524]	ATOM	4747	CB	PHE	C	69	-3.984	-29.697	-56.939	1.00	26.90	C
[11525]	ATOM	4748	CG	PHE	C	69	-3.384	-30.705	-56.023	1.00	26.05	C
[11526]	ATOM	4749	CD1	PHE	C	69	-2.285	-30.377	-55.230	1.00	26.33	C
[11527]	ATOM	4750	CD2	PHE	C	69	-3.847	-32.015	-56.020	1.00	24.99	C
[11528]	ATOM	4751	CE1	PHE	C	69	-1.690	-31.325	-54.412	1.00	24.47	C
[11529]	ATOM	4752	CE2	PHE	C	69	-3.259	-32.972	-55.195	1.00	25.07	C
[11530]	ATOM	4753	CZ	PHE	C	69	-2.185	-32.619	-54.386	1.00	25.88	C
[11531]	ATOM	4754	N	GLN	C	70	-4.049	-28.081	-59.959	1.00	28.37	N
[11532]	ATOM	4755	CA	GLN	C	70	-4.772	-27.705	-61.168	1.00	28.56	C
[11533]	ATOM	4756	C	GLN	C	70	-3.975	-27.975	-62.439	1.00	28.41	C
[11534]	ATOM	4757	O	GLN	C	70	-4.498	-27.852	-63.540	1.00	27.70	O
[11535]	ATOM	4758	CB	GLN	C	70	-5.152	-26.227	-61.118	1.00	28.61	C
[11536]	ATOM	4759	CG	GLN	C	70	-6.286	-25.884	-60.177	1.00	29.63	C
[11537]	ATOM	4760	CD	GLN	C	70	-6.666	-24.410	-60.234	1.00	30.67	C
[11538]	ATOM	4761	OE1	GLN	C	70	-5.931	-23.572	-60.777	1.00	35.55	O
[11539]	ATOM	4762	NE2	GLN	C	70	-7.816	-24.084	-59.664	1.00	32.97	N
[11540]	ATOM	4763	N	PHE	C	71	-2.704	-28.315	-62.290	1.00	29.04	N

[11541]	ATOM	4764	CA	PHE	C	71	-1.842	-28.610	-63.432	1.00	29.64	C
[11542]	ATOM	4765	C	PHE	C	71	-2.469	-29.786	-64.164	1.00	30.17	C
[11543]	ATOM	4766	O	PHE	C	71	-2.880	-30.768	-63.548	1.00	29.63	O
[11544]	ATOM	4767	CB	PHE	C	71	-0.415	-28.922	-62.947	1.00	29.95	C
[11545]	ATOM	4768	CG	PHE	C	71	0.590	-29.097	-64.049	1.00	30.73	C
[11546]	ATOM	4769	CD1	PHE	C	71	0.961	-28.025	-64.853	1.00	31.94	C
[11547]	ATOM	4770	CD2	PHE	C	71	1.187	-30.333	-64.263	1.00	32.14	C
[11548]	ATOM	4771	CE1	PHE	C	71	1.907	-28.186	-65.873	1.00	33.46	C
[11549]	ATOM	4772	CE2	PHE	C	71	2.120	-30.513	-65.280	1.00	33.21	C
[11550]	ATOM	4773	CZ	PHE	C	71	2.488	-29.435	-66.090	1.00	32.94	C
[11551]	ATOM	4774	N	GLU	C	72	-2.583	-29.688	-65.478	1.00	30.62	N
[11552]	ATOM	4775	CA	GLU	C	72	-3.413	-30.641	-66.201	1.00	31.55	C
[11553]	ATOM	4776	C	GLU	C	72	-2.931	-32.104	-66.141	1.00	31.15	C
[11554]	ATOM	4777	O	GLU	C	72	-3.757	-33.023	-66.057	1.00	30.38	O
[11555]	ATOM	4778	CB	GLU	C	72	-3.648	-30.177	-67.643	1.00	32.49	C
[11556]	ATOM	4779	CG	GLU	C	72	-5.091	-30.417	-68.122	1.00	37.06	C
[11557]	ATOM	4780	CD	GLU	C	72	-6.112	-29.472	-67.459	1.00	42.04	C
[11558]	ATOM	4781	OE1	GLU	C	72	-6.273	-28.325	-67.962	1.00	43.93	O
[11559]	ATOM	4782	OE2	GLU	C	72	-6.751	-29.884	-66.449	1.00	44.05	O
[11560]	ATOM	4783	N	ASP	C	73	-1.612	-32.309	-66.171	1.00	30.72	N
[11561]	ATOM	4784	CA	ASP	C	73	-1.022	-33.643	-66.002	1.00	30.96	C
[11562]	ATOM	4785	C	ASP	C	73	-1.287	-34.205	-64.600	1.00	29.95	C
[11563]	ATOM	4786	O	ASP	C	73	-1.516	-35.405	-64.442	1.00	30.16	O
[11564]	ATOM	4787	CB	ASP	C	73	0.486	-33.620	-66.265	1.00	31.44	C
[11565]	ATOM	4788	CG	ASP	C	73	0.830	-33.457	-67.743	1.00	34.21	C
[11566]	ATOM	4789	OD1	ASP	C	73	-0.090	-33.553	-68.592	1.00	37.14	O
[11567]	ATOM	4790	OD2	ASP	C	73	2.030	-33.246	-68.049	1.00	35.56	O
[11568]	ATOM	4791	N	MET	C	74	-1.271	-33.340	-63.593	1.00	29.34	N
[11569]	ATOM	4792	CA	MET	C	74	-1.628	-33.753	-62.235	1.00	28.99	C
[11570]	ATOM	4793	C	MET	C	74	-3.095	-34.146	-62.185	1.00	28.66	C
[11571]	ATOM	4794	O	MET	C	74	-3.423	-35.194	-61.656	1.00	28.72	O
[11572]	ATOM	4795	CB	MET	C	74	-1.305	-32.658	-61.216	1.00	28.92	C
[11573]	ATOM	4796	CG	MET	C	74	-1.576	-33.018	-59.758	1.00	29.63	C
[11574]	ATOM	4797	SD	MET	C	74	-0.817	-34.539	-59.110	1.00	30.67	S
[11575]	ATOM	4798	CE	MET	C	74	0.809	-33.986	-58.580	1.00	32.27	C
[11576]	ATOM	4799	N	GLN	C	75	-3.966	-33.317	-62.757	1.00	29.11	N



[11577]	ATOM	4800	CA	GLN	C	75	-5.406	-33.593	-62.810	1.00	30.15	C
[11578]	ATOM	4801	C	GLN	C	75	-5.699	-35.003	-63.347	1.00	30.59	C
[11579]	ATOM	4802	O	GLN	C	75	-6.524	-35.736	-62.800	1.00	30.92	O
[11580]	ATOM	4803	CB	GLN	C	75	-6.132	-32.528	-63.648	1.00	30.40	C
[11581]	ATOM	4804	CG	GLN	C	75	-6.472	-31.232	-62.881	1.00	31.84	C
[11582]	ATOM	4805	CD	GLN	C	75	-7.447	-31.464	-61.724	1.00	35.59	C
[11583]	ATOM	4806	OE1	GLN	C	75	-7.150	-31.150	-60.564	1.00	37.66	O
[11584]	ATOM	4807	NE2	GLN	C	75	-8.600	-32.041	-62.028	1.00	35.98	N
[11585]	ATOM	4808	N	GLU	C	76	-4.982	-35.380	-64.396	1.00	31.00	N
[11586]	ATOM	4809	CA	GLU	C	76	-5.128	-36.673	-65.036	1.00	31.77	C
[11587]	ATOM	4810	C	GLU	C	76	-4.837	-37.806	-64.059	1.00	31.72	C
[11588]	ATOM	4811	O	GLU	C	76	-5.545	-38.806	-64.026	1.00	32.18	O
[11589]	ATOM	4812	CB	GLU	C	76	-4.213	-36.738	-66.261	1.00	31.72	C
[11590]	ATOM	4813	CG	GLU	C	76	-4.135	-38.106	-66.916	1.00	35.06	C
[11591]	ATOM	4814	CD	GLU	C	76	-3.844	-38.025	-68.397	1.00	38.89	C
[11592]	ATOM	4815	OE1	GLU	C	76	-3.044	-37.153	-68.812	1.00	39.15	O
[11593]	ATOM	4816	OE2	GLU	C	76	-4.423	-38.844	-69.145	1.00	40.76	O
[11594]	ATOM	4817	N	ILE	C	77	-3.812	-37.615	-63.243	1.00	32.37	N
[11595]	ATOM	4818	CA	ILE	C	77	-3.336	-38.620	-62.288	1.00	32.80	C
[11596]	ATOM	4819	C	ILE	C	77	-4.267	-38.792	-61.083	1.00	32.79	C
[11597]	ATOM	4820	O	ILE	C	77	-4.585	-39.923	-60.700	1.00	33.50	O
[11598]	ATOM	4821	CB	ILE	C	77	-1.874	-38.311	-61.878	1.00	32.72	C
[11599]	ATOM	4822	CG1	ILE	C	77	-0.939	-38.855	-62.958	1.00	34.36	C
[11600]	ATOM	4823	CG2	ILE	C	77	-1.535	-38.898	-60.526	1.00	34.34	C
[11601]	ATOM	4824	CD1	ILE	C	77	0.284	-38.013	-63.199	1.00	36.36	C
[11602]	ATOM	4825	N	ILE	C	78	-4.740	-37.673	-60.535	1.00	32.23	N
[11603]	ATOM	4826	CA	ILE	C	78	-5.541	-37.656	-59.306	1.00	32.06	C
[11604]	ATOM	4827	C	ILE	C	78	-7.027	-37.896	-59.581	1.00	32.56	C
[11605]	ATOM	4828	O	ILE	C	78	-7.830	-38.020	-58.661	1.00	32.15	O
[11606]	ATOM	4829	CB	ILE	C	78	-5.356	-36.334	-58.521	1.00	32.03	C
[11607]	ATOM	4830	CG1	ILE	C	78	-5.895	-35.142	-59.329	1.00	31.43	C
[11608]	ATOM	4831	CG2	ILE	C	78	-3.894	-36.163	-58.145	1.00	32.02	C
[11609]	ATOM	4832	CD1	ILE	C	78	-5.714	-33.807	-58.681	1.00	31.65	C
[11610]	ATOM	4833	N	GLN	C	79	-7.373	-37.962	-60.857	1.00	32.79	N
[11611]	ATOM	4834	CA	GLN	C	79	-8.723	-38.249	-61.318	1.00	33.81	C
[11612]	ATOM	4835	C	GLN	C	79	-9.386	-39.396	-60.567	1.00	33.22	C

[11613]	ATOM	4836	O	GLN	C	79	-10.593	-39.378	-60.336	1.00	33.94	O
[11614]	ATOM	4837	CB	GLN	C	79	-8.616	-38.651	-62.776	1.00	34.23	C
[11615]	ATOM	4838	CG	GLN	C	79	-9.799	-38.370	-63.616	1.00	37.76	C
[11616]	ATOM	4839	CD	GLN	C	79	-9.607	-38.927	-65.013	1.00	40.02	C
[11617]	ATOM	4840	OE1	GLN	C	79	-8.472	-39.045	-65.498	1.00	39.66	O
[11618]	ATOM	4841	NE2	GLN	C	79	-10.712	-39.291	-65.660	1.00	40.88	N
[11619]	ATOM	4842	N	ASN	C	80	-8.595	-40.402	-60.211	1.00	32.42	N
[11620]	ATOM	4843	CA	ASN	C	80	-9.096	-41.611	-59.566	1.00	31.59	C
[11621]	ATOM	4844	C	ASN	C	80	-8.970	-41.585	-58.050	1.00	30.53	C
[11622]	ATOM	4845	O	ASN	C	80	-9.079	-42.621	-57.407	1.00	30.43	O
[11623]	ATOM	4846	CB	ASN	C	80	-8.370	-42.846	-60.137	1.00	32.56	C
[11624]	ATOM	4847	CG	ASN	C	80	-8.635	-43.052	-61.632	1.00	34.21	C
[11625]	ATOM	4848	OD1	ASN	C	80	-7.704	-43.223	-62.414	1.00	37.24	O
[11626]	ATOM	4849	ND2	ASN	C	80	-9.902	-43.034	-62.024	1.00	34.64	N
[11627]	ATOM	4850	N	PHE	C	81	-8.759	-40.402	-57.474	1.00	29.08	N
[11628]	ATOM	4851	CA	PHE	C	81	-8.589	-40.268	-56.024	1.00	28.31	C
[11629]	ATOM	4852	C	PHE	C	81	-9.490	-39.166	-55.499	1.00	27.68	C
[11630]	ATOM	4853	O	PHE	C	81	-9.864	-38.239	-56.235	1.00	26.96	O
[11631]	ATOM	4854	CB	PHE	C	81	-7.137	-39.905	-55.675	1.00	28.02	C
[11632]	ATOM	4855	CG	PHE	C	81	-6.121	-41.005	-55.960	1.00	28.12	C
[11633]	ATOM	4856	CD1	PHE	C	81	-5.740	-41.890	-54.959	1.00	27.84	C
[11634]	ATOM	4857	CD2	PHE	C	81	-5.532	-41.131	-57.210	1.00	28.37	C
[11635]	ATOM	4858	CE1	PHE	C	81	-4.821	-42.896	-55.209	1.00	27.01	C
[11636]	ATOM	4859	CE2	PHE	C	81	-4.601	-42.138	-57.461	1.00	27.67	C
[11637]	ATOM	4860	CZ	PHE	C	81	-4.256	-43.019	-56.461	1.00	26.80	C
[11638]	ATOM	4861	N	VAL	C	82	-9.851	-39.264	-54.226	1.00	27.08	N
[11639]	ATOM	4862	CA	VAL	C	82	-10.478	-38.127	-53.569	1.00	26.72	C
[11640]	ATOM	4863	C	VAL	C	82	-9.319	-37.296	-52.985	1.00	26.07	C
[11641]	ATOM	4864	O	VAL	C	82	-8.280	-37.860	-52.629	1.00	26.50	O
[11642]	ATOM	4865	CB	VAL	C	82	-11.600	-38.544	-52.546	1.00	26.83	C
[11643]	ATOM	4866	CG1	VAL	C	82	-11.073	-39.470	-51.480	1.00	29.34	C
[11644]	ATOM	4867	CG2	VAL	C	82	-12.202	-37.328	-51.877	1.00	27.10	C
[11645]	ATOM	4868	N	ARG	C	83	-9.452	-35.967	-52.977	1.00	24.47	N
[11646]	ATOM	4869	CA	ARG	C	83	-8.402	-35.094	-52.467	1.00	23.39	C
[11647]	ATOM	4870	C	ARG	C	83	-8.990	-34.279	-51.352	1.00	23.15	C
[11648]	ATOM	4871	O	ARG	C	83	-10.115	-33.809	-51.474	1.00	23.27	O

[11649]	ATOM	4872	CB	ARG	C	83	-7.877	-34.159	-53.559	1.00	23.34	C
[11650]	ATOM	4873	CG	ARG	C	83	-7.079	-34.841	-54.644	1.00	22.27	C
[11651]	ATOM	4874	CD	ARG	C	83	-7.988	-35.406	-55.742	1.00	23.24	C
[11652]	ATOM	4875	NE	ARG	C	83	-8.578	-34.346	-56.568	1.00	22.00	N
[11653]	ATOM	4876	CZ	ARG	C	83	-9.464	-34.545	-57.551	1.00	22.31	C
[11654]	ATOM	4877	NH1	ARG	C	83	-9.893	-35.752	-57.835	1.00	22.53	N
[11655]	ATOM	4878	NH2	ARG	C	83	-9.917	-33.528	-58.255	1.00	21.00	N
[11656]	ATOM	4879	N	VAL	C	84	-8.245	-34.146	-50.257	1.00	22.20	N
[11657]	ATOM	4880	CA	VAL	C	84	-8.690	-33.384	-49.106	1.00	21.17	C
[11658]	ATOM	4881	C	VAL	C	84	-7.628	-32.329	-48.846	1.00	21.03	C
[11659]	ATOM	4882	O	VAL	C	84	-6.505	-32.674	-48.469	1.00	20.52	O
[11660]	ATOM	4883	CB	VAL	C	84	-8.864	-34.272	-47.852	1.00	21.44	C
[11661]	ATOM	4884	CG1	VAL	C	84	-9.321	-33.442	-46.665	1.00	19.28	C
[11662]	ATOM	4885	CG2	VAL	C	84	-9.835	-35.425	-48.122	1.00	22.29	C
[11663]	ATOM	4886	N	HIS	C	85	-7.976	-31.058	-49.044	1.00	20.28	N
[11664]	ATOM	4887	CA	HIS	C	85	-7.010	-29.972	-48.923	1.00	20.99	C
[11665]	ATOM	4888	C	HIS	C	85	-7.213	-29.174	-47.637	1.00	22.22	C
[11666]	ATOM	4889	O	HIS	C	85	-8.173	-28.424	-47.521	1.00	22.77	O
[11667]	ATOM	4890	CB	HIS	C	85	-7.099	-29.061	-50.152	1.00	21.27	C
[11668]	ATOM	4891	CG	HIS	C	85	-6.799	-29.765	-51.440	1.00	21.02	C
[11669]	ATOM	4892	ND1	HIS	C	85	-5.595	-30.391	-51.683	1.00	22.39	N
[11670]	ATOM	4893	CD2	HIS	C	85	-7.547	-29.950	-52.555	1.00	21.98	C
[11671]	ATOM	4894	CE1	HIS	C	85	-5.610	-30.939	-52.887	1.00	21.32	C
[11672]	ATOM	4895	NE2	HIS	C	85	-6.782	-30.680	-53.440	1.00	22.27	N
[11673]	ATOM	4896	N	VAL	C	86	-6.323	-29.368	-46.662	1.00	22.59	N
[11674]	ATOM	4897	CA	VAL	C	86	-6.466	-28.763	-45.357	1.00	22.76	C
[11675]	ATOM	4898	C	VAL	C	86	-5.856	-27.352	-45.374	1.00	23.27	C
[11676]	ATOM	4899	O	VAL	C	86	-4.766	-27.139	-45.940	1.00	23.33	O
[11677]	ATOM	4900	CB	VAL	C	86	-5.793	-29.646	-44.267	1.00	23.22	C
[11678]	ATOM	4901	CG1	VAL	C	86	-5.989	-29.036	-42.890	1.00	23.10	C
[11679]	ATOM	4902	CG2	VAL	C	86	-6.361	-31.075	-44.282	1.00	21.30	C
[11680]	ATOM	4903	N	ASP	C	87	-6.584	-26.399	-44.791	1.00	23.18	N
[11681]	ATOM	4904	CA	ASP	C	87	-6.076	-25.061	-44.421	1.00	22.93	C
[11682]	ATOM	4905	C	ASP	C	87	-5.819	-25.048	-42.901	1.00	22.99	C
[11683]	ATOM	4906	O	ASP	C	87	-6.752	-25.276	-42.134	1.00	23.45	O
[11684]	ATOM	4907	CB	ASP	C	87	-7.125	-24.001	-44.769	1.00	22.93	C

[11685]	ATOM	4908	CG	ASP	C	87	-7.244	-23.762	-46.279	1.00	23.93	C
[11686]	ATOM	4909	OD1	ASP	C	87	-6.205	-23.578	-46.949	1.00	24.44	O
[11687]	ATOM	4910	OD2	ASP	C	87	-8.376	-23.769	-46.806	1.00	25.10	O
[11688]	ATOM	4911	N	ALA	C	88	-4.580	-24.819	-42.448	1.00	22.53	N
[11689]	ATOM	4912	CA	ALA	C	88	-4.303	-24.778	-41.000	1.00	22.76	C
[11690]	ATOM	4913	C	ALA	C	88	-5.274	-23.812	-40.321	1.00	22.68	C
[11691]	ATOM	4914	O	ALA	C	88	-5.744	-22.870	-40.967	1.00	23.25	O
[11692]	ATOM	4915	CB	ALA	C	88	-2.849	-24.305	-40.745	1.00	22.36	C
[11693]	ATOM	4916	N	PRO	C	89	-5.554	-23.995	-39.011	1.00	23.10	N
[11694]	ATOM	4917	CA	PRO	C	89	-6.455	-23.030	-38.372	1.00	23.28	C
[11695]	ATOM	4918	C	PRO	C	89	-6.057	-21.581	-38.651	1.00	23.35	C
[11696]	ATOM	4919	O	PRO	C	89	-4.886	-21.224	-38.494	1.00	23.65	O
[11697]	ATOM	4920	CB	PRO	C	89	-6.306	-23.351	-36.878	1.00	22.83	C
[11698]	ATOM	4921	CG	PRO	C	89	-5.944	-24.804	-36.855	1.00	23.88	C
[11699]	ATOM	4922	CD	PRO	C	89	-5.094	-25.030	-38.063	1.00	22.82	C
[11700]	ATOM	4923	N	GLY	C	90	-7.021	-20.765	-39.065	1.00	23.19	N
[11701]	ATOM	4924	CA	GLY	C	90	-6.807	-19.329	-39.253	1.00	23.46	C
[11702]	ATOM	4925	C	GLY	C	90	-6.215	-18.902	-40.589	1.00	24.36	C
[11703]	ATOM	4926	O	GLY	C	90	-5.921	-17.713	-40.778	1.00	23.53	O
[11704]	ATOM	4927	N	MET	C	91	-6.031	-19.870	-41.502	1.00	26.03	N
[11705]	ATOM	4928	CA	MET	C	91	-5.315	-19.675	-42.788	1.00	27.01	C
[11706]	ATOM	4929	C	MET	C	91	-6.212	-19.740	-44.014	1.00	27.86	C
[11707]	ATOM	4930	O	MET	C	91	-5.796	-19.365	-45.118	1.00	27.71	O
[11708]	ATOM	4931	CB	MET	C	91	-4.186	-20.707	-42.972	1.00	26.94	C
[11709]	ATOM	4932	CG	MET	C	91	-3.181	-20.795	-41.837	1.00	27.99	C
[11710]	ATOM	4933	SD	MET	C	91	-2.469	-19.229	-41.287	1.00	27.99	S
[11711]	ATOM	4934	CE	MET	C	91	-2.129	-19.640	-39.567	1.00	26.61	C
[11712]	ATOM	4935	N	GLU	C	92	-7.432	-20.234	-43.832	1.00	28.88	N
[11713]	ATOM	4936	CA	GLU	C	92	-8.390	-20.321	-44.931	1.00	29.75	C
[11714]	ATOM	4937	C	GLU	C	92	-8.811	-18.924	-45.369	1.00	30.94	C
[11715]	ATOM	4938	O	GLU	C	92	-8.683	-17.956	-44.616	1.00	30.80	O
[11716]	ATOM	4939	CB	GLU	C	92	-9.603	-21.178	-44.543	1.00	29.46	C
[11717]	ATOM	4940	CG	GLU	C	92	-10.612	-20.521	-43.587	1.00	30.50	C
[11718]	ATOM	4941	CD	GLU	C	92	-10.225	-20.647	-42.122	1.00	32.44	C
[11719]	ATOM	4942	OE1	GLU	C	92	-9.136	-21.183	-41.811	1.00	33.69	O
[11720]	ATOM	4943	OE2	GLU	C	92	-11.008	-20.192	-41.268	1.00	33.14	O

[11721]	ATOM	4944	N	GLU	C	93	-9.308	-18.810	-46.593	1.00	32.63	N
[11722]	ATOM	4945	CA	GLU	C	93	-9.728	-17.509	-47.086	1.00	34.79	C
[11723]	ATOM	4946	C	GLU	C	93	-10.851	-16.995	-46.206	1.00	33.84	C
[11724]	ATOM	4947	O	GLU	C	93	-11.758	-17.744	-45.836	1.00	33.81	O
[11725]	ATOM	4948	CB	GLU	C	93	-10.104	-17.541	-48.580	1.00	34.26	C
[11726]	ATOM	4949	CG	GLU	C	93	-11.571	-17.769	-48.906	1.00	38.07	C
[11727]	ATOM	4950	CD	GLU	C	93	-11.921	-17.401	-50.358	1.00	39.17	C
[11728]	ATOM	4951	OE1	GLU	C	93	-11.432	-16.344	-50.836	1.00	44.23	O
[11729]	ATOM	4952	OE2	GLU	C	93	-12.684	-18.166	-51.014	1.00	44.70	O
[11730]	ATOM	4953	N	GLY	C	94	-10.749	-15.724	-45.834	1.00	34.12	N
[11731]	ATOM	4954	CA	GLY	C	94	-11.767	-15.076	-45.014	1.00	34.12	C
[11732]	ATOM	4955	C	GLY	C	94	-11.760	-15.511	-43.562	1.00	34.15	C
[11733]	ATOM	4956	O	GLY	C	94	-12.750	-15.312	-42.852	1.00	34.14	O
[11734]	ATOM	4957	N	ALA	C	95	-10.651	-16.106	-43.117	1.00	33.89	N
[11735]	ATOM	4958	CA	ALA	C	95	-10.512	-16.537	-41.730	1.00	33.67	C
[11736]	ATOM	4959	C	ALA	C	95	-10.427	-15.327	-40.806	1.00	33.74	C
[11737]	ATOM	4960	O	ALA	C	95	-9.740	-14.350	-41.127	1.00	33.46	O
[11738]	ATOM	4961	CB	ALA	C	95	-9.296	-17.386	-41.571	1.00	33.44	C
[11739]	ATOM	4962	N	PRO	C	96	-11.113	-15.390	-39.651	1.00	34.11	N
[11740]	ATOM	4963	CA	PRO	C	96	-11.009	-14.290	-38.691	1.00	34.02	C
[11741]	ATOM	4964	C	PRO	C	96	-9.623	-14.241	-38.029	1.00	34.04	C
[11742]	ATOM	4965	O	PRO	C	96	-8.941	-15.268	-37.940	1.00	33.70	O
[11743]	ATOM	4966	CB	PRO	C	96	-12.090	-14.620	-37.653	1.00	34.32	C
[11744]	ATOM	4967	CG	PRO	C	96	-12.272	-16.096	-37.740	1.00	34.82	C
[11745]	ATOM	4968	CD	PRO	C	96	-11.999	-16.474	-39.175	1.00	34.19	C
[11746]	ATOM	4969	N	VAL	C	97	-9.204	-13.057	-37.587	1.00	33.82	N
[11747]	ATOM	4970	CA	VAL	C	97	-7.964	-12.954	-36.846	1.00	33.95	C
[11748]	ATOM	4971	C	VAL	C	97	-8.230	-13.409	-35.418	1.00	33.96	C
[11749]	ATOM	4972	O	VAL	C	97	-9.130	-12.891	-34.760	1.00	33.86	O
[11750]	ATOM	4973	CB	VAL	C	97	-7.357	-11.522	-36.859	1.00	34.26	C
[11751]	ATOM	4974	CG1	VAL	C	97	-5.999	-11.506	-36.136	1.00	34.50	C
[11752]	ATOM	4975	CG2	VAL	C	97	-7.182	-10.995	-38.288	1.00	33.96	C
[11753]	ATOM	4976	N	PHE	C	98	-7.450	-14.386	-34.955	1.00	33.77	N
[11754]	ATOM	4977	CA	PHE	C	98	-7.516	-14.868	-33.574	1.00	34.07	C
[11755]	ATOM	4978	C	PHE	C	98	-7.325	-13.705	-32.578	1.00	34.12	C
[11756]	ATOM	4979	O	PHE	C	98	-6.711	-12.696	-32.925	1.00	33.85	O

[11757]	ATOM	4980	CB	PHE	C	98	-6.468	-15.965	-33.325	1.00	34.03	C
[11758]	ATOM	4981	CG	PHE	C	98	-6.753	-17.273	-34.042	1.00	34.58	C
[11759]	ATOM	4982	CD1	PHE	C	98	-7.962	-17.948	-33.860	1.00	34.39	C
[11760]	ATOM	4983	CD2	PHE	C	98	-5.803	-17.843	-34.880	1.00	35.15	C
[11761]	ATOM	4984	CE1	PHE	C	98	-8.216	-19.150	-34.500	1.00	33.10	C
[11762]	ATOM	4985	CE2	PHE	C	98	-6.065	-19.056	-35.528	1.00	33.61	C
[11763]	ATOM	4986	CZ	PHE	C	98	-7.273	-19.697	-35.335	1.00	33.80	C
[11764]	ATOM	4987	N	PRO	C	99	-7.865	-13.839	-31.348	1.00	34.37	N
[11765]	ATOM	4988	CA	PRO	C	99	-7.754	-12.747	-30.372	1.00	34.39	C
[11766]	ATOM	4989	C	PRO	C	99	-6.347	-12.644	-29.817	1.00	34.81	C
[11767]	ATOM	4990	O	PRO	C	99	-5.552	-13.581	-29.964	1.00	34.77	O
[11768]	ATOM	4991	CB	PRO	C	99	-8.723	-13.162	-29.254	1.00	34.36	C
[11769]	ATOM	4992	CG	PRO	C	99	-9.459	-14.381	-29.752	1.00	34.38	C
[11770]	ATOM	4993	CD	PRO	C	99	-8.599	-14.995	-30.797	1.00	34.49	C
[11771]	ATOM	4994	N	LEU	C	100	-6.039	-11.515	-29.180	1.00	35.37	N
[11772]	ATOM	4995	CA	LEU	C	100	-4.765	-11.355	-28.491	1.00	35.54	C
[11773]	ATOM	4996	C	LEU	C	100	-4.578	-12.483	-27.481	1.00	35.29	C
[11774]	ATOM	4997	O	LEU	C	100	-5.535	-12.903	-26.828	1.00	35.06	O
[11775]	ATOM	4998	CB	LEU	C	100	-4.679	-9.992	-27.781	1.00	36.19	C
[11776]	ATOM	4999	CG	LEU	C	100	-4.483	-8.709	-28.616	1.00	37.98	C
[11777]	ATOM	5000	CD1	LEU	C	100	-3.529	-8.934	-29.814	1.00	39.48	C
[11778]	ATOM	5001	CD2	LEU	C	100	-5.814	-8.097	-29.093	1.00	38.96	C
[11779]	ATOM	5002	N	GLY	C	101	-3.345	-12.980	-27.383	1.00	35.21	N
[11780]	ATOM	5003	CA	GLY	C	101	-3.010	-14.064	-26.461	1.00	34.77	C
[11781]	ATOM	5004	C	GLY	C	101	-3.568	-15.443	-26.804	1.00	34.43	C
[11782]	ATOM	5005	O	GLY	C	101	-3.412	-16.385	-26.013	1.00	34.65	O
[11783]	ATOM	5006	N	TYR	C	102	-4.233	-15.570	-27.957	1.00	33.49	N
[11784]	ATOM	5007	CA	TYR	C	102	-4.730	-16.877	-28.415	1.00	32.59	C
[11785]	ATOM	5008	C	TYR	C	102	-3.590	-17.891	-28.393	1.00	32.19	C
[11786]	ATOM	5009	O	TYR	C	102	-2.500	-17.582	-28.868	1.00	31.94	O
[11787]	ATOM	5010	CB	TYR	C	102	-5.303	-16.783	-29.829	1.00	32.12	C
[11788]	ATOM	5011	CG	TYR	C	102	-5.991	-18.045	-30.257	1.00	31.92	C
[11789]	ATOM	5012	CD1	TYR	C	102	-7.295	-18.332	-29.833	1.00	31.86	C
[11790]	ATOM	5013	CD2	TYR	C	102	-5.332	-18.987	-31.061	1.00	31.87	C
[11791]	ATOM	5014	CE1	TYR	C	102	-7.938	-19.524	-30.225	1.00	31.48	C
[11792]	ATOM	5015	CE2	TYR	C	102	-5.968	-20.179	-31.461	1.00	31.41	C

[11793]	ATOM	5016	CZ	TYR	C	102	-7.261	-20.436	-31.033	1.00	31.61	C
[11794]	ATOM	5017	OH	TYR	C	102	-7.868	-21.598	-31.418	1.00	31.67	O
[11795]	ATOM	5018	N	GLN	C	103	-3.847	-19.083	-27.841	1.00	31.87	N
[11796]	ATOM	5019	CA	GLN	C	103	-2.866	-20.191	-27.806	1.00	31.56	C
[11797]	ATOM	5020	C	GLN	C	103	-3.004	-21.105	-29.025	1.00	30.40	C
[11798]	ATOM	5021	O	GLN	C	103	-3.841	-22.004	-29.060	1.00	30.22	O
[11799]	ATOM	5022	CB	GLN	C	103	-3.010	-21.026	-26.522	1.00	32.33	C
[11800]	ATOM	5023	CG	GLN	C	103	-2.938	-20.225	-25.222	1.00	35.03	C
[11801]	ATOM	5024	CD	GLN	C	103	-1.598	-19.527	-25.041	1.00	40.10	C
[11802]	ATOM	5025	OE1	GLN	C	103	-1.516	-18.289	-25.031	1.00	41.94	O
[11803]	ATOM	5026	NE2	GLN	C	103	-0.532	-20.319	-24.909	1.00	41.21	N
[11804]	ATOM	5027	N	TYR	C	104	-2.162	-20.877	-30.018	1.00	29.76	N
[11805]	ATOM	5028	CA	TYR	C	104	-2.245	-21.615	-31.273	1.00	28.59	C
[11806]	ATOM	5029	C	TYR	C	104	-1.737	-23.041	-31.079	1.00	28.77	C
[11807]	ATOM	5030	O	TYR	C	104	-0.791	-23.245	-30.319	1.00	29.30	O
[11808]	ATOM	5031	CB	TYR	C	104	-1.425	-20.896	-32.342	1.00	27.91	C
[11809]	ATOM	5032	CG	TYR	C	104	-1.749	-21.330	-33.753	1.00	26.38	C
[11810]	ATOM	5033	CD1	TYR	C	104	-2.861	-20.817	-34.417	1.00	25.56	C
[11811]	ATOM	5034	CD2	TYR	C	104	-0.940	-22.247	-34.426	1.00	26.56	C
[11812]	ATOM	5035	CE1	TYR	C	104	-3.163	-21.203	-35.706	1.00	25.19	C
[11813]	ATOM	5036	CE2	TYR	C	104	-1.230	-22.635	-35.742	1.00	23.58	C
[11814]	ATOM	5037	CZ	TYR	C	104	-2.348	-22.110	-36.360	1.00	25.85	C
[11815]	ATOM	5038	OH	TYR	C	104	-2.675	-22.501	-37.639	1.00	25.75	O
[11816]	ATOM	5039	N	PRO	C	105	-2.352	-24.037	-31.761	1.00	28.59	N
[11817]	ATOM	5040	CA	PRO	C	105	-1.853	-25.393	-31.549	1.00	27.98	C
[11818]	ATOM	5041	C	PRO	C	105	-0.375	-25.550	-31.912	1.00	27.63	C
[11819]	ATOM	5042	O	PRO	C	105	0.134	-24.846	-32.804	1.00	27.48	O
[11820]	ATOM	5043	CB	PRO	C	105	-2.735	-26.244	-32.470	1.00	28.13	C
[11821]	ATOM	5044	CG	PRO	C	105	-3.956	-25.442	-32.702	1.00	28.08	C
[11822]	ATOM	5045	CD	PRO	C	105	-3.499	-24.018	-32.698	1.00	28.45	C
[11823]	ATOM	5046	N	SER	C	106	0.314	-26.446	-31.201	1.00	26.67	N
[11824]	ATOM	5047	CA	SER	C	106	1.655	-26.870	-31.600	1.00	25.78	C
[11825]	ATOM	5048	C	SER	C	106	1.525	-27.721	-32.874	1.00	25.78	C
[11826]	ATOM	5049	O	SER	C	106	0.417	-28.157	-33.199	1.00	25.91	O
[11827]	ATOM	5050	CB	SER	C	106	2.294	-27.663	-30.468	1.00	25.65	C
[11828]	ATOM	5051	OG	SER	C	106	1.564	-28.835	-30.205	1.00	25.56	O

[11829]	ATOM	5052	N	LEU	C	107	2.622	-27.960	-33.597	1.00	25.28	N
[11830]	ATOM	5053	CA	LEU	C	107	2.567	-28.842	-34.780	1.00	25.07	C
[11831]	ATOM	5054	C	LEU	C	107	2.029	-30.242	-34.442	1.00	25.05	C
[11832]	ATOM	5055	O	LEU	C	107	1.275	-30.840	-35.216	1.00	23.82	O
[11833]	ATOM	5056	CB	LEU	C	107	3.934	-28.987	-35.445	1.00	25.05	C
[11834]	ATOM	5057	CG	LEU	C	107	4.584	-27.723	-35.991	1.00	25.83	C
[11835]	ATOM	5058	CD1	LEU	C	107	5.781	-28.114	-36.871	1.00	26.19	C
[11836]	ATOM	5059	CD2	LEU	C	107	3.557	-26.854	-36.753	1.00	27.52	C
[11837]	ATOM	5060	N	ASP	C	108	2.407	-30.751	-33.275	1.00	25.24	N
[11838]	ATOM	5061	CA	ASP	C	108	1.911	-32.041	-32.812	1.00	25.29	C
[11839]	ATOM	5062	C	ASP	C	108	0.388	-32.019	-32.621	1.00	25.26	C
[11840]	ATOM	5063	O	ASP	C	108	-0.295	-32.999	-32.922	1.00	25.50	O
[11841]	ATOM	5064	CB	ASP	C	108	2.616	-32.460	-31.521	1.00	25.68	C
[11842]	ATOM	5065	CG	ASP	C	108	4.067	-32.934	-31.747	1.00	28.79	C
[11843]	ATOM	5066	OD1	ASP	C	108	4.527	-33.048	-32.921	1.00	30.97	O
[11844]	ATOM	5067	OD2	ASP	C	108	4.761	-33.191	-30.733	1.00	31.79	O
[11845]	ATOM	5068	N	GLN	C	109	-0.145	-30.896	-32.153	1.00	25.16	N
[11846]	ATOM	5069	CA	GLN	C	109	-1.585	-30.771	-31.939	1.00	24.80	C
[11847]	ATOM	5070	C	GLN	C	109	-2.273	-30.601	-33.274	1.00	24.43	C
[11848]	ATOM	5071	O	GLN	C	109	-3.350	-31.135	-33.477	1.00	24.51	O
[11849]	ATOM	5072	CB	GLN	C	109	-1.908	-29.619	-31.005	1.00	24.82	C
[11850]	ATOM	5073	CG	GLN	C	109	-1.634	-29.941	-29.535	1.00	24.92	C
[11851]	ATOM	5074	CD	GLN	C	109	-1.682	-28.717	-28.646	1.00	26.59	C
[11852]	ATOM	5075	OE1	GLN	C	109	-1.592	-27.574	-29.114	1.00	26.03	O
[11853]	ATOM	5076	NE2	GLN	C	109	-1.825	-28.951	-27.338	1.00	26.83	N
[11854]	ATOM	5077	N	LEU	C	110	-1.630	-29.893	-34.200	1.00	24.40	N
[11855]	ATOM	5078	CA	LEU	C	110	-2.154	-29.794	-35.566	1.00	24.49	C
[11856]	ATOM	5079	C	LEU	C	110	-2.265	-31.157	-36.216	1.00	24.52	C
[11857]	ATOM	5080	O	LEU	C	110	-3.218	-31.417	-36.938	1.00	24.86	O
[11858]	ATOM	5081	CB	LEU	C	110	-1.320	-28.864	-36.446	1.00	23.55	C
[11859]	ATOM	5082	CG	LEU	C	110	-1.343	-27.399	-36.021	1.00	23.33	C
[11860]	ATOM	5083	CD1	LEU	C	110	-0.354	-26.593	-36.830	1.00	21.43	C
[11861]	ATOM	5084	CD2	LEU	C	110	-2.755	-26.844	-36.157	1.00	20.36	C
[11862]	ATOM	5085	N	ALA	C	111	-1.294	-32.023	-35.944	1.00	24.87	N
[11863]	ATOM	5086	CA	ALA	C	111	-1.320	-33.392	-36.441	1.00	25.60	C
[11864]	ATOM	5087	C	ALA	C	111	-2.453	-34.199	-35.803	1.00	26.67	C



[11865]	ATOM	5088	O	ALA	C	111	-3.046	-35.054	-36.467	1.00	25.79	O
[11866]	ATOM	5089	CB	ALA	C	111	0.013	-34.067	-36.195	1.00	25.58	C
[11867]	ATOM	5090	N	ASP	C	112	-2.771	-33.913	-34.535	1.00	27.72	N
[11868]	ATOM	5091	CA	ASP	C	112	-3.853	-34.638	-33.841	1.00	29.28	C
[11869]	ATOM	5092	C	ASP	C	112	-5.293	-34.157	-34.173	1.00	28.82	C
[11870]	ATOM	5093	O	ASP	C	112	-6.276	-34.660	-33.622	1.00	28.95	O
[11871]	ATOM	5094	CB	ASP	C	112	-3.602	-34.651	-32.333	1.00	30.59	C
[11872]	ATOM	5095	CG	ASP	C	112	-2.718	-35.824	-31.891	1.00	35.90	C
[11873]	ATOM	5096	OD1	ASP	C	112	-3.076	-36.997	-32.188	1.00	42.19	O
[11874]	ATOM	5097	OD2	ASP	C	112	-1.685	-35.581	-31.214	1.00	40.70	O
[11875]	ATOM	5098	N	MET	C	113	-5.397	-33.176	-35.064	1.00	28.46	N
[11876]	ATOM	5099	CA	MET	C	113	-6.666	-32.755	-35.650	1.00	27.98	C
[11877]	ATOM	5100	C	MET	C	113	-7.046	-33.612	-36.867	1.00	27.75	C
[11878]	ATOM	5101	O	MET	C	113	-8.223	-33.715	-37.191	1.00	27.49	O
[11879]	ATOM	5102	CB	MET	C	113	-6.610	-31.289	-36.090	1.00	27.92	C
[11880]	ATOM	5103	CG	MET	C	113	-6.516	-30.275	-34.942	1.00	28.48	C
[11881]	ATOM	5104	SD	MET	C	113	-6.322	-28.634	-35.655	1.00	28.69	S
[11882]	ATOM	5105	CE	MET	C	113	-6.797	-27.557	-34.340	1.00	30.08	C
[11883]	ATOM	5106	N	ILE	C	114	-6.060	-34.223	-37.530	1.00	27.42	N
[11884]	ATOM	5107	CA	ILE	C	114	-6.315	-35.053	-38.735	1.00	27.48	C
[11885]	ATOM	5108	C	ILE	C	114	-7.248	-36.250	-38.460	1.00	27.01	C
[11886]	ATOM	5109	O	ILE	C	114	-8.150	-36.482	-39.242	1.00	27.16	O
[11887]	ATOM	5110	CB	ILE	C	114	-5.006	-35.476	-39.466	1.00	27.82	C
[11888]	ATOM	5111	CG1	ILE	C	114	-4.310	-34.242	-40.049	1.00	28.69	C
[11889]	ATOM	5112	CG2	ILE	C	114	-5.289	-36.503	-40.576	1.00	27.37	C
[11890]	ATOM	5113	CD1	ILE	C	114	-2.823	-34.407	-40.331	1.00	28.12	C
[11891]	ATOM	5114	N	PRO	C	115	-7.074	-36.986	-37.332	1.00	26.73	N
[11892]	ATOM	5115	CA	PRO	C	115	-8.082	-38.046	-37.125	1.00	26.41	C
[11893]	ATOM	5116	C	PRO	C	115	-9.519	-37.504	-37.166	1.00	26.22	C
[11894]	ATOM	5117	O	PRO	C	115	-10.422	-38.167	-37.677	1.00	26.19	O
[11895]	ATOM	5118	CB	PRO	C	115	-7.745	-38.603	-35.729	1.00	26.55	C
[11896]	ATOM	5119	CG	PRO	C	115	-6.306	-38.251	-35.494	1.00	25.85	C
[11897]	ATOM	5120	CD	PRO	C	115	-6.058	-36.965	-36.257	1.00	26.54	C
[11898]	ATOM	5121	N	CYS	C	116	-9.717	-36.295	-36.646	1.00	26.32	N
[11899]	ATOM	5122	CA	CYS	C	116	-11.043	-35.670	-36.608	1.00	26.12	C
[11900]	ATOM	5123	C	CYS	C	116	-11.539	-35.411	-38.030	1.00	25.68	C

[11901]	ATOM	5124	O	CYS	C	116	-12.704	-35.631	-38.327	1.00	25.84	O
[11902]	ATOM	5125	CB	CYS	C	116	-11.003	-34.366	-35.817	1.00	25.83	C
[11903]	ATOM	5126	SG	CYS	C	116	-10.556	-34.621	-34.099	1.00	27.27	S
[11904]	ATOM	5127	N	VAL	C	117	-10.644	-34.960	-38.895	1.00	25.08	N
[11905]	ATOM	5128	CA	VAL	C	117	-10.972	-34.725	-40.306	1.00	25.23	C
[11906]	ATOM	5129	C	VAL	C	117	-11.416	-36.028	-40.975	1.00	25.39	C
[11907]	ATOM	5130	O	VAL	C	117	-12.474	-36.090	-41.623	1.00	25.46	O
[11908]	ATOM	5131	CB	VAL	C	117	-9.781	-34.080	-41.055	1.00	24.86	C
[11909]	ATOM	5132	CG1	VAL	C	117	-10.031	-34.015	-42.583	1.00	25.13	C
[11910]	ATOM	5133	CG2	VAL	C	117	-9.528	-32.673	-40.511	1.00	25.81	C
[11911]	ATOM	5134	N	LEU	C	118	-10.629	-37.080	-40.799	1.00	25.55	N
[11912]	ATOM	5135	CA	LEU	C	118	-10.938	-38.357	-41.458	1.00	25.67	C
[11913]	ATOM	5136	C	LEU	C	118	-12.154	-39.062	-40.870	1.00	25.84	C
[11914]	ATOM	5137	O	LEU	C	118	-12.843	-39.777	-41.577	1.00	25.85	O
[11915]	ATOM	5138	CB	LEU	C	118	-9.734	-39.287	-41.419	1.00	25.67	C
[11916]	ATOM	5139	CG	LEU	C	118	-8.445	-38.778	-42.065	1.00	24.36	C
[11917]	ATOM	5140	CD1	LEU	C	118	-7.351	-39.850	-41.889	1.00	25.91	C
[11918]	ATOM	5141	CD2	LEU	C	118	-8.641	-38.410	-43.552	1.00	25.64	C
[11919]	ATOM	5142	N	GLN	C	119	-12.406	-38.880	-39.576	1.00	26.42	N
[11920]	ATOM	5143	CA	GLN	C	119	-13.608	-39.431	-38.959	1.00	27.31	C
[11921]	ATOM	5144	C	GLN	C	119	-14.853	-38.762	-39.537	1.00	26.96	C
[11922]	ATOM	5145	O	GLN	C	119	-15.784	-39.443	-39.949	1.00	27.32	O
[11923]	ATOM	5146	CB	GLN	C	119	-13.580	-39.265	-37.439	1.00	27.83	C
[11924]	ATOM	5147	CG	GLN	C	119	-12.694	-40.270	-36.733	1.00	31.16	C
[11925]	ATOM	5148	CD	GLN	C	119	-12.407	-39.864	-35.297	1.00	37.76	C
[11926]	ATOM	5149	OE1	GLN	C	119	-13.281	-39.320	-34.609	1.00	37.57	O
[11927]	ATOM	5150	NE2	GLN	C	119	-11.165	-40.103	-34.841	1.00	40.34	N
[11928]	ATOM	5151	N	TYR	C	120	-14.853	-37.434	-39.579	1.00	26.70	N
[11929]	ATOM	5152	CA	TYR	C	120	-15.921	-36.658	-40.211	1.00	26.88	C
[11930]	ATOM	5153	C	TYR	C	120	-16.215	-37.142	-41.639	1.00	26.26	C
[11931]	ATOM	5154	O	TYR	C	120	-17.366	-37.285	-42.026	1.00	24.97	O
[11932]	ATOM	5155	CB	TYR	C	120	-15.541	-35.170	-40.232	1.00	27.92	C
[11933]	ATOM	5156	CG	TYR	C	120	-16.520	-34.265	-40.972	1.00	29.24	C
[11934]	ATOM	5157	CD1	TYR	C	120	-16.397	-34.045	-42.347	1.00	28.49	C
[11935]	ATOM	5158	CD2	TYR	C	120	-17.539	-33.593	-40.284	1.00	30.50	C
[11936]	ATOM	5159	CE1	TYR	C	120	-17.275	-33.213	-43.025	1.00	28.85	C

[11937]	ATOM	5160	CE2	TYR	C	120	-18.423	-32.743	-40.959	1.00	30.15	C
[11938]	ATOM	5161	CZ	TYR	C	120	-18.283	-32.566	-42.334	1.00	29.54	C
[11939]	ATOM	5162	OH	TYR	C	120	-19.146	-31.730	-43.012	1.00	30.56	O
[11940]	ATOM	5163	N	LEU	C	121	-15.158	-37.402	-42.408	1.00	25.53	N
[11941]	ATOM	5164	CA	LEU	C	121	-15.287	-37.868	-43.791	1.00	24.35	C
[11942]	ATOM	5165	C	LEU	C	121	-15.563	-39.381	-43.914	1.00	24.19	C
[11943]	ATOM	5166	O	LEU	C	121	-15.931	-39.886	-44.998	1.00	23.74	O
[11944]	ATOM	5167	CB	LEU	C	121	-14.011	-37.494	-44.551	1.00	23.92	C
[11945]	ATOM	5168	CG	LEU	C	121	-13.816	-35.997	-44.789	1.00	22.02	C
[11946]	ATOM	5169	CD1	LEU	C	121	-12.444	-35.706	-45.380	1.00	21.47	C
[11947]	ATOM	5170	CD2	LEU	C	121	-14.928	-35.429	-45.683	1.00	20.23	C
[11948]	ATOM	5171	N	ASN	C	122	-15.397	-40.105	-42.806	1.00	23.86	N
[11949]	ATOM	5172	CA	ASN	C	122	-15.390	-41.567	-42.837	1.00	24.16	C
[11950]	ATOM	5173	C	ASN	C	122	-14.356	-42.133	-43.838	1.00	24.47	C
[11951]	ATOM	5174	O	ASN	C	122	-14.666	-43.026	-44.639	1.00	24.77	O
[11952]	ATOM	5175	CB	ASN	C	122	-16.791	-42.096	-43.142	1.00	23.78	C
[11953]	ATOM	5176	CG	ASN	C	122	-17.016	-43.503	-42.629	1.00	24.40	C
[11954]	ATOM	5177	OD1	ASN	C	122	-16.512	-43.895	-41.578	1.00	23.86	O
[11955]	ATOM	5178	ND2	ASN	C	122	-17.794	-44.266	-43.364	1.00	22.12	N
[11956]	ATOM	5179	N	PHE	C	123	-13.139	-41.591	-43.813	1.00	24.35	N
[11957]	ATOM	5180	CA	PHE	C	123	-12.054	-42.126	-44.645	1.00	24.16	C
[11958]	ATOM	5181	C	PHE	C	123	-11.122	-42.918	-43.753	1.00	24.55	C
[11959]	ATOM	5182	O	PHE	C	123	-10.933	-42.554	-42.579	1.00	24.75	O
[11960]	ATOM	5183	CB	PHE	C	123	-11.290	-40.996	-45.337	1.00	23.92	C
[11961]	ATOM	5184	CG	PHE	C	123	-12.093	-40.260	-46.397	1.00	24.28	C
[11962]	ATOM	5185	CD1	PHE	C	123	-13.352	-40.703	-46.775	1.00	21.19	C
[11963]	ATOM	5186	CD2	PHE	C	123	-11.554	-39.132	-47.050	1.00	24.11	C
[11964]	ATOM	5187	CE1	PHE	C	123	-14.082	-40.026	-47.771	1.00	22.06	C
[11965]	ATOM	5188	CE2	PHE	C	123	-12.266	-38.464	-48.048	1.00	21.90	C
[11966]	ATOM	5189	CZ	PHE	C	123	-13.542	-38.906	-48.397	1.00	21.66	C
[11967]	ATOM	5190	N	SER	C	124	-10.523	-43.987	-44.272	1.00	24.50	N
[11968]	ATOM	5191	CA	SER	C	124	-9.671	-44.830	-43.400	1.00	24.98	C
[11969]	ATOM	5192	C	SER	C	124	-8.159	-44.710	-43.652	1.00	24.28	C
[11970]	ATOM	5193	O	SER	C	124	-7.376	-44.887	-42.720	1.00	24.30	O
[11971]	ATOM	5194	CB	SER	C	124	-10.105	-46.290	-43.457	1.00	25.37	C
[11972]	ATOM	5195	OG	SER	C	124	-9.845	-46.793	-44.744	1.00	28.70	O

[11973]	ATOM	5196	N	THR	C	125	-7.755	-44.396	-44.886	1.00	22.76	N
[11974]	ATOM	5197	CA	THR	C	125	-6.334	-44.209	-45.195	1.00	22.80	C
[11975]	ATOM	5198	C	THR	C	125	-6.070	-43.001	-46.096	1.00	22.04	C
[11976]	ATOM	5199	O	THR	C	125	-6.940	-42.562	-46.840	1.00	22.06	O
[11977]	ATOM	5200	CB	THR	C	125	-5.717	-45.434	-45.878	1.00	22.77	C
[11978]	ATOM	5201	OG1	THR	C	125	-6.217	-45.515	-47.207	1.00	23.33	O
[11979]	ATOM	5202	CG2	THR	C	125	-6.024	-46.760	-45.129	1.00	24.17	C
[11980]	ATOM	5203	N	ILE	C	126	-4.843	-42.487	-46.034	1.00	21.82	N
[11981]	ATOM	5204	CA	ILE	C	126	-4.434	-41.320	-46.832	1.00	21.27	C
[11982]	ATOM	5205	C	ILE	C	126	-3.060	-41.506	-47.469	1.00	20.40	C
[11983]	ATOM	5206	O	ILE	C	126	-2.280	-42.363	-47.046	1.00	19.72	O
[11984]	ATOM	5207	CB	ILE	C	126	-4.430	-39.981	-45.998	1.00	21.34	C
[11985]	ATOM	5208	CG1	ILE	C	126	-3.408	-40.031	-44.861	1.00	22.00	C
[11986]	ATOM	5209	CG2	ILE	C	126	-5.810	-39.678	-45.449	1.00	22.17	C
[11987]	ATOM	5210	CD1	ILE	C	126	-3.051	-38.670	-44.288	1.00	21.92	C
[11988]	ATOM	5211	N	ILE	C	127	-2.806	-40.708	-48.510	1.00	20.11	N
[11989]	ATOM	5212	CA	ILE	C	127	-1.478	-40.415	-48.992	0.80	19.50	C
[11990]	ATOM	5213	C	ILE	C	127	-1.295	-38.968	-48.583	1.00	20.62	C
[11991]	ATOM	5214	O	ILE	C	127	-2.048	-38.110	-49.017	1.00	21.02	O
[11992]	ATOM	5215	CB	ILE	C	127	-1.407	-40.514	-50.516	0.80	19.35	C
[11993]	ATOM	5216	CG1	ILE	C	127	-1.578	-41.975	-50.955	0.80	16.99	C
[11994]	ATOM	5217	CG2	ILE	C	127	-0.087	-39.915	-51.041	0.80	16.73	C
[11995]	ATOM	5218	CD1	ILE	C	127	-1.975	-42.106	-52.402	0.80	14.63	C
[11996]	ATOM	5219	N	GLY	C	128	-0.332	-38.672	-47.716	1.00	21.66	N
[11997]	ATOM	5220	CA	GLY	C	128	-0.166	-37.274	-47.281	1.00	21.24	C
[11998]	ATOM	5221	C	GLY	C	128	0.824	-36.553	-48.167	1.00	20.85	C
[11999]	ATOM	5222	O	GLY	C	128	1.847	-37.118	-48.521	1.00	21.62	O
[12000]	ATOM	5223	N	VAL	C	129	0.533	-35.301	-48.521	1.00	20.44	N
[12001]	ATOM	5224	CA	VAL	C	129	1.469	-34.467	-49.295	1.00	20.59	C
[12002]	ATOM	5225	C	VAL	C	129	1.615	-33.141	-48.534	1.00	20.80	C
[12003]	ATOM	5226	O	VAL	C	129	0.622	-32.434	-48.338	1.00	21.03	O
[12004]	ATOM	5227	CB	VAL	C	129	0.939	-34.178	-50.739	1.00	20.41	C
[12005]	ATOM	5228	CG1	VAL	C	129	1.930	-33.311	-51.510	1.00	19.32	C
[12006]	ATOM	5229	CG2	VAL	C	129	0.692	-35.488	-51.513	1.00	21.17	C
[12007]	ATOM	5230	N	GLY	C	130	2.823	-32.834	-48.065	1.00	21.42	N
[12008]	ATOM	5231	CA	GLY	C	130	3.059	-31.666	-47.232	1.00	20.53	C

[12009]	ATOM	5232	C	GLY C 130	4.284	-30.873	-47.645	1.00	21.77	C
[12010]	ATOM	5233	O	GLY C 130	5.217	-31.421	-48.239	1.00	21.49	O
[12011]	ATOM	5234	N	VAL C 131	4.260	-29.567	-47.375	1.00	21.52	N
[12012]	ATOM	5235	CA	VAL C 131	5.413	-28.724	-47.627	1.00	22.38	C
[12013]	ATOM	5236	C	VAL C 131	5.816	-28.078	-46.315	1.00	22.59	C
[12014]	ATOM	5237	O	VAL C 131	4.974	-27.492	-45.636	1.00	22.80	O
[12015]	ATOM	5238	CB	VAL C 131	5.112	-27.609	-48.645	1.00	22.43	C
[12016]	ATOM	5239	CG1	VAL C 131	6.295	-26.645	-48.722	1.00	22.78	C
[12017]	ATOM	5240	CG2	VAL C 131	4.820	-28.194	-50.026	1.00	23.61	C
[12018]	ATOM	5241	N	GLY C 132	7.093	-28.190	-45.948	1.00	23.04	N
[12019]	ATOM	5242	CA	GLY C 132	7.603	-27.488	-44.776	1.00	23.29	C
[12020]	ATOM	5243	C	GLY C 132	6.914	-27.896	-43.486	1.00	23.69	C
[12021]	ATOM	5244	O	GLY C 132	6.969	-29.071	-43.103	1.00	23.14	O
[12022]	ATOM	5245	N	ALA C 133	6.285	-26.932	-42.800	1.00	23.22	N
[12023]	ATOM	5246	CA	ALA C 133	5.605	-27.237	-41.542	1.00	22.99	C
[12024]	ATOM	5247	C	ALA C 133	4.519	-28.306	-41.765	1.00	22.78	C
[12025]	ATOM	5248	O	ALA C 133	4.313	-29.178	-40.911	1.00	24.05	O
[12026]	ATOM	5249	CB	ALA C 133	5.030	-25.980	-40.917	1.00	21.72	C
[12027]	ATOM	5250	N	GLY C 134	3.865	-28.261	-42.924	1.00	21.72	N
[12028]	ATOM	5251	CA	GLY C 134	2.911	-29.303	-43.323	1.00	21.36	C
[12029]	ATOM	5252	C	GLY C 134	3.502	-30.691	-43.470	1.00	21.09	C
[12030]	ATOM	5253	O	GLY C 134	2.879	-31.664	-43.096	1.00	20.00	O
[12031]	ATOM	5254	N	ALA C 135	4.724	-30.777	-44.013	1.00	21.61	N
[12032]	ATOM	5255	CA	ALA C 135	5.428	-32.051	-44.134	1.00	21.15	C
[12033]	ATOM	5256	C	ALA C 135	5.731	-32.579	-42.739	1.00	21.30	C
[12034]	ATOM	5257	O	ALA C 135	5.532	-33.748	-42.462	1.00	22.56	O
[12035]	ATOM	5258	CB	ALA C 135	6.689	-31.903	-44.943	1.00	20.32	C
[12036]	ATOM	5259	N	TYR C 136	6.141	-31.713	-41.835	1.00	20.78	N
[12037]	ATOM	5260	CA	TYR C 136	6.401	-32.148	-40.469	1.00	20.62	C
[12038]	ATOM	5261	C	TYR C 136	5.122	-32.713	-39.867	1.00	20.80	C
[12039]	ATOM	5262	O	TYR C 136	5.127	-33.788	-39.279	1.00	21.69	O
[12040]	ATOM	5263	CB	TYR C 136	6.920	-30.972	-39.627	1.00	20.74	C
[12041]	ATOM	5264	CG	TYR C 136	7.239	-31.384	-38.196	1.00	21.20	C
[12042]	ATOM	5265	CD1	TYR C 136	6.209	-31.596	-37.263	1.00	20.05	C
[12043]	ATOM	5266	CD2	TYR C 136	8.564	-31.576	-37.783	1.00	22.45	C
[12044]	ATOM	5267	CE1	TYR C 136	6.477	-31.978	-35.955	1.00	21.66	C

[12045]	ATOM	5268	CE2	TYR	C	136	8.852	-31.953	-36.450	1.00	23.12	C
[12046]	ATOM	5269	CZ	TYR	C	136	7.804	-32.164	-35.564	1.00	22.37	C
[12047]	ATOM	5270	OH	TYR	C	136	8.062	-32.540	-34.275	1.00	23.45	O
[12048]	ATOM	5271	N	ILE	C	137	4.019	-31.991	-40.049	1.00	20.97	N
[12049]	ATOM	5272	CA	ILE	C	137	2.729	-32.355	-39.473	1.00	20.47	C
[12050]	ATOM	5273	C	ILE	C	137	2.270	-33.718	-39.979	1.00	20.78	C
[12051]	ATOM	5274	O	ILE	C	137	1.787	-34.541	-39.187	1.00	21.08	O
[12052]	ATOM	5275	CB	ILE	C	137	1.671	-31.236	-39.744	1.00	20.85	C
[12053]	ATOM	5276	CG1	ILE	C	137	1.971	-29.999	-38.886	1.00	20.46	C
[12054]	ATOM	5277	CG2	ILE	C	137	0.246	-31.741	-39.526	1.00	19.83	C
[12055]	ATOM	5278	CD1	ILE	C	137	1.356	-28.712	-39.448	1.00	23.02	C
[12056]	ATOM	5279	N	LEU	C	138	2.424	-33.988	-41.280	1.00	21.15	N
[12057]	ATOM	5280	CA	LEU	C	138	1.966	-35.289	-41.806	1.00	21.17	C
[12058]	ATOM	5281	C	LEU	C	138	2.875	-36.420	-41.348	1.00	21.45	C
[12059]	ATOM	5282	O	LEU	C	138	2.412	-37.523	-41.070	1.00	22.13	O
[12060]	ATOM	5283	CB	LEU	C	138	1.799	-35.283	-43.335	1.00	21.13	C
[12061]	ATOM	5284	CG	LEU	C	138	0.864	-34.194	-43.888	1.00	21.07	C
[12062]	ATOM	5285	CD1	LEU	C	138	0.887	-34.078	-45.405	1.00	23.26	C
[12063]	ATOM	5286	CD2	LEU	C	138	-0.538	-34.419	-43.401	1.00	24.18	C
[12064]	ATOM	5287	N	ALA	C	139	4.168	-36.143	-41.273	1.00	21.68	N
[12065]	ATOM	5288	CA	ALA	C	139	5.139	-37.108	-40.744	1.00	21.87	C
[12066]	ATOM	5289	C	ALA	C	139	4.828	-37.482	-39.279	1.00	22.84	C
[12067]	ATOM	5290	O	ALA	C	139	4.859	-38.663	-38.910	1.00	23.24	O
[12068]	ATOM	5291	CB	ALA	C	139	6.546	-36.540	-40.878	1.00	21.41	C
[12069]	ATOM	5292	N	ARG	C	140	4.523	-36.480	-38.450	1.00	23.39	N
[12070]	ATOM	5293	CA	ARG	C	140	4.118	-36.709	-37.073	1.00	24.50	C
[12071]	ATOM	5294	C	ARG	C	140	2.792	-37.483	-37.000	1.00	24.80	C
[12072]	ATOM	5295	O	ARG	C	140	2.620	-38.391	-36.172	1.00	25.45	O
[12073]	ATOM	5296	CB	ARG	C	140	4.006	-35.370	-36.328	1.00	24.03	C
[12074]	ATOM	5297	CG	ARG	C	140	3.321	-35.469	-34.994	1.00	26.76	C
[12075]	ATOM	5298	CD	ARG	C	140	4.183	-36.221	-33.986	1.00	27.74	C
[12076]	ATOM	5299	NE	ARG	C	140	5.414	-35.496	-33.702	1.00	30.79	N
[12077]	ATOM	5300	CZ	ARG	C	140	6.523	-36.039	-33.201	1.00	31.97	C
[12078]	ATOM	5301	NH1	ARG	C	140	6.589	-37.339	-32.938	1.00	31.08	N
[12079]	ATOM	5302	NH2	ARG	C	140	7.579	-35.271	-32.986	1.00	35.14	N
[12080]	ATOM	5303	N	TYR	C	141	1.848	-37.106	-37.849	1.00	25.53	N

[12081]	ATOM	5304	CA	TYR	C	141	0.604	-37.852	-37.969	1.00	26.32	C
[12082]	ATOM	5305	C	TYR	C	141	0.857	-39.332	-38.324	1.00	26.24	C
[12083]	ATOM	5306	O	TYR	C	141	0.234	-40.222	-37.762	1.00	26.57	O
[12084]	ATOM	5307	CB	TYR	C	141	-0.361	-37.215	-38.981	1.00	26.33	C
[12085]	ATOM	5308	CG	TYR	C	141	-1.585	-38.106	-39.178	1.00	26.88	C
[12086]	ATOM	5309	CD1	TYR	C	141	-2.598	-38.145	-38.207	1.00	26.01	C
[12087]	ATOM	5310	CD2	TYR	C	141	-1.700	-38.952	-40.294	1.00	26.03	C
[12088]	ATOM	5311	CE1	TYR	C	141	-3.712	-38.982	-38.345	1.00	26.69	C
[12089]	ATOM	5312	CE2	TYR	C	141	-2.821	-39.812	-40.437	1.00	26.36	C
[12090]	ATOM	5313	CZ	TYR	C	141	-3.818	-39.814	-39.462	1.00	27.75	C
[12091]	ATOM	5314	OH	TYR	C	141	-4.922	-40.642	-39.583	1.00	27.95	O
[12092]	ATOM	5315	N	ALA	C	142	1.764	-39.582	-39.263	1.00	26.45	N
[12093]	ATOM	5316	CA	ALA	C	142	2.062	-40.955	-39.715	1.00	26.06	C
[12094]	ATOM	5317	C	ALA	C	142	2.693	-41.819	-38.595	1.00	26.30	C
[12095]	ATOM	5318	O	ALA	C	142	2.418	-43.006	-38.477	1.00	26.39	O
[12096]	ATOM	5319	CB	ALA	C	142	2.964	-40.908	-40.929	1.00	25.75	C
[12097]	ATOM	5320	N	LEU	C	143	3.543	-41.214	-37.780	1.00	26.48	N
[12098]	ATOM	5321	CA	LEU	C	143	4.139	-41.909	-36.639	1.00	27.03	C
[12099]	ATOM	5322	C	LEU	C	143	3.094	-42.255	-35.606	1.00	27.37	C
[12100]	ATOM	5323	O	LEU	C	143	3.191	-43.291	-34.951	1.00	27.78	O
[12101]	ATOM	5324	CB	LEU	C	143	5.230	-41.058	-35.985	1.00	26.65	C
[12102]	ATOM	5325	CG	LEU	C	143	6.529	-40.865	-36.768	1.00	27.45	C
[12103]	ATOM	5326	CD1	LEU	C	143	7.392	-39.827	-36.083	1.00	25.13	C
[12104]	ATOM	5327	CD2	LEU	C	143	7.290	-42.184	-36.916	1.00	28.86	C
[12105]	ATOM	5328	N	ASN	C	144	2.109	-41.372	-35.452	1.00	28.14	N
[12106]	ATOM	5329	CA	ASN	C	144	1.004	-41.587	-34.518	1.00	28.55	C
[12107]	ATOM	5330	C	ASN	C	144	0.004	-42.641	-34.990	1.00	28.74	C
[12108]	ATOM	5331	O	ASN	C	144	-0.519	-43.402	-34.175	1.00	28.56	O
[12109]	ATOM	5332	CB	ASN	C	144	0.254	-40.275	-34.274	1.00	28.66	C
[12110]	ATOM	5333	CG	ASN	C	144	1.059	-39.273	-33.486	1.00	28.74	C
[12111]	ATOM	5334	OD1	ASN	C	144	1.953	-39.638	-32.735	1.00	29.88	O
[12112]	ATOM	5335	ND2	ASN	C	144	0.736	-37.997	-33.650	1.00	30.45	N
[12113]	ATOM	5336	N	HIS	C	145	-0.280	-42.648	-36.295	1.00	28.82	N
[12114]	ATOM	5337	CA	HIS	C	145	-1.332	-43.482	-36.891	1.00	29.09	C
[12115]	ATOM	5338	C	HIS	C	145	-0.848	-44.176	-38.164	1.00	29.64	C
[12116]	ATOM	5339	O	HIS	C	145	-1.410	-43.946	-39.256	1.00	29.23	O

[12117]	ATOM	5340	CB	HIS	C	145	-2.587	-42.635	-37.187	1.00	28.95	C
[12118]	ATOM	5341	CG	HIS	C	145	-3.112	-41.911	-35.984	1.00	29.25	C
[12119]	ATOM	5342	ND1	HIS	C	145	-4.000	-42.485	-35.096	1.00	27.95	N
[12120]	ATOM	5343	CD2	HIS	C	145	-2.831	-40.679	-35.492	1.00	28.54	C
[12121]	ATOM	5344	CE1	HIS	C	145	-4.256	-41.632	-34.121	1.00	28.29	C
[12122]	ATOM	5345	NE2	HIS	C	145	-3.568	-40.524	-34.344	1.00	29.70	N
[12123]	ATOM	5346	N	PRO	C	146	0.184	-45.039	-38.027	1.00	29.87	N
[12124]	ATOM	5347	CA	PRO	C	146	0.823	-45.646	-39.197	1.00	30.35	C
[12125]	ATOM	5348	C	PRO	C	146	-0.129	-46.516	-40.012	1.00	30.77	C
[12126]	ATOM	5349	O	PRO	C	146	-0.023	-46.548	-41.244	1.00	31.44	O
[12127]	ATOM	5350	CB	PRO	C	146	1.973	-46.472	-38.597	1.00	29.91	C
[12128]	ATOM	5351	CG	PRO	C	146	1.571	-46.713	-37.176	1.00	30.34	C
[12129]	ATOM	5352	CD	PRO	C	146	0.808	-45.489	-36.765	1.00	29.67	C
[12130]	ATOM	5353	N	ASP	C	147	-1.077	-47.171	-39.347	1.00	30.85	N
[12131]	ATOM	5354	CA	ASP	C	147	-2.083	-47.993	-40.044	1.00	31.51	C
[12132]	ATOM	5355	C	ASP	C	147	-2.964	-47.205	-41.024	1.00	30.22	C
[12133]	ATOM	5356	O	ASP	C	147	-3.597	-47.797	-41.885	1.00	29.68	O
[12134]	ATOM	5357	CB	ASP	C	147	-2.955	-48.785	-39.059	1.00	32.40	C
[12135]	ATOM	5358	CG	ASP	C	147	-3.585	-47.905	-37.977	1.00	36.57	C
[12136]	ATOM	5359	OD1	ASP	C	147	-2.925	-46.940	-37.483	1.00	39.53	O
[12137]	ATOM	5360	OD2	ASP	C	147	-4.749	-48.208	-37.594	1.00	41.80	O
[12138]	ATOM	5361	N	THR	C	148	-2.969	-45.876	-40.908	1.00	29.01	N
[12139]	ATOM	5362	CA	THR	C	148	-3.818	-45.048	-41.755	1.00	27.90	C
[12140]	ATOM	5363	C	THR	C	148	-3.082	-44.311	-42.882	1.00	26.87	C
[12141]	ATOM	5364	O	THR	C	148	-3.702	-43.548	-43.622	1.00	25.91	O
[12142]	ATOM	5365	CB	THR	C	148	-4.576	-44.016	-40.936	1.00	27.82	C
[12143]	ATOM	5366	OG1	THR	C	148	-3.656	-43.006	-40.497	1.00	30.03	O
[12144]	ATOM	5367	CG2	THR	C	148	-5.290	-44.667	-39.713	1.00	27.24	C
[12145]	ATOM	5368	N	VAL	C	149	-1.769	-44.516	-43.003	1.00	26.14	N
[12146]	ATOM	5369	CA	VAL	C	149	-0.986	-43.798	-44.001	1.00	24.69	C
[12147]	ATOM	5370	C	VAL	C	149	-0.354	-44.772	-44.995	1.00	24.27	C
[12148]	ATOM	5371	O	VAL	C	149	0.493	-45.568	-44.624	1.00	24.08	O
[12149]	ATOM	5372	CB	VAL	C	149	0.093	-42.903	-43.337	1.00	24.97	C
[12150]	ATOM	5373	CG1	VAL	C	149	0.921	-42.179	-44.373	1.00	23.35	C
[12151]	ATOM	5374	CG2	VAL	C	149	-0.552	-41.884	-42.397	1.00	25.53	C
[12152]	ATOM	5375	N	GLU	C	150	-0.762	-44.689	-46.256	1.00	23.11	N



[12153]	ATOM	5376	CA	GLU	C	150	-0.228	-45.575	-47.300	1.00	22.81	C
[12154]	ATOM	5377	C	GLU	C	150	1.032	-45.014	-47.952	1.00	21.88	C
[12155]	ATOM	5378	O	GLU	C	150	1.781	-45.757	-48.597	1.00	21.95	O
[12156]	ATOM	5379	CB	GLU	C	150	-1.285	-45.822	-48.395	1.00	22.21	C
[12157]	ATOM	5380	CG	GLU	C	150	-2.493	-46.642	-47.949	1.00	22.69	C
[12158]	ATOM	5381	CD	GLU	C	150	-3.346	-47.110	-49.114	1.00	23.74	C
[12159]	ATOM	5382	OE1	GLU	C	150	-2.772	-47.454	-50.173	1.00	21.42	O
[12160]	ATOM	5383	OE2	GLU	C	150	-4.596	-47.135	-48.970	1.00	27.16	O
[12161]	ATOM	5384	N	GLY	C	151	1.233	-43.698	-47.840	1.00	20.73	N
[12162]	ATOM	5385	CA	GLY	C	151	2.436	-43.045	-48.371	1.00	20.09	C
[12163]	ATOM	5386	C	GLY	C	151	2.522	-41.569	-47.996	1.00	20.81	C
[12164]	ATOM	5387	O	GLY	C	151	1.521	-40.972	-47.616	1.00	19.62	O
[12165]	ATOM	5388	N	LEU	C	152	3.720	-40.982	-48.101	1.00	20.69	N
[12166]	ATOM	5389	CA	LEU	C	152	3.932	-39.561	-47.826	1.00	21.53	C
[12167]	ATOM	5390	C	LEU	C	152	4.839	-38.913	-48.855	1.00	21.90	C
[12168]	ATOM	5391	O	LEU	C	152	5.875	-39.488	-49.236	1.00	21.87	O
[12169]	ATOM	5392	CB	LEU	C	152	4.586	-39.349	-46.457	1.00	21.13	C
[12170]	ATOM	5393	CG	LEU	C	152	3.808	-39.769	-45.219	1.00	21.01	C
[12171]	ATOM	5394	CD1	LEU	C	152	4.717	-39.718	-43.988	1.00	19.84	C
[12172]	ATOM	5395	CD2	LEU	C	152	2.569	-38.926	-44.988	1.00	20.93	C
[12173]	ATOM	5396	N	VAL	C	153	4.464	-37.714	-49.288	1.00	21.22	N
[12174]	ATOM	5397	CA	VAL	C	153	5.362	-36.892	-50.096	1.00	21.60	C
[12175]	ATOM	5398	C	VAL	C	153	5.716	-35.724	-49.193	1.00	21.75	C
[12176]	ATOM	5399	O	VAL	C	153	4.840	-34.922	-48.854	1.00	21.79	O
[12177]	ATOM	5400	CB	VAL	C	153	4.677	-36.364	-51.378	1.00	21.29	C
[12178]	ATOM	5401	CG1	VAL	C	153	5.598	-35.406	-52.116	1.00	21.26	C
[12179]	ATOM	5402	CG2	VAL	C	153	4.232	-37.510	-52.273	1.00	19.87	C
[12180]	ATOM	5403	N	LEU	C	154	6.991	-35.639	-48.808	1.00	21.99	N
[12181]	ATOM	5404	CA	LEU	C	154	7.445	-34.664	-47.805	1.00	22.15	C
[12182]	ATOM	5405	C	LEU	C	154	8.439	-33.685	-48.434	1.00	22.76	C
[12183]	ATOM	5406	O	LEU	C	154	9.615	-34.010	-48.646	1.00	22.45	O
[12184]	ATOM	5407	CB	LEU	C	154	8.067	-35.363	-46.582	1.00	21.28	C
[12185]	ATOM	5408	CG	LEU	C	154	7.238	-36.445	-45.893	1.00	19.49	C
[12186]	ATOM	5409	CD1	LEU	C	154	8.021	-37.189	-44.794	1.00	18.96	C
[12187]	ATOM	5410	CD2	LEU	C	154	5.906	-35.854	-45.342	1.00	20.05	C
[12188]	ATOM	5411	N	ILE	C	155	7.932	-32.485	-48.706	1.00	22.67	N

[12189]	ATOM	5412	CA	ILE	C	155	8.677	-31.421	-49.363	1.00	23.12	C
[12190]	ATOM	5413	C	ILE	C	155	9.256	-30.508	-48.289	1.00	23.42	C
[12191]	ATOM	5414	O	ILE	C	155	8.527	-30.037	-47.410	1.00	24.37	O
[12192]	ATOM	5415	CB	ILE	C	155	7.757	-30.632	-50.334	1.00	22.41	C
[12193]	ATOM	5416	CG1	ILE	C	155	7.056	-31.605	-51.314	1.00	22.94	C
[12194]	ATOM	5417	CG2	ILE	C	155	8.546	-29.564	-51.102	1.00	20.38	C
[12195]	ATOM	5418	CD1	ILE	C	155	5.867	-31.058	-52.057	1.00	23.91	C
[12196]	ATOM	5419	N	ASN	C	156	10.562	-30.278	-48.344	1.00	23.27	N
[12197]	ATOM	5420	CA	ASN	C	156	11.244	-29.357	-47.429	1.00	23.06	C
[12198]	ATOM	5421	C	ASN	C	156	11.101	-29.746	-45.956	1.00	24.17	C
[12199]	ATOM	5422	O	ASN	C	156	11.002	-28.868	-45.084	1.00	24.99	O
[12200]	ATOM	5423	CB	ASN	C	156	10.748	-27.914	-47.616	1.00	22.91	C
[12201]	ATOM	5424	CG	ASN	C	156	10.987	-27.370	-49.004	1.00	23.00	C
[12202]	ATOM	5425	OD1	ASN	C	156	11.629	-28.008	-49.839	1.00	22.09	O
[12203]	ATOM	5426	ND2	ASN	C	156	10.460	-26.176	-49.265	1.00	23.52	N
[12204]	ATOM	5427	N	ILE	C	157	11.077	-31.041	-45.653	1.00	23.94	N
[12205]	ATOM	5428	CA	ILE	C	157	10.832	-31.434	-44.267	1.00	24.61	C
[12206]	ATOM	5429	C	ILE	C	157	12.096	-31.218	-43.427	1.00	24.73	C
[12207]	ATOM	5430	O	ILE	C	157	13.201	-31.498	-43.882	1.00	24.25	O
[12208]	ATOM	5431	CB	ILE	C	157	10.334	-32.877	-44.125	1.00	24.24	C
[12209]	ATOM	5432	CG1	ILE	C	157	10.115	-33.177	-42.628	1.00	24.68	C
[12210]	ATOM	5433	CG2	ILE	C	157	11.322	-33.848	-44.785	1.00	24.76	C
[12211]	ATOM	5434	CD1	ILE	C	157	9.270	-34.335	-42.317	1.00	24.89	C
[12212]	ATOM	5435	N	ASP	C	158	11.923	-30.684	-42.224	1.00	25.16	N
[12213]	ATOM	5436	CA	ASP	C	158	13.045	-30.537	-41.314	1.00	25.97	C
[12214]	ATOM	5437	C	ASP	C	158	12.599	-31.159	-40.012	1.00	26.22	C
[12215]	ATOM	5438	O	ASP	C	158	11.880	-30.532	-39.241	1.00	26.69	O
[12216]	ATOM	5439	CB	ASP	C	158	13.474	-29.062	-41.171	1.00	26.18	C
[12217]	ATOM	5440	CG	ASP	C	158	14.702	-28.884	-40.288	1.00	28.19	C
[12218]	ATOM	5441	OD1	ASP	C	158	15.035	-29.838	-39.521	1.00	29.51	O
[12219]	ATOM	5442	OD2	ASP	C	158	15.336	-27.791	-40.371	1.00	25.15	O
[12220]	ATOM	5443	N	PRO	C	159	12.997	-32.423	-39.793	1.00	26.65	N
[12221]	ATOM	5444	CA	PRO	C	159	12.508	-33.274	-38.725	1.00	27.07	C
[12222]	ATOM	5445	C	PRO	C	159	13.138	-33.000	-37.358	1.00	27.61	C
[12223]	ATOM	5446	O	PRO	C	159	12.720	-33.597	-36.362	1.00	28.20	O
[12224]	ATOM	5447	CB	PRO	C	159	12.900	-34.687	-39.206	1.00	27.04	C

[12225]	ATOM	5448	CG	PRO	C	159	14.075	-34.498	-40.013	1.00	25.77	C
[12226]	ATOM	5449	CD	PRO	C	159	13.974	-33.129	-40.641	1.00	26.41	C
[12227]	ATOM	5450	N	ASN	C	160	14.146	-32.143	-37.310	1.00	27.68	N
[12228]	ATOM	5451	CA	ASN	C	160	14.832	-31.881	-36.060	1.00	27.74	C
[12229]	ATOM	5452	C	ASN	C	160	14.390	-30.558	-35.445	1.00	27.62	C
[12230]	ATOM	5453	O	ASN	C	160	14.055	-29.618	-36.164	1.00	29.22	O
[12231]	ATOM	5454	CB	ASN	C	160	16.342	-31.852	-36.287	1.00	27.96	C
[12232]	ATOM	5455	CG	ASN	C	160	16.908	-33.204	-36.727	1.00	29.94	C
[12233]	ATOM	5456	OD1	ASN	C	160	17.661	-33.270	-37.701	1.00	33.70	O
[12234]	ATOM	5457	ND2	ASN	C	160	16.568	-34.274	-36.007	1.00	29.82	N
[12235]	ATOM	5458	N	ALA	C	161	14.411	-30.480	-34.119	1.00	26.48	N
[12236]	ATOM	5459	CA	ALA	C	161	14.170	-29.230	-33.392	1.00	25.62	C
[12237]	ATOM	5460	C	ALA	C	161	15.298	-28.267	-33.708	1.00	24.53	C
[12238]	ATOM	5461	O	ALA	C	161	16.395	-28.706	-34.072	1.00	24.81	O
[12239]	ATOM	5462	CB	ALA	C	161	14.134	-29.508	-31.880	1.00	24.61	C
[12240]	ATOM	5463	N	LYS	C	162	15.053	-26.965	-33.579	1.00	23.87	N
[12241]	ATOM	5464	CA	LYS	C	162	16.148	-25.999	-33.610	1.00	23.08	C
[12242]	ATOM	5465	C	LYS	C	162	17.184	-26.345	-32.548	1.00	22.45	C
[12243]	ATOM	5466	O	LYS	C	162	16.829	-26.566	-31.388	1.00	21.94	O
[12244]	ATOM	5467	CB	LYS	C	162	15.629	-24.599	-33.312	1.00	24.13	C
[12245]	ATOM	5468	CG	LYS	C	162	14.967	-23.900	-34.464	1.00	25.11	C
[12246]	ATOM	5469	CD	LYS	C	162	14.647	-22.478	-34.004	1.00	28.78	C
[12247]	ATOM	5470	CE	LYS	C	162	14.841	-21.489	-35.097	1.00	29.13	C
[12248]	ATOM	5471	NZ	LYS	C	162	14.037	-21.888	-36.247	1.00	33.89	N
[12249]	ATOM	5472	N	GLY	C	163	18.459	-26.397	-32.953	1.00	21.87	N
[12250]	ATOM	5473	CA	GLY	C	163	19.582	-26.610	-32.027	1.00	20.54	C
[12251]	ATOM	5474	C	GLY	C	163	19.795	-25.349	-31.224	1.00	19.98	C
[12252]	ATOM	5475	O	GLY	C	163	19.260	-24.306	-31.566	1.00	20.06	O
[12253]	ATOM	5476	N	TRP	C	164	20.584	-25.426	-30.165	1.00	19.59	N
[12254]	ATOM	5477	CA	TRP	C	164	20.822	-24.242	-29.352	1.00	19.53	C
[12255]	ATOM	5478	C	TRP	C	164	21.497	-23.114	-30.133	1.00	20.29	C
[12256]	ATOM	5479	O	TRP	C	164	21.213	-21.944	-29.887	1.00	20.53	O
[12257]	ATOM	5480	CB	TRP	C	164	21.611	-24.586	-28.095	1.00	18.41	C
[12258]	ATOM	5481	CG	TRP	C	164	23.012	-25.147	-28.278	1.00	17.57	C
[12259]	ATOM	5482	CD1	TRP	C	164	23.363	-26.460	-28.474	1.00	16.21	C
[12260]	ATOM	5483	CD2	TRP	C	164	24.250	-24.411	-28.211	1.00	16.92	C

[12261]	ATOM	5484	NE1	TRP	C	164	24.745	-26.579	-28.547	1.00	16.18	N
[12262]	ATOM	5485	CE2	TRP	C	164	25.304	-25.336	-28.397	1.00	15.36	C
[12263]	ATOM	5486	CE3	TRP	C	164	24.562	-23.055	-28.040	1.00	15.06	C
[12264]	ATOM	5487	CZ2	TRP	C	164	26.633	-24.952	-28.408	1.00	16.26	C
[12265]	ATOM	5488	CZ3	TRP	C	164	25.870	-22.676	-28.043	1.00	15.32	C
[12266]	ATOM	5489	CH2	TRP	C	164	26.905	-23.625	-28.226	1.00	17.33	C
[12267]	ATOM	5490	N	MET	C	165	22.373	-23.460	-31.077	1.00	21.05	N
[12268]	ATOM	5491	CA	MET	C	165	23.080	-22.447	-31.879	1.00	23.08	C
[12269]	ATOM	5492	C	MET	C	165	22.187	-21.816	-32.922	1.00	22.79	C
[12270]	ATOM	5493	O	MET	C	165	22.333	-20.620	-33.192	1.00	23.50	O
[12271]	ATOM	5494	CB	MET	C	165	24.326	-23.025	-32.551	1.00	22.35	C
[12272]	ATOM	5495	CG	MET	C	165	25.471	-23.240	-31.585	1.00	24.14	C
[12273]	ATOM	5496	SD	MET	C	165	26.867	-24.126	-32.308	1.00	26.85	S
[12274]	ATOM	5497	CE	MET	C	165	28.029	-22.789	-32.472	1.00	29.57	C
[12275]	ATOM	5498	N	ASP	C	166	21.300	-22.637	-33.510	1.00	22.69	N
[12276]	ATOM	5499	CA	ASP	C	166	20.205	-22.199	-34.389	1.00	22.72	C
[12277]	ATOM	5500	C	ASP	C	166	19.268	-21.175	-33.749	1.00	22.36	C
[12278]	ATOM	5501	O	ASP	C	166	18.857	-20.228	-34.412	1.00	21.31	O
[12279]	ATOM	5502	CB	ASP	C	166	19.370	-23.384	-34.832	1.00	23.41	C
[12280]	ATOM	5503	CG	ASP	C	166	20.158	-24.394	-35.650	1.00	26.62	C
[12281]	ATOM	5504	OD1	ASP	C	166	21.091	-23.976	-36.368	1.00	28.00	O
[12282]	ATOM	5505	OD2	ASP	C	166	19.844	-25.612	-35.542	1.00	29.07	O
[12283]	ATOM	5506	N	TRP	C	167	18.921	-21.390	-32.475	1.00	22.24	N
[12284]	ATOM	5507	CA	TRP	C	167	18.096	-20.441	-31.693	1.00	22.56	C
[12285]	ATOM	5508	C	TRP	C	167	18.754	-19.047	-31.558	1.00	22.51	C
[12286]	ATOM	5509	O	TRP	C	167	18.111	-18.019	-31.772	1.00	22.39	O
[12287]	ATOM	5510	CB	TRP	C	167	17.799	-21.005	-30.295	1.00	23.33	C
[12288]	ATOM	5511	CG	TRP	C	167	16.601	-21.905	-30.241	1.00	23.41	C
[12289]	ATOM	5512	CD1	TRP	C	167	16.568	-23.243	-29.901	1.00	23.42	C
[12290]	ATOM	5513	CD2	TRP	C	167	15.249	-21.528	-30.520	1.00	24.28	C
[12291]	ATOM	5514	NE1	TRP	C	167	15.270	-23.712	-29.969	1.00	24.63	N
[12292]	ATOM	5515	CE2	TRP	C	167	14.446	-22.681	-30.353	1.00	23.70	C
[12293]	ATOM	5516	CE3	TRP	C	167	14.640	-20.328	-30.927	1.00	25.73	C
[12294]	ATOM	5517	CZ2	TRP	C	167	13.063	-22.666	-30.560	1.00	24.70	C
[12295]	ATOM	5518	CZ3	TRP	C	167	13.256	-20.315	-31.140	1.00	24.56	C
[12296]	ATOM	5519	CH2	TRP	C	167	12.484	-21.479	-30.945	1.00	23.93	C

[12297]	ATOM	5520	N	ALA C 168	20.035	-19.033	-31.185	1.00	22.48	N
[12298]	ATOM	5521	CA	ALA C 168	20.814	-17.799	-31.053	1.00	22.18	C
[12299]	ATOM	5522	C	ALA C 168	20.850	-17.045	-32.389	1.00	22.50	C
[12300]	ATOM	5523	O	ALA C 168	20.652	-15.837	-32.420	1.00	22.78	O
[12301]	ATOM	5524	CB	ALA C 168	22.229	-18.122	-30.580	1.00	21.18	C
[12302]	ATOM	5525	N	ALA C 169	21.097	-17.769	-33.480	1.00	22.47	N
[12303]	ATOM	5526	CA	ALA C 169	21.166	-17.188	-34.809	1.00	23.12	C
[12304]	ATOM	5527	C	ALA C 169	19.807	-16.667	-35.223	1.00	23.89	C
[12305]	ATOM	5528	O	ALA C 169	19.716	-15.617	-35.846	1.00	24.62	O
[12306]	ATOM	5529	CB	ALA C 169	21.644	-18.191	-35.791	1.00	23.22	C
[12307]	ATOM	5530	N	HIS C 170	18.753	-17.395	-34.855	1.00	23.76	N
[12308]	ATOM	5531	CA	HIS C 170	17.378	-17.007	-35.137	1.00	23.97	C
[12309]	ATOM	5532	C	HIS C 170	16.942	-15.733	-34.392	1.00	23.68	C
[12310]	ATOM	5533	O	HIS C 170	16.308	-14.848	-34.971	1.00	22.99	O
[12311]	ATOM	5534	CB	HIS C 170	16.461	-18.174	-34.770	1.00	24.83	C
[12312]	ATOM	5535	CG	HIS C 170	15.038	-17.991	-35.181	1.00	27.03	C
[12313]	ATOM	5536	ND1	HIS C 170	14.072	-17.507	-34.321	1.00	28.70	N
[12314]	ATOM	5537	CD2	HIS C 170	14.411	-18.243	-36.355	1.00	28.38	C
[12315]	ATOM	5538	CE1	HIS C 170	12.913	-17.456	-34.952	1.00	28.17	C
[12316]	ATOM	5539	NE2	HIS C 170	13.090	-17.901	-36.183	1.00	29.12	N
[12317]	ATOM	5540	N	LYS C 171	17.292	-15.628	-33.113	1.00	23.44	N
[12318]	ATOM	5541	CA	LYS C 171	16.986	-14.424	-32.358	1.00	24.20	C
[12319]	ATOM	5542	C	LYS C 171	17.777	-13.226	-32.874	1.00	24.59	C
[12320]	ATOM	5543	O	LYS C 171	17.272	-12.110	-32.877	1.00	24.69	O
[12321]	ATOM	5544	CB	LYS C 171	17.186	-14.665	-30.866	1.00	24.26	C
[12322]	ATOM	5545	CG	LYS C 171	16.219	-15.712	-30.380	1.00	26.11	C
[12323]	ATOM	5546	CD	LYS C 171	16.098	-15.812	-28.883	1.00	28.19	C
[12324]	ATOM	5547	CE	LYS C 171	14.901	-16.701	-28.543	1.00	29.85	C
[12325]	ATOM	5548	NZ	LYS C 171	13.585	-15.988	-28.747	1.00	30.87	N
[12326]	ATOM	5549	N	LEU C 172	19.000	-13.463	-33.341	1.00	25.32	N
[12327]	ATOM	5550	CA	LEU C 172	19.807	-12.423	-33.991	1.00	25.88	C
[12328]	ATOM	5551	C	LEU C 172	19.148	-11.919	-35.279	1.00	25.83	C
[12329]	ATOM	5552	O	LEU C 172	18.914	-10.722	-35.429	1.00	25.53	O
[12330]	ATOM	5553	CB	LEU C 172	21.226	-12.923	-34.274	1.00	26.39	C
[12331]	ATOM	5554	CG	LEU C 172	22.338	-12.553	-33.290	1.00	27.57	C
[12332]	ATOM	5555	CD1	LEU C 172	23.647	-13.281	-33.636	1.00	28.57	C

[12333]	ATOM	5556	CD2	LEU	C	172	22.570	-11.063	-33.231	1.00	26.85	C
[12334]	ATOM	5557	N	THR	C	173	18.831	-12.832	-36.195	1.00	25.83	N
[12335]	ATOM	5558	CA	THR	C	173	18.050	-12.486	-37.396	1.00	26.06	C
[12336]	ATOM	5559	C	THR	C	173	16.783	-11.697	-37.044	1.00	25.32	C
[12337]	ATOM	5560	O	THR	C	173	16.445	-10.724	-37.725	1.00	24.90	O
[12338]	ATOM	5561	CB	THR	C	173	17.669	-13.739	-38.209	1.00	26.13	C
[12339]	ATOM	5562	OG1	THR	C	173	18.856	-14.482	-38.478	1.00	27.97	O
[12340]	ATOM	5563	CG2	THR	C	173	17.034	-13.363	-39.529	1.00	26.10	C
[12341]	ATOM	5564	N	GLY	C	174	16.132	-12.092	-35.951	1.00	24.70	N
[12342]	ATOM	5565	CA	GLY	C	174	14.882	-11.490	-35.515	1.00	24.00	C
[12343]	ATOM	5566	C	GLY	C	174	15.007	-10.011	-35.192	1.00	24.15	C
[12344]	ATOM	5567	O	GLY	C	174	14.013	-9.286	-35.168	1.00	23.58	O
[12345]	ATOM	5568	N	LEU	C	175	16.235	-9.561	-34.965	1.00	23.57	N
[12346]	ATOM	5569	CA	LEU	C	175	16.471	-8.175	-34.567	1.00	23.76	C
[12347]	ATOM	5570	C	LEU	C	175	16.358	-7.204	-35.722	1.00	23.89	C
[12348]	ATOM	5571	O	LEU	C	175	16.070	-6.037	-35.514	1.00	23.95	O
[12349]	ATOM	5572	CB	LEU	C	175	17.818	-8.020	-33.868	1.00	22.56	C
[12350]	ATOM	5573	CG	LEU	C	175	17.843	-8.541	-32.439	1.00	22.75	C
[12351]	ATOM	5574	CD1	LEU	C	175	19.224	-8.417	-31.908	1.00	20.65	C
[12352]	ATOM	5575	CD2	LEU	C	175	16.846	-7.786	-31.545	1.00	22.20	C
[12353]	ATOM	5576	N	THR	C	176	16.577	-7.682	-36.938	1.00	25.23	N
[12354]	ATOM	5577	CA	THR	C	176	16.582	-6.791	-38.095	1.00	26.07	C
[12355]	ATOM	5578	C	THR	C	176	15.690	-7.252	-39.236	1.00	27.01	C
[12356]	ATOM	5579	O	THR	C	176	15.474	-6.497	-40.166	1.00	27.64	O
[12357]	ATOM	5580	CB	THR	C	176	18.002	-6.592	-38.643	1.00	26.47	C
[12358]	ATOM	5581	OG1	THR	C	176	18.541	-7.873	-39.014	1.00	26.69	O
[12359]	ATOM	5582	CG2	THR	C	176	18.895	-5.910	-37.591	1.00	24.32	C
[12360]	ATOM	5583	N	SER	C	177	15.175	-8.477	-39.179	1.00	27.40	N
[12361]	ATOM	5584	CA	SER	C	177	14.280	-8.976	-40.220	1.00	28.11	C
[12362]	ATOM	5585	C	SER	C	177	12.866	-9.030	-39.682	1.00	27.93	C
[12363]	ATOM	5586	O	SER	C	177	12.638	-9.561	-38.589	1.00	28.14	O
[12364]	ATOM	5587	CB	SER	C	177	14.668	-10.385	-40.660	1.00	27.99	C
[12365]	ATOM	5588	OG	SER	C	177	15.737	-10.389	-41.589	1.00	30.96	O
[12366]	ATOM	5589	N	SER	C	178	11.914	-8.500	-40.446	1.00	27.36	N
[12367]	ATOM	5590	CA	SER	C	178	10.511	-8.596	-40.071	1.00	27.62	C
[12368]	ATOM	5591	C	SER	C	178	10.078	-10.059	-40.165	1.00	27.69	C

[12369]	ATOM	5592	O	SER	C	178	10.772	-10.892	-40.753	1.00	27.36	O
[12370]	ATOM	5593	CB	SER	C	178	9.645	-7.753	-41.005	1.00	27.73	C
[12371]	ATOM	5594	OG	SER	C	178	9.570	-8.381	-42.278	1.00	26.95	O
[12372]	ATOM	5595	N	ILE	C	179	8.922	-10.355	-39.585	1.00	28.23	N
[12373]	ATOM	5596	CA	ILE	C	179	8.339	-11.690	-39.640	1.00	28.30	C
[12374]	ATOM	5597	C	ILE	C	179	7.997	-12.133	-41.074	1.00	27.78	C
[12375]	ATOM	5598	O	ILE	C	179	8.324	-13.261	-41.447	1.00	28.77	O
[12376]	ATOM	5599	CB	ILE	C	179	7.184	-11.825	-38.631	1.00	28.66	C
[12377]	ATOM	5600	CG1	ILE	C	179	7.798	-12.002	-37.228	1.00	30.09	C
[12378]	ATOM	5601	CG2	ILE	C	179	6.297	-13.016	-38.972	1.00	29.38	C
[12379]	ATOM	5602	CD1	ILE	C	179	7.043	-11.332	-36.120	1.00	33.81	C
[12380]	ATOM	5603	N	PRO	C	180	7.369	-11.257	-41.888	1.00	26.91	N
[12381]	ATOM	5604	CA	PRO	C	180	7.232	-11.637	-43.303	1.00	26.73	C
[12382]	ATOM	5605	C	PRO	C	180	8.562	-11.950	-43.986	1.00	26.77	C
[12383]	ATOM	5606	O	PRO	C	180	8.632	-12.912	-44.744	1.00	26.79	O
[12384]	ATOM	5607	CB	PRO	C	180	6.573	-10.413	-43.946	1.00	25.97	C
[12385]	ATOM	5608	CG	PRO	C	180	5.884	-9.741	-42.851	1.00	26.81	C
[12386]	ATOM	5609	CD	PRO	C	180	6.706	-9.973	-41.612	1.00	26.84	C
[12387]	ATOM	5610	N	GLU	C	181	9.595	-11.156	-43.712	1.00	27.12	N
[12388]	ATOM	5611	CA	GLU	C	181	10.936	-11.376	-44.264	1.00	28.21	C
[12389]	ATOM	5612	C	GLU	C	181	11.495	-12.727	-43.846	1.00	27.48	C
[12390]	ATOM	5613	O	GLU	C	181	12.019	-13.461	-44.674	1.00	27.52	O
[12391]	ATOM	5614	CB	GLU	C	181	11.885	-10.240	-43.873	1.00	27.88	C
[12392]	ATOM	5615	CG	GLU	C	181	11.568	-8.918	-44.594	1.00	30.65	C
[12393]	ATOM	5616	CD	GLU	C	181	12.297	-7.668	-44.024	1.00	32.23	C
[12394]	ATOM	5617	OE1	GLU	C	181	12.840	-7.696	-42.880	1.00	36.58	O
[12395]	ATOM	5618	OE2	GLU	C	181	12.306	-6.625	-44.736	1.00	36.09	O
[12396]	ATOM	5619	N	MET	C	182	11.353	-13.059	-42.566	1.00	27.15	N
[12397]	ATOM	5620	CA	MET	C	182	11.795	-14.346	-42.034	1.00	27.48	C
[12398]	ATOM	5621	C	MET	C	182	10.996	-15.535	-42.576	1.00	26.86	C
[12399]	ATOM	5622	O	MET	C	182	11.566	-16.585	-42.819	1.00	26.66	O
[12400]	ATOM	5623	CB	MET	C	182	11.762	-14.315	-40.516	1.00	27.05	C
[12401]	ATOM	5624	CG	MET	C	182	12.846	-13.396	-39.941	1.00	27.84	C
[12402]	ATOM	5625	SD	MET	C	182	12.968	-13.500	-38.159	1.00	30.42	S
[12403]	ATOM	5626	CE	MET	C	182	13.842	-15.066	-38.053	1.00	28.60	C
[12404]	ATOM	5627	N	ILE	C	183	9.689	-15.355	-42.794	1.00	26.39	N

[12405]	ATOM	5628	CA	ILE	C	183	8.866	-16.388	-43.431	1.00	26.61	C
[12406]	ATOM	5629	C	ILE	C	183	9.265	-16.618	-44.907	1.00	26.97	C
[12407]	ATOM	5630	O	ILE	C	183	9.380	-17.763	-45.350	1.00	27.46	O
[12408]	ATOM	5631	CB	ILE	C	183	7.335	-16.122	-43.279	1.00	26.69	C
[12409]	ATOM	5632	CG1	ILE	C	183	6.929	-16.355	-41.820	1.00	26.07	C
[12410]	ATOM	5633	CG2	ILE	C	183	6.537	-17.101	-44.138	1.00	27.22	C
[12411]	ATOM	5634	CD1	ILE	C	183	5.699	-15.618	-41.343	1.00	22.49	C
[12412]	ATOM	5635	N	LEU	C	184	9.497	-15.536	-45.650	1.00	26.62	N
[12413]	ATOM	5636	CA	LEU	C	184	9.981	-15.628	-47.022	1.00	26.89	C
[12414]	ATOM	5637	C	LEU	C	184	11.320	-16.357	-47.110	1.00	27.19	C
[12415]	ATOM	5638	O	LEU	C	184	11.537	-17.147	-48.030	1.00	27.66	O
[12416]	ATOM	5639	CB	LEU	C	184	10.060	-14.239	-47.649	1.00	26.87	C
[12417]	ATOM	5640	CG	LEU	C	184	8.697	-13.690	-48.075	1.00	27.67	C
[12418]	ATOM	5641	CD1	LEU	C	184	8.666	-12.175	-48.009	1.00	28.88	C
[12419]	ATOM	5642	CD2	LEU	C	184	8.319	-14.176	-49.482	1.00	27.23	C
[12420]	ATOM	5643	N	GLY	C	185	12.205	-16.098	-46.146	1.00	27.25	N
[12421]	ATOM	5644	CA	GLY	C	185	13.492	-16.799	-46.048	1.00	27.68	C
[12422]	ATOM	5645	C	GLY	C	185	13.334	-18.278	-45.708	1.00	27.86	C
[12423]	ATOM	5646	O	GLY	C	185	14.212	-19.092	-46.007	1.00	28.05	O
[12424]	ATOM	5647	N	HIS	C	186	12.219	-18.628	-45.073	1.00	27.49	N
[12425]	ATOM	5648	CA	HIS	C	186	11.837	-20.039	-44.851	1.00	27.23	C
[12426]	ATOM	5649	C	HIS	C	186	11.355	-20.680	-46.162	1.00	27.44	C
[12427]	ATOM	5650	O	HIS	C	186	11.667	-21.836	-46.453	1.00	27.28	O
[12428]	ATOM	5651	CB	HIS	C	186	10.775	-20.118	-43.736	1.00	27.16	C
[12429]	ATOM	5652	CG	HIS	C	186	10.067	-21.436	-43.639	1.00	25.50	C
[12430]	ATOM	5653	ND1	HIS	C	186	10.666	-22.575	-43.146	1.00	24.83	N
[12431]	ATOM	5654	CD2	HIS	C	186	8.796	-21.783	-43.937	1.00	22.81	C
[12432]	ATOM	5655	CE1	HIS	C	186	9.801	-23.573	-43.161	1.00	24.25	C
[12433]	ATOM	5656	NE2	HIS	C	186	8.661	-23.125	-43.655	1.00	24.14	N
[12434]	ATOM	5657	N	LEU	C	187	10.635	-19.908	-46.975	1.00	27.70	N
[12435]	ATOM	5658	CA	LEU	C	187	9.978	-20.464	-48.158	1.00	27.57	C
[12436]	ATOM	5659	C	LEU	C	187	10.878	-20.514	-49.378	1.00	28.36	C
[12437]	ATOM	5660	O	LEU	C	187	10.887	-21.523	-50.089	1.00	28.78	O
[12438]	ATOM	5661	CB	LEU	C	187	8.684	-19.694	-48.483	1.00	27.19	C
[12439]	ATOM	5662	CG	LEU	C	187	7.581	-19.733	-47.426	1.00	25.20	C
[12440]	ATOM	5663	CD1	LEU	C	187	6.523	-18.718	-47.738	1.00	22.26	C



[12441]	ATOM	5664	CD2	LEU	C	187	6.998	-21.143	-47.352	1.00	22.12	C
[12442]	ATOM	5665	N	PHE	C	188	11.606	-19.421	-49.631	1.00	28.66	N
[12443]	ATOM	5666	CA	PHE	C	188	12.434	-19.271	-50.835	1.00	28.97	C
[12444]	ATOM	5667	C	PHE	C	188	13.920	-19.114	-50.491	1.00	29.86	C
[12445]	ATOM	5668	O	PHE	C	188	14.267	-18.703	-49.381	1.00	29.49	O
[12446]	ATOM	5669	CB	PHE	C	188	11.944	-18.077	-51.679	1.00	28.31	C
[12447]	ATOM	5670	CG	PHE	C	188	10.497	-18.175	-52.074	1.00	28.62	C
[12448]	ATOM	5671	CD1	PHE	C	188	10.101	-18.988	-53.136	1.00	27.36	C
[12449]	ATOM	5672	CD2	PHE	C	188	9.521	-17.464	-51.370	1.00	28.43	C
[12450]	ATOM	5673	CE1	PHE	C	188	8.761	-19.077	-53.494	1.00	27.15	C
[12451]	ATOM	5674	CE2	PHE	C	188	8.180	-17.554	-51.717	1.00	28.53	C
[12452]	ATOM	5675	CZ	PHE	C	188	7.795	-18.370	-52.775	1.00	27.01	C
[12453]	ATOM	5676	N	SER	C	189	14.792	-19.441	-51.442	1.00	31.36	N
[12454]	ATOM	5677	CA	SER	C	189	16.235	-19.290	-51.241	1.00	33.50	C
[12455]	ATOM	5678	C	SER	C	189	16.641	-17.805	-51.251	1.00	34.98	C
[12456]	ATOM	5679	O	SER	C	189	15.834	-16.935	-51.589	1.00	34.77	O
[12457]	ATOM	5680	CB	SER	C	189	17.012	-20.068	-52.305	1.00	33.19	C
[12458]	ATOM	5681	OG	SER	C	189	16.959	-19.413	-53.564	1.00	34.05	O
[12459]	ATOM	5682	N	GLN	C	190	17.881	-17.512	-50.865	1.00	36.96	N
[12460]	ATOM	5683	CA	GLN	C	190	18.338	-16.121	-50.874	1.00	38.90	C
[12461]	ATOM	5684	C	GLN	C	190	18.613	-15.679	-52.307	1.00	39.39	C
[12462]	ATOM	5685	O	GLN	C	190	18.335	-14.536	-52.660	1.00	40.18	O
[12463]	ATOM	5686	CB	GLN	C	190	19.541	-15.876	-49.944	1.00	39.30	C
[12464]	ATOM	5687	CG	GLN	C	190	19.242	-16.017	-48.422	1.00	41.04	C
[12465]	ATOM	5688	CD	GLN	C	190	18.187	-15.033	-47.899	1.00	42.83	C
[12466]	ATOM	5689	OE1	GLN	C	190	18.284	-13.826	-48.126	1.00	44.62	O
[12467]	ATOM	5690	NE2	GLN	C	190	17.185	-15.551	-47.185	1.00	40.37	N
[12468]	ATOM	5691	N	GLU	C	191	19.119	-16.594	-53.132	1.00	39.91	N
[12469]	ATOM	5692	CA	GLU	C	191	19.292	-16.332	-54.568	1.00	40.86	C
[12470]	ATOM	5693	C	GLU	C	191	17.953	-15.952	-55.229	1.00	40.00	C
[12471]	ATOM	5694	O	GLU	C	191	17.906	-15.051	-56.061	1.00	39.89	O
[12472]	ATOM	5695	CB	GLU	C	191	19.955	-17.529	-55.277	1.00	40.76	C
[12473]	ATOM	5696	CG	GLU	C	191	20.837	-17.141	-56.483	1.00	43.17	C
[12474]	ATOM	5697	CD	GLU	C	191	21.729	-18.287	-57.033	1.00	43.92	C
[12475]	ATOM	5698	OE1	GLU	C	191	21.595	-19.452	-56.571	1.00	47.55	O
[12476]	ATOM	5699	OE2	GLU	C	191	22.575	-18.013	-57.937	1.00	46.93	O

[12477]	ATOM	5700	N	GLU	C	192	16.865	-16.614	-54.834	1.00	39.47	N
[12478]	ATOM	5701	CA	GLU	C	192	15.525	-16.275	-55.330	1.00	38.76	C
[12479]	ATOM	5702	C	GLU	C	192	15.060	-14.916	-54.837	1.00	38.60	C
[12480]	ATOM	5703	O	GLU	C	192	14.593	-14.103	-55.627	1.00	38.67	O
[12481]	ATOM	5704	CB	GLU	C	192	14.498	-17.324	-54.906	1.00	38.59	C
[12482]	ATOM	5705	CG	GLU	C	192	14.629	-18.646	-55.620	1.00	38.22	C
[12483]	ATOM	5706	CD	GLU	C	192	13.590	-19.649	-55.153	1.00	36.99	C
[12484]	ATOM	5707	OE1	GLU	C	192	13.643	-20.069	-53.963	1.00	34.67	O
[12485]	ATOM	5708	OE2	GLU	C	192	12.720	-20.000	-55.982	1.00	35.65	O
[12486]	ATOM	5709	N	LEU	C	193	15.191	-14.670	-53.534	1.00	38.48	N
[12487]	ATOM	5710	CA	LEU	C	193	14.687	-13.432	-52.943	1.00	38.50	C
[12488]	ATOM	5711	C	LEU	C	193	15.423	-12.186	-53.428	1.00	39.29	C
[12489]	ATOM	5712	O	LEU	C	193	14.826	-11.121	-53.533	1.00	39.57	O
[12490]	ATOM	5713	CB	LEU	C	193	14.714	-13.499	-51.423	1.00	37.93	C
[12491]	ATOM	5714	CG	LEU	C	193	13.787	-14.509	-50.760	1.00	36.45	C
[12492]	ATOM	5715	CD1	LEU	C	193	14.264	-14.693	-49.359	1.00	35.90	C
[12493]	ATOM	5716	CD2	LEU	C	193	12.340	-14.073	-50.787	1.00	33.13	C
[12494]	ATOM	5717	N	SER	C	194	16.709	-12.319	-53.732	1.00	40.08	N
[12495]	ATOM	5718	CA	SER	C	194	17.486	-11.181	-54.225	1.00	40.93	C
[12496]	ATOM	5719	C	SER	C	194	17.331	-11.007	-55.738	1.00	41.14	C
[12497]	ATOM	5720	O	SER	C	194	17.331	-9.883	-56.248	1.00	41.44	O
[12498]	ATOM	5721	CB	SER	C	194	18.958	-11.311	-53.833	1.00	41.10	C
[12499]	ATOM	5722	OG	SER	C	194	19.563	-12.407	-54.495	1.00	42.14	O
[12500]	ATOM	5723	N	GLY	C	195	17.200	-12.121	-56.449	1.00	41.09	N
[12501]	ATOM	5724	CA	GLY	C	195	16.915	-12.094	-57.872	1.00	41.44	C
[12502]	ATOM	5725	C	GLY	C	195	15.589	-11.407	-58.106	1.00	41.73	C
[12503]	ATOM	5726	O	GLY	C	195	15.380	-10.781	-59.145	1.00	41.77	O
[12504]	ATOM	5727	N	ASN	C	196	14.696	-11.536	-57.126	1.00	41.77	N
[12505]	ATOM	5728	CA	ASN	C	196	13.404	-10.841	-57.094	1.00	41.89	C
[12506]	ATOM	5729	C	ASN	C	196	12.521	-10.996	-58.353	1.00	41.78	C
[12507]	ATOM	5730	O	ASN	C	196	12.151	-10.005	-59.000	1.00	41.78	O
[12508]	ATOM	5731	CB	ASN	C	196	13.618	-9.368	-56.718	1.00	42.03	C
[12509]	ATOM	5732	CG	ASN	C	196	12.339	-8.683	-56.288	1.00	43.04	C
[12510]	ATOM	5733	OD1	ASN	C	196	11.895	-7.723	-56.921	1.00	43.59	O
[12511]	ATOM	5734	ND2	ASN	C	196	11.731	-9.180	-55.217	1.00	44.28	N
[12512]	ATOM	5735	N	SER	C	197	12.176	-12.245	-58.677	1.00	41.52	N

[12513]	ATOM	5736	CA	SER	C	197	11.342	-12.558	-59.851	1.00	41.33	C
[12514]	ATOM	5737	C	SER	C	197	9.875	-12.208	-59.630	1.00	41.00	C
[12515]	ATOM	5738	O	SER	C	197	9.483	-11.833	-58.532	1.00	41.12	O
[12516]	ATOM	5739	CB	SER	C	197	11.465	-14.038	-60.230	1.00	41.43	C
[12517]	ATOM	5740	OG	SER	C	197	10.986	-14.868	-59.184	1.00	41.44	O
[12518]	ATOM	5741	N	GLU	C	198	9.076	-12.344	-60.684	1.00	40.73	N
[12519]	ATOM	5742	CA	GLU	C	198	7.642	-12.067	-60.647	1.00	40.83	C
[12520]	ATOM	5743	C	GLU	C	198	6.936	-12.863	-59.547	1.00	39.74	C
[12521]	ATOM	5744	O	GLU	C	198	6.011	-12.356	-58.900	1.00	39.66	O
[12522]	ATOM	5745	CB	GLU	C	198	7.039	-12.420	-62.003	1.00	41.63	C
[12523]	ATOM	5746	CG	GLU	C	198	5.952	-11.484	-62.495	1.00	45.38	C
[12524]	ATOM	5747	CD	GLU	C	198	5.969	-11.320	-64.018	1.00	50.28	C
[12525]	ATOM	5748	OE1	GLU	C	198	6.940	-11.790	-64.667	1.00	52.59	O
[12526]	ATOM	5749	OE2	GLU	C	198	5.018	-10.711	-64.568	1.00	51.58	O
[12527]	ATOM	5750	N	LEU	C	199	7.385	-14.107	-59.347	1.00	38.44	N
[12528]	ATOM	5751	CA	LEU	C	199	6.842	-15.016	-58.329	1.00	37.30	C
[12529]	ATOM	5752	C	LEU	C	199	7.169	-14.537	-56.920	1.00	36.51	C
[12530]	ATOM	5753	O	LEU	C	199	6.282	-14.414	-56.087	1.00	36.62	O
[12531]	ATOM	5754	CB	LEU	C	199	7.370	-16.447	-58.535	1.00	37.43	C
[12532]	ATOM	5755	CG	LEU	C	199	6.826	-17.576	-57.641	1.00	37.91	C
[12533]	ATOM	5756	CD1	LEU	C	199	5.454	-18.045	-58.129	1.00	37.93	C
[12534]	ATOM	5757	CD2	LEU	C	199	7.791	-18.743	-57.594	1.00	37.23	C
[12535]	ATOM	5758	N	ILE	C	200	8.448	-14.280	-56.668	1.00	35.80	N
[12536]	ATOM	5759	CA	ILE	C	200	8.925	-13.709	-55.412	1.00	35.54	C
[12537]	ATOM	5760	C	ILE	C	200	8.241	-12.374	-55.056	1.00	35.36	C
[12538]	ATOM	5761	O	ILE	C	200	7.904	-12.155	-53.903	1.00	35.69	O
[12539]	ATOM	5762	CB	ILE	C	200	10.474	-13.522	-55.444	1.00	35.63	C
[12540]	ATOM	5763	CG1	ILE	C	200	11.185	-14.848	-55.760	1.00	36.06	C
[12541]	ATOM	5764	CG2	ILE	C	200	11.004	-12.873	-54.156	1.00	35.06	C
[12542]	ATOM	5765	CD1	ILE	C	200	10.884	-15.976	-54.824	1.00	35.69	C
[12543]	ATOM	5766	N	GLN	C	201	8.036	-11.494	-56.035	1.00	35.19	N
[12544]	ATOM	5767	CA	GLN	C	201	7.313	-10.230	-55.797	1.00	35.47	C
[12545]	ATOM	5768	C	GLN	C	201	5.859	-10.473	-55.369	1.00	34.93	C
[12546]	ATOM	5769	O	GLN	C	201	5.367	-9.843	-54.425	1.00	34.84	O
[12547]	ATOM	5770	CB	GLN	C	201	7.354	-9.299	-57.021	1.00	35.38	C
[12548]	ATOM	5771	CG	GLN	C	201	8.754	-8.842	-57.451	1.00	35.99	C

[12549]	ATOM	5772	CD	GLN	C	201	8.774	-8.193	-58.841	1.00	36.77	C
[12550]	ATOM	5773	OE1	GLN	C	201	7.987	-7.288	-59.132	1.00	38.46	O
[12551]	ATOM	5774	NE2	GLN	C	201	9.686	-8.650	-59.699	1.00	37.88	N
[12552]	ATOM	5775	N	LYS	C	202	5.186	-11.387	-56.070	1.00	34.16	N
[12553]	ATOM	5776	CA	LYS	C	202	3.821	-11.781	-55.756	1.00	33.79	C
[12554]	ATOM	5777	C	LYS	C	202	3.728	-12.369	-54.347	1.00	32.65	C
[12555]	ATOM	5778	O	LYS	C	202	2.887	-11.986	-53.552	1.00	32.79	O
[12556]	ATOM	5779	CB	LYS	C	202	3.334	-12.789	-56.803	1.00	34.01	C
[12557]	ATOM	5780	CG	LYS	C	202	1.989	-13.415	-56.514	1.00	35.02	C
[12558]	ATOM	5781	CD	LYS	C	202	1.552	-14.361	-57.636	1.00	35.42	C
[12559]	ATOM	5782	CE	LYS	C	202	0.416	-15.273	-57.146	1.00	38.19	C
[12560]	ATOM	5783	NZ	LYS	C	202	-0.021	-16.293	-58.146	1.00	37.45	N
[12561]	ATOM	5784	N	TYR	C	203	4.610	-13.294	-54.029	1.00	31.76	N
[12562]	ATOM	5785	CA	TYR	C	203	4.569	-13.921	-52.727	1.00	30.91	C
[12563]	ATOM	5786	C	TYR	C	203	5.027	-13.012	-51.590	1.00	31.06	C
[12564]	ATOM	5787	O	TYR	C	203	4.593	-13.195	-50.465	1.00	31.20	O
[12565]	ATOM	5788	CB	TYR	C	203	5.312	-15.261	-52.750	1.00	30.10	C
[12566]	ATOM	5789	CG	TYR	C	203	4.425	-16.383	-53.241	1.00	29.28	C
[12567]	ATOM	5790	CD1	TYR	C	203	4.167	-16.555	-54.602	1.00	27.56	C
[12568]	ATOM	5791	CD2	TYR	C	203	3.819	-17.260	-52.337	1.00	26.99	C
[12569]	ATOM	5792	CE1	TYR	C	203	3.341	-17.575	-55.053	1.00	27.44	C
[12570]	ATOM	5793	CE2	TYR	C	203	3.006	-18.286	-52.779	1.00	27.91	C
[12571]	ATOM	5794	CZ	TYR	C	203	2.765	-18.435	-54.131	1.00	28.26	C
[12572]	ATOM	5795	OH	TYR	C	203	1.926	-19.443	-54.554	1.00	29.41	O
[12573]	ATOM	5796	N	ARG	C	204	5.867	-12.016	-51.878	1.00	31.03	N
[12574]	ATOM	5797	CA	ARG	C	204	6.252	-11.041	-50.853	1.00	31.21	C
[12575]	ATOM	5798	C	ARG	C	204	5.030	-10.227	-50.466	1.00	31.38	C
[12576]	ATOM	5799	O	ARG	C	204	4.749	-10.005	-49.279	1.00	30.29	O
[12577]	ATOM	5800	CB	ARG	C	204	7.367	-10.118	-51.347	1.00	31.26	C
[12578]	ATOM	5801	CG	ARG	C	204	7.856	-9.116	-50.293	1.00	31.46	C
[12579]	ATOM	5802	CD	ARG	C	204	9.133	-8.396	-50.718	1.00	31.50	C
[12580]	ATOM	5803	NE	ARG	C	204	10.314	-9.024	-50.121	1.00	32.81	N
[12581]	ATOM	5804	CZ	ARG	C	204	11.334	-9.546	-50.804	1.00	32.65	C
[12582]	ATOM	5805	NH1	ARG	C	204	11.367	-9.512	-52.142	1.00	30.51	N
[12583]	ATOM	5806	NH2	ARG	C	204	12.343	-10.093	-50.137	1.00	31.58	N
[12584]	ATOM	5807	N	ASN	C	205	4.301	-9.806	-51.494	1.00	31.94	N

[12585]	ATOM	5808	CA	ASN	C	205	3.089	-9.017	-51.339	1.00	33.24	C
[12586]	ATOM	5809	C	ASN	C	205	2.022	-9.798	-50.579	1.00	32.83	C
[12587]	ATOM	5810	O	ASN	C	205	1.361	-9.254	-49.697	1.00	32.49	O
[12588]	ATOM	5811	CB	ASN	C	205	2.565	-8.620	-52.729	1.00	34.07	C
[12589]	ATOM	5812	CG	ASN	C	205	1.611	-7.433	-52.690	1.00	37.30	C
[12590]	ATOM	5813	OD1	ASN	C	205	0.451	-7.548	-52.254	1.00	40.78	O
[12591]	ATOM	5814	ND2	ASN	C	205	2.082	-6.287	-53.191	1.00	39.15	N
[12592]	ATOM	5815	N	ILE	C	206	1.880	-11.080	-50.928	1.00	32.79	N
[12593]	ATOM	5816	CA	ILE	C	206	0.867	-11.953	-50.354	1.00	32.88	C
[12594]	ATOM	5817	C	ILE	C	206	1.044	-12.117	-48.850	1.00	32.40	C
[12595]	ATOM	5818	O	ILE	C	206	0.065	-12.047	-48.102	1.00	32.90	O
[12596]	ATOM	5819	CB	ILE	C	206	0.846	-13.348	-51.059	1.00	32.83	C
[12597]	ATOM	5820	CG1	ILE	C	206	0.117	-13.256	-52.405	1.00	33.91	C
[12598]	ATOM	5821	CG2	ILE	C	206	0.181	-14.393	-50.197	1.00	33.32	C
[12599]	ATOM	5822	CD1	ILE	C	206	0.013	-14.598	-53.171	1.00	33.84	C
[12600]	ATOM	5823	N	ILE	C	207	2.287	-12.334	-48.421	1.00	31.45	N
[12601]	ATOM	5824	CA	ILE	C	207	2.604	-12.597	-47.023	1.00	30.34	C
[12602]	ATOM	5825	C	ILE	C	207	2.707	-11.289	-46.247	1.00	29.93	C
[12603]	ATOM	5826	O	ILE	C	207	2.135	-11.162	-45.171	1.00	29.36	O
[12604]	ATOM	5827	CB	ILE	C	207	3.895	-13.453	-46.893	1.00	30.26	C
[12605]	ATOM	5828	CG1	ILE	C	207	3.702	-14.780	-47.629	1.00	29.98	C
[12606]	ATOM	5829	CG2	ILE	C	207	4.240	-13.710	-45.414	1.00	31.09	C
[12607]	ATOM	5830	CD1	ILE	C	207	4.969	-15.544	-47.876	1.00	30.95	C
[12608]	ATOM	5831	N	THR	C	208	3.421	-10.314	-46.807	1.00	30.51	N
[12609]	ATOM	5832	CA	THR	C	208	3.586	-8.995	-46.169	1.00	30.34	C
[12610]	ATOM	5833	C	THR	C	208	2.245	-8.297	-45.906	1.00	30.49	C
[12611]	ATOM	5834	O	THR	C	208	2.028	-7.766	-44.811	1.00	30.12	O
[12612]	ATOM	5835	CB	THR	C	208	4.573	-8.082	-46.946	1.00	30.36	C
[12613]	ATOM	5836	OG1	THR	C	208	5.838	-8.742	-47.051	1.00	30.46	O
[12614]	ATOM	5837	CG2	THR	C	208	4.792	-6.743	-46.234	1.00	29.80	C
[12615]	ATOM	5838	N	HIS	C	209	1.343	-8.339	-46.883	1.00	30.57	N
[12616]	ATOM	5839	CA	HIS	C	209	0.046	-7.674	-46.749	1.00	31.15	C
[12617]	ATOM	5840	C	HIS	C	209	-1.150	-8.581	-46.420	1.00	30.97	C
[12618]	ATOM	5841	O	HIS	C	209	-2.298	-8.163	-46.545	1.00	30.75	O
[12619]	ATOM	5842	CB	HIS	C	209	-0.224	-6.804	-47.979	1.00	31.51	C
[12620]	ATOM	5843	CG	HIS	C	209	0.847	-5.791	-48.216	1.00	32.71	C

[12621]	ATOM	5844	ND1	HIS	C	209	1.056	-4.724	-47.371	1.00	34.05	N
[12622]	ATOM	5845	CD2	HIS	C	209	1.802	-5.710	-49.173	1.00	33.97	C
[12623]	ATOM	5846	CE1	HIS	C	209	2.089	-4.021	-47.804	1.00	35.33	C
[12624]	ATOM	5847	NE2	HIS	C	209	2.558	-4.597	-48.897	1.00	33.99	N
[12625]	ATOM	5848	N	ALA	C	210	-0.875	-9.805	-45.977	1.00	30.78	N
[12626]	ATOM	5849	CA	ALA	C	210	-1.923	-10.739	-45.566	1.00	30.78	C
[12627]	ATOM	5850	C	ALA	C	210	-2.839	-10.158	-44.477	1.00	30.43	C
[12628]	ATOM	5851	O	ALA	C	210	-2.348	-9.658	-43.476	1.00	30.43	O
[12629]	ATOM	5852	CB	ALA	C	210	-1.291	-12.033	-45.080	1.00	31.28	C
[12630]	ATOM	5853	N	PRO	C	211	-4.173	-10.226	-44.669	1.00	30.07	N
[12631]	ATOM	5854	CA	PRO	C	211	-5.117	-9.784	-43.633	1.00	29.84	C
[12632]	ATOM	5855	C	PRO	C	211	-4.969	-10.595	-42.344	1.00	29.34	C
[12633]	ATOM	5856	O	PRO	C	211	-5.275	-10.107	-41.261	1.00	28.97	O
[12634]	ATOM	5857	CB	PRO	C	211	-6.494	-10.066	-44.252	1.00	30.24	C
[12635]	ATOM	5858	CG	PRO	C	211	-6.264	-10.147	-45.719	1.00	30.73	C
[12636]	ATOM	5859	CD	PRO	C	211	-4.870	-10.719	-45.871	1.00	30.44	C
[12637]	ATOM	5860	N	ASN	C	212	-4.506	-11.832	-42.474	1.00	28.46	N
[12638]	ATOM	5861	CA	ASN	C	212	-4.361	-12.716	-41.330	1.00	28.00	C
[12639]	ATOM	5862	C	ASN	C	212	-2.893	-12.937	-40.929	1.00	27.84	C
[12640]	ATOM	5863	O	ASN	C	212	-2.556	-13.998	-40.416	1.00	27.51	O
[12641]	ATOM	5864	CB	ASN	C	212	-5.043	-14.061	-41.619	1.00	27.30	C
[12642]	ATOM	5865	CG	ASN	C	212	-4.407	-14.796	-42.781	1.00	27.98	C
[12643]	ATOM	5866	OD1	ASN	C	212	-3.944	-14.177	-43.736	1.00	26.80	O
[12644]	ATOM	5867	ND2	ASN	C	212	-4.362	-16.128	-42.694	1.00	26.55	N
[12645]	ATOM	5868	N	LEU	C	213	-2.039	-11.937	-41.148	1.00	27.78	N
[12646]	ATOM	5869	CA	LEU	C	213	-0.616	-12.053	-40.815	1.00	27.74	C
[12647]	ATOM	5870	C	LEU	C	213	-0.385	-12.437	-39.356	1.00	27.91	C
[12648]	ATOM	5871	O	LEU	C	213	0.539	-13.181	-39.066	1.00	28.09	O
[12649]	ATOM	5872	CB	LEU	C	213	0.165	-10.771	-41.186	1.00	28.50	C
[12650]	ATOM	5873	CG	LEU	C	213	1.678	-10.711	-40.893	1.00	27.88	C
[12651]	ATOM	5874	CD1	LEU	C	213	2.448	-11.899	-41.534	1.00	27.86	C
[12652]	ATOM	5875	CD2	LEU	C	213	2.293	-9.378	-41.311	1.00	27.29	C
[12653]	ATOM	5876	N	ASP	C	214	-1.220	-11.943	-38.439	1.00	28.05	N
[12654]	ATOM	5877	CA	ASP	C	214	-1.058	-12.277	-37.016	1.00	28.17	C
[12655]	ATOM	5878	C	ASP	C	214	-1.324	-13.758	-36.716	1.00	27.63	C
[12656]	ATOM	5879	O	ASP	C	214	-0.788	-14.307	-35.746	1.00	27.70	O

[12657]	ATOM	5880	CB	ASP	C	214	-1.964	-11.412	-36.133	1.00	28.54	C
[12658]	ATOM	5881	CG	ASP	C	214	-1.529	-9.926	-36.077	1.00	30.75	C
[12659]	ATOM	5882	OD1	ASP	C	214	-2.352	-9.116	-35.610	1.00	34.54	O
[12660]	ATOM	5883	OD2	ASP	C	214	-0.395	-9.559	-36.474	1.00	31.71	O
[12661]	ATOM	5884	N	ASN	C	215	-2.196	-14.376	-37.512	1.00	27.13	N
[12662]	ATOM	5885	CA	ASN	C	215	-2.451	-15.812	-37.428	1.00	26.44	C
[12663]	ATOM	5886	C	ASN	C	215	-1.246	-16.561	-37.979	1.00	26.25	C
[12664]	ATOM	5887	O	ASN	C	215	-0.786	-17.528	-37.377	1.00	26.58	O
[12665]	ATOM	5888	CB	ASN	C	215	-3.676	-16.221	-38.256	1.00	26.35	C
[12666]	ATOM	5889	CG	ASN	C	215	-4.981	-15.572	-37.787	1.00	26.08	C
[12667]	ATOM	5890	OD1	ASN	C	215	-5.039	-14.890	-36.766	1.00	24.35	O
[12668]	ATOM	5891	ND2	ASN	C	215	-6.038	-15.784	-38.561	1.00	25.26	N
[12669]	ATOM	5892	N	ILE	C	216	-0.760	-16.122	-39.144	1.00	25.42	N
[12670]	ATOM	5893	CA	ILE	C	216	0.423	-16.724	-39.788	1.00	24.77	C
[12671]	ATOM	5894	C	ILE	C	216	1.593	-16.748	-38.814	1.00	24.61	C
[12672]	ATOM	5895	O	ILE	C	216	2.352	-17.724	-38.741	1.00	24.92	O
[12673]	ATOM	5896	CB	ILE	C	216	0.834	-15.954	-41.067	1.00	24.67	C
[12674]	ATOM	5897	CG1	ILE	C	216	-0.132	-16.235	-42.217	1.00	23.63	C
[12675]	ATOM	5898	CG2	ILE	C	216	2.283	-16.303	-41.465	1.00	25.48	C
[12676]	ATOM	5899	CD1	ILE	C	216	-0.163	-15.127	-43.273	1.00	20.77	C
[12677]	ATOM	5900	N	GLU	C	217	1.713	-15.677	-38.044	1.00	24.30	N
[12678]	ATOM	5901	CA	GLU	C	217	2.787	-15.559	-37.076	1.00	24.69	C
[12679]	ATOM	5902	C	GLU	C	217	2.722	-16.647	-36.027	1.00	24.16	C
[12680]	ATOM	5903	O	GLU	C	217	3.755	-17.184	-35.635	1.00	24.88	O
[12681]	ATOM	5904	CB	GLU	C	217	2.783	-14.183	-36.400	1.00	24.77	C
[12682]	ATOM	5905	CG	GLU	C	217	3.984	-14.028	-35.468	1.00	28.33	C
[12683]	ATOM	5906	CD	GLU	C	217	4.026	-12.707	-34.746	1.00	31.34	C
[12684]	ATOM	5907	OE1	GLU	C	217	3.178	-11.818	-35.037	1.00	34.71	O
[12685]	ATOM	5908	OE2	GLU	C	217	4.921	-12.569	-33.880	1.00	32.90	O
[12686]	ATOM	5909	N	LEU	C	218	1.512	-16.987	-35.595	1.00	23.82	N
[12687]	ATOM	5910	CA	LEU	C	218	1.306	-18.045	-34.608	1.00	23.80	C
[12688]	ATOM	5911	C	LEU	C	218	1.696	-19.442	-35.144	1.00	23.43	C
[12689]	ATOM	5912	O	LEU	C	218	2.289	-20.250	-34.425	1.00	23.86	O
[12690]	ATOM	5913	CB	LEU	C	218	-0.139	-18.039	-34.129	1.00	23.65	C
[12691]	ATOM	5914	CG	LEU	C	218	-0.707	-16.729	-33.550	1.00	24.70	C
[12692]	ATOM	5915	CD1	LEU	C	218	-2.115	-16.964	-33.067	1.00	23.43	C

[12693]	ATOM	5916	CD2	LEU	C	218	0.160	-16.193	-32.421	1.00	25.61	C
[12694]	ATOM	5917	N	TYR	C	219	1.359	-19.713	-36.398	1.00	23.29	N
[12695]	ATOM	5918	CA	TYR	C	219	1.812	-20.937	-37.093	1.00	23.00	C
[12696]	ATOM	5919	C	TYR	C	219	3.350	-20.975	-37.201	1.00	23.30	C
[12697]	ATOM	5920	O	TYR	C	219	3.977	-21.997	-36.900	1.00	22.69	O
[12698]	ATOM	5921	CB	TYR	C	219	1.168	-20.998	-38.490	1.00	23.09	C
[12699]	ATOM	5922	CG	TYR	C	219	1.318	-22.301	-39.281	1.00	22.40	C
[12700]	ATOM	5923	CD1	TYR	C	219	1.587	-23.519	-38.652	1.00	20.38	C
[12701]	ATOM	5924	CD2	TYR	C	219	1.117	-22.307	-40.669	1.00	23.08	C
[12702]	ATOM	5925	CE1	TYR	C	219	1.710	-24.715	-39.402	1.00	21.16	C
[12703]	ATOM	5926	CE2	TYR	C	219	1.218	-23.503	-41.432	1.00	21.11	C
[12704]	ATOM	5927	CZ	TYR	C	219	1.510	-24.677	-40.790	1.00	20.82	C
[12705]	ATOM	5928	OH	TYR	C	219	1.608	-25.805	-41.545	1.00	24.31	O
[12706]	ATOM	5929	N	TRP	C	220	3.931	-19.863	-37.652	1.00	23.55	N
[12707]	ATOM	5930	CA	TRP	C	220	5.383	-19.640	-37.658	1.00	23.49	C
[12708]	ATOM	5931	C	TRP	C	220	6.042	-19.976	-36.298	1.00	23.68	C
[12709]	ATOM	5932	O	TRP	C	220	7.027	-20.713	-36.273	1.00	23.51	O
[12710]	ATOM	5933	CB	TRP	C	220	5.678	-18.194	-38.099	1.00	23.68	C
[12711]	ATOM	5934	CG	TRP	C	220	7.133	-17.752	-38.114	1.00	24.20	C
[12712]	ATOM	5935	CD1	TRP	C	220	7.685	-16.693	-37.424	1.00	25.61	C
[12713]	ATOM	5936	CD2	TRP	C	220	8.207	-18.334	-38.871	1.00	24.79	C
[12714]	ATOM	5937	NE1	TRP	C	220	9.029	-16.595	-37.705	1.00	24.56	N
[12715]	ATOM	5938	CE2	TRP	C	220	9.371	-17.582	-38.594	1.00	24.09	C
[12716]	ATOM	5939	CE3	TRP	C	220	8.295	-19.425	-39.761	1.00	24.84	C
[12717]	ATOM	5940	CZ2	TRP	C	220	10.614	-17.889	-39.162	1.00	24.81	C
[12718]	ATOM	5941	CZ3	TRP	C	220	9.536	-19.732	-40.328	1.00	25.50	C
[12719]	ATOM	5942	CH2	TRP	C	220	10.676	-18.963	-40.024	1.00	24.74	C
[12720]	ATOM	5943	N	ASN	C	221	5.505	-19.457	-35.189	1.00	23.38	N
[12721]	ATOM	5944	CA	ASN	C	221	6.021	-19.815	-33.863	1.00	23.95	C
[12722]	ATOM	5945	C	ASN	C	221	5.928	-21.296	-33.554	1.00	24.05	C
[12723]	ATOM	5946	O	ASN	C	221	6.864	-21.856	-33.011	1.00	24.61	O
[12724]	ATOM	5947	CB	ASN	C	221	5.275	-19.090	-32.747	1.00	24.54	C
[12725]	ATOM	5948	CG	ASN	C	221	5.541	-17.609	-32.727	1.00	25.94	C
[12726]	ATOM	5949	OD1	ASN	C	221	6.566	-17.124	-33.226	1.00	29.29	O
[12727]	ATOM	5950	ND2	ASN	C	221	4.608	-16.870	-32.146	1.00	27.21	N
[12728]	ATOM	5951	N	SER	C	222	4.776	-21.908	-33.828	1.00	23.64	N



[12729]	ATOM	5952	CA	SER	C	222	4.593	-23.353	-33.652	1.00	24.10	C
[12730]	ATOM	5953	C	SER	C	222	5.637	-24.158	-34.438	1.00	23.88	C
[12731]	ATOM	5954	O	SER	C	222	6.219	-25.118	-33.918	1.00	23.50	O
[12732]	ATOM	5955	CB	SER	C	222	3.189	-23.773	-34.110	1.00	24.04	C
[12733]	ATOM	5956	OG	SER	C	222	2.250	-23.475	-33.102	1.00	27.46	O
[12734]	ATOM	5957	N	TYR	C	223	5.829	-23.785	-35.699	1.00	23.73	N
[12735]	ATOM	5958	CA	TYR	C	223	6.892	-24.351	-36.505	1.00	24.27	C
[12736]	ATOM	5959	C	TYR	C	223	8.279	-24.242	-35.841	1.00	24.82	C
[12737]	ATOM	5960	O	TYR	C	223	8.981	-25.257	-35.682	1.00	25.27	O
[12738]	ATOM	5961	CB	TYR	C	223	6.930	-23.732	-37.905	1.00	24.44	C
[12739]	ATOM	5962	CG	TYR	C	223	8.102	-24.287	-38.679	1.00	24.79	C
[12740]	ATOM	5963	CD1	TYR	C	223	8.107	-25.619	-39.107	1.00	24.73	C
[12741]	ATOM	5964	CD2	TYR	C	223	9.227	-23.512	-38.922	1.00	24.11	C
[12742]	ATOM	5965	CE1	TYR	C	223	9.189	-26.150	-39.781	1.00	25.26	C
[12743]	ATOM	5966	CE2	TYR	C	223	10.321	-24.034	-39.599	1.00	25.06	C
[12744]	ATOM	5967	CZ	TYR	C	223	10.286	-25.358	-40.030	1.00	25.56	C
[12745]	ATOM	5968	OH	TYR	C	223	11.358	-25.888	-40.723	1.00	28.33	O
[12746]	ATOM	5969	N	ASN	C	224	8.684	-23.027	-35.467	1.00	23.55	N
[12747]	ATOM	5970	CA	ASN	C	224	9.994	-22.827	-34.850	1.00	23.64	C
[12748]	ATOM	5971	C	ASN	C	224	10.170	-23.582	-33.523	1.00	23.93	C
[12749]	ATOM	5972	O	ASN	C	224	11.296	-23.929	-33.149	1.00	24.59	O
[12750]	ATOM	5973	CB	ASN	C	224	10.267	-21.339	-34.656	1.00	23.34	C
[12751]	ATOM	5974	CG	ASN	C	224	10.428	-20.592	-35.979	1.00	25.36	C
[12752]	ATOM	5975	OD1	ASN	C	224	10.028	-19.432	-36.101	1.00	27.83	O
[12753]	ATOM	5976	ND2	ASN	C	224	11.014	-21.246	-36.965	1.00	24.24	N
[12754]	ATOM	5977	N	ASN	C	225	9.061	-23.884	-32.845	1.00	23.63	N
[12755]	ATOM	5978	CA	ASN	C	225	9.103	-24.527	-31.513	1.00	24.27	C
[12756]	ATOM	5979	C	ASN	C	225	9.043	-26.064	-31.530	1.00	24.33	C
[12757]	ATOM	5980	O	ASN	C	225	9.145	-26.685	-30.481	1.00	23.80	O
[12758]	ATOM	5981	CB	ASN	C	225	7.963	-23.992	-30.628	1.00	24.06	C
[12759]	ATOM	5982	CG	ASN	C	225	8.047	-22.497	-30.403	1.00	25.39	C
[12760]	ATOM	5983	OD1	ASN	C	225	9.109	-21.887	-30.546	1.00	27.29	O
[12761]	ATOM	5984	ND2	ASN	C	225	6.917	-21.892	-30.053	1.00	27.08	N
[12762]	ATOM	5985	N	ARG	C	226	8.871	-26.662	-32.713	1.00	24.48	N
[12763]	ATOM	5986	CA	ARG	C	226	8.712	-28.103	-32.865	1.00	25.60	C
[12764]	ATOM	5987	C	ARG	C	226	9.840	-28.893	-32.221	1.00	27.07	C

[12765]	ATOM	5988	O	ARG C 226	10.982	-28.416	-32.118	1.00	26.90	O
[12766]	ATOM	5989	CB	ARG C 226	8.613	-28.478	-34.356	1.00	25.32	C
[12767]	ATOM	5990	CG	ARG C 226	9.920	-28.271	-35.130	1.00	25.39	C
[12768]	ATOM	5991	CD	ARG C 226	9.715	-28.318	-36.624	1.00	27.10	C
[12769]	ATOM	5992	NE	ARG C 226	11.003	-28.321	-37.309	1.00	29.28	N
[12770]	ATOM	5993	CZ	ARG C 226	11.849	-27.295	-37.347	1.00	29.76	C
[12771]	ATOM	5994	NH1	ARG C 226	11.560	-26.151	-36.745	1.00	28.47	N
[12772]	ATOM	5995	NH2	ARG C 226	13.006	-27.427	-37.984	1.00	32.59	N
[12773]	ATOM	5996	N	AARG C 227	9.508	-30.108	-31.794	0.50	27.76	N
[12774]	ATOM	5997	CA	AARG C 227	10.472	-31.041	-31.222	0.50	28.46	C
[12775]	ATOM	5998	C	AARG C 227	10.985	-31.983	-32.319	0.50	29.14	C
[12776]	ATOM	5999	O	AARG C 227	10.436	-32.000	-33.423	0.50	28.93	O
[12777]	ATOM	6000	CB	AARG C 227	9.807	-31.826	-30.084	0.50	28.49	C
[12778]	ATOM	6001	CG	AARG C 227	9.197	-30.929	-28.996	0.50	28.44	C
[12779]	ATOM	6002	CD	AARG C 227	8.464	-31.713	-27.905	0.50	28.44	C
[12780]	ATOM	6003	NE	AARG C 227	9.351	-32.610	-27.163	0.50	28.66	N
[12781]	ATOM	6004	CZ	AARG C 227	8.976	-33.368	-26.133	0.50	27.85	C
[12782]	ATOM	6005	NH1AARG	C 227	7.727	-33.343	-25.694	0.50	27.48	N
[12783]	ATOM	6006	NH2AARG	C 227	9.860	-34.154	-25.536	0.50	26.99	N
[12784]	ATOM	6007	N	BARG C 227	9.515	-30.099	-31.766	0.50	27.82	N
[12785]	ATOM	6008	CA	BARG C 227	10.511	-31.021	-31.233	0.50	28.59	C
[12786]	ATOM	6009	C	BARG C 227	11.014	-31.954	-32.335	0.50	29.22	C
[12787]	ATOM	6010	O	BARG C 227	10.483	-31.946	-33.447	0.50	29.03	O
[12788]	ATOM	6011	CB	BARG C 227	9.921	-31.827	-30.071	0.50	28.67	C
[12789]	ATOM	6012	CG	BARG C 227	8.504	-32.317	-30.302	0.50	29.03	C
[12790]	ATOM	6013	CD	BARG C 227	7.944	-33.005	-29.069	0.50	29.44	C
[12791]	ATOM	6014	NE	BARG C 227	8.334	-34.411	-29.011	0.50	29.81	N
[12792]	ATOM	6015	CZ	BARG C 227	7.579	-35.420	-29.435	0.50	29.75	C
[12793]	ATOM	6016	NH1BARG	C 227	8.031	-36.664	-29.342	0.50	29.43	N
[12794]	ATOM	6017	NH2BARG	C 227	6.373	-35.187	-29.942	0.50	28.80	N
[12795]	ATOM	6018	N	ASP C 228	12.035	-32.751	-32.024	1.00	29.67	N
[12796]	ATOM	6019	CA	ASP C 228	12.582	-33.724	-32.975	1.00	31.85	C
[12797]	ATOM	6020	C	ASP C 228	11.497	-34.748	-33.396	1.00	33.49	C
[12798]	ATOM	6021	O	ASP C 228	10.649	-35.122	-32.588	1.00	34.04	O
[12799]	ATOM	6022	CB	ASP C 228	13.746	-34.498	-32.349	1.00	31.54	C
[12800]	ATOM	6023	CG	ASP C 228	15.028	-33.677	-32.215	1.00	33.08	C

[12801]	ATOM	6024	OD1	ASP	C	228	15.188	-32.623	-32.856	1.00	34.46	O
[12802]	ATOM	6025	OD2	ASP	C	228	15.920	-34.109	-31.462	1.00	34.97	O
[12803]	ATOM	6026	N	LEU	C	229	11.514	-35.207	-34.641	1.00	35.37	N
[12804]	ATOM	6027	CA	LEU	C	229	10.746	-36.409	-34.960	1.00	37.53	C
[12805]	ATOM	6028	C	LEU	C	229	11.495	-37.644	-34.437	1.00	39.46	C
[12806]	ATOM	6029	O	LEU	C	229	10.888	-38.625	-34.011	1.00	39.78	O
[12807]	ATOM	6030	CB	LEU	C	229	10.447	-36.508	-36.450	1.00	37.35	C
[12808]	ATOM	6031	CG	LEU	C	229	9.314	-35.590	-36.935	1.00	36.74	C
[12809]	ATOM	6032	CD1	LEU	C	229	9.281	-35.519	-38.435	1.00	35.28	C
[12810]	ATOM	6033	CD2	LEU	C	229	7.968	-36.056	-36.400	1.00	36.08	C
[12811]	ATOM	6034	N	ASN	C	230	12.818	-37.554	-34.424	1.00	41.69	N
[12812]	ATOM	6035	CA	ASN	C	230	13.688	-38.593	-33.861	1.00	44.33	C
[12813]	ATOM	6036	C	ASN	C	230	13.647	-39.915	-34.621	1.00	45.66	C
[12814]	ATOM	6037	O	ASN	C	230	13.596	-40.992	-34.006	1.00	46.02	O
[12815]	ATOM	6038	CB	ASN	C	230	13.436	-38.809	-32.356	1.00	44.37	C
[12816]	ATOM	6039	CG	ASN	C	230	14.343	-37.944	-31.471	1.00	46.07	C
[12817]	ATOM	6040	OD1	ASN	C	230	14.020	-37.688	-30.312	1.00	46.89	O
[12818]	ATOM	6041	ND2	ASN	C	230	15.482	-37.498	-32.014	1.00	46.63	N
[12819]	ATOM	6042	N	PHE	C	231	13.673	-39.807	-35.955	1.00	47.30	N
[12820]	ATOM	6043	CA	PHE	C	231	13.834	-40.948	-36.861	1.00	48.46	C
[12821]	ATOM	6044	C	PHE	C	231	15.187	-41.615	-36.615	1.00	49.90	C
[12822]	ATOM	6045	O	PHE	C	231	16.231	-40.953	-36.627	1.00	50.01	O
[12823]	ATOM	6046	CB	PHE	C	231	13.791	-40.497	-38.326	1.00	48.01	C
[12824]	ATOM	6047	CG	PHE	C	231	12.489	-39.900	-38.758	1.00	46.96	C
[12825]	ATOM	6048	CD1	PHE	C	231	11.284	-40.532	-38.477	1.00	46.02	C
[12826]	ATOM	6049	CD2	PHE	C	231	12.476	-38.725	-39.498	1.00	46.62	C
[12827]	ATOM	6050	CE1	PHE	C	231	10.077	-39.978	-38.896	1.00	47.37	C
[12828]	ATOM	6051	CE2	PHE	C	231	11.269	-38.160	-39.933	1.00	46.99	C
[12829]	ATOM	6052	CZ	PHE	C	231	10.071	-38.787	-39.633	1.00	46.99	C
[12830]	ATOM	6053	N	GLU	C	232	15.160	-42.925	-36.404	1.00	51.45	N
[12831]	ATOM	6054	CA	GLU	C	232	16.368	-43.702	-36.190	1.00	53.65	C
[12832]	ATOM	6055	C	GLU	C	232	16.305	-44.830	-37.185	1.00	54.37	C
[12833]	ATOM	6056	O	GLU	C	232	15.321	-45.574	-37.189	1.00	54.66	O
[12834]	ATOM	6057	CB	GLU	C	232	16.393	-44.269	-34.760	1.00	53.55	C
[12835]	ATOM	6058	CG	GLU	C	232	17.427	-45.382	-34.516	1.00	54.36	C
[12836]	ATOM	6059	CD	GLU	C	232	17.364	-45.976	-33.103	1.00	54.89	C

[12837]	ATOM	6060	OE1	GLU	C	232	16.834	-45.305	-32.179	1.00	56.37	O
[12838]	ATOM	6061	OE2	GLU	C	232	17.859	-47.115	-32.914	1.00	55.77	O
[12839]	ATOM	6062	N	ARG	C	233	17.325	-44.968	-38.031	1.00	55.51	N
[12840]	ATOM	6063	CA	ARG	C	233	17.325	-46.096	-38.967	1.00	56.60	C
[12841]	ATOM	6064	C	ARG	C	233	17.337	-47.441	-38.217	1.00	56.81	C
[12842]	ATOM	6065	O	ARG	C	233	18.118	-47.631	-37.280	1.00	56.73	O
[12843]	ATOM	6066	CB	ARG	C	233	18.457	-46.014	-39.994	1.00	56.94	C
[12844]	ATOM	6067	CG	ARG	C	233	18.136	-46.818	-41.252	1.00	57.78	C
[12845]	ATOM	6068	CD	ARG	C	233	19.331	-46.971	-42.148	1.00	60.19	C
[12846]	ATOM	6069	NE	ARG	C	233	19.541	-45.799	-42.992	1.00	61.71	N
[12847]	ATOM	6070	CZ	ARG	C	233	20.394	-45.765	-44.012	1.00	62.54	C
[12848]	ATOM	6071	NH1	ARG	C	233	21.115	-46.837	-44.317	1.00	62.52	N
[12849]	ATOM	6072	NH2	ARG	C	233	20.525	-44.661	-44.734	1.00	63.19	N
[12850]	ATOM	6073	N	GLY	C	234	16.434	-48.341	-38.623	1.00	57.15	N
[12851]	ATOM	6074	CA	GLY	C	234	16.251	-49.653	-37.984	1.00	57.22	C
[12852]	ATOM	6075	C	GLY	C	234	15.583	-49.614	-36.614	1.00	57.20	C
[12853]	ATOM	6076	O	GLY	C	234	15.444	-50.654	-35.955	1.00	57.34	O
[12854]	ATOM	6077	N	GLY	C	235	15.160	-48.420	-36.191	1.00	56.84	N
[12855]	ATOM	6078	CA	GLY	C	235	14.630	-48.198	-34.846	1.00	56.29	C
[12856]	ATOM	6079	C	GLY	C	235	13.115	-48.209	-34.720	1.00	55.95	C
[12857]	ATOM	6080	O	GLY	C	235	12.392	-48.531	-35.677	1.00	55.80	O
[12858]	ATOM	6081	N	ASP	C	236	12.645	-47.852	-33.523	1.00	55.42	N
[12859]	ATOM	6082	CA	ASP	C	236	11.214	-47.839	-33.189	1.00	54.81	C
[12860]	ATOM	6083	C	ASP	C	236	10.455	-46.637	-33.779	1.00	53.85	C
[12861]	ATOM	6084	O	ASP	C	236	9.305	-46.781	-34.224	1.00	53.85	O
[12862]	ATOM	6085	CB	ASP	C	236	11.012	-47.933	-31.666	1.00	55.12	C
[12863]	ATOM	6086	CG	ASP	C	236	11.158	-49.361	-31.144	1.00	56.27	C
[12864]	ATOM	6087	OD1	ASP	C	236	10.411	-50.248	-31.620	1.00	56.87	O
[12865]	ATOM	6088	OD2	ASP	C	236	12.018	-49.599	-30.260	1.00	57.63	O
[12866]	ATOM	6089	N	ILE	C	237	11.091	-45.459	-33.764	1.00	52.40	N
[12867]	ATOM	6090	CA	ILE	C	237	10.564	-44.295	-34.489	1.00	50.53	C
[12868]	ATOM	6091	C	ILE	C	237	11.053	-44.366	-35.934	1.00	48.94	C
[12869]	ATOM	6092	O	ILE	C	237	12.174	-43.964	-36.273	1.00	48.41	O
[12870]	ATOM	6093	CB	ILE	C	237	10.875	-42.923	-33.805	1.00	50.83	C
[12871]	ATOM	6094	CG1	ILE	C	237	10.143	-42.795	-32.459	1.00	51.53	C
[12872]	ATOM	6095	CG2	ILE	C	237	10.450	-41.759	-34.699	1.00	50.74	C

[12873]	ATOM	6096	CD1	ILE	C	237	11.010	-43.079	-31.231	1.00	53.02	C
[12874]	ATOM	6097	N	THR	C	238	10.186	-44.935	-36.759	1.00	47.08	N
[12875]	ATOM	6098	CA	THR	C	238	10.421	-45.106	-38.178	1.00	45.36	C
[12876]	ATOM	6099	C	THR	C	238	9.064	-44.977	-38.868	1.00	43.74	C
[12877]	ATOM	6100	O	THR	C	238	8.048	-45.455	-38.356	1.00	43.90	O
[12878]	ATOM	6101	CB	THR	C	238	11.129	-46.482	-38.494	1.00	45.72	C
[12879]	ATOM	6102	OG1	THR	C	238	11.645	-46.481	-39.833	1.00	45.94	O
[12880]	ATOM	6103	CG2	THR	C	238	10.197	-47.680	-38.312	1.00	45.39	C
[12881]	ATOM	6104	N	LEU	C	239	9.044	-44.266	-39.988	1.00	41.58	N
[12882]	ATOM	6105	CA	LEU	C	239	7.894	-44.253	-40.870	1.00	39.83	C
[12883]	ATOM	6106	C	LEU	C	239	7.836	-45.622	-41.538	1.00	38.81	C
[12884]	ATOM	6107	O	LEU	C	239	8.848	-46.134	-41.999	1.00	38.85	O
[12885]	ATOM	6108	CB	LEU	C	239	8.039	-43.137	-41.911	1.00	39.49	C
[12886]	ATOM	6109	CG	LEU	C	239	8.060	-41.700	-41.385	1.00	37.97	C
[12887]	ATOM	6110	CD1	LEU	C	239	8.374	-40.720	-42.488	1.00	37.63	C
[12888]	ATOM	6111	CD2	LEU	C	239	6.746	-41.342	-40.729	1.00	36.99	C
[12889]	ATOM	6112	N	ARG	C	240	6.669	-46.243	-41.564	1.00	37.82	N
[12890]	ATOM	6113	CA	ARG	C	240	6.601	-47.595	-42.097	1.00	36.73	C
[12891]	ATOM	6114	C	ARG	C	240	5.826	-47.658	-43.413	1.00	35.17	C
[12892]	ATOM	6115	O	ARG	C	240	5.268	-48.702	-43.766	1.00	35.73	O
[12893]	ATOM	6116	CB	ARG	C	240	6.051	-48.559	-41.050	1.00	37.60	C
[12894]	ATOM	6117	CG	ARG	C	240	6.914	-48.632	-39.792	1.00	40.07	C
[12895]	ATOM	6118	CD	ARG	C	240	6.241	-49.408	-38.670	1.00	44.77	C
[12896]	ATOM	6119	NE	ARG	C	240	6.831	-49.068	-37.375	1.00	48.77	N
[12897]	ATOM	6120	CZ	ARG	C	240	7.784	-49.774	-36.757	1.00	52.10	C
[12898]	ATOM	6121	NH1	ARG	C	240	8.274	-50.887	-37.311	1.00	52.60	N
[12899]	ATOM	6122	NH2	ARG	C	240	8.253	-49.369	-35.574	1.00	52.16	N
[12900]	ATOM	6123	N	CYS	C	241	5.802	-46.537	-44.131	1.00	32.05	N
[12901]	ATOM	6124	CA	CYS	C	241	5.169	-46.458	-45.440	1.00	30.04	C
[12902]	ATOM	6125	C	CYS	C	241	6.153	-45.878	-46.459	1.00	28.36	C
[12903]	ATOM	6126	O	CYS	C	241	7.156	-45.267	-46.072	1.00	28.18	O
[12904]	ATOM	6127	CB	CYS	C	241	3.945	-45.564	-45.365	1.00	29.50	C
[12905]	ATOM	6128	SG	CYS	C	241	4.363	-43.877	-44.883	1.00	30.52	S
[12906]	ATOM	6129	N	PRO	C	242	5.884	-46.075	-47.762	1.00	27.39	N
[12907]	ATOM	6130	CA	PRO	C	242	6.650	-45.402	-48.798	1.00	26.49	C
[12908]	ATOM	6131	C	PRO	C	242	6.720	-43.888	-48.585	1.00	26.28	C

[12909]	ATOM	6132	O	PRO	C	242	5.691	-43.263	-48.302	1.00	25.93	O
[12910]	ATOM	6133	CB	PRO	C	242	5.856	-45.720	-50.058	1.00	26.39	C
[12911]	ATOM	6134	CG	PRO	C	242	5.301	-47.060	-49.776	1.00	27.02	C
[12912]	ATOM	6135	CD	PRO	C	242	4.875	-46.976	-48.350	1.00	26.98	C
[12913]	ATOM	6136	N	VAL	C	243	7.923	-43.318	-48.704	1.00	25.26	N
[12914]	ATOM	6137	CA	VAL	C	243	8.136	-41.864	-48.527	1.00	25.25	C
[12915]	ATOM	6138	C	VAL	C	243	8.903	-41.327	-49.722	1.00	24.90	C
[12916]	ATOM	6139	O	VAL	C	243	9.865	-41.939	-50.150	1.00	24.94	O
[12917]	ATOM	6140	CB	VAL	C	243	8.928	-41.544	-47.229	1.00	25.30	C
[12918]	ATOM	6141	CG1	VAL	C	243	9.343	-40.062	-47.165	1.00	25.65	C
[12919]	ATOM	6142	CG2	VAL	C	243	8.128	-41.946	-45.991	1.00	25.23	C
[12920]	ATOM	6143	N	MET	C	244	8.471	-40.195	-50.277	1.00	24.65	N
[12921]	ATOM	6144	CA	MET	C	244	9.263	-39.524	-51.283	1.00	24.48	C
[12922]	ATOM	6145	C	MET	C	244	9.645	-38.183	-50.695	1.00	23.77	C
[12923]	ATOM	6146	O	MET	C	244	8.784	-37.366	-50.368	1.00	22.82	O
[12924]	ATOM	6147	CB	MET	C	244	8.504	-39.358	-52.606	1.00	24.68	C
[12925]	ATOM	6148	CG	MET	C	244	9.309	-38.610	-53.674	1.00	25.42	C
[12926]	ATOM	6149	SD	MET	C	244	8.517	-38.569	-55.278	1.00	27.86	S
[12927]	ATOM	6150	CE	MET	C	244	7.034	-37.614	-54.986	1.00	24.34	C
[12928]	ATOM	6151	N	LEU	C	245	10.949	-37.985	-50.525	1.00	22.54	N
[12929]	ATOM	6152	CA	LEU	C	245	11.478	-36.747	-49.991	1.00	22.30	C
[12930]	ATOM	6153	C	LEU	C	245	11.795	-35.818	-51.153	1.00	21.76	C
[12931]	ATOM	6154	O	LEU	C	245	12.379	-36.239	-52.148	1.00	21.71	O
[12932]	ATOM	6155	CB	LEU	C	245	12.733	-37.022	-49.145	1.00	22.60	C
[12933]	ATOM	6156	CG	LEU	C	245	12.579	-37.863	-47.878	1.00	22.82	C
[12934]	ATOM	6157	CD1	LEU	C	245	13.950	-38.256	-47.387	1.00	24.69	C
[12935]	ATOM	6158	CD2	LEU	C	245	11.845	-37.129	-46.773	1.00	21.78	C
[12936]	ATOM	6159	N	VAL	C	246	11.392	-34.557	-51.037	1.00	21.68	N
[12937]	ATOM	6160	CA	VAL	C	246	11.581	-33.593	-52.117	1.00	21.01	C
[12938]	ATOM	6161	C	VAL	C	246	12.219	-32.304	-51.569	1.00	21.63	C
[12939]	ATOM	6162	O	VAL	C	246	11.761	-31.781	-50.560	1.00	20.37	O
[12940]	ATOM	6163	CB	VAL	C	246	10.213	-33.255	-52.777	1.00	20.79	C
[12941]	ATOM	6164	CG1	VAL	C	246	10.351	-32.189	-53.877	1.00	20.63	C
[12942]	ATOM	6165	CG2	VAL	C	246	9.565	-34.521	-53.347	1.00	20.99	C
[12943]	ATOM	6166	N	VAL	C	247	13.259	-31.793	-52.235	1.00	21.71	N
[12944]	ATOM	6167	CA	VAL	C	247	13.878	-30.511	-51.857	1.00	22.22	C

[12945]	ATOM	6168	C	VAL C 247	14.571	-29.862	-53.064	1.00	23.28	C
[12946]	ATOM	6169	O	VAL C 247	14.971	-30.557	-53.991	1.00	22.67	O
[12947]	ATOM	6170	CB	VAL C 247	14.909	-30.664	-50.683	1.00	22.49	C
[12948]	ATOM	6171	CG1	VAL C 247	16.262	-31.292	-51.170	1.00	21.18	C
[12949]	ATOM	6172	CG2	VAL C 247	15.125	-29.297	-49.972	1.00	20.40	C
[12950]	ATOM	6173	N	GLY C 248	14.690	-28.533	-53.055	1.00	24.43	N
[12951]	ATOM	6174	CA	GLY C 248	15.392	-27.822	-54.127	1.00	25.89	C
[12952]	ATOM	6175	C	GLY C 248	16.894	-27.845	-53.910	1.00	27.23	C
[12953]	ATOM	6176	O	GLY C 248	17.377	-27.657	-52.796	1.00	26.83	O
[12954]	ATOM	6177	N	ASP C 249	17.643	-28.103	-54.973	1.00	29.03	N
[12955]	ATOM	6178	CA	ASP C 249	19.088	-27.969	-54.910	1.00	31.07	C
[12956]	ATOM	6179	C	ASP C 249	19.439	-26.541	-54.471	1.00	31.62	C
[12957]	ATOM	6180	O	ASP C 249	18.927	-25.572	-55.041	1.00	31.72	O
[12958]	ATOM	6181	CB	ASP C 249	19.688	-28.263	-56.276	1.00	31.75	C
[12959]	ATOM	6182	CG	ASP C 249	21.192	-28.321	-56.254	1.00	33.69	C
[12960]	ATOM	6183	OD1	ASP C 249	21.787	-28.582	-55.170	1.00	35.47	O
[12961]	ATOM	6184	OD2	ASP C 249	21.774	-28.105	-57.347	1.00	37.41	O
[12962]	ATOM	6185	N	GLN C 250	20.258	-26.429	-53.422	1.00	32.24	N
[12963]	ATOM	6186	CA	GLN C 250	20.703	-25.136	-52.886	1.00	33.23	C
[12964]	ATOM	6187	C	GLN C 250	19.625	-24.284	-52.195	1.00	33.03	C
[12965]	ATOM	6188	O	GLN C 250	19.839	-23.090	-51.930	1.00	33.19	O
[12966]	ATOM	6189	CB	GLN C 250	21.462	-24.319	-53.959	1.00	33.96	C
[12967]	ATOM	6190	CG	GLN C 250	22.741	-24.992	-54.495	1.00	37.30	C
[12968]	ATOM	6191	CD	GLN C 250	23.628	-25.529	-53.379	1.00	41.21	C
[12969]	ATOM	6192	OE1	GLN C 250	23.548	-26.712	-53.008	1.00	43.51	O
[12970]	ATOM	6193	NE2	GLN C 250	24.459	-24.657	-52.819	1.00	43.11	N
[12971]	ATOM	6194	N	ALA C 251	18.488	-24.907	-51.875	1.00	32.65	N
[12972]	ATOM	6195	CA	ALA C 251	17.412	-24.244	-51.148	1.00	31.97	C
[12973]	ATOM	6196	C	ALA C 251	17.614	-24.355	-49.622	1.00	31.80	C
[12974]	ATOM	6197	O	ALA C 251	18.365	-25.220	-49.154	1.00	31.93	O
[12975]	ATOM	6198	CB	ALA C 251	16.072	-24.817	-51.578	1.00	32.35	C
[12976]	ATOM	6199	N	PRO C 252	16.954	-23.481	-48.836	1.00	31.45	N
[12977]	ATOM	6200	CA	PRO C 252	17.170	-23.431	-47.370	1.00	31.25	C
[12978]	ATOM	6201	C	PRO C 252	17.094	-24.780	-46.625	1.00	31.21	C
[12979]	ATOM	6202	O	PRO C 252	17.825	-24.974	-45.653	1.00	31.65	O
[12980]	ATOM	6203	CB	PRO C 252	16.057	-22.494	-46.884	1.00	31.22	C

[12981]	ATOM	6204	CG	PRO	C	252	15.757	-21.628	-48.037	1.00	31.34	C
[12982]	ATOM	6205	CD	PRO	C	252	15.982	-22.461	-49.278	1.00	31.38	C
[12983]	ATOM	6206	N	HIS	C	253	16.251	-25.713	-47.080	1.00	30.87	N
[12984]	ATOM	6207	CA	HIS	C	253	16.041	-26.964	-46.335	1.00	30.17	C
[12985]	ATOM	6208	C	HIS	C	253	16.812	-28.167	-46.851	1.00	29.99	C
[12986]	ATOM	6209	O	HIS	C	253	16.609	-29.278	-46.371	1.00	29.75	O
[12987]	ATOM	6210	CB	HIS	C	253	14.535	-27.269	-46.194	1.00	30.23	C
[12988]	ATOM	6211	CG	HIS	C	253	13.777	-26.159	-45.533	1.00	29.35	C
[12989]	ATOM	6212	ND1	HIS	C	253	13.838	-25.930	-44.173	1.00	29.27	N
[12990]	ATOM	6213	CD2	HIS	C	253	13.018	-25.162	-46.048	1.00	28.36	C
[12991]	ATOM	6214	CE1	HIS	C	253	13.121	-24.862	-43.877	1.00	27.28	C
[12992]	ATOM	6215	NE2	HIS	C	253	12.610	-24.380	-44.993	1.00	27.42	N
[12993]	ATOM	6216	N	GLU	C	254	17.722	-27.941	-47.793	1.00	30.08	N
[12994]	ATOM	6217	CA	GLU	C	254	18.429	-29.042	-48.452	1.00	30.50	C
[12995]	ATOM	6218	C	GLU	C	254	19.180	-29.949	-47.477	1.00	30.10	C
[12996]	ATOM	6219	O	GLU	C	254	18.996	-31.167	-47.507	1.00	29.72	O
[12997]	ATOM	6220	CB	GLU	C	254	19.363	-28.539	-49.548	1.00	30.84	C
[12998]	ATOM	6221	CG	GLU	C	254	20.049	-29.687	-50.308	1.00	32.77	C
[12999]	ATOM	6222	CD	GLU	C	254	21.305	-29.238	-51.017	1.00	35.72	C
[13000]	ATOM	6223	OE1	GLU	C	254	21.458	-28.021	-51.270	1.00	37.47	O
[13001]	ATOM	6224	OE2	GLU	C	254	22.145	-30.106	-51.322	1.00	37.24	O
[13002]	ATOM	6225	N	ASP	C	255	20.014	-29.361	-46.619	1.00	30.06	N
[13003]	ATOM	6226	CA	ASP	C	255	20.680	-30.117	-45.546	1.00	30.04	C
[13004]	ATOM	6227	C	ASP	C	255	19.702	-30.944	-44.695	1.00	29.24	C
[13005]	ATOM	6228	O	ASP	C	255	19.985	-32.107	-44.340	1.00	28.66	O
[13006]	ATOM	6229	CB	ASP	C	255	21.480	-29.180	-44.640	1.00	31.21	C
[13007]	ATOM	6230	CG	ASP	C	255	22.658	-28.519	-45.358	1.00	33.56	C
[13008]	ATOM	6231	OD1	ASP	C	255	22.950	-28.867	-46.525	1.00	36.58	O
[13009]	ATOM	6232	OD2	ASP	C	255	23.298	-27.642	-44.746	1.00	38.14	O
[13010]	ATOM	6233	N	ALA	C	256	18.564	-30.336	-44.360	1.00	28.01	N
[13011]	ATOM	6234	CA	ALA	C	256	17.570	-30.973	-43.486	1.00	27.11	C
[13012]	ATOM	6235	C	ALA	C	256	16.955	-32.202	-44.170	1.00	26.55	C
[13013]	ATOM	6236	O	ALA	C	256	16.822	-33.262	-43.563	1.00	25.98	O
[13014]	ATOM	6237	CB	ALA	C	256	16.505	-29.976	-43.098	1.00	27.02	C
[13015]	ATOM	6238	N	VAL	C	257	16.614	-32.068	-45.446	1.00	26.51	N
[13016]	ATOM	6239	CA	VAL	C	257	16.079	-33.206	-46.205	1.00	26.46	C



[13017]	ATOM	6240	C	VAL C 257	17.126	-34.317	-46.467	1.00	26.89	C
[13018]	ATOM	6241	O	VAL C 257	16.795	-35.504	-46.403	1.00	26.31	O
[13019]	ATOM	6242	CB	VAL C 257	15.383	-32.755	-47.518	1.00	26.26	C
[13020]	ATOM	6243	CG1	VAL C 257	14.728	-33.951	-48.212	1.00	24.92	C
[13021]	ATOM	6244	CG2	VAL C 257	14.348	-31.662	-47.218	1.00	25.48	C
[13022]	ATOM	6245	N	VAL C 258	18.367	-33.933	-46.773	1.00	27.52	N
[13023]	ATOM	6246	CA	VAL C 258	19.475	-34.893	-46.926	1.00	28.99	C
[13024]	ATOM	6247	C	VAL C 258	19.638	-35.734	-45.654	1.00	30.18	C
[13025]	ATOM	6248	O	VAL C 258	19.829	-36.954	-45.708	1.00	30.10	O
[13026]	ATOM	6249	CB	VAL C 258	20.835	-34.182	-47.211	1.00	28.55	C
[13027]	ATOM	6250	CG1	VAL C 258	21.979	-35.170	-47.160	1.00	29.14	C
[13028]	ATOM	6251	CG2	VAL C 258	20.821	-33.470	-48.555	1.00	28.75	C
[13029]	ATOM	6252	N	GLU C 259	19.578	-35.067	-44.511	1.00	31.22	N
[13030]	ATOM	6253	CA	GLU C 259	19.753	-35.731	-43.233	1.00	33.18	C
[13031]	ATOM	6254	C	GLU C 259	18.550	-36.622	-42.913	1.00	32.99	C
[13032]	ATOM	6255	O	GLU C 259	18.704	-37.711	-42.369	1.00	33.35	O
[13033]	ATOM	6256	CB	GLU C 259	19.996	-34.688	-42.132	1.00	34.00	C
[13034]	ATOM	6257	CG	GLU C 259	19.536	-35.110	-40.735	1.00	39.14	C
[13035]	ATOM	6258	CD	GLU C 259	20.552	-34.771	-39.657	1.00	45.59	C
[13036]	ATOM	6259	OE1	GLU C 259	20.863	-33.565	-39.469	1.00	47.91	O
[13037]	ATOM	6260	OE2	GLU C 259	21.037	-35.724	-38.997	1.00	48.27	O
[13038]	ATOM	6261	N	CYS C 260	17.359	-36.165	-43.278	1.00	32.36	N
[13039]	ATOM	6262	CA	CYS C 260	16.149	-36.951	-43.093	1.00	32.64	C
[13040]	ATOM	6263	C	CYS C 260	16.193	-38.219	-43.954	1.00	33.02	C
[13041]	ATOM	6264	O	CYS C 260	15.733	-39.276	-43.531	1.00	33.19	O
[13042]	ATOM	6265	CB	CYS C 260	14.912	-36.112	-43.413	1.00	32.20	C
[13043]	ATOM	6266	SG	CYS C 260	13.386	-36.903	-42.903	1.00	31.74	S
[13044]	ATOM	6267	N	ASN C 261	16.755	-38.106	-45.153	1.00	33.01	N
[13045]	ATOM	6268	CA	ASN C 261	16.935	-39.255	-46.024	1.00	33.78	C
[13046]	ATOM	6269	C	ASN C 261	17.819	-40.340	-45.381	1.00	34.75	C
[13047]	ATOM	6270	O	ASN C 261	17.591	-41.537	-45.571	1.00	34.88	O
[13048]	ATOM	6271	CB	ASN C 261	17.530	-38.802	-47.363	1.00	33.48	C
[13049]	ATOM	6272	CG	ASN C 261	17.629	-39.930	-48.364	1.00	33.20	C
[13050]	ATOM	6273	OD1	ASN C 261	16.661	-40.669	-48.595	1.00	32.77	O
[13051]	ATOM	6274	ND2	ASN C 261	18.806	-40.081	-48.960	1.00	31.69	N
[13052]	ATOM	6275	N	SER C 262	18.815	-39.909	-44.611	1.00	35.61	N

[13053]	ATOM	6276	CA	SER C 262	19.755	-40.819	-43.944	1.00	36.52	C
[13054]	ATOM	6277	C	SER C 262	19.140	-41.579	-42.766	1.00	37.02	C
[13055]	ATOM	6278	O	SER C 262	19.672	-42.614	-42.362	1.00	37.45	O
[13056]	ATOM	6279	CB	SER C 262	21.011	-40.050	-43.487	1.00	36.36	C
[13057]	ATOM	6280	OG	SER C 262	20.789	-39.357	-42.261	1.00	37.15	O
[13058]	ATOM	6281	N	LYS C 263	18.034	-41.064	-42.220	1.00	37.83	N
[13059]	ATOM	6282	CA	LYS C 263	17.369	-41.673	-41.057	1.00	38.56	C
[13060]	ATOM	6283	C	LYS C 263	16.178	-42.580	-41.406	1.00	38.60	C
[13061]	ATOM	6284	O	LYS C 263	15.624	-43.245	-40.521	1.00	38.90	O
[13062]	ATOM	6285	CB	LYS C 263	16.934	-40.600	-40.042	1.00	38.57	C
[13063]	ATOM	6286	CG	LYS C 263	18.072	-39.751	-39.483	1.00	40.49	C
[13064]	ATOM	6287	CD	LYS C 263	19.019	-40.549	-38.564	1.00	44.67	C
[13065]	ATOM	6288	CE	LYS C 263	20.438	-39.959	-38.544	1.00	46.50	C
[13066]	ATOM	6289	NZ	LYS C 263	20.442	-38.532	-38.106	1.00	48.57	N
[13067]	ATOM	6290	N	LEU C 264	15.789	-42.616	-42.681	1.00	38.19	N
[13068]	ATOM	6291	CA	LEU C 264	14.644	-43.431	-43.102	1.00	37.43	C
[13069]	ATOM	6292	C	LEU C 264	15.075	-44.696	-43.843	1.00	37.37	C
[13070]	ATOM	6293	O	LEU C 264	16.238	-44.835	-44.234	1.00	37.22	O
[13071]	ATOM	6294	CB	LEU C 264	13.666	-42.617	-43.950	1.00	36.92	C
[13072]	ATOM	6295	CG	LEU C 264	12.967	-41.414	-43.305	1.00	36.08	C
[13073]	ATOM	6296	CD1	LEU C 264	12.170	-40.690	-44.382	1.00	35.58	C
[13074]	ATOM	6297	CD2	LEU C 264	12.070	-41.815	-42.145	1.00	34.50	C
[13075]	ATOM	6298	N	ASP C 265	14.115	-45.606	-44.024	1.00	37.22	N
[13076]	ATOM	6299	CA	ASP C 265	14.344	-46.914	-44.642	1.00	36.99	C
[13077]	ATOM	6300	C	ASP C 265	14.581	-46.771	-46.149	1.00	36.42	C
[13078]	ATOM	6301	O	ASP C 265	13.657	-46.419	-46.894	1.00	36.09	O
[13079]	ATOM	6302	CB	ASP C 265	13.155	-47.847	-44.331	1.00	37.43	C
[13080]	ATOM	6303	CG	ASP C 265	13.252	-49.213	-45.025	1.00	38.68	C
[13081]	ATOM	6304	OD1	ASP C 265	14.346	-49.627	-45.473	1.00	38.94	O
[13082]	ATOM	6305	OD2	ASP C 265	12.200	-49.878	-45.123	1.00	41.89	O
[13083]	ATOM	6306	N	PRO C 266	15.827	-47.037	-46.600	1.00	35.79	N
[13084]	ATOM	6307	CA	PRO C 266	16.223	-46.896	-48.004	1.00	35.59	C
[13085]	ATOM	6308	C	PRO C 266	15.397	-47.729	-48.984	1.00	35.29	C
[13086]	ATOM	6309	O	PRO C 266	15.249	-47.334	-50.145	1.00	36.10	O
[13087]	ATOM	6310	CB	PRO C 266	17.689	-47.361	-48.011	1.00	35.50	C
[13088]	ATOM	6311	CG	PRO C 266	17.863	-48.115	-46.738	1.00	35.58	C

[13089]	ATOM	6312	CD	PRO	C	266	16.955	-47.477	-45.761	1.00	35.73	C
[13090]	ATOM	6313	N	THR	C	267	14.852	-48.855	-48.527	1.00	34.73	N
[13091]	ATOM	6314	CA	THR	C	267	14.064	-49.734	-49.405	1.00	34.10	C
[13092]	ATOM	6315	C	THR	C	267	12.682	-49.136	-49.748	1.00	33.85	C
[13093]	ATOM	6316	O	THR	C	267	12.039	-49.559	-50.716	1.00	33.53	O
[13094]	ATOM	6317	CB	THR	C	267	13.885	-51.162	-48.805	1.00	34.34	C
[13095]	ATOM	6318	OG1	THR	C	267	12.891	-51.136	-47.778	1.00	34.53	O
[13096]	ATOM	6319	CG2	THR	C	267	15.199	-51.701	-48.217	1.00	34.87	C
[13097]	ATOM	6320	N	GLN	C	268	12.251	-48.151	-48.953	1.00	32.89	N
[13098]	ATOM	6321	CA	GLN	C	268	10.926	-47.525	-49.077	1.00	32.90	C
[13099]	ATOM	6322	C	GLN	C	268	10.968	-46.002	-49.282	1.00	31.81	C
[13100]	ATOM	6323	O	GLN	C	268	9.926	-45.357	-49.340	1.00	30.98	O
[13101]	ATOM	6324	CB	GLN	C	268	10.096	-47.794	-47.809	1.00	33.65	C
[13102]	ATOM	6325	CG	GLN	C	268	9.503	-49.165	-47.707	1.00	35.48	C
[13103]	ATOM	6326	CD	GLN	C	268	8.336	-49.216	-46.750	1.00	39.81	C
[13104]	ATOM	6327	OE1	GLN	C	268	8.508	-49.230	-45.519	1.00	38.90	O
[13105]	ATOM	6328	NE2	GLN	C	268	7.129	-49.269	-47.310	1.00	41.21	N
[13106]	ATOM	6329	N	THR	C	269	12.166	-45.434	-49.361	1.00	30.70	N
[13107]	ATOM	6330	CA	THR	C	269	12.319	-43.984	-49.383	1.00	30.09	C
[13108]	ATOM	6331	C	THR	C	269	12.979	-43.605	-50.687	1.00	30.40	C
[13109]	ATOM	6332	O	THR	C	269	13.967	-44.212	-51.082	1.00	29.64	O
[13110]	ATOM	6333	CB	THR	C	269	13.141	-43.479	-48.176	1.00	30.15	C
[13111]	ATOM	6334	OG1	THR	C	269	12.513	-43.932	-46.974	1.00	28.65	O
[13112]	ATOM	6335	CG2	THR	C	269	13.231	-41.947	-48.138	1.00	29.12	C
[13113]	ATOM	6336	N	SER	C	270	12.407	-42.628	-51.383	1.00	30.10	N
[13114]	ATOM	6337	CA	SER	C	270	13.145	-42.025	-52.479	1.00	30.39	C
[13115]	ATOM	6338	C	SER	C	270	13.379	-40.560	-52.167	1.00	30.07	C
[13116]	ATOM	6339	O	SER	C	270	12.710	-39.993	-51.306	1.00	29.34	O
[13117]	ATOM	6340	CB	SER	C	270	12.468	-42.248	-53.835	1.00	30.59	C
[13118]	ATOM	6341	OG	SER	C	270	11.157	-41.741	-53.843	1.00	33.12	O
[13119]	ATOM	6342	N	PHE	C	271	14.355	-39.968	-52.847	1.00	29.81	N
[13120]	ATOM	6343	CA	PHE	C	271	14.774	-38.614	-52.552	1.00	30.28	C
[13121]	ATOM	6344	C	PHE	C	271	15.001	-37.878	-53.854	1.00	30.65	C
[13122]	ATOM	6345	O	PHE	C	271	15.899	-38.221	-54.627	1.00	30.89	O
[13123]	ATOM	6346	CB	PHE	C	271	16.021	-38.639	-51.657	1.00	30.25	C
[13124]	ATOM	6347	CG	PHE	C	271	16.660	-37.297	-51.438	1.00	30.25	C

[13125]	ATOM	6348	CD1	PHE	C	271	15.903	-36.173	-51.137	1.00	31.40	C
[13126]	ATOM	6349	CD2	PHE	C	271	18.035	-37.168	-51.498	1.00	32.21	C
[13127]	ATOM	6350	CE1	PHE	C	271	16.505	-34.942	-50.939	1.00	29.60	C
[13128]	ATOM	6351	CE2	PHE	C	271	18.644	-35.941	-51.290	1.00	32.95	C
[13129]	ATOM	6352	CZ	PHE	C	271	17.867	-34.826	-51.002	1.00	30.88	C
[13130]	ATOM	6353	N	LEU	C	272	14.151	-36.886	-54.097	1.00	31.10	N
[13131]	ATOM	6354	CA	LEU	C	272	14.216	-36.061	-55.291	1.00	31.79	C
[13132]	ATOM	6355	C	LEU	C	272	14.765	-34.673	-54.929	1.00	31.77	C
[13133]	ATOM	6356	O	LEU	C	272	14.061	-33.851	-54.350	1.00	31.43	O
[13134]	ATOM	6357	CB	LEU	C	272	12.812	-35.959	-55.888	1.00	32.39	C
[13135]	ATOM	6358	CG	LEU	C	272	12.481	-35.478	-57.308	1.00	33.21	C
[13136]	ATOM	6359	CD1	LEU	C	272	12.645	-36.589	-58.290	1.00	33.20	C
[13137]	ATOM	6360	CD2	LEU	C	272	11.034	-35.036	-57.351	1.00	32.11	C
[13138]	ATOM	6361	N	LYS	C	273	16.043	-34.440	-55.217	1.00	32.03	N
[13139]	ATOM	6362	CA	LYS	C	273	16.631	-33.118	-55.090	1.00	32.66	C
[13140]	ATOM	6363	C	LYS	C	273	16.499	-32.454	-56.451	1.00	32.97	C
[13141]	ATOM	6364	O	LYS	C	273	17.102	-32.892	-57.431	1.00	33.24	O
[13142]	ATOM	6365	CB	LYS	C	273	18.101	-33.218	-54.675	1.00	32.55	C
[13143]	ATOM	6366	CG	LYS	C	273	18.788	-31.863	-54.431	1.00	33.31	C
[13144]	ATOM	6367	CD	LYS	C	273	20.309	-31.998	-54.207	1.00	34.40	C
[13145]	ATOM	6368	CE	LYS	C	273	20.633	-32.709	-52.896	1.00	39.01	C
[13146]	ATOM	6369	NZ	LYS	C	273	22.054	-33.179	-52.813	1.00	40.35	N
[13147]	ATOM	6370	N	MET	C	274	15.702	-31.403	-56.527	1.00	33.72	N
[13148]	ATOM	6371	CA	MET	C	274	15.357	-30.842	-57.827	1.00	34.81	C
[13149]	ATOM	6372	C	MET	C	274	16.246	-29.672	-58.227	1.00	34.58	C
[13150]	ATOM	6373	O	MET	C	274	16.369	-28.686	-57.498	1.00	34.42	O
[13151]	ATOM	6374	CB	MET	C	274	13.873	-30.480	-57.867	1.00	34.71	C
[13152]	ATOM	6375	CG	MET	C	274	12.969	-31.692	-57.706	1.00	34.80	C
[13153]	ATOM	6376	SD	MET	C	274	11.203	-31.310	-57.735	1.00	37.22	S
[13154]	ATOM	6377	CE	MET	C	274	11.011	-30.885	-59.453	1.00	36.32	C
[13155]	ATOM	6378	N	ALA	C	275	16.878	-29.800	-59.387	1.00	34.80	N
[13156]	ATOM	6379	CA	ALA	C	275	17.728	-28.745	-59.928	1.00	35.11	C
[13157]	ATOM	6380	C	ALA	C	275	16.882	-27.589	-60.448	1.00	35.15	C
[13158]	ATOM	6381	O	ALA	C	275	15.879	-27.811	-61.125	1.00	35.46	O
[13159]	ATOM	6382	CB	ALA	C	275	18.620	-29.300	-61.038	1.00	34.81	C
[13160]	ATOM	6383	N	ASP	C	276	17.282	-26.364	-60.102	1.00	35.39	N

[13161]	ATOM	6384	CA	ASP	C	276	16.661	-25.134	-60.609	1.00	35.63	C
[13162]	ATOM	6385	C	ASP	C	276	15.185	-24.986	-60.232	1.00	35.40	C
[13163]	ATOM	6386	O	ASP	C	276	14.393	-24.442	-61.010	1.00	35.34	O
[13164]	ATOM	6387	CB	ASP	C	276	16.810	-25.031	-62.137	1.00	36.61	C
[13165]	ATOM	6388	CG	ASP	C	276	18.270	-25.035	-62.605	1.00	38.44	C
[13166]	ATOM	6389	OD1	ASP	C	276	19.102	-24.273	-62.055	1.00	40.37	O
[13167]	ATOM	6390	OD2	ASP	C	276	18.580	-25.788	-63.557	1.00	42.08	O
[13168]	ATOM	6391	N	SER	C	277	14.815	-25.487	-59.057	1.00	34.69	N
[13169]	ATOM	6392	CA	SER	C	277	13.441	-25.400	-58.585	1.00	34.39	C
[13170]	ATOM	6393	C	SER	C	277	13.318	-24.417	-57.434	1.00	34.41	C
[13171]	ATOM	6394	O	SER	C	277	12.241	-23.860	-57.208	1.00	35.16	O
[13172]	ATOM	6395	CB	SER	C	277	12.929	-26.770	-58.145	1.00	34.06	C
[13173]	ATOM	6396	OG	SER	C	277	13.600	-27.204	-56.987	1.00	33.33	O
[13174]	ATOM	6397	N	GLY	C	278	14.410	-24.229	-56.695	1.00	33.95	N
[13175]	ATOM	6398	CA	GLY	C	278	14.443	-23.301	-55.556	1.00	33.10	C
[13176]	ATOM	6399	C	GLY	C	278	13.729	-23.744	-54.286	1.00	32.33	C
[13177]	ATOM	6400	O	GLY	C	278	13.609	-24.931	-54.001	1.00	33.12	O
[13178]	ATOM	6401	N	GLY	C	279	13.255	-22.776	-53.515	1.00	31.21	N
[13179]	ATOM	6402	CA	GLY	C	279	12.624	-23.057	-52.239	1.00	30.28	C
[13180]	ATOM	6403	C	GLY	C	279	11.278	-23.762	-52.294	1.00	29.76	C
[13181]	ATOM	6404	O	GLY	C	279	10.939	-24.522	-51.380	1.00	30.50	O
[13182]	ATOM	6405	N	GLN	C	280	10.489	-23.500	-53.336	1.00	28.34	N
[13183]	ATOM	6406	CA	GLN	C	280	9.138	-24.072	-53.427	1.00	26.97	C
[13184]	ATOM	6407	C	GLN	C	280	8.984	-24.849	-54.736	1.00	26.53	C
[13185]	ATOM	6408	O	GLN	C	280	8.415	-24.323	-55.705	1.00	26.29	O
[13186]	ATOM	6409	CB	GLN	C	280	8.067	-22.973	-53.338	1.00	26.86	C
[13187]	ATOM	6410	CG	GLN	C	280	8.003	-22.203	-52.030	1.00	25.14	C
[13188]	ATOM	6411	CD	GLN	C	280	7.600	-23.069	-50.850	1.00	26.21	C
[13189]	ATOM	6412	OE1	GLN	C	280	8.388	-23.263	-49.926	1.00	28.49	O
[13190]	ATOM	6413	NE2	GLN	C	280	6.381	-23.618	-50.885	1.00	23.47	N
[13191]	ATOM	6414	N	PRO	C	281	9.512	-26.097	-54.784	1.00	26.30	N
[13192]	ATOM	6415	CA	PRO	C	281	9.510	-26.851	-56.050	1.00	25.85	C
[13193]	ATOM	6416	C	PRO	C	281	8.116	-27.119	-56.631	1.00	26.72	C
[13194]	ATOM	6417	O	PRO	C	281	7.961	-27.213	-57.864	1.00	26.84	O
[13195]	ATOM	6418	CB	PRO	C	281	10.246	-28.154	-55.709	1.00	26.05	C
[13196]	ATOM	6419	CG	PRO	C	281	10.321	-28.221	-54.228	1.00	25.86	C

[13197]	ATOM	6420	CD	PRO	C	281	10.166	-26.836	-53.683	1.00	25.39	C
[13198]	ATOM	6421	N	GLN	C	282	7.108	-27.229	-55.763	1.00	27.21	N
[13199]	ATOM	6422	CA	GLN	C	282	5.740	-27.460	-56.201	1.00	27.45	C
[13200]	ATOM	6423	C	GLN	C	282	5.114	-26.242	-56.884	1.00	28.03	C
[13201]	ATOM	6424	O	GLN	C	282	4.064	-26.365	-57.503	1.00	27.51	O
[13202]	ATOM	6425	CB	GLN	C	282	4.878	-27.919	-55.024	1.00	27.52	C
[13203]	ATOM	6426	CG	GLN	C	282	4.283	-26.789	-54.193	1.00	27.73	C
[13204]	ATOM	6427	CD	GLN	C	282	5.261	-26.121	-53.218	1.00	27.12	C
[13205]	ATOM	6428	OE1	GLN	C	282	4.863	-25.255	-52.443	1.00	28.65	O
[13206]	ATOM	6429	NE2	GLN	C	282	6.510	-26.525	-53.237	1.00	24.69	N
[13207]	ATOM	6430	N	LEU	C	283	5.750	-25.069	-56.748	1.00	28.68	N
[13208]	ATOM	6431	CA	LEU	C	283	5.331	-23.858	-57.468	1.00	28.63	C
[13209]	ATOM	6432	C	LEU	C	283	6.108	-23.642	-58.767	1.00	28.93	C
[13210]	ATOM	6433	O	LEU	C	283	5.538	-23.213	-59.778	1.00	28.91	O
[13211]	ATOM	6434	CB	LEU	C	283	5.467	-22.609	-56.582	1.00	28.73	C
[13212]	ATOM	6435	CG	LEU	C	283	4.568	-22.518	-55.352	1.00	28.60	C
[13213]	ATOM	6436	CD1	LEU	C	283	4.983	-21.336	-54.502	1.00	30.06	C
[13214]	ATOM	6437	CD2	LEU	C	283	3.101	-22.414	-55.753	1.00	29.83	C
[13215]	ATOM	6438	N	THR	C	284	7.407	-23.931	-58.744	1.00	28.44	N
[13216]	ATOM	6439	CA	THR	C	284	8.254	-23.636	-59.893	1.00	28.48	C
[13217]	ATOM	6440	C	THR	C	284	8.333	-24.794	-60.883	1.00	28.73	C
[13218]	ATOM	6441	O	THR	C	284	8.534	-24.590	-62.094	1.00	28.56	O
[13219]	ATOM	6442	CB	THR	C	284	9.672	-23.242	-59.455	1.00	28.60	C
[13220]	ATOM	6443	OG1	THR	C	284	10.200	-24.285	-58.629	1.00	30.35	O
[13221]	ATOM	6444	CG2	THR	C	284	9.647	-21.929	-58.659	1.00	27.88	C
[13222]	ATOM	6445	N	GLN	C	285	8.150	-26.014	-60.382	1.00	29.18	N
[13223]	ATOM	6446	CA	GLN	C	285	8.301	-27.202	-61.221	1.00	29.54	C
[13224]	ATOM	6447	C	GLN	C	285	7.173	-28.205	-61.049	1.00	29.37	C
[13225]	ATOM	6448	O	GLN	C	285	7.425	-29.364	-60.711	1.00	28.73	O
[13226]	ATOM	6449	CB	GLN	C	285	9.649	-27.846	-60.930	1.00	29.71	C
[13227]	ATOM	6450	CG	GLN	C	285	10.765	-26.860	-61.156	1.00	32.90	C
[13228]	ATOM	6451	CD	GLN	C	285	12.046	-27.498	-61.492	1.00	37.03	C
[13229]	ATOM	6452	OE1	GLN	C	285	12.530	-28.363	-60.758	1.00	39.73	O
[13230]	ATOM	6453	NE2	GLN	C	285	12.643	-27.067	-62.596	1.00	36.16	N
[13231]	ATOM	6454	N	PRO	C	286	5.918	-27.760	-61.279	1.00	29.38	N
[13232]	ATOM	6455	CA	PRO	C	286	4.772	-28.656	-61.188	1.00	28.87	C

[13233]	ATOM	6456	C	PRO	C	286	4.879	-29.851	-62.128	1.00	28.91	C
[13234]	ATOM	6457	O	PRO	C	286	4.490	-30.942	-61.741	1.00	29.62	O
[13235]	ATOM	6458	CB	PRO	C	286	3.595	-27.776	-61.608	1.00	29.09	C
[13236]	ATOM	6459	CG	PRO	C	286	4.222	-26.603	-62.334	1.00	29.06	C
[13237]	ATOM	6460	CD	PRO	C	286	5.509	-26.385	-61.625	1.00	29.41	C
[13238]	ATOM	6461	N	GLY	C	287	5.397	-29.648	-63.336	1.00	28.15	N
[13239]	ATOM	6462	CA	GLY	C	287	5.541	-30.724	-64.319	1.00	27.43	C
[13240]	ATOM	6463	C	GLY	C	287	6.407	-31.896	-63.878	1.00	26.96	C
[13241]	ATOM	6464	O	GLY	C	287	5.998	-33.055	-63.984	1.00	26.71	O
[13242]	ATOM	6465	N	LYS	C	288	7.608	-31.597	-63.396	1.00	26.84	N
[13243]	ATOM	6466	CA	LYS	C	288	8.520	-32.628	-62.925	1.00	26.54	C
[13244]	ATOM	6467	C	LYS	C	288	8.040	-33.236	-61.587	1.00	25.70	C
[13245]	ATOM	6468	O	LYS	C	288	8.122	-34.460	-61.394	1.00	25.18	O
[13246]	ATOM	6469	CB	LYS	C	288	9.957	-32.089	-62.834	1.00	27.23	C
[13247]	ATOM	6470	CG	LYS	C	288	11.001	-33.185	-62.594	1.00	29.97	C
[13248]	ATOM	6471	CD	LYS	C	288	12.312	-32.663	-62.058	1.00	33.09	C
[13249]	ATOM	6472	CE	LYS	C	288	13.413	-32.752	-63.092	1.00	35.72	C
[13250]	ATOM	6473	NZ	LYS	C	288	14.698	-32.289	-62.494	1.00	37.76	N
[13251]	ATOM	6474	N	LEU	C	289	7.503	-32.403	-60.692	1.00	24.58	N
[13252]	ATOM	6475	CA	LEU	C	289	6.916	-32.905	-59.446	1.00	24.16	C
[13253]	ATOM	6476	C	LEU	C	289	5.725	-33.839	-59.702	1.00	24.19	C
[13254]	ATOM	6477	O	LEU	C	289	5.604	-34.875	-59.060	1.00	24.73	O
[13255]	ATOM	6478	CB	LEU	C	289	6.501	-31.762	-58.533	1.00	23.78	C
[13256]	ATOM	6479	CG	LEU	C	289	6.111	-32.235	-57.134	1.00	25.44	C
[13257]	ATOM	6480	CD1	LEU	C	289	7.302	-32.860	-56.395	1.00	26.09	C
[13258]	ATOM	6481	CD2	LEU	C	289	5.565	-31.094	-56.350	1.00	27.87	C
[13259]	ATOM	6482	N	THR	C	290	4.855	-33.480	-60.647	1.00	24.25	N
[13260]	ATOM	6483	CA	THR	C	290	3.743	-34.353	-61.069	1.00	24.10	C
[13261]	ATOM	6484	C	THR	C	290	4.246	-35.694	-61.628	1.00	24.30	C
[13262]	ATOM	6485	O	THR	C	290	3.717	-36.766	-61.298	1.00	23.45	O
[13263]	ATOM	6486	CB	THR	C	290	2.873	-33.663	-62.140	1.00	24.51	C
[13264]	ATOM	6487	OG1	THR	C	290	2.250	-32.501	-61.574	1.00	24.37	O
[13265]	ATOM	6488	CG2	THR	C	290	1.781	-34.619	-62.681	1.00	24.32	C
[13266]	ATOM	6489	N	GLU	C	291	5.275	-35.631	-62.467	1.00	24.37	N
[13267]	ATOM	6490	CA	GLU	C	291	5.859	-36.852	-63.013	1.00	24.18	C
[13268]	ATOM	6491	C	GLU	C	291	6.414	-37.729	-61.880	1.00	23.54	C

[13269]	ATOM	6492	O	GLU	C	291	6.187	-38.934	-61.865	1.00	23.93	O
[13270]	ATOM	6493	CB	GLU	C	291	6.939	-36.537	-64.040	1.00	23.99	C
[13271]	ATOM	6494	CG	GLU	C	291	7.335	-37.765	-64.800	1.00	25.55	C
[13272]	ATOM	6495	CD	GLU	C	291	8.359	-37.502	-65.890	1.00	28.41	C
[13273]	ATOM	6496	OE1	GLU	C	291	8.466	-36.346	-66.368	1.00	28.92	O
[13274]	ATOM	6497	OE2	GLU	C	291	9.055	-38.476	-66.268	1.00	29.22	O
[13275]	ATOM	6498	N	ALA	C	292	7.126	-37.129	-60.935	1.00	22.86	N
[13276]	ATOM	6499	CA	ALA	C	292	7.576	-37.863	-59.742	1.00	22.24	C
[13277]	ATOM	6500	C	ALA	C	292	6.423	-38.505	-58.928	1.00	22.45	C
[13278]	ATOM	6501	O	ALA	C	292	6.525	-39.647	-58.436	1.00	21.42	O
[13279]	ATOM	6502	CB	ALA	C	292	8.376	-36.960	-58.877	1.00	22.70	C
[13280]	ATOM	6503	N	PHE	C	293	5.337	-37.756	-58.750	1.00	22.09	N
[13281]	ATOM	6504	CA	PHE	C	293	4.178	-38.286	-58.047	1.00	22.35	C
[13282]	ATOM	6505	C	PHE	C	293	3.582	-39.517	-58.727	1.00	21.75	C
[13283]	ATOM	6506	O	PHE	C	293	3.203	-40.496	-58.064	1.00	21.13	O
[13284]	ATOM	6507	CB	PHE	C	293	3.098	-37.220	-57.887	1.00	22.38	C
[13285]	ATOM	6508	CG	PHE	C	293	2.024	-37.602	-56.925	1.00	24.29	C
[13286]	ATOM	6509	CD1	PHE	C	293	2.322	-37.832	-55.588	1.00	25.67	C
[13287]	ATOM	6510	CD2	PHE	C	293	0.716	-37.719	-57.352	1.00	24.70	C
[13288]	ATOM	6511	CE1	PHE	C	293	1.321	-38.178	-54.685	1.00	26.07	C
[13289]	ATOM	6512	CE2	PHE	C	293	-0.293	-38.069	-56.471	1.00	26.90	C
[13290]	ATOM	6513	CZ	PHE	C	293	0.013	-38.293	-55.116	1.00	24.48	C
[13291]	ATOM	6514	N	LYS	C	294	3.487	-39.462	-60.050	1.00	21.49	N
[13292]	ATOM	6515	CA	LYS	C	294	3.030	-40.622	-60.803	1.00	21.83	C
[13293]	ATOM	6516	C	LYS	C	294	3.845	-41.886	-60.462	1.00	21.30	C
[13294]	ATOM	6517	O	LYS	C	294	3.268	-42.940	-60.184	1.00	21.05	O
[13295]	ATOM	6518	CB	LYS	C	294	3.060	-40.324	-62.291	1.00	21.68	C
[13296]	ATOM	6519	CG	LYS	C	294	3.052	-41.570	-63.121	1.00	22.84	C
[13297]	ATOM	6520	CD	LYS	C	294	2.575	-41.311	-64.510	1.00	28.41	C
[13298]	ATOM	6521	CE	LYS	C	294	3.640	-40.672	-65.334	1.00	29.27	C
[13299]	ATOM	6522	NZ	LYS	C	294	3.547	-41.249	-66.692	1.00	30.47	N
[13300]	ATOM	6523	N	TYR	C	295	5.176	-41.779	-60.472	1.00	21.26	N
[13301]	ATOM	6524	CA	TYR	C	295	6.022	-42.930	-60.167	1.00	21.38	C
[13302]	ATOM	6525	C	TYR	C	295	5.948	-43.287	-58.691	1.00	21.92	C
[13303]	ATOM	6526	O	TYR	C	295	6.121	-44.441	-58.335	1.00	21.33	O
[13304]	ATOM	6527	CB	TYR	C	295	7.475	-42.707	-60.582	1.00	21.68	C



[13305]	ATOM	6528	CG	TYR	C	295	7.652	-42.277	-62.014	1.00	21.58	C
[13306]	ATOM	6529	CD1	TYR	C	295	6.930	-42.887	-63.048	1.00	22.29	C
[13307]	ATOM	6530	CD2	TYR	C	295	8.547	-41.281	-62.335	1.00	21.60	C
[13308]	ATOM	6531	CE1	TYR	C	295	7.096	-42.491	-64.360	1.00	24.47	C
[13309]	ATOM	6532	CE2	TYR	C	295	8.732	-40.877	-63.636	1.00	23.31	C
[13310]	ATOM	6533	CZ	TYR	C	295	8.005	-41.476	-64.643	1.00	23.13	C
[13311]	ATOM	6534	OH	TYR	C	295	8.195	-41.061	-65.931	1.00	25.09	O
[13312]	ATOM	6535	N	PHE	C	296	5.686	-42.300	-57.834	1.00	22.52	N
[13313]	ATOM	6536	CA	PHE	C	296	5.528	-42.573	-56.421	1.00	22.72	C
[13314]	ATOM	6537	C	PHE	C	296	4.303	-43.466	-56.177	1.00	23.20	C
[13315]	ATOM	6538	O	PHE	C	296	4.410	-44.451	-55.468	1.00	23.12	O
[13316]	ATOM	6539	CB	PHE	C	296	5.442	-41.272	-55.618	1.00	22.93	C
[13317]	ATOM	6540	CG	PHE	C	296	5.265	-41.492	-54.143	1.00	22.65	C
[13318]	ATOM	6541	CD1	PHE	C	296	6.245	-42.139	-53.397	1.00	23.25	C
[13319]	ATOM	6542	CD2	PHE	C	296	4.111	-41.062	-53.499	1.00	22.90	C
[13320]	ATOM	6543	CE1	PHE	C	296	6.079	-42.354	-52.019	1.00	23.91	C
[13321]	ATOM	6544	CE2	PHE	C	296	3.932	-41.285	-52.123	1.00	24.57	C
[13322]	ATOM	6545	CZ	PHE	C	296	4.918	-41.927	-51.383	1.00	23.13	C
[13323]	ATOM	6546	N	LEU	C	297	3.169	-43.123	-56.796	1.00	23.63	N
[13324]	ATOM	6547	CA	LEU	C	297	1.936	-43.922	-56.780	1.00	24.02	C
[13325]	ATOM	6548	C	LEU	C	297	2.186	-45.332	-57.273	1.00	24.10	C
[13326]	ATOM	6549	O	LEU	C	297	1.726	-46.285	-56.659	1.00	24.46	O
[13327]	ATOM	6550	CB	LEU	C	297	0.832	-43.265	-57.645	1.00	23.98	C
[13328]	ATOM	6551	CG	LEU	C	297	0.253	-41.917	-57.169	1.00	25.86	C
[13329]	ATOM	6552	CD1	LEU	C	297	-0.753	-41.297	-58.175	1.00	25.89	C
[13330]	ATOM	6553	CD2	LEU	C	297	-0.386	-42.090	-55.796	1.00	27.33	C
[13331]	ATOM	6554	N	GLN	C	298	2.937	-45.465	-58.371	1.00	24.22	N
[13332]	ATOM	6555	CA	GLN	C	298	3.344	-46.786	-58.875	1.00	24.12	C
[13333]	ATOM	6556	C	GLN	C	298	4.150	-47.598	-57.838	1.00	24.35	C
[13334]	ATOM	6557	O	GLN	C	298	3.911	-48.784	-57.655	1.00	23.36	O
[13335]	ATOM	6558	CB	GLN	C	298	4.118	-46.657	-60.187	1.00	23.82	C
[13336]	ATOM	6559	CG	GLN	C	298	3.258	-46.117	-61.322	1.00	22.66	C
[13337]	ATOM	6560	CD	GLN	C	298	4.013	-45.903	-62.624	1.00	24.30	C
[13338]	ATOM	6561	OE1	GLN	C	298	3.482	-45.300	-63.569	1.00	25.01	O
[13339]	ATOM	6562	NE2	GLN	C	298	5.249	-46.395	-62.687	1.00	21.24	N
[13340]	ATOM	6563	N	GLY	C	299	5.084	-46.946	-57.151	1.00	25.12	N

[13341]	ATOM	6564	CA	GLY C 299	5.887	-47.605	-56.122	1.00	25.70	C
[13342]	ATOM	6565	C	GLY C 299	5.017	-48.006	-54.948	1.00	26.27	C
[13343]	ATOM	6566	O	GLY C 299	5.329	-48.957	-54.235	1.00	26.70	O
[13344]	ATOM	6567	N	MET C 300	3.900	-47.305	-54.776	1.00	26.33	N
[13345]	ATOM	6568	CA	MET C 300	2.926	-47.644	-53.750	1.00	27.29	C
[13346]	ATOM	6569	C	MET C 300	1.986	-48.789	-54.129	1.00	26.69	C
[13347]	ATOM	6570	O	MET C 300	1.188	-49.236	-53.302	1.00	27.83	O
[13348]	ATOM	6571	CB	MET C 300	2.099	-46.416	-53.423	1.00	27.37	C
[13349]	ATOM	6572	CG	MET C 300	2.718	-45.512	-52.385	1.00	28.86	C
[13350]	ATOM	6573	SD	MET C 300	1.550	-44.223	-51.946	1.00	30.71	S
[13351]	ATOM	6574	CE	MET C 300	0.087	-45.167	-51.605	1.00	32.77	C
[13352]	ATOM	6575	N	GLY C 301	2.055	-49.260	-55.372	1.00	25.58	N
[13353]	ATOM	6576	CA	GLY C 301	1.196	-50.348	-55.807	1.00	24.60	C
[13354]	ATOM	6577	C	GLY C 301	0.030	-49.970	-56.701	1.00	24.04	C
[13355]	ATOM	6578	O	GLY C 301	-0.735	-50.856	-57.108	1.00	23.55	O
[13356]	ATOM	6579	N	TYR C 302	-0.097	-48.679	-57.019	1.00	23.42	N
[13357]	ATOM	6580	CA	TYR C 302	-1.229	-48.168	-57.811	1.00	23.94	C
[13358]	ATOM	6581	C	TYR C 302	-0.832	-47.785	-59.243	1.00	24.45	C
[13359]	ATOM	6582	O	TYR C 302	0.056	-46.978	-59.437	1.00	24.55	O
[13360]	ATOM	6583	CB	TYR C 302	-1.892	-46.952	-57.112	1.00	23.64	C
[13361]	ATOM	6584	CG	TYR C 302	-2.521	-47.288	-55.782	1.00	22.57	C
[13362]	ATOM	6585	CD1	TYR C 302	-3.623	-48.149	-55.700	1.00	21.12	C
[13363]	ATOM	6586	CD2	TYR C 302	-1.994	-46.778	-54.600	1.00	22.30	C
[13364]	ATOM	6587	CE1	TYR C 302	-4.179	-48.478	-54.477	1.00	22.81	C
[13365]	ATOM	6588	CE2	TYR C 302	-2.550	-47.093	-53.372	1.00	23.26	C
[13366]	ATOM	6589	CZ	TYR C 302	-3.640	-47.938	-53.318	1.00	22.50	C
[13367]	ATOM	6590	OH	TYR C 302	-4.184	-48.253	-52.093	1.00	24.60	O
[13368]	ATOM	6591	N	MET C 303	-1.524	-48.344	-60.239	1.00	25.07	N
[13369]	ATOM	6592	CA	MET C 303	-1.354	-47.927	-61.624	1.00	25.09	C
[13370]	ATOM	6593	C	MET C 303	-1.590	-46.430	-61.702	1.00	25.54	C
[13371]	ATOM	6594	O	MET C 303	-2.584	-45.933	-61.162	1.00	25.87	O
[13372]	ATOM	6595	CB	MET C 303	-2.370	-48.622	-62.523	1.00	25.07	C
[13373]	ATOM	6596	CG	MET C 303	-2.214	-50.119	-62.676	1.00	26.61	C
[13374]	ATOM	6597	SD	MET C 303	-0.672	-50.619	-63.449	1.00	31.59	S
[13375]	ATOM	6598	CE	MET C 303	-1.111	-50.679	-65.173	1.00	30.69	C
[13376]	ATOM	6599	N	ALA C 304	-0.681	-45.697	-62.343	1.00	26.09	N

[13377]	ATOM	6600	CA	ALA C 304	-0.876	-44.250	-62.556	1.00	25.99	C
[13378]	ATOM	6601	C	ALA C 304	-0.305	-43.822	-63.894	1.00	26.35	C
[13379]	ATOM	6602	O	ALA C 304	-0.801	-42.863	-64.486	1.00	26.31	O
[13380]	ATOM	6603	CB	ALA C 304	-0.251	-43.439	-61.445	1.00	25.89	C
[13381]	ATOM	6604	OXT	ALA C 304	0.672	-44.411	-64.378	1.00	26.35	O
[13382]	TER	6605		ALA C 304						
[13383]	HETATM	6606	CA	CA A1305	6.242	-6.317	-11.682	1.00	26.23	CA
[13384]	HETATM	6607	C	ACT A1306	0.182	-25.382	-11.878	1.00	20.33	C
[13385]	HETATM	6608	O	ACT A1306	0.357	-26.616	-11.673	1.00	22.74	O
[13386]	HETATM	6609	OXT	ACT A1306	-0.988	-24.962	-11.995	1.00	21.16	O
[13387]	HETATM	6610	CH3	ACT A1306	1.313	-24.461	-11.996	1.00	16.98	C
[13388]	HETATM	6611	C1	GOL A1307	9.783	-40.534	-10.629	1.00	30.55	C
[13389]	HETATM	6612	O1	GOL A1307	10.141	-39.827	-9.468	1.00	31.17	O
[13390]	HETATM	6613	C2	GOL A1307	10.990	-40.576	-11.544	1.00	30.09	C
[13391]	HETATM	6614	O2	GOL A1307	11.091	-41.851	-12.151	1.00	28.14	O
[13392]	HETATM	6615	C3	GOL A1307	10.769	-39.524	-12.621	1.00	30.72	C
[13393]	HETATM	6616	O3	GOL A1307	12.002	-39.050	-13.117	1.00	33.22	O
[13394]	HETATM	6617	C	ACT B1305	33.199	-1.363	-18.762	1.00	20.56	C
[13395]	HETATM	6618	O	ACT B1305	33.312	-0.149	-19.074	1.00	22.01	O
[13396]	HETATM	6619	OXT	ACT B1305	32.609	-1.647	-17.694	1.00	21.40	O
[13397]	HETATM	6620	CH3	ACT B1305	33.754	-2.422	-19.625	1.00	18.40	C
[13398]	HETATM	6621	C1	GOL B1306	39.828	11.419	-29.165	1.00	26.82	C
[13399]	HETATM	6622	O1	GOL B1306	41.223	11.502	-29.334	1.00	24.99	O
[13400]	HETATM	6623	C2	GOL B1306	39.179	12.693	-29.658	1.00	28.27	C
[13401]	HETATM	6624	O2	GOL B1306	39.873	13.802	-29.127	1.00	28.20	O
[13402]	HETATM	6625	C3	GOL B1306	37.724	12.739	-29.222	1.00	31.58	C
[13403]	HETATM	6626	O3	GOL B1306	36.999	11.785	-29.962	1.00	35.14	O
[13404]	HETATM	6627	C	ACT C1305	-7.983	-30.713	-56.798	1.00	29.23	C
[13405]	HETATM	6628	O	ACT C1305	-8.591	-30.983	-57.851	1.00	30.21	O
[13406]	HETATM	6629	OXT	ACT C1305	-7.631	-29.517	-56.637	1.00	30.06	O
[13407]	HETATM	6630	CH3	ACT C1305	-7.700	-31.759	-55.792	1.00	27.66	C
[13408]	HETATM	6631	C1	GOL C1306	-3.187	-17.475	-46.228	1.00	35.87	C
[13409]	HETATM	6632	O1	GOL C1306	-3.650	-17.551	-44.902	1.00	33.83	O
[13410]	HETATM	6633	C2	GOL C1306	-2.174	-16.354	-46.368	1.00	37.20	C
[13411]	HETATM	6634	O2	GOL C1306	-2.771	-15.140	-45.948	1.00	38.05	O
[13412]	HETATM	6635	C3	GOL C1306	-1.850	-16.209	-47.848	1.00	38.82	C

[13413]	HETATM	6636	03	GOL	C1306	-0.914	-17.185	-48.231	1.00	40.97	0
[13414]	HETATM	6637	0	HOH	A2001	-1.308	-31.370	-24.212	1.00	50.12	0
[13415]	HETATM	6638	0	HOH	A2002	12.359	-27.510	-29.443	1.00	34.96	0
[13416]	HETATM	6639	0	HOH	A2003	21.153	-29.865	-27.372	1.00	42.12	0
[13417]	HETATM	6640	0	HOH	A2004	30.234	-26.211	-19.456	1.00	31.08	0
[13418]	HETATM	6641	0	HOH	A2005	27.527	-22.538	-20.732	1.00	40.44	0
[13419]	HETATM	6642	0	HOH	A2006	19.077	-33.999	-22.165	1.00	33.84	0
[13420]	HETATM	6643	0	HOH	A2007	19.320	-34.626	-24.891	1.00	38.96	0
[13421]	HETATM	6644	0	HOH	A2008	2.524	-31.015	-15.906	1.00	49.61	0
[13422]	HETATM	6645	0	HOH	A2009	0.459	-8.887	-14.466	1.00	51.68	0
[13423]	HETATM	6646	0	HOH	A2010	1.643	-6.887	-9.860	1.00	26.32	0
[13424]	HETATM	6647	0	HOH	A2011	-0.807	-12.988	-5.981	1.00	40.40	0
[13425]	HETATM	6648	0	HOH	A2012	3.721	-14.406	-13.955	1.00	21.66	0
[13426]	HETATM	6649	0	HOH	A2013	18.307	-27.725	-16.582	1.00	19.37	0
[13427]	HETATM	6650	0	HOH	A2014	16.010	-33.194	-0.135	1.00	22.98	0
[13428]	HETATM	6651	0	HOH	A2015	15.269	-37.254	-10.533	1.00	17.23	0
[13429]	HETATM	6652	0	HOH	A2016	0.143	-30.075	-12.658	1.00	33.67	0
[13430]	HETATM	6653	0	HOH	A2017	2.522	-37.241	-6.873	1.00	41.70	0
[13431]	HETATM	6654	0	HOH	A2018	5.105	-40.460	-10.247	1.00	43.35	0
[13432]	HETATM	6655	0	HOH	A2019	-2.833	-31.352	-3.307	1.00	45.46	0
[13433]	HETATM	6656	0	HOH	A2020	4.296	-31.019	-3.714	1.00	31.09	0
[13434]	HETATM	6657	0	HOH	A2021	-2.481	-29.583	-12.411	1.00	38.13	0
[13435]	HETATM	6658	0	HOH	A2022	-6.369	-28.025	-7.858	1.00	50.57	0
[13436]	HETATM	6659	0	HOH	A2023	-7.208	-30.024	-5.982	1.00	51.36	0
[13437]	HETATM	6660	0	HOH	A2024	-6.659	-29.046	-2.047	1.00	43.19	0
[13438]	HETATM	6661	0	HOH	A2025	-9.157	-22.755	-5.502	1.00	41.31	0
[13439]	HETATM	6662	0	HOH	A2026	-2.987	-22.536	3.046	1.00	36.01	0
[13440]	HETATM	6663	0	HOH	A2027	-4.975	-21.193	-10.554	1.00	37.34	0
[13441]	HETATM	6664	0	HOH	A2028	-9.393	-18.389	-0.660	1.00	33.78	0
[13442]	HETATM	6665	0	HOH	A2029	-7.456	-13.308	-8.109	1.00	45.74	0
[13443]	HETATM	6666	0	HOH	A2030	-4.193	-19.943	-13.905	1.00	37.17	0
[13444]	HETATM	6667	0	HOH	A2031	9.705	-28.984	-11.283	1.00	14.59	0
[13445]	HETATM	6668	0	HOH	A2032	6.542	-34.807	-17.077	1.00	27.32	0
[13446]	HETATM	6669	0	HOH	A2033	13.706	-32.688	-19.268	1.00	30.33	0
[13447]	HETATM	6670	0	HOH	A2034	6.712	-34.216	-14.576	1.00	27.77	0
[13448]	HETATM	6671	0	HOH	A2035	7.324	-30.503	-16.649	1.00	28.26	0

[13449]	HETATM	6672	0	HOH	A2036	11.161	-36.899	-23.772	1.00	35.69	0
[13450]	HETATM	6673	0	HOH	A2037	15.567	-36.352	-22.334	1.00	45.27	0
[13451]	HETATM	6674	0	HOH	A2038	6.326	-39.280	-11.769	1.00	40.93	0
[13452]	HETATM	6675	0	HOH	A2039	7.072	-35.521	-21.321	1.00	36.12	0
[13453]	HETATM	6676	0	HOH	A2040	9.002	-42.067	-16.420	1.00	42.89	0
[13454]	HETATM	6677	0	HOH	A2041	11.130	-43.073	-18.480	1.00	35.86	0
[13455]	HETATM	6678	0	HOH	A2042	14.399	-46.475	-22.453	1.00	40.53	0
[13456]	HETATM	6679	0	HOH	A2043	21.129	-43.765	-18.369	1.00	35.04	0
[13457]	HETATM	6680	0	HOH	A2044	21.647	-33.817	-20.967	1.00	24.02	0
[13458]	HETATM	6681	0	HOH	A2045	27.888	-42.245	-17.643	1.00	34.91	0
[13459]	HETATM	6682	0	HOH	A2046	33.463	-34.723	-23.138	1.00	36.92	0
[13460]	HETATM	6683	0	HOH	A2047	27.393	-38.305	-15.591	1.00	25.74	0
[13461]	HETATM	6684	0	HOH	A2048	29.322	-33.256	-12.058	1.00	33.85	0
[13462]	HETATM	6685	0	HOH	A2049	30.390	-27.487	-14.858	1.00	36.01	0
[13463]	HETATM	6686	0	HOH	A2050	28.735	-28.343	-10.646	1.00	34.18	0
[13464]	HETATM	6687	0	HOH	A2051	26.311	-22.146	-14.117	1.00	24.18	0
[13465]	HETATM	6688	0	HOH	A2052	29.200	-23.840	-16.382	1.00	48.48	0
[13466]	HETATM	6689	0	HOH	A2053	22.964	-19.905	-15.790	1.00	37.96	0
[13467]	HETATM	6690	0	HOH	A2054	10.881	-17.832	-28.770	1.00	39.92	0
[13468]	HETATM	6691	0	HOH	A2055	11.387	-10.521	2.814	1.00	43.31	0
[13469]	HETATM	6692	0	HOH	A2056	15.441	-8.550	-16.932	1.00	39.00	0
[13470]	HETATM	6693	0	HOH	A2057	21.241	-28.277	-2.614	1.00	24.58	0
[13471]	HETATM	6694	0	HOH	A2058	28.114	-27.128	-8.808	1.00	23.33	0
[13472]	HETATM	6695	0	HOH	A2059	27.960	-18.287	-10.249	1.00	33.18	0
[13473]	HETATM	6696	0	HOH	A2060	25.993	-12.414	-8.121	1.00	42.23	0
[13474]	HETATM	6697	0	HOH	A2061	18.513	-11.645	-7.866	1.00	33.18	0
[13475]	HETATM	6698	0	HOH	A2062	21.909	-10.376	-14.317	1.00	32.91	0
[13476]	HETATM	6699	0	HOH	A2063	21.421	-11.410	-17.190	1.00	39.93	0
[13477]	HETATM	6700	0	HOH	A2064	15.473	-8.255	-8.969	1.00	42.12	0
[13478]	HETATM	6701	0	HOH	A2065	12.083	-8.537	-5.605	1.00	28.15	0
[13479]	HETATM	6702	0	HOH	A2066	9.931	-7.726	-7.095	1.00	24.90	0
[13480]	HETATM	6703	0	HOH	A2067	8.054	-8.014	-12.945	1.00	28.73	0
[13481]	HETATM	6704	0	HOH	A2068	13.571	-30.794	4.957	1.00	26.02	0
[13482]	HETATM	6705	0	HOH	A2069	22.982	-31.482	3.739	1.00	22.82	0
[13483]	HETATM	6706	0	HOH	A2070	28.162	-30.591	2.761	1.00	44.01	0
[13484]	HETATM	6707	0	HOH	A2071	33.045	-32.503	-3.112	1.00	33.63	0

[13485]	HETATM 6708	0	HOH A2072	36.604	-38.767	1.606	1.00	32.13	0
[13486]	HETATM 6709	0	HOH A2073	35.081	-32.516	5.787	1.00	28.69	0
[13487]	HETATM 6710	0	HOH A2074	32.390	-32.908	5.331	1.00	38.16	0
[13488]	HETATM 6711	0	HOH A2075	27.445	-38.181	3.671	1.00	45.60	0
[13489]	HETATM 6712	0	HOH A2076	28.769	-43.802	7.299	1.00	45.24	0
[13490]	HETATM 6713	0	HOH A2077	30.408	-47.046	-2.113	1.00	21.16	0
[13491]	HETATM 6714	0	HOH A2078	27.910	-49.147	5.464	1.00	32.23	0
[13492]	HETATM 6715	0	HOH A2079	25.273	-51.357	7.017	1.00	31.65	0
[13493]	HETATM 6716	0	HOH A2080	25.326	-48.260	-3.258	1.00	27.89	0
[13494]	HETATM 6717	0	HOH A2081	17.018	-50.998	-3.554	1.00	30.86	0
[13495]	HETATM 6718	0	HOH A2082	22.096	-49.761	-6.372	1.00	40.57	0
[13496]	HETATM 6719	0	HOH A2083	21.965	-40.703	1.706	1.00	32.02	0
[13497]	HETATM 6720	0	HOH A2084	18.055	-39.675	5.790	1.00	39.64	0
[13498]	HETATM 6721	0	HOH A2085	22.123	-35.803	0.289	1.00	24.50	0
[13499]	HETATM 6722	0	HOH A2086	15.706	-34.313	2.815	1.00	23.64	0
[13500]	HETATM 6723	0	HOH A2087	7.689	-49.861	-0.700	1.00	29.98	0
[13501]	HETATM 6724	0	HOH A2088	14.960	-48.576	0.227	1.00	36.55	0
[13502]	HETATM 6725	0	HOH A2089	8.685	-44.065	-11.371	1.00	40.62	0
[13503]	HETATM 6726	0	HOH A2090	14.415	-49.576	-2.097	1.00	32.79	0
[13504]	HETATM 6727	0	HOH A2091	16.880	-47.105	-16.031	1.00	32.26	0
[13505]	HETATM 6728	0	HOH A2092	23.234	-44.765	-13.921	1.00	34.30	0
[13506]	HETATM 6729	0	HOH A2093	24.360	-48.743	-11.482	1.00	47.52	0
[13507]	HETATM 6730	0	HOH A2094	26.617	-37.491	-13.311	1.00	35.95	0
[13508]	HETATM 6731	0	HOH A2095	25.635	-43.343	-4.915	1.00	38.50	0
[13509]	HETATM 6732	0	HOH A2096	27.674	-31.159	-10.425	1.00	15.53	0
[13510]	HETATM 6733	0	HOH A2097	28.246	-35.166	-13.223	1.00	50.72	0
[13511]	HETATM 6734	0	HOH A2098	23.726	-33.434	0.931	1.00	39.03	0
[13512]	HETATM 6735	0	HOH A2099	20.307	-30.442	-0.947	1.00	28.88	0
[13513]	HETATM 6736	0	HOH A2100	27.195	-39.931	-6.181	1.00	34.16	0
[13514]	HETATM 6737	0	HOH A2101	24.702	-36.793	-0.615	1.00	39.57	0
[13515]	HETATM 6738	0	HOH A2102	25.979	-34.039	-0.776	1.00	36.06	0
[13516]	HETATM 6739	0	HOH A2103	30.385	-31.875	-3.772	1.00	23.96	0
[13517]	HETATM 6740	0	HOH A2104	28.934	-21.780	-13.472	1.00	38.00	0
[13518]	HETATM 6741	0	HOH A2105	33.852	-26.126	-4.568	1.00	29.75	0
[13519]	HETATM 6742	0	HOH A2106	32.675	-22.192	-6.128	1.00	36.43	0
[13520]	HETATM 6743	0	HOH A2107	33.941	-22.204	0.390	1.00	34.82	0

[13521]	HETATM 6744	0	HOH A2108	29.683	-19.046	-6.477	1.00	36.30	0
[13522]	HETATM 6745	0	HOH A2109	35.321	-22.823	-3.743	1.00	43.56	0
[13523]	HETATM 6746	0	HOH A2110	20.896	-12.434	0.476	1.00	37.51	0
[13524]	HETATM 6747	0	HOH A2111	18.304	-12.747	0.395	1.00	30.29	0
[13525]	HETATM 6748	0	HOH A2112	10.507	-32.327	10.722	1.00	34.72	0
[13526]	HETATM 6749	0	HOH A2113	17.198	-29.381	15.111	1.00	27.45	0
[13527]	HETATM 6750	0	HOH A2114	19.265	-30.426	15.543	1.00	52.82	0
[13528]	HETATM 6751	0	HOH A2115	19.470	-33.014	11.321	1.00	39.68	0
[13529]	HETATM 6752	0	HOH A2116	22.614	-30.901	6.565	1.00	31.05	0
[13530]	HETATM 6753	0	HOH A2117	22.671	-34.949	7.416	1.00	38.72	0
[13531]	HETATM 6754	0	HOH A2118	16.286	-32.069	4.676	1.00	30.51	0
[13532]	HETATM 6755	0	HOH A2119	20.996	-31.830	9.501	1.00	28.72	0
[13533]	HETATM 6756	0	HOH A2120	30.339	-25.642	6.579	1.00	39.91	0
[13534]	HETATM 6757	0	HOH A2121	12.118	-7.307	0.285	1.00	42.03	0
[13535]	HETATM 6758	0	HOH A2122	14.362	-12.016	8.308	1.00	43.46	0
[13536]	HETATM 6759	0	HOH A2123	11.836	-13.027	2.736	1.00	47.51	0
[13537]	HETATM 6760	0	HOH A2124	8.606	-35.398	4.189	1.00	29.95	0
[13538]	HETATM 6761	0	HOH A2125	-1.279	-29.418	4.401	1.00	36.73	0
[13539]	HETATM 6762	0	HOH A2126	-0.353	-28.190	6.183	1.00	26.70	0
[13540]	HETATM 6763	0	HOH A2127	7.723	-11.656	4.335	1.00	35.08	0
[13541]	HETATM 6764	0	HOH A2128	9.227	-11.530	1.861	1.00	24.82	0
[13542]	HETATM 6765	0	HOH A2129	-0.080	-10.119	5.750	1.00	34.85	0
[13543]	HETATM 6766	0	HOH A2130	-3.044	-12.080	4.088	1.00	36.39	0
[13544]	HETATM 6767	0	HOH A2131	-4.172	-14.589	-3.826	1.00	30.81	0
[13545]	HETATM 6768	0	HOH A2132	-3.349	-26.597	-12.604	1.00	37.32	0
[13546]	HETATM 6769	0	HOH B2001	44.177	3.716	-13.268	1.00	51.96	0
[13547]	HETATM 6770	0	HOH B2002	56.070	-1.955	-21.515	1.00	37.06	0
[13548]	HETATM 6771	0	HOH B2003	52.674	5.861	-29.465	1.00	32.36	0
[13549]	HETATM 6772	0	HOH B2004	41.033	-12.208	-15.850	1.00	32.44	0
[13550]	HETATM 6773	0	HOH B2005	35.098	13.317	-25.151	1.00	48.41	0
[13551]	HETATM 6774	0	HOH B2006	37.106	-12.364	-19.434	1.00	24.87	0
[13552]	HETATM 6775	0	HOH B2007	47.295	-0.358	-31.503	1.00	18.83	0
[13553]	HETATM 6776	0	HOH B2008	33.701	-12.772	-13.066	1.00	52.42	0
[13554]	HETATM 6777	0	HOH B2009	32.718	4.549	-39.342	1.00	29.06	0
[13555]	HETATM 6778	0	HOH B2010	40.869	8.974	-33.298	1.00	19.41	0
[13556]	HETATM 6779	0	HOH B2011	36.713	11.621	-26.170	1.00	35.42	0

[13557]	HETATM 6780	0	HOH B2012	34.037	3.714	-18.889	1.00	24.67	0
[13558]	HETATM 6781	0	HOH B2013	30.527	9.941	-24.805	1.00	43.03	0
[13559]	HETATM 6782	0	HOH B2014	56.619	2.932	-37.530	1.00	43.46	0
[13560]	HETATM 6783	0	HOH B2015	24.861	4.803	-21.691	1.00	33.30	0
[13561]	HETATM 6784	0	HOH B2016	27.443	6.561	-20.519	1.00	47.22	0
[13562]	HETATM 6785	0	HOH B2017	21.473	2.586	-18.902	1.00	30.28	0
[13563]	HETATM 6786	0	HOH B2018	17.383	-7.205	-17.188	1.00	37.95	0
[13564]	HETATM 6787	0	HOH B2019	28.687	-12.173	-18.290	1.00	41.60	0
[13565]	HETATM 6788	0	HOH B2020	50.781	-17.537	-34.442	1.00	43.24	0
[13566]	HETATM 6789	0	HOH B2021	31.847	-20.838	-31.295	1.00	45.58	0
[13567]	HETATM 6790	0	HOH B2022	27.128	-12.816	-12.097	1.00	39.34	0
[13568]	HETATM 6791	0	HOH B2023	31.632	-11.347	-11.831	1.00	52.96	0
[13569]	HETATM 6792	0	HOH B2024	33.557	-8.995	-14.347	1.00	50.88	0
[13570]	HETATM 6793	0	HOH B2025	29.589	-12.741	-11.413	1.00	40.95	0
[13571]	HETATM 6794	0	HOH B2026	32.357	-5.423	-13.807	1.00	38.50	0
[13572]	HETATM 6795	0	HOH B2027	42.008	14.777	-50.049	1.00	30.49	0
[13573]	HETATM 6796	0	HOH B2028	38.105	1.536	-27.575	1.00	18.51	0
[13574]	HETATM 6797	0	HOH B2029	39.172	7.110	-24.003	1.00	24.13	0
[13575]	HETATM 6798	0	HOH B2030	40.753	3.456	-22.614	1.00	28.33	0
[13576]	HETATM 6799	0	HOH B2031	47.111	5.245	-26.554	1.00	22.90	0
[13577]	HETATM 6800	0	HOH B2032	42.802	19.988	-45.718	1.00	43.80	0
[13578]	HETATM 6801	0	HOH B2033	42.395	13.736	-26.135	1.00	33.53	0
[13579]	HETATM 6802	0	HOH B2034	50.327	8.338	-26.637	1.00	43.03	0
[13580]	HETATM 6803	0	HOH B2035	36.941	15.223	-22.850	1.00	53.67	0
[13581]	HETATM 6804	0	HOH B2036	37.907	12.607	-24.353	1.00	42.70	0
[13582]	HETATM 6805	0	HOH B2037	40.887	8.079	-22.584	1.00	41.66	0
[13583]	HETATM 6806	0	HOH B2038	44.744	8.776	-20.536	1.00	40.59	0
[13584]	HETATM 6807	0	HOH B2039	45.024	15.764	-26.334	1.00	47.90	0
[13585]	HETATM 6808	0	HOH B2040	55.024	15.113	-28.281	1.00	38.78	0
[13586]	HETATM 6809	0	HOH B2041	50.288	15.241	-34.466	1.00	33.78	0
[13587]	HETATM 6810	0	HOH B2042	52.977	14.730	-37.301	1.00	36.49	0
[13588]	HETATM 6811	0	HOH B2043	59.821	14.789	-35.426	1.00	38.36	0
[13589]	HETATM 6812	0	HOH B2044	60.689	11.553	-36.558	1.00	44.56	0
[13590]	HETATM 6813	0	HOH B2045	59.882	11.346	-40.257	1.00	37.50	0
[13591]	HETATM 6814	0	HOH B2046	53.961	12.887	-39.688	1.00	34.16	0
[13592]	HETATM 6815	0	HOH B2047	52.833	5.616	-32.090	1.00	33.14	0



[13593]	HETATM	6816	0	HOH B2048	57.178	4.454	-39.924	1.00	47.54	0
[13594]	HETATM	6817	0	HOH B2049	55.802	4.099	-35.499	1.00	42.99	0
[13595]	HETATM	6818	0	HOH B2050	52.930	-1.226	-42.313	1.00	39.69	0
[13596]	HETATM	6819	0	HOH B2051	49.741	-6.626	-38.684	1.00	32.36	0
[13597]	HETATM	6820	0	HOH B2052	54.467	2.751	-41.192	1.00	39.93	0
[13598]	HETATM	6821	0	HOH B2053	53.700	-8.165	-32.168	1.00	42.38	0
[13599]	HETATM	6822	0	HOH B2054	54.125	-6.448	-23.401	1.00	29.40	0
[13600]	HETATM	6823	0	HOH B2055	53.290	-10.146	-18.393	1.00	53.85	0
[13601]	HETATM	6824	0	HOH B2056	52.254	-8.718	-16.623	1.00	41.70	0
[13602]	HETATM	6825	0	HOH B2057	46.544	-9.398	-15.484	1.00	38.58	0
[13603]	HETATM	6826	0	HOH B2058	54.617	-12.288	-17.639	1.00	52.29	0
[13604]	HETATM	6827	0	HOH B2059	37.091	-0.571	-41.544	1.00	21.61	0
[13605]	HETATM	6828	0	HOH B2060	47.311	-10.516	-42.138	1.00	27.24	0
[13606]	HETATM	6829	0	HOH B2061	48.891	-8.576	-35.648	1.00	46.04	0
[13607]	HETATM	6830	0	HOH B2062	49.337	-16.675	-32.534	1.00	36.74	0
[13608]	HETATM	6831	0	HOH B2063	43.294	-21.123	-28.723	1.00	38.37	0
[13609]	HETATM	6832	0	HOH B2064	34.725	-19.464	-30.881	1.00	48.36	0
[13610]	HETATM	6833	0	HOH B2065	37.880	-19.868	-23.902	1.00	52.77	0
[13611]	HETATM	6834	0	HOH B2066	26.837	2.260	-39.854	1.00	25.29	0
[13612]	HETATM	6835	0	HOH B2067	38.186	3.838	-47.673	1.00	31.12	0
[13613]	HETATM	6836	0	HOH B2068	42.474	7.533	-58.531	1.00	44.74	0
[13614]	HETATM	6837	0	HOH B2069	42.665	0.534	-58.068	1.00	39.88	0
[13615]	HETATM	6838	0	HOH B2070	35.284	8.687	-58.207	1.00	40.78	0
[13616]	HETATM	6839	0	HOH B2071	37.644	1.533	-58.361	1.00	34.67	0
[13617]	HETATM	6840	0	HOH B2072	36.645	0.004	-52.187	1.00	34.31	0
[13618]	HETATM	6841	0	HOH B2073	36.886	2.060	-56.015	1.00	44.59	0
[13619]	HETATM	6842	0	HOH B2074	37.472	1.353	-50.184	1.00	54.41	0
[13620]	HETATM	6843	0	HOH B2075	36.180	7.277	-51.038	1.00	46.54	0
[13621]	HETATM	6844	0	HOH B2076	44.777	2.311	-51.758	1.00	32.50	0
[13622]	HETATM	6845	0	HOH B2077	37.157	9.726	-47.871	1.00	45.48	0
[13623]	HETATM	6846	0	HOH B2078	42.019	16.704	-51.974	1.00	28.25	0
[13624]	HETATM	6847	0	HOH B2079	31.801	15.247	-53.886	1.00	48.46	0
[13625]	HETATM	6848	0	HOH B2080	33.104	13.158	-54.902	1.00	42.67	0
[13626]	HETATM	6849	0	HOH B2081	34.568	18.886	-53.436	1.00	33.04	0
[13627]	HETATM	6850	0	HOH B2082	40.637	18.508	-47.136	1.00	22.52	0
[13628]	HETATM	6851	0	HOH B2083	32.483	15.532	-46.695	1.00	40.01	0

[13629]	HETATM	6852	0	HOH B2084	35.494	22.098	-40.318	1.00	29.46	0
[13630]	HETATM	6853	0	HOH B2085	41.367	20.452	-42.750	1.00	44.01	0
[13631]	HETATM	6854	0	HOH B2086	34.464	11.371	-45.680	1.00	31.69	0
[13632]	HETATM	6855	0	HOH B2087	32.902	7.759	-45.872	1.00	43.27	0
[13633]	HETATM	6856	0	HOH B2088	28.794	10.543	-44.992	1.00	25.35	0
[13634]	HETATM	6857	0	HOH B2089	29.606	5.479	-40.878	1.00	31.24	0
[13635]	HETATM	6858	0	HOH B2090	35.392	6.678	-44.886	1.00	28.96	0
[13636]	HETATM	6859	0	HOH B2091	20.925	7.688	-41.650	1.00	47.68	0
[13637]	HETATM	6860	0	HOH B2092	22.388	9.740	-46.078	1.00	43.83	0
[13638]	HETATM	6861	0	HOH B2093	24.603	7.227	-35.815	1.00	28.76	0
[13639]	HETATM	6862	0	HOH B2094	20.955	14.408	-37.453	1.00	38.73	0
[13640]	HETATM	6863	0	HOH B2095	20.999	9.461	-35.935	1.00	48.15	0
[13641]	HETATM	6864	0	HOH B2096	21.649	21.604	-41.147	1.00	47.45	0
[13642]	HETATM	6865	0	HOH B2097	27.970	21.626	-33.521	1.00	37.34	0
[13643]	HETATM	6866	0	HOH B2098	31.079	19.691	-40.235	1.00	45.19	0
[13644]	HETATM	6867	0	HOH B2099	26.672	20.405	-36.114	1.00	40.24	0
[13645]	HETATM	6868	0	HOH B2100	37.515	17.155	-28.529	1.00	37.31	0
[13646]	HETATM	6869	0	HOH B2101	33.414	20.852	-38.630	1.00	37.37	0
[13647]	HETATM	6870	0	HOH B2102	39.574	22.765	-36.492	1.00	53.52	0
[13648]	HETATM	6871	0	HOH B2103	46.232	20.759	-28.302	1.00	38.24	0
[13649]	HETATM	6872	0	HOH B2104	46.158	19.193	-32.640	1.00	28.87	0
[13650]	HETATM	6873	0	HOH B2105	48.365	22.264	-37.411	1.00	50.90	0
[13651]	HETATM	6874	0	HOH B2106	48.617	15.830	-38.576	1.00	35.51	0
[13652]	HETATM	6875	0	HOH B2107	48.388	14.615	-42.593	1.00	36.35	0
[13653]	HETATM	6876	0	HOH B2108	44.373	17.964	-39.012	1.00	49.44	0
[13654]	HETATM	6877	0	HOH B2109	42.423	13.865	-45.803	1.00	33.17	0
[13655]	HETATM	6878	0	HOH B2110	50.445	10.257	-41.705	1.00	38.87	0
[13656]	HETATM	6879	0	HOH B2111	44.543	10.418	-46.011	1.00	27.13	0
[13657]	HETATM	6880	0	HOH B2112	47.639	1.877	-42.871	1.00	21.22	0
[13658]	HETATM	6881	0	HOH B2113	49.899	7.814	-40.967	1.00	32.30	0
[13659]	HETATM	6882	0	HOH B2114	35.940	3.905	-46.080	1.00	30.79	0
[13660]	HETATM	6883	0	HOH B2115	35.506	1.561	-41.888	1.00	24.12	0
[13661]	HETATM	6884	0	HOH B2116	38.093	7.356	-46.190	1.00	28.98	0
[13662]	HETATM	6885	0	HOH B2117	48.004	10.105	-47.463	1.00	48.71	0
[13663]	HETATM	6886	0	HOH B2118	49.655	0.925	-45.657	1.00	40.71	0
[13664]	HETATM	6887	0	HOH B2119	47.859	3.814	-50.424	1.00	38.33	0

[13665]	HETATM 6888	0	HOH B2120	43.510	2.102	-49.163	1.00	21.89	0
[13666]	HETATM 6889	0	HOH B2121	46.563	-2.036	-43.925	1.00	32.09	0
[13667]	HETATM 6890	0	HOH B2122	50.639	-7.371	-41.455	1.00	48.41	0
[13668]	HETATM 6891	0	HOH B2123	46.528	-7.276	-48.597	1.00	32.02	0
[13669]	HETATM 6892	0	HOH B2124	41.271	-4.494	-53.648	1.00	34.48	0
[13670]	HETATM 6893	0	HOH B2125	45.600	-4.111	-51.104	1.00	27.57	0
[13671]	HETATM 6894	0	HOH B2126	43.911	-3.014	-53.827	1.00	46.97	0
[13672]	HETATM 6895	0	HOH B2127	45.216	-10.161	-46.002	1.00	27.49	0
[13673]	HETATM 6896	0	HOH B2128	43.070	-9.072	-54.643	1.00	42.29	0
[13674]	HETATM 6897	0	HOH B2129	46.189	-10.280	-48.434	1.00	41.81	0
[13675]	HETATM 6898	0	HOH B2130	42.474	-16.897	-39.958	1.00	46.07	0
[13676]	HETATM 6899	0	HOH B2131	34.848	-16.595	-42.119	1.00	38.05	0
[13677]	HETATM 6900	0	HOH B2132	37.282	-19.793	-33.294	1.00	46.33	0
[13678]	HETATM 6901	0	HOH B2133	33.499	-16.017	-39.941	1.00	35.59	0
[13679]	HETATM 6902	0	HOH B2134	19.944	-0.152	-48.065	1.00	32.70	0
[13680]	HETATM 6903	0	HOH B2135	25.472	3.444	-48.604	1.00	45.20	0
[13681]	HETATM 6904	0	HOH B2136	30.622	1.563	-48.363	1.00	27.85	0
[13682]	HETATM 6905	0	HOH B2137	33.158	2.112	-46.652	1.00	42.39	0
[13683]	HETATM 6906	0	HOH B2138	28.354	3.324	-41.865	1.00	27.31	0
[13684]	HETATM 6907	0	HOH B2139	34.213	-2.599	-52.932	1.00	45.42	0
[13685]	HETATM 6908	0	HOH B2140	24.555	-16.915	-40.362	1.00	33.64	0
[13686]	HETATM 6909	0	HOH B2141	21.881	-6.108	-48.268	1.00	46.70	0
[13687]	HETATM 6910	0	HOH B2142	16.349	-3.071	-38.421	1.00	44.58	0
[13688]	HETATM 6911	0	HOH B2143	20.056	3.900	-40.234	1.00	32.09	0
[13689]	HETATM 6912	0	HOH B2144	28.854	3.547	-27.638	1.00	26.50	0
[13690]	HETATM 6913	0	HOH B2145	19.260	-4.697	-24.717	1.00	19.48	0
[13691]	HETATM 6914	0	HOH B2146	18.457	2.008	-26.979	1.00	33.33	0
[13692]	HETATM 6915	0	HOH B2147	17.393	-0.906	-35.586	1.00	37.33	0
[13693]	HETATM 6916	0	HOH B2148	18.000	0.585	-29.148	1.00	36.11	0
[13694]	HETATM 6917	0	HOH B2149	15.783	-3.944	-27.082	1.00	49.96	0
[13695]	HETATM 6918	0	HOH B2150	27.661	-16.555	-32.180	1.00	33.82	0
[13696]	HETATM 6919	0	HOH B2151	28.307	-19.182	-33.547	1.00	48.86	0
[13697]	HETATM 6920	0	HOH B2152	25.630	-13.011	-16.661	1.00	42.33	0
[13698]	HETATM 6921	0	HOH C2001	-16.470	-26.432	-36.784	1.00	42.06	0
[13699]	HETATM 6922	0	HOH C2002	-20.578	-30.950	-32.506	1.00	29.38	0
[13700]	HETATM 6923	0	HOH C2003	-17.545	-31.349	-35.766	1.00	31.85	0

[13701]	HETATM	6924	0	HOH	C2004	-13.342	-26.910	-32.211	1.00	39.97	0
[13702]	HETATM	6925	0	HOH	C2005	-11.493	-22.594	-33.617	1.00	37.27	0
[13703]	HETATM	6926	0	HOH	C2006	-9.005	-23.132	-34.865	1.00	33.14	0
[13704]	HETATM	6927	0	HOH	C2007	-11.919	-47.899	-54.824	1.00	36.88	0
[13705]	HETATM	6928	0	HOH	C2008	-5.550	-46.926	-59.340	1.00	39.39	0
[13706]	HETATM	6929	0	HOH	C2009	-9.194	-41.681	-52.828	1.00	26.48	0
[13707]	HETATM	6930	0	HOH	C2010	9.493	-24.480	-47.036	1.00	26.63	0
[13708]	HETATM	6931	0	HOH	C2011	0.223	-20.070	-43.169	1.00	21.43	0
[13709]	HETATM	6932	0	HOH	C2012	-6.215	-17.401	-50.013	1.00	46.11	0
[13710]	HETATM	6933	0	HOH	C2013	-1.897	-19.666	-56.268	1.00	35.47	0
[13711]	HETATM	6934	0	HOH	C2014	-8.582	-25.559	-56.216	1.00	37.32	0
[13712]	HETATM	6935	0	HOH	C2015	-3.557	-20.776	-58.053	1.00	43.10	0
[13713]	HETATM	6936	0	HOH	C2016	-0.882	-24.669	-62.663	1.00	38.86	0
[13714]	HETATM	6937	0	HOH	C2017	1.311	-25.649	-56.168	1.00	34.37	0
[13715]	HETATM	6938	0	HOH	C2018	-7.340	-28.087	-63.862	1.00	42.04	0
[13716]	HETATM	6939	0	HOH	C2019	-9.194	-26.318	-58.741	1.00	42.99	0
[13717]	HETATM	6940	0	HOH	C2020	-1.847	-27.105	-66.883	1.00	42.26	0
[13718]	HETATM	6941	0	HOH	C2021	-11.982	-35.147	-60.474	1.00	51.47	0
[13719]	HETATM	6942	0	HOH	C2022	-8.499	-26.016	-48.399	1.00	36.48	0
[13720]	HETATM	6943	0	HOH	C2023	13.042	-13.924	-33.178	1.00	35.52	0
[13721]	HETATM	6944	0	HOH	C2024	-3.339	-27.620	-48.193	1.00	12.83	0
[13722]	HETATM	6945	0	HOH	C2025	-10.852	-24.171	-46.555	1.00	45.41	0
[13723]	HETATM	6946	0	HOH	C2026	-7.230	-22.217	-49.396	1.00	36.45	0
[13724]	HETATM	6947	0	HOH	C2027	-9.447	-21.412	-48.111	1.00	37.33	0
[13725]	HETATM	6948	0	HOH	C2028	-8.787	-23.827	-41.163	1.00	26.33	0
[13726]	HETATM	6949	0	HOH	C2029	15.454	-20.881	-42.980	1.00	36.67	0
[13727]	HETATM	6950	0	HOH	C2030	-13.622	-19.416	-41.388	1.00	38.83	0
[13728]	HETATM	6951	0	HOH	C2031	-10.193	-20.960	-38.285	1.00	33.49	0
[13729]	HETATM	6952	0	HOH	C2032	-6.973	-23.626	-32.915	1.00	31.28	0
[13730]	HETATM	6953	0	HOH	C2033	-6.678	-19.529	-26.575	1.00	35.02	0
[13731]	HETATM	6954	0	HOH	C2034	-5.800	-24.628	-28.283	1.00	45.25	0
[13732]	HETATM	6955	0	HOH	C2035	4.403	-24.811	-29.682	1.00	41.43	0
[13733]	HETATM	6956	0	HOH	C2036	2.167	-30.360	-28.074	1.00	30.68	0
[13734]	HETATM	6957	0	HOH	C2037	5.058	-29.626	-31.663	1.00	33.89	0
[13735]	HETATM	6958	0	HOH	C2038	-1.300	-25.319	-26.959	1.00	51.46	0
[13736]	HETATM	6959	0	HOH	C2039	-4.437	-29.455	-38.256	1.00	20.96	0

[13737]	HETATM	6960	0	HOH C2040	0.748	-35.551	-32.414	1.00	28.86	0
[13738]	HETATM	6961	0	HOH C2041	-14.826	-36.103	-36.337	1.00	39.86	0
[13739]	HETATM	6962	0	HOH C2042	22.214	-28.267	-39.065	1.00	45.37	0
[13740]	HETATM	6963	0	HOH C2043	20.029	-27.176	-40.415	1.00	52.13	0
[13741]	HETATM	6964	0	HOH C2044	-20.139	-36.385	-40.612	1.00	49.49	0
[13742]	HETATM	6965	0	HOH C2045	-17.210	-38.402	-47.254	1.00	35.78	0
[13743]	HETATM	6966	0	HOH C2046	-12.520	-42.994	-39.940	1.00	43.04	0
[13744]	HETATM	6967	0	HOH C2047	9.356	-29.290	-41.632	1.00	24.63	0
[13745]	HETATM	6968	0	HOH C2048	6.635	-30.950	-32.483	1.00	41.71	0
[13746]	HETATM	6969	0	HOH C2049	4.686	-39.304	-32.653	1.00	40.25	0
[13747]	HETATM	6970	0	HOH C2050	5.045	-45.529	-35.450	1.00	37.47	0
[13748]	HETATM	6971	0	HOH C2051	-1.678	-37.678	-34.423	1.00	34.43	0
[13749]	HETATM	6972	0	HOH C2052	2.044	-45.816	-42.379	1.00	33.38	0
[13750]	HETATM	6973	0	HOH C2053	1.787	-48.235	-49.106	1.00	27.92	0
[13751]	HETATM	6974	0	HOH C2054	-6.648	-48.767	-49.429	1.00	24.07	0
[13752]	HETATM	6975	0	HOH C2055	-0.479	-48.799	-50.735	1.00	27.06	0
[13753]	HETATM	6976	0	HOH C2056	13.265	-26.733	-51.430	1.00	19.96	0
[13754]	HETATM	6977	0	HOH C2057	16.211	-25.873	-37.663	1.00	40.41	0
[13755]	HETATM	6978	0	HOH C2058	16.052	-26.506	-42.550	1.00	36.97	0
[13756]	HETATM	6979	0	HOH C2059	17.697	-31.064	-39.447	1.00	46.50	0
[13757]	HETATM	6980	0	HOH C2060	17.326	-27.864	-36.929	1.00	47.80	0
[13758]	HETATM	6981	0	HOH C2061	13.842	-24.460	-37.601	1.00	29.84	0
[13759]	HETATM	6982	0	HOH C2062	14.970	-26.426	-29.435	1.00	27.54	0
[13760]	HETATM	6983	0	HOH C2063	21.296	-28.352	-30.031	1.00	29.46	0
[13761]	HETATM	6984	0	HOH C2064	22.923	-26.010	-32.228	1.00	32.03	0
[13762]	HETATM	6985	0	HOH C2065	14.864	-11.662	-32.327	1.00	30.42	0
[13763]	HETATM	6986	0	HOH C2066	20.157	-9.452	-37.710	1.00	34.32	0
[13764]	HETATM	6987	0	HOH C2067	15.846	-12.830	-43.689	1.00	40.21	0
[13765]	HETATM	6988	0	HOH C2068	11.457	-10.020	-36.242	1.00	28.46	0
[13766]	HETATM	6989	0	HOH C2069	7.322	-8.284	-37.934	1.00	39.47	0
[13767]	HETATM	6990	0	HOH C2070	13.975	-17.433	-42.415	1.00	38.41	0
[13768]	HETATM	6991	0	HOH C2071	12.850	-22.042	-41.447	1.00	24.40	0
[13769]	HETATM	6992	0	HOH C2072	12.483	-23.321	-48.745	1.00	30.65	0
[13770]	HETATM	6993	0	HOH C2073	16.149	-18.146	-47.623	1.00	38.36	0
[13771]	HETATM	6994	0	HOH C2074	10.924	-21.944	-55.587	1.00	31.54	0
[13772]	HETATM	6995	0	HOH C2075	5.422	-7.548	-60.387	1.00	42.00	0

[13773]	HETATM 6996	0	HOH C2076	6.788	-7.509	-53.972	1.00	41.92	0
[13774]	HETATM 6997	0	HOH C2077	9.737	-8.613	-53.798	1.00	44.58	0
[13775]	HETATM 6998	0	HOH C2078	10.467	-9.119	-47.426	1.00	45.20	0
[13776]	HETATM 6999	0	HOH C2079	-2.721	-12.340	-48.450	1.00	32.46	0
[13777]	HETATM 7000	0	HOH C2080	5.527	-5.170	-50.455	1.00	47.95	0
[13778]	HETATM 7001	0	HOH C2081	-3.538	-9.934	-39.169	1.00	40.61	0
[13779]	HETATM 7002	0	HOH C2082	0.243	-12.791	-33.897	1.00	35.18	0
[13780]	HETATM 7003	0	HOH C2083	2.826	-10.531	-37.269	1.00	34.16	0
[13781]	HETATM 7004	0	HOH C2084	2.359	-20.270	-31.482	1.00	40.67	0
[13782]	HETATM 7005	0	HOH C2085	9.171	-18.003	-33.396	1.00	43.64	0
[13783]	HETATM 7006	0	HOH C2086	2.954	-22.412	-30.235	1.00	44.91	0
[13784]	HETATM 7007	0	HOH C2087	5.263	-26.879	-32.254	1.00	23.90	0
[13785]	HETATM 7008	0	HOH C2088	10.523	-27.215	-42.953	1.00	24.61	0
[13786]	HETATM 7009	0	HOH C2089	13.739	-24.616	-40.376	1.00	30.72	0
[13787]	HETATM 7010	0	HOH C2090	12.960	-21.013	-38.891	1.00	30.79	0
[13788]	HETATM 7011	0	HOH C2091	8.333	-27.454	-27.747	1.00	27.36	0
[13789]	HETATM 7012	0	HOH C2092	9.762	-19.260	-30.426	1.00	48.32	0
[13790]	HETATM 7013	0	HOH C2093	12.478	-26.251	-32.368	1.00	25.13	0
[13791]	HETATM 7014	0	HOH C2094	5.067	-37.227	-29.852	1.00	41.60	0
[13792]	HETATM 7015	0	HOH C2095	12.824	-32.549	-29.062	1.00	37.42	0
[13793]	HETATM 7016	0	HOH C2096	8.958	-39.095	-32.332	1.00	39.04	0
[13794]	HETATM 7017	0	HOH C2097	5.613	-45.859	-37.992	1.00	41.93	0
[13795]	HETATM 7018	0	HOH C2098	20.274	-25.727	-58.959	1.00	40.75	0
[13796]	HETATM 7019	0	HOH C2099	18.022	-22.588	-54.515	1.00	47.45	0
[13797]	HETATM 7020	0	HOH C2100	18.344	-27.308	-43.972	1.00	31.89	0
[13798]	HETATM 7021	0	HOH C2101	20.604	-26.202	-46.540	1.00	37.19	0
[13799]	HETATM 7022	0	HOH C2102	13.912	-25.546	-49.058	1.00	26.22	0
[13800]	HETATM 7023	0	HOH C2103	20.334	-30.348	-40.331	1.00	48.79	0
[13801]	HETATM 7024	0	HOH C2104	13.957	-45.062	-40.035	1.00	40.49	0
[13802]	HETATM 7025	0	HOH C2105	11.327	-45.215	-43.273	1.00	39.38	0
[13803]	HETATM 7026	0	HOH C2106	4.397	-50.413	-46.262	1.00	44.52	0
[13804]	HETATM 7027	0	HOH C2107	10.104	-44.740	-45.559	1.00	28.54	0
[13805]	HETATM 7028	0	HOH C2108	13.879	-46.618	-53.301	1.00	47.83	0
[13806]	HETATM 7029	0	HOH C2109	6.595	-27.448	-65.010	1.00	39.06	0
[13807]	HETATM 7030	0	HOH C2110	4.232	-34.603	-65.892	1.00	43.64	0
[13808]	HETATM 7031	0	HOH C2111	8.555	-28.736	-64.507	1.00	33.60	0

[13809]	HETATM	7032	O	HOH	C2112	16.821	-31.993	-61.108	1.00	39.22	O
[13810]	HETATM	7033	O	HOH	C2113	4.818	-44.783	-66.664	1.00	38.91	O
[13811]	HETATM	7034	O	HOH	C2114	-3.450	-42.434	-64.469	1.00	34.00	O
[13812]	HETATM	7035	O	HOH	C2115	-9.624	-29.190	-59.423	1.00	41.97	O

[13813] [표 4]

[13814] 인간 NDRG2 단백질의 K2Y 변이체의 X, Y, Z 원자좌표

[13815]	ATOM	1	N	ALA	A	24	-32.998	-10.340	6.791	1.00	55.19	N
[13816]	ATOM	2	CA	ALA	A	24	-32.239	-9.061	6.834	1.00	55.56	C
[13817]	ATOM	3	C	ALA	A	24	-30.799	-9.313	7.249	1.00	55.69	C
[13818]	ATOM	4	O	ALA	A	24	-30.541	-10.074	8.187	1.00	56.32	O
[13819]	ATOM	5	CB	ALA	A	24	-32.895	-8.082	7.798	1.00	55.66	C
[13820]	ATOM	6	N	LYS	A	25	-29.858	-8.672	6.563	1.00	55.33	N
[13821]	ATOM	7	CA	LYS	A	25	-28.440	-8.857	6.869	1.00	54.59	C
[13822]	ATOM	8	C	LYS	A	25	-27.789	-7.512	7.162	1.00	53.65	C
[13823]	ATOM	9	O	LYS	A	25	-27.833	-6.605	6.337	1.00	53.50	O
[13824]	ATOM	10	CB	LYS	A	25	-27.725	-9.562	5.714	1.00	55.05	C
[13825]	ATOM	11	CG	LYS	A	25	-26.402	-10.237	6.090	1.00	57.18	C
[13826]	ATOM	12	CD	LYS	A	25	-26.605	-11.455	6.986	1.00	60.47	C
[13827]	ATOM	13	CE	LYS	A	25	-25.448	-12.449	6.852	1.00	62.76	C
[13828]	ATOM	14	NZ	LYS	A	25	-24.178	-11.890	7.402	1.00	64.02	N
[13829]	ATOM	15	N	THR	A	26	-27.184	-7.402	8.340	1.00	52.28	N
[13830]	ATOM	16	CA	THR	A	26	-26.527	-6.186	8.768	1.00	51.46	C
[13831]	ATOM	17	C	THR	A	26	-25.066	-6.237	8.329	1.00	50.84	C
[13832]	ATOM	18	O	THR	A	26	-24.415	-7.264	8.492	1.00	50.55	O
[13833]	ATOM	19	CB	THR	A	26	-26.641	-6.044	10.299	1.00	51.81	C
[13834]	ATOM	20	OG1	THR	A	26	-28.025	-6.082	10.674	1.00	51.59	O
[13835]	ATOM	21	CG2	THR	A	26	-26.019	-4.748	10.783	1.00	51.38	C
[13836]	ATOM	22	N	HIS	A	27	-24.561	-5.140	7.764	1.00	49.78	N
[13837]	ATOM	23	CA	HIS	A	27	-23.166	-5.065	7.331	1.00	49.27	C
[13838]	ATOM	24	C	HIS	A	27	-22.525	-3.782	7.858	1.00	49.35	C
[13839]	ATOM	25	O	HIS	A	27	-23.227	-2.832	8.229	1.00	49.25	O
[13840]	ATOM	26	CB	HIS	A	27	-23.067	-5.076	5.800	1.00	49.12	C
[13841]	ATOM	27	CG	HIS	A	27	-23.748	-6.236	5.139	1.00	49.30	C
[13842]	ATOM	28	ND1	HIS	A	27	-23.089	-7.407	4.816	1.00	50.30	N
[13843]	ATOM	29	CD2	HIS	A	27	-25.024	-6.399	4.718	1.00	49.15	C

[13844]	ATOM	30	CE1	HIS	A	27	-23.931	-8.245	4.240	1.00	50.32	C
[13845]	ATOM	31	NE2	HIS	A	27	-25.113	-7.659	4.170	1.00	51.29	N
[13846]	ATOM	32	N	SER	A	28	-21.197	-3.742	7.887	1.00	48.90	N
[13847]	ATOM	33	CA	SER	A	28	-20.486	-2.485	8.107	1.00	49.64	C
[13848]	ATOM	34	C	SER	A	28	-19.426	-2.348	7.047	1.00	49.32	C
[13849]	ATOM	35	O	SER	A	28	-18.910	-3.345	6.563	1.00	50.09	O
[13850]	ATOM	36	CB	SER	A	28	-19.817	-2.421	9.483	1.00	49.86	C
[13851]	ATOM	37	OG	SER	A	28	-20.069	-3.581	10.255	1.00	51.65	O
[13852]	ATOM	38	N	VAL	A	29	-19.099	-1.121	6.675	1.00	49.18	N
[13853]	ATOM	39	CA	VAL	A	29	-17.977	-0.883	5.767	1.00	49.03	C
[13854]	ATOM	40	C	VAL	A	29	-17.107	0.218	6.316	1.00	48.76	C
[13855]	ATOM	41	O	VAL	A	29	-17.604	1.150	6.921	1.00	48.36	O
[13856]	ATOM	42	CB	VAL	A	29	-18.412	-0.537	4.300	1.00	49.11	C
[13857]	ATOM	43	CG1	VAL	A	29	-19.156	-1.683	3.699	1.00	49.83	C
[13858]	ATOM	44	CG2	VAL	A	29	-19.268	0.748	4.225	1.00	48.10	C
[13859]	ATOM	45	N	GLU	A	30	-15.806	0.106	6.092	1.00	49.26	N
[13860]	ATOM	46	CA	GLU	A	30	-14.887	1.158	6.486	1.00	49.99	C
[13861]	ATOM	47	C	GLU	A	30	-14.928	2.295	5.468	1.00	49.79	C
[13862]	ATOM	48	O	GLU	A	30	-15.073	2.064	4.278	1.00	50.17	O
[13863]	ATOM	49	CB	GLU	A	30	-13.464	0.604	6.664	1.00	49.97	C
[13864]	ATOM	50	CG	GLU	A	30	-13.278	-0.255	7.924	1.00	51.97	C
[13865]	ATOM	51	CD	GLU	A	30	-13.507	0.512	9.251	1.00	55.47	C
[13866]	ATOM	52	OE1	GLU	A	30	-13.586	1.780	9.268	1.00	55.21	O
[13867]	ATOM	53	OE2	GLU	A	30	-13.606	-0.174	10.295	1.00	56.84	O
[13868]	ATOM	54	N	THR	A	31	-14.828	3.529	5.942	1.00	49.80	N
[13869]	ATOM	55	CA	THR	A	31	-14.752	4.670	5.044	1.00	49.95	C
[13870]	ATOM	56	C	THR	A	31	-13.637	5.619	5.520	1.00	50.43	C
[13871]	ATOM	57	O	THR	A	31	-13.082	5.421	6.609	1.00	50.16	O
[13872]	ATOM	58	CB	THR	A	31	-16.108	5.427	4.952	1.00	49.87	C
[13873]	ATOM	59	OG1	THR	A	31	-16.195	6.406	5.998	1.00	50.09	O
[13874]	ATOM	60	CG2	THR	A	31	-17.285	4.474	5.035	1.00	48.94	C
[13875]	ATOM	61	N	PRO	A	32	-13.300	6.647	4.706	1.00	50.80	N
[13876]	ATOM	62	CA	PRO	A	32	-12.404	7.723	5.151	1.00	50.88	C
[13877]	ATOM	63	C	PRO	A	32	-12.794	8.394	6.486	1.00	50.90	C
[13878]	ATOM	64	O	PRO	A	32	-11.927	8.982	7.141	1.00	51.29	O
[13879]	ATOM	65	CB	PRO	A	32	-12.485	8.739	4.005	1.00	50.95	C



[13880]	ATOM	66	CG	PRO	A	32	-12.827	7.909	2.795	1.00	51.51	C
[13881]	ATOM	67	CD	PRO	A	32	-13.719	6.825	3.298	1.00	51.00	C
[13882]	ATOM	68	N	TYR	A	33	-14.064	8.297	6.886	1.00	50.73	N
[13883]	ATOM	69	CA	TYR	A	33	-14.582	9.018	8.059	1.00	50.60	C
[13884]	ATOM	70	C	TYR	A	33	-15.085	8.079	9.154	1.00	50.46	C
[13885]	ATOM	71	O	TYR	A	33	-15.817	8.501	10.059	1.00	50.64	O
[13886]	ATOM	72	CB	TYR	A	33	-15.698	9.994	7.644	1.00	50.81	C
[13887]	ATOM	73	CG	TYR	A	33	-15.407	10.699	6.344	1.00	50.94	C
[13888]	ATOM	74	CD1	TYR	A	33	-14.539	11.803	6.305	1.00	51.64	C
[13889]	ATOM	75	CD2	TYR	A	33	-15.953	10.238	5.145	1.00	50.34	C
[13890]	ATOM	76	CE1	TYR	A	33	-14.243	12.449	5.096	1.00	52.28	C
[13891]	ATOM	77	CE2	TYR	A	33	-15.668	10.869	3.934	1.00	50.91	C
[13892]	ATOM	78	CZ	TYR	A	33	-14.819	11.977	3.917	1.00	53.01	C
[13893]	ATOM	79	OH	TYR	A	33	-14.532	12.604	2.720	1.00	54.50	O
[13894]	ATOM	80	N	GLY	A	34	-14.692	6.809	9.067	1.00	49.93	N
[13895]	ATOM	81	CA	GLY	A	34	-15.085	5.807	10.055	1.00	49.55	C
[13896]	ATOM	82	C	GLY	A	34	-16.029	4.768	9.495	1.00	49.07	C
[13897]	ATOM	83	O	GLY	A	34	-16.318	4.766	8.302	1.00	49.39	O
[13898]	ATOM	84	N	SER	A	35	-16.512	3.885	10.361	1.00	48.87	N
[13899]	ATOM	85	CA	SER	A	35	-17.389	2.785	9.967	1.00	48.64	C
[13900]	ATOM	86	C	SER	A	35	-18.868	3.189	9.879	1.00	48.25	C
[13901]	ATOM	87	O	SER	A	35	-19.372	3.950	10.717	1.00	48.62	O
[13902]	ATOM	88	CB	SER	A	35	-17.232	1.632	10.952	1.00	48.82	C
[13903]	ATOM	89	OG	SER	A	35	-18.120	0.577	10.624	1.00	50.92	O
[13904]	ATOM	90	N	VAL	A	36	-19.564	2.679	8.868	1.00	46.98	N
[13905]	ATOM	91	CA	VAL	A	36	-21.017	2.844	8.799	1.00	45.97	C
[13906]	ATOM	92	C	VAL	A	36	-21.713	1.474	8.701	1.00	45.35	C
[13907]	ATOM	93	O	VAL	A	36	-21.211	0.555	8.059	1.00	44.49	O
[13908]	ATOM	94	CB	VAL	A	36	-21.466	3.876	7.691	1.00	46.11	C
[13909]	ATOM	95	CG1	VAL	A	36	-21.213	3.360	6.274	1.00	44.38	C
[13910]	ATOM	96	CG2	VAL	A	36	-22.932	4.287	7.872	1.00	46.09	C
[13911]	ATOM	97	N	THR	A	37	-22.850	1.352	9.383	1.00	44.66	N
[13912]	ATOM	98	CA	THR	A	37	-23.628	0.117	9.415	1.00	44.13	C
[13913]	ATOM	99	C	THR	A	37	-24.893	0.293	8.573	1.00	43.28	C
[13914]	ATOM	100	O	THR	A	37	-25.420	1.391	8.465	1.00	43.23	O
[13915]	ATOM	101	CB	THR	A	37	-23.945	-0.304	10.890	1.00	44.22	C

[13916]	ATOM	102	OG1	THR	A	37	-22.717	-0.566	11.590	1.00	44.93	O
[13917]	ATOM	103	CG2	THR	A	37	-24.805	-1.561	10.962	1.00	45.14	C
[13918]	ATOM	104	N	PHE	A	38	-25.356	-0.785	7.954	1.00	42.82	N
[13919]	ATOM	105	CA	PHE	A	38	-26.566	-0.773	7.120	1.00	42.30	C
[13920]	ATOM	106	C	PHE	A	38	-27.181	-2.178	7.069	1.00	42.26	C
[13921]	ATOM	107	O	PHE	A	38	-26.468	-3.171	7.160	1.00	41.70	O
[13922]	ATOM	108	CB	PHE	A	38	-26.268	-0.248	5.704	1.00	42.14	C
[13923]	ATOM	109	CG	PHE	A	38	-25.063	-0.901	5.051	1.00	42.59	C
[13924]	ATOM	110	CD1	PHE	A	38	-23.773	-0.474	5.342	1.00	42.86	C
[13925]	ATOM	111	CD2	PHE	A	38	-25.225	-1.938	4.148	1.00	42.54	C
[13926]	ATOM	112	CE1	PHE	A	38	-22.669	-1.077	4.742	1.00	42.94	C
[13927]	ATOM	113	CE2	PHE	A	38	-24.122	-2.539	3.535	1.00	42.70	C
[13928]	ATOM	114	CZ	PHE	A	38	-22.852	-2.110	3.835	1.00	42.32	C
[13929]	ATOM	115	N	THR	A	39	-28.503	-2.253	6.937	1.00	41.85	N
[13930]	ATOM	116	CA	THR	A	39	-29.186	-3.534	6.923	1.00	41.70	C
[13931]	ATOM	117	C	THR	A	39	-29.910	-3.682	5.594	1.00	41.86	C
[13932]	ATOM	118	O	THR	A	39	-30.641	-2.787	5.143	1.00	41.10	O
[13933]	ATOM	119	CB	THR	A	39	-30.144	-3.696	8.132	1.00	41.59	C
[13934]	ATOM	120	OG1	THR	A	39	-29.453	-3.324	9.324	1.00	43.05	O
[13935]	ATOM	121	CG2	THR	A	39	-30.607	-5.132	8.299	1.00	40.82	C
[13936]	ATOM	122	N	VAL	A	40	-29.663	-4.817	4.961	1.00	42.59	N
[13937]	ATOM	123	CA	VAL	A	40	-30.211	-5.127	3.647	1.00	42.66	C
[13938]	ATOM	124	C	VAL	A	40	-31.391	-6.081	3.807	1.00	43.13	C
[13939]	ATOM	125	O	VAL	A	40	-31.307	-7.065	4.546	1.00	42.81	O
[13940]	ATOM	126	CB	VAL	A	40	-29.127	-5.763	2.755	1.00	42.81	C
[13941]	ATOM	127	CG1	VAL	A	40	-29.654	-6.002	1.363	1.00	41.14	C
[13942]	ATOM	128	CG2	VAL	A	40	-27.897	-4.866	2.740	1.00	41.89	C
[13943]	ATOM	129	N	TYR	A	41	-32.487	-5.753	3.127	1.00	43.75	N
[13944]	ATOM	130	CA	TYR	A	41	-33.705	-6.551	3.123	1.00	43.92	C
[13945]	ATOM	131	C	TYR	A	41	-34.047	-6.876	1.682	1.00	44.55	C
[13946]	ATOM	132	O	TYR	A	41	-33.766	-6.079	0.765	1.00	44.01	O
[13947]	ATOM	133	CB	TYR	A	41	-34.880	-5.768	3.726	1.00	44.07	C
[13948]	ATOM	134	CG	TYR	A	41	-34.864	-5.554	5.236	1.00	44.13	C
[13949]	ATOM	135	CD1	TYR	A	41	-34.007	-4.616	5.824	1.00	43.86	C
[13950]	ATOM	136	CD2	TYR	A	41	-35.729	-6.269	6.071	1.00	45.44	C
[13951]	ATOM	137	CE1	TYR	A	41	-34.003	-4.387	7.214	1.00	42.80	C

[13952]	ATOM	138	CE2	TYR	A	41	-35.726	-6.069	7.458	1.00	45.36	C
[13953]	ATOM	139	CZ	TYR	A	41	-34.868	-5.109	8.018	1.00	45.30	C
[13954]	ATOM	140	OH	TYR	A	41	-34.853	-4.905	9.387	1.00	46.14	O
[13955]	ATOM	141	N	GLY	A	42	-34.654	-8.049	1.492	1.00	44.63	N
[13956]	ATOM	142	CA	GLY	A	42	-35.213	-8.456	0.228	1.00	45.22	C
[13957]	ATOM	143	C	GLY	A	42	-34.161	-8.994	-0.708	1.00	46.35	C
[13958]	ATOM	144	O	GLY	A	42	-33.021	-9.282	-0.311	1.00	46.10	O
[13959]	ATOM	145	N	THR	A	43	-34.556	-9.145	-1.962	1.00	46.95	N
[13960]	ATOM	146	CA	THR	A	43	-33.680	-9.719	-2.960	1.00	48.72	C
[13961]	ATOM	147	C	THR	A	43	-33.575	-8.777	-4.171	1.00	48.44	C
[13962]	ATOM	148	O	THR	A	43	-34.566	-8.151	-4.557	1.00	48.15	O
[13963]	ATOM	149	CB	THR	A	43	-34.075	-11.214	-3.292	1.00	49.54	C
[13964]	ATOM	150	OG1	THR	A	43	-33.858	-11.482	-4.680	1.00	53.13	O
[13965]	ATOM	151	CG2	THR	A	43	-35.557	-11.514	-2.958	1.00	51.46	C
[13966]	ATOM	152	N	PRO	A	44	-32.346	-8.598	-4.712	1.00	48.39	N
[13967]	ATOM	153	CA	PRO	A	44	-32.143	-7.677	-5.838	1.00	47.46	C
[13968]	ATOM	154	C	PRO	A	44	-33.026	-8.036	-7.054	1.00	46.63	C
[13969]	ATOM	155	O	PRO	A	44	-33.142	-9.206	-7.425	1.00	46.71	O
[13970]	ATOM	156	CB	PRO	A	44	-30.653	-7.847	-6.168	1.00	48.09	C
[13971]	ATOM	157	CG	PRO	A	44	-30.017	-8.301	-4.871	1.00	48.01	C
[13972]	ATOM	158	CD	PRO	A	44	-31.072	-9.209	-4.271	1.00	48.63	C
[13973]	ATOM	159	N	TYR	A	45	-33.688	-7.032	-7.608	1.00	44.50	N
[13974]	ATOM	160	CA	TYR	A	45	-34.562	-7.220	-8.743	1.00	43.43	C
[13975]	ATOM	161	C	TYR	A	45	-33.707	-6.778	-9.923	1.00	42.82	C
[13976]	ATOM	162	O	TYR	A	45	-33.087	-5.713	-9.878	1.00	42.38	O
[13977]	ATOM	163	CB	TYR	A	45	-35.849	-6.383	-8.575	1.00	42.56	C
[13978]	ATOM	164	CG	TYR	A	45	-36.921	-6.590	-9.631	1.00	40.87	C
[13979]	ATOM	165	CD1	TYR	A	45	-38.137	-7.238	-9.326	1.00	39.78	C
[13980]	ATOM	166	CD2	TYR	A	45	-36.733	-6.120	-10.940	1.00	39.53	C
[13981]	ATOM	167	CE1	TYR	A	45	-39.150	-7.411	-10.313	1.00	38.90	C
[13982]	ATOM	168	CE2	TYR	A	45	-37.712	-6.295	-11.936	1.00	40.35	C
[13983]	ATOM	169	CZ	TYR	A	45	-38.922	-6.933	-11.618	1.00	40.58	C
[13984]	ATOM	170	OH	TYR	A	45	-39.874	-7.063	-12.621	1.00	42.65	O
[13985]	ATOM	171	N	PRO	A	46	-33.604	-7.638	-10.953	1.00	42.73	N
[13986]	ATOM	172	CA	PRO	A	46	-32.779	-7.348	-12.132	1.00	42.26	C
[13987]	ATOM	173	C	PRO	A	46	-33.059	-5.971	-12.741	1.00	41.24	C

[13988]	ATOM	174	O	PRO	A	46	-34.208	-5.664	-13.058	1.00	41.42	O
[13989]	ATOM	175	CB	PRO	A	46	-33.148	-8.491	-13.103	1.00	42.84	C
[13990]	ATOM	176	CG	PRO	A	46	-33.402	-9.677	-12.109	1.00	44.93	C
[13991]	ATOM	177	CD	PRO	A	46	-34.225	-8.975	-11.023	1.00	42.88	C
[13992]	ATOM	178	N	TYR	A	47	-32.002	-5.152	-12.854	1.00	39.99	N
[13993]	ATOM	179	CA	TYR	A	47	-32.047	-3.844	-13.520	1.00	38.67	C
[13994]	ATOM	180	C	TYR	A	47	-33.014	-2.841	-12.869	1.00	38.58	C
[13995]	ATOM	181	O	TYR	A	47	-33.658	-2.027	-13.561	1.00	39.33	O
[13996]	ATOM	182	CB	TYR	A	47	-32.349	-4.007	-15.029	1.00	37.34	C
[13997]	ATOM	183	CG	TYR	A	47	-31.515	-5.112	-15.673	1.00	36.50	C
[13998]	ATOM	184	CD1	TYR	A	47	-30.192	-4.867	-16.049	1.00	34.92	C
[13999]	ATOM	185	CD2	TYR	A	47	-32.030	-6.398	-15.869	1.00	30.71	C
[14000]	ATOM	186	CE1	TYR	A	47	-29.415	-5.857	-16.638	1.00	33.13	C
[14001]	ATOM	187	CE2	TYR	A	47	-31.231	-7.429	-16.451	1.00	31.73	C
[14002]	ATOM	188	CZ	TYR	A	47	-29.929	-7.128	-16.821	1.00	32.73	C
[14003]	ATOM	189	OH	TYR	A	47	-29.097	-8.048	-17.392	1.00	35.35	O
[14004]	ATOM	190	N	ARG	A	48	-33.122	-2.903	-11.547	1.00	37.89	N
[14005]	ATOM	191	CA	ARG	A	48	-33.856	-1.881	-10.812	1.00	37.09	C
[14006]	ATOM	192	C	ARG	A	48	-32.911	-1.258	-9.797	1.00	37.19	C
[14007]	ATOM	193	O	ARG	A	48	-31.967	-1.902	-9.363	1.00	36.71	O
[14008]	ATOM	194	CB	ARG	A	48	-35.068	-2.477	-10.096	1.00	37.33	C
[14009]	ATOM	195	CG	ARG	A	48	-36.317	-2.530	-10.966	1.00	36.54	C
[14010]	ATOM	196	CD	ARG	A	48	-37.539	-3.064	-10.236	1.00	36.87	C
[14011]	ATOM	197	NE	ARG	A	48	-38.735	-2.888	-11.075	1.00	35.11	N
[14012]	ATOM	198	CZ	ARG	A	48	-39.976	-2.783	-10.597	1.00	37.40	C
[14013]	ATOM	199	NH1	ARG	A	48	-40.202	-2.851	-9.291	1.00	37.62	N
[14014]	ATOM	200	NH2	ARG	A	48	-40.993	-2.573	-11.416	1.00	33.88	N
[14015]	ATOM	201	N	PRO	A	49	-33.183	-0.021	-9.383	1.00	37.12	N
[14016]	ATOM	202	CA	PRO	A	49	-32.372	0.569	-8.316	1.00	37.22	C
[14017]	ATOM	203	C	PRO	A	49	-32.661	-0.142	-6.992	1.00	38.52	C
[14018]	ATOM	204	O	PRO	A	49	-33.751	-0.695	-6.829	1.00	39.59	O
[14019]	ATOM	205	CB	PRO	A	49	-32.863	2.021	-8.276	1.00	37.37	C
[14020]	ATOM	206	CG	PRO	A	49	-34.288	1.962	-8.784	1.00	36.17	C
[14021]	ATOM	207	CD	PRO	A	49	-34.281	0.863	-9.824	1.00	37.09	C
[14022]	ATOM	208	N	ALA	A	50	-31.686	-0.174	-6.076	1.00	38.84	N
[14023]	ATOM	209	CA	ALA	A	50	-31.969	-0.490	-4.676	1.00	39.61	C

[14024]	ATOM	210	C	ALA	A	50	-32.717	0.673	-4.019	1.00	40.25	C
[14025]	ATOM	211	O	ALA	A	50	-32.517	1.830	-4.393	1.00	41.03	O
[14026]	ATOM	212	CB	ALA	A	50	-30.660	-0.790	-3.929	1.00	39.54	C
[14027]	ATOM	213	N	ILE	A	51	-33.595	0.394	-3.065	1.00	40.04	N
[14028]	ATOM	214	CA	ILE	A	51	-34.130	1.489	-2.243	1.00	40.16	C
[14029]	ATOM	215	C	ILE	A	51	-33.194	1.683	-1.053	1.00	40.30	C
[14030]	ATOM	216	O	ILE	A	51	-32.942	0.746	-0.289	1.00	41.24	O
[14031]	ATOM	217	CB	ILE	A	51	-35.600	1.241	-1.784	1.00	39.84	C
[14032]	ATOM	218	CG1	ILE	A	51	-36.541	1.158	-3.000	1.00	39.67	C
[14033]	ATOM	219	CG2	ILE	A	51	-36.084	2.356	-0.805	1.00	39.92	C
[14034]	ATOM	220	CD1	ILE	A	51	-37.911	0.558	-2.631	1.00	39.77	C
[14035]	ATOM	221	N	LEU	A	52	-32.636	2.877	-0.921	1.00	39.65	N
[14036]	ATOM	222	CA	LEU	A	52	-31.711	3.164	0.176	1.00	39.84	C
[14037]	ATOM	223	C	LEU	A	52	-32.291	4.296	1.031	1.00	39.53	C
[14038]	ATOM	224	O	LEU	A	52	-32.694	5.333	0.504	1.00	39.40	O
[14039]	ATOM	225	CB	LEU	A	52	-30.320	3.550	-0.349	1.00	39.90	C
[14040]	ATOM	226	CG	LEU	A	52	-29.201	3.773	0.696	1.00	40.32	C
[14041]	ATOM	227	CD1	LEU	A	52	-27.840	3.320	0.190	1.00	39.21	C
[14042]	ATOM	228	CD2	LEU	A	52	-29.142	5.246	1.169	1.00	39.35	C
[14043]	ATOM	229	N	THR	A	53	-32.345	4.069	2.337	1.00	39.76	N
[14044]	ATOM	230	CA	THR	A	53	-32.891	5.034	3.276	1.00	39.35	C
[14045]	ATOM	231	C	THR	A	53	-31.831	5.639	4.186	1.00	40.15	C
[14046]	ATOM	232	O	THR	A	53	-30.819	5.002	4.480	1.00	40.50	O
[14047]	ATOM	233	CB	THR	A	53	-34.009	4.408	4.147	1.00	39.59	C
[14048]	ATOM	234	OG1	THR	A	53	-33.423	3.572	5.159	1.00	39.33	O
[14049]	ATOM	235	CG2	THR	A	53	-35.024	3.591	3.252	1.00	34.81	C
[14050]	ATOM	236	N	TYR	A	54	-32.085	6.871	4.625	1.00	39.94	N
[14051]	ATOM	237	CA	TYR	A	54	-31.254	7.525	5.620	1.00	40.53	C
[14052]	ATOM	238	C	TYR	A	54	-32.169	8.255	6.630	1.00	40.01	C
[14053]	ATOM	239	O	TYR	A	54	-33.026	9.034	6.242	1.00	40.74	O
[14054]	ATOM	240	CB	TYR	A	54	-30.236	8.466	4.957	1.00	40.15	C
[14055]	ATOM	241	CG	TYR	A	54	-28.895	8.530	5.693	1.00	40.75	C
[14056]	ATOM	242	CD1	TYR	A	54	-28.792	9.095	6.960	1.00	39.18	C
[14057]	ATOM	243	CD2	TYR	A	54	-27.733	8.009	5.112	1.00	42.64	C
[14058]	ATOM	244	CE1	TYR	A	54	-27.547	9.146	7.635	1.00	40.96	C
[14059]	ATOM	245	CE2	TYR	A	54	-26.498	8.044	5.777	1.00	41.21	C

[14060]	ATOM	246	CZ	TYR	A	54	-26.414	8.620	7.033	1.00	40.66	C
[14061]	ATOM	247	OH	TYR	A	54	-25.190	8.676	7.665	1.00	39.05	O
[14062]	ATOM	248	N	HIS	A	55	-32.022	7.940	7.916	1.00	39.44	N
[14063]	ATOM	249	CA	HIS	A	55	-33.007	8.327	8.908	1.00	39.63	C
[14064]	ATOM	250	C	HIS	A	55	-32.679	9.714	9.428	1.00	39.49	C
[14065]	ATOM	251	O	HIS	A	55	-31.599	10.230	9.136	1.00	39.49	O
[14066]	ATOM	252	CB	HIS	A	55	-33.016	7.306	10.066	1.00	39.14	C
[14067]	ATOM	253	CG	HIS	A	55	-31.699	7.214	10.782	1.00	40.40	C
[14068]	ATOM	254	ND1	HIS	A	55	-31.309	8.127	11.742	1.00	39.51	N
[14069]	ATOM	255	CD2	HIS	A	55	-30.658	6.357	10.633	1.00	39.23	C
[14070]	ATOM	256	CE1	HIS	A	55	-30.097	7.813	12.173	1.00	42.05	C
[14071]	ATOM	257	NE2	HIS	A	55	-29.683	6.739	11.522	1.00	39.54	N
[14072]	ATOM	258	N	ASP	A	56	-33.596	10.290	10.221	1.00	39.54	N
[14073]	ATOM	259	CA	ASP	A	56	-33.414	11.621	10.841	1.00	39.45	C
[14074]	ATOM	260	C	ASP	A	56	-32.600	11.610	12.178	1.00	40.01	C
[14075]	ATOM	261	O	ASP	A	56	-32.355	10.553	12.765	1.00	40.52	O
[14076]	ATOM	262	CB	ASP	A	56	-34.784	12.256	11.107	1.00	38.25	C
[14077]	ATOM	263	CG	ASP	A	56	-34.788	13.797	10.927	1.00	40.73	C
[14078]	ATOM	264	OD1	ASP	A	56	-33.709	14.442	10.895	1.00	37.95	O
[14079]	ATOM	265	OD2	ASP	A	56	-35.899	14.362	10.793	1.00	41.09	O
[14080]	ATOM	266	N	VAL	A	57	-32.193	12.803	12.636	1.00	40.14	N
[14081]	ATOM	267	CA	VAL	A	57	-31.508	12.995	13.917	1.00	39.48	C
[14082]	ATOM	268	C	VAL	A	57	-32.373	12.507	15.082	1.00	39.54	C
[14083]	ATOM	269	O	VAL	A	57	-33.562	12.854	15.173	1.00	39.98	O
[14084]	ATOM	270	CB	VAL	A	57	-31.163	14.498	14.178	1.00	39.68	C
[14085]	ATOM	271	CG1	VAL	A	57	-30.491	14.644	15.522	1.00	38.23	C
[14086]	ATOM	272	CG2	VAL	A	57	-30.260	15.060	13.103	1.00	38.39	C
[14087]	ATOM	273	N	GLY	A	58	-31.788	11.697	15.970	1.00	39.17	N
[14088]	ATOM	274	CA	GLY	A	58	-32.519	11.199	17.139	1.00	39.15	C
[14089]	ATOM	275	C	GLY	A	58	-33.072	9.786	16.936	1.00	39.32	C
[14090]	ATOM	276	O	GLY	A	58	-33.484	9.126	17.897	1.00	39.32	O
[14091]	ATOM	277	N	LEU	A	59	-33.081	9.325	15.687	1.00	39.40	N
[14092]	ATOM	278	CA	LEU	A	59	-33.719	8.056	15.324	1.00	38.89	C
[14093]	ATOM	279	C	LEU	A	59	-32.690	7.029	14.829	1.00	39.31	C
[14094]	ATOM	280	O	LEU	A	59	-31.482	7.296	14.812	1.00	39.01	O
[14095]	ATOM	281	CB	LEU	A	59	-34.770	8.303	14.232	1.00	39.07	C

[14096]	ATOM	282	CG	LEU	A	59	-35.880	9.314	14.529	1.00	38.00	C
[14097]	ATOM	283	CD1	LEU	A	59	-36.830	9.429	13.354	1.00	38.35	C
[14098]	ATOM	284	CD2	LEU	A	59	-36.602	8.988	15.824	1.00	37.87	C
[14099]	ATOM	285	N	ASN	A	60	-33.177	5.857	14.436	1.00	39.53	N
[14100]	ATOM	286	CA	ASN	A	60	-32.381	4.921	13.649	1.00	40.71	C
[14101]	ATOM	287	C	ASN	A	60	-33.269	4.417	12.517	1.00	40.77	C
[14102]	ATOM	288	O	ASN	A	60	-34.420	4.886	12.390	1.00	40.32	O
[14103]	ATOM	289	CB	ASN	A	60	-31.776	3.810	14.515	1.00	40.81	C
[14104]	ATOM	290	CG	ASN	A	60	-32.821	2.987	15.237	1.00	40.91	C
[14105]	ATOM	291	OD1	ASN	A	60	-33.908	2.747	14.716	1.00	41.80	O
[14106]	ATOM	292	ND2	ASN	A	60	-32.496	2.553	16.449	1.00	40.99	N
[14107]	ATOM	293	N	TYR	A	61	-32.769	3.512	11.668	1.00	40.85	N
[14108]	ATOM	294	CA	TYR	A	61	-33.567	3.136	10.501	1.00	40.84	C
[14109]	ATOM	295	C	TYR	A	61	-34.910	2.535	10.931	1.00	40.45	C
[14110]	ATOM	296	O	TYR	A	61	-35.916	2.661	10.252	1.00	40.20	O
[14111]	ATOM	297	CB	TYR	A	61	-32.779	2.228	9.541	1.00	41.18	C
[14112]	ATOM	298	CG	TYR	A	61	-32.832	0.727	9.818	1.00	42.08	C
[14113]	ATOM	299	CD1	TYR	A	61	-33.931	-0.043	9.400	1.00	43.40	C
[14114]	ATOM	300	CD2	TYR	A	61	-31.765	0.071	10.456	1.00	42.53	C
[14115]	ATOM	301	CE1	TYR	A	61	-33.971	-1.448	9.604	1.00	41.70	C
[14116]	ATOM	302	CE2	TYR	A	61	-31.799	-1.340	10.685	1.00	42.24	C
[14117]	ATOM	303	CZ	TYR	A	61	-32.918	-2.067	10.254	1.00	42.17	C
[14118]	ATOM	304	OH	TYR	A	61	-32.995	-3.404	10.453	1.00	42.41	O
[14119]	ATOM	305	N	LYS	A	62	-34.914	1.918	12.097	1.00	40.32	N
[14120]	ATOM	306	CA	LYS	A	62	-36.097	1.241	12.619	1.00	41.65	C
[14121]	ATOM	307	C	LYS	A	62	-37.138	2.215	13.186	1.00	40.61	C
[14122]	ATOM	308	O	LYS	A	62	-38.312	2.150	12.845	1.00	40.81	O
[14123]	ATOM	309	CB	LYS	A	62	-35.664	0.267	13.715	1.00	41.36	C
[14124]	ATOM	310	CG	LYS	A	62	-36.431	-0.987	13.754	1.00	46.59	C
[14125]	ATOM	311	CD	LYS	A	62	-35.837	-1.967	12.778	1.00	51.51	C
[14126]	ATOM	312	CE	LYS	A	62	-36.532	-3.326	12.868	1.00	52.41	C
[14127]	ATOM	313	NZ	LYS	A	62	-37.657	-3.406	11.867	1.00	49.06	N
[14128]	ATOM	314	N	SER	A	63	-36.704	3.090	14.081	1.00	39.55	N
[14129]	ATOM	315	CA	SER	A	63	-37.606	4.066	14.680	1.00	39.54	C
[14130]	ATOM	316	C	SER	A	63	-38.059	5.101	13.609	1.00	39.86	C
[14131]	ATOM	317	O	SER	A	63	-39.129	5.695	13.721	1.00	40.87	O

[14132]	ATOM	318	CB	SER	A	63	-36.927	4.733	15.886	1.00	38.91	C
[14133]	ATOM	319	OG	SER	A	63	-35.731	5.379	15.461	1.00	37.66	O
[14134]	ATOM	320	N	CYS	A	64	-37.261	5.272	12.553	1.00	39.15	N
[14135]	ATOM	321	CA	CYS	A	64	-37.611	6.192	11.488	1.00	39.32	C
[14136]	ATOM	322	C	CYS	A	64	-38.491	5.566	10.378	1.00	39.46	C
[14137]	ATOM	323	O	CYS	A	64	-39.458	6.199	9.934	1.00	39.61	O
[14138]	ATOM	324	CB	CYS	A	64	-36.358	6.829	10.900	1.00	38.12	C
[14139]	ATOM	325	SG	CYS	A	64	-36.706	8.243	9.795	1.00	41.56	S
[14140]	ATOM	326	N	PHE	A	65	-38.175	4.330	9.974	1.00	38.54	N
[14141]	ATOM	327	CA	PHE	A	65	-38.761	3.702	8.770	1.00	38.41	C
[14142]	ATOM	328	C	PHE	A	65	-39.591	2.424	8.930	1.00	38.53	C
[14143]	ATOM	329	O	PHE	A	65	-40.160	1.942	7.963	1.00	38.15	O
[14144]	ATOM	330	CB	PHE	A	65	-37.661	3.462	7.745	1.00	37.14	C
[14145]	ATOM	331	CG	PHE	A	65	-37.095	4.737	7.175	1.00	37.94	C
[14146]	ATOM	332	CD1	PHE	A	65	-37.902	5.585	6.448	1.00	37.67	C
[14147]	ATOM	333	CD2	PHE	A	65	-35.758	5.075	7.376	1.00	36.70	C
[14148]	ATOM	334	CE1	PHE	A	65	-37.409	6.774	5.924	1.00	39.18	C
[14149]	ATOM	335	CE2	PHE	A	65	-35.243	6.255	6.851	1.00	38.50	C
[14150]	ATOM	336	CZ	PHE	A	65	-36.070	7.106	6.111	1.00	36.98	C
[14151]	ATOM	337	N	GLN	A	66	-39.673	1.866	10.131	1.00	39.51	N
[14152]	ATOM	338	CA	GLN	A	66	-40.416	0.615	10.284	1.00	40.20	C
[14153]	ATOM	339	C	GLN	A	66	-41.918	0.730	9.995	1.00	40.45	C
[14154]	ATOM	340	O	GLN	A	66	-42.476	-0.116	9.314	1.00	41.10	O
[14155]	ATOM	341	CB	GLN	A	66	-40.176	-0.019	11.652	1.00	40.63	C
[14156]	ATOM	342	CG	GLN	A	66	-40.850	-1.390	11.802	1.00	43.35	C
[14157]	ATOM	343	CD	GLN	A	66	-40.721	-1.946	13.199	1.00	48.12	C
[14158]	ATOM	344	OE1	GLN	A	66	-39.814	-2.716	13.485	1.00	48.80	O
[14159]	ATOM	345	NE2	GLN	A	66	-41.622	-1.541	14.085	1.00	51.55	N
[14160]	ATOM	346	N	PRO	A	67	-42.591	1.758	10.540	1.00	41.32	N
[14161]	ATOM	347	CA	PRO	A	67	-44.033	1.856	10.211	1.00	40.80	C
[14162]	ATOM	348	C	PRO	A	67	-44.309	1.965	8.708	1.00	40.02	C
[14163]	ATOM	349	O	PRO	A	67	-45.321	1.441	8.226	1.00	40.03	O
[14164]	ATOM	350	CB	PRO	A	67	-44.463	3.148	10.938	1.00	41.40	C
[14165]	ATOM	351	CG	PRO	A	67	-43.477	3.216	12.139	1.00	41.58	C
[14166]	ATOM	352	CD	PRO	A	67	-42.169	2.807	11.505	1.00	40.78	C
[14167]	ATOM	353	N	LEU	A	68	-43.419	2.623	7.966	1.00	38.64	N



[14168]	ATOM	354	CA	LEU	A	68	-43.608	2.757	6.531	1.00	37.68	C
[14169]	ATOM	355	C	LEU	A	68	-43.268	1.447	5.809	1.00	37.50	C
[14170]	ATOM	356	O	LEU	A	68	-44.077	0.915	5.064	1.00	35.87	O
[14171]	ATOM	357	CB	LEU	A	68	-42.777	3.932	5.972	1.00	37.95	C
[14172]	ATOM	358	CG	LEU	A	68	-42.782	4.114	4.449	1.00	37.69	C
[14173]	ATOM	359	CD1	LEU	A	68	-44.162	4.472	3.916	1.00	37.72	C
[14174]	ATOM	360	CD2	LEU	A	68	-41.729	5.174	4.061	1.00	36.62	C
[14175]	ATOM	361	N	PHE	A	69	-42.068	0.929	6.033	1.00	38.01	N
[14176]	ATOM	362	CA	PHE	A	69	-41.621	-0.241	5.275	1.00	39.19	C
[14177]	ATOM	363	C	PHE	A	69	-42.341	-1.530	5.661	1.00	39.71	C
[14178]	ATOM	364	O	PHE	A	69	-42.386	-2.455	4.857	1.00	39.94	O
[14179]	ATOM	365	CB	PHE	A	69	-40.091	-0.373	5.306	1.00	39.22	C
[14180]	ATOM	366	CG	PHE	A	69	-39.410	0.570	4.360	1.00	40.42	C
[14181]	ATOM	367	CD1	PHE	A	69	-39.245	1.918	4.695	1.00	39.70	C
[14182]	ATOM	368	CD2	PHE	A	69	-38.995	0.130	3.102	1.00	41.08	C
[14183]	ATOM	369	CE1	PHE	A	69	-38.645	2.814	3.808	1.00	41.17	C
[14184]	ATOM	370	CE2	PHE	A	69	-38.401	1.009	2.194	1.00	40.34	C
[14185]	ATOM	371	CZ	PHE	A	69	-38.214	2.361	2.548	1.00	42.21	C
[14186]	ATOM	372	N	GLN	A	70	-42.979	-1.551	6.836	1.00	40.54	N
[14187]	ATOM	373	CA	GLN	A	70	-43.798	-2.710	7.271	1.00	41.92	C
[14188]	ATOM	374	C	GLN	A	70	-45.285	-2.497	7.029	1.00	42.12	C
[14189]	ATOM	375	O	GLN	A	70	-46.071	-3.401	7.253	1.00	43.07	O
[14190]	ATOM	376	CB	GLN	A	70	-43.558	-3.083	8.749	1.00	41.56	C
[14191]	ATOM	377	CG	GLN	A	70	-42.187	-3.700	8.991	1.00	43.03	C
[14192]	ATOM	378	CD	GLN	A	70	-41.996	-4.296	10.384	1.00	44.66	C
[14193]	ATOM	379	OE1	GLN	A	70	-41.026	-5.029	10.609	1.00	45.54	O
[14194]	ATOM	380	NE2	GLN	A	70	-42.902	-3.977	11.330	1.00	44.40	N
[14195]	ATOM	381	N	PHE	A	71	-45.673	-1.318	6.552	1.00	42.73	N
[14196]	ATOM	382	CA	PHE	A	71	-47.062	-1.109	6.149	1.00	42.77	C
[14197]	ATOM	383	C	PHE	A	71	-47.442	-2.143	5.074	1.00	43.02	C
[14198]	ATOM	384	O	PHE	A	71	-46.646	-2.414	4.180	1.00	41.63	O
[14199]	ATOM	385	CB	PHE	A	71	-47.274	0.308	5.606	1.00	42.28	C
[14200]	ATOM	386	CG	PHE	A	71	-48.729	0.696	5.523	1.00	41.78	C
[14201]	ATOM	387	CD1	PHE	A	71	-49.444	1.000	6.684	1.00	40.57	C
[14202]	ATOM	388	CD2	PHE	A	71	-49.385	0.748	4.298	1.00	40.81	C
[14203]	ATOM	389	CE1	PHE	A	71	-50.781	1.342	6.622	1.00	41.19	C

[14204]	ATOM	390	CE2	PHE	A	71	-50.731	1.077	4.234	1.00	39.69	C
[14205]	ATOM	391	CZ	PHE	A	71	-51.428	1.378	5.393	1.00	40.57	C
[14206]	ATOM	392	N	GLU	A	72	-48.641	-2.713	5.171	1.00	43.81	N
[14207]	ATOM	393	CA	GLU	A	72	-49.045	-3.834	4.294	1.00	46.38	C
[14208]	ATOM	394	C	GLU	A	72	-48.938	-3.523	2.789	1.00	45.44	C
[14209]	ATOM	395	O	GLU	A	72	-48.348	-4.282	2.028	1.00	44.97	O
[14210]	ATOM	396	CB	GLU	A	72	-50.464	-4.305	4.648	1.00	46.93	C
[14211]	ATOM	397	CG	GLU	A	72	-51.506	-3.157	4.655	1.00	51.32	C
[14212]	ATOM	398	CD	GLU	A	72	-52.972	-3.629	4.824	1.00	56.95	C
[14213]	ATOM	399	OE1	GLU	A	72	-53.231	-4.850	5.100	1.00	57.27	O
[14214]	ATOM	400	OE2	GLU	A	72	-53.868	-2.740	4.696	1.00	62.80	O
[14215]	ATOM	401	N	ASP	A	73	-49.486	-2.381	2.378	1.00	46.15	N
[14216]	ATOM	402	CA	ASP	A	73	-49.360	-1.875	0.988	1.00	45.94	C
[14217]	ATOM	403	C	ASP	A	73	-47.922	-1.650	0.543	1.00	45.41	C
[14218]	ATOM	404	O	ASP	A	73	-47.597	-1.860	-0.627	1.00	45.43	O
[14219]	ATOM	405	CB	ASP	A	73	-50.166	-0.584	0.827	1.00	46.35	C
[14220]	ATOM	406	CG	ASP	A	73	-51.635	-0.789	1.139	1.00	48.05	C
[14221]	ATOM	407	OD1	ASP	A	73	-52.073	-1.945	1.073	1.00	49.47	O
[14222]	ATOM	408	OD2	ASP	A	73	-52.347	0.182	1.476	1.00	51.28	O
[14223]	ATOM	409	N	MET	A	74	-47.068	-1.202	1.458	1.00	44.84	N
[14224]	ATOM	410	CA	MET	A	74	-45.655	-1.015	1.140	1.00	44.99	C
[14225]	ATOM	411	C	MET	A	74	-44.959	-2.344	0.852	1.00	46.12	C
[14226]	ATOM	412	O	MET	A	74	-44.204	-2.452	-0.100	1.00	45.86	O
[14227]	ATOM	413	CB	MET	A	74	-44.918	-0.265	2.241	1.00	44.23	C
[14228]	ATOM	414	CG	MET	A	74	-43.490	0.171	1.853	1.00	43.17	C
[14229]	ATOM	415	SD	MET	A	74	-43.370	1.135	0.290	1.00	43.97	S
[14230]	ATOM	416	CE	MET	A	74	-43.259	2.776	0.934	1.00	42.91	C
[14231]	ATOM	417	N	GLN	A	75	-45.219	-3.354	1.678	1.00	47.55	N
[14232]	ATOM	418	CA	GLN	A	75	-44.655	-4.701	1.483	1.00	48.77	C
[14233]	ATOM	419	C	GLN	A	75	-44.902	-5.264	0.100	1.00	48.34	C
[14234]	ATOM	420	O	GLN	A	75	-44.032	-5.887	-0.489	1.00	48.58	O
[14235]	ATOM	421	CB	GLN	A	75	-45.166	-5.659	2.573	1.00	49.20	C
[14236]	ATOM	422	CG	GLN	A	75	-44.737	-5.209	3.960	1.00	51.19	C
[14237]	ATOM	423	CD	GLN	A	75	-43.671	-6.107	4.567	1.00	57.84	C
[14238]	ATOM	424	OE1	GLN	A	75	-42.757	-6.559	3.876	1.00	59.25	O
[14239]	ATOM	425	NE2	GLN	A	75	-43.799	-6.392	5.877	1.00	58.63	N

[14240]	ATOM	426	N	GLU	A	76	-46.075	-5.005	-0.445	1.00	49.23	N
[14241]	ATOM	427	CA	GLU	A	76	-46.390	-5.422	-1.805	1.00	50.05	C
[14242]	ATOM	428	C	GLU	A	76	-45.604	-4.673	-2.907	1.00	48.60	C
[14243]	ATOM	429	O	GLU	A	76	-45.406	-5.192	-4.005	1.00	49.46	O
[14244]	ATOM	430	CB	GLU	A	76	-47.896	-5.299	-1.993	1.00	51.37	C
[14245]	ATOM	431	CG	GLU	A	76	-48.406	-5.088	-3.427	1.00	55.94	C
[14246]	ATOM	432	CD	GLU	A	76	-49.852	-4.520	-3.445	1.00	61.42	C
[14247]	ATOM	433	OE1	GLU	A	76	-50.498	-4.427	-2.346	1.00	64.03	O
[14248]	ATOM	434	OE2	GLU	A	76	-50.345	-4.188	-4.564	1.00	66.54	O
[14249]	ATOM	435	N	ILE	A	77	-45.170	-3.447	-2.632	1.00	45.85	N
[14250]	ATOM	436	CA	ILE	A	77	-44.341	-2.732	-3.577	1.00	43.06	C
[14251]	ATOM	437	C	ILE	A	77	-42.907	-3.220	-3.431	1.00	41.92	C
[14252]	ATOM	438	O	ILE	A	77	-42.288	-3.619	-4.408	1.00	39.00	O
[14253]	ATOM	439	CB	ILE	A	77	-44.419	-1.193	-3.348	1.00	43.11	C
[14254]	ATOM	440	CG1	ILE	A	77	-45.819	-0.685	-3.706	1.00	41.05	C
[14255]	ATOM	441	CG2	ILE	A	77	-43.292	-0.441	-4.126	1.00	41.45	C
[14256]	ATOM	442	CD1	ILE	A	77	-46.018	0.773	-3.353	1.00	44.39	C
[14257]	ATOM	443	N	ILE	A	78	-42.394	-3.196	-2.198	1.00	41.25	N
[14258]	ATOM	444	CA	ILE	A	78	-40.973	-3.471	-1.945	1.00	41.63	C
[14259]	ATOM	445	C	ILE	A	78	-40.530	-4.930	-2.154	1.00	41.52	C
[14260]	ATOM	446	O	ILE	A	78	-39.327	-5.179	-2.184	1.00	42.03	O
[14261]	ATOM	447	CB	ILE	A	78	-40.512	-2.964	-0.540	1.00	41.26	C
[14262]	ATOM	448	CG1	ILE	A	78	-41.125	-3.826	0.590	1.00	42.39	C
[14263]	ATOM	449	CG2	ILE	A	78	-40.753	-1.442	-0.438	1.00	42.98	C
[14264]	ATOM	450	CD1	ILE	A	78	-41.080	-3.191	2.004	1.00	43.51	C
[14265]	ATOM	451	N	GLN	A	79	-41.466	-5.879	-2.278	1.00	41.36	N
[14266]	ATOM	452	CA	GLN	A	79	-41.133	-7.236	-2.749	1.00	42.27	C
[14267]	ATOM	453	C	GLN	A	79	-40.287	-7.197	-4.016	1.00	42.25	C
[14268]	ATOM	454	O	GLN	A	79	-39.584	-8.166	-4.328	1.00	41.52	O
[14269]	ATOM	455	CB	GLN	A	79	-42.386	-7.974	-3.192	1.00	43.13	C
[14270]	ATOM	456	CG	GLN	A	79	-43.273	-8.515	-2.117	1.00	50.06	C
[14271]	ATOM	457	CD	GLN	A	79	-44.596	-8.986	-2.711	1.00	57.48	C
[14272]	ATOM	458	OE1	GLN	A	79	-44.931	-8.650	-3.866	1.00	60.12	O
[14273]	ATOM	459	NE2	GLN	A	79	-45.362	-9.743	-1.927	1.00	59.33	N
[14274]	ATOM	460	N	ASN	A	80	-40.437	-6.112	-4.796	1.00	40.39	N
[14275]	ATOM	461	CA	ASN	A	80	-39.789	-6.020	-6.091	1.00	40.46	C

[14276]	ATOM	462	C	ASN	A	80	-38.584	-5.100	-6.077	1.00	40.49	C
[14277]	ATOM	463	O	ASN	A	80	-38.190	-4.581	-7.108	1.00	39.54	O
[14278]	ATOM	464	CB	ASN	A	80	-40.810	-5.628	-7.156	1.00	40.02	C
[14279]	ATOM	465	CG	ASN	A	80	-41.806	-6.753	-7.427	1.00	41.51	C
[14280]	ATOM	466	OD1	ASN	A	80	-41.411	-7.901	-7.654	1.00	39.77	O
[14281]	ATOM	467	ND2	ASN	A	80	-43.092	-6.439	-7.367	1.00	42.08	N
[14282]	ATOM	468	N	PHE	A	81	-38.003	-4.922	-4.893	1.00	40.38	N
[14283]	ATOM	469	CA	PHE	A	81	-36.789	-4.130	-4.715	1.00	40.43	C
[14284]	ATOM	470	C	PHE	A	81	-35.937	-4.778	-3.642	1.00	39.88	C
[14285]	ATOM	471	O	PHE	A	81	-36.455	-5.413	-2.743	1.00	40.26	O
[14286]	ATOM	472	CB	PHE	A	81	-37.116	-2.674	-4.275	1.00	39.78	C
[14287]	ATOM	473	CG	PHE	A	81	-37.819	-1.839	-5.343	1.00	40.50	C
[14288]	ATOM	474	CD1	PHE	A	81	-37.076	-1.052	-6.253	1.00	38.62	C
[14289]	ATOM	475	CD2	PHE	A	81	-39.211	-1.806	-5.413	1.00	39.34	C
[14290]	ATOM	476	CE1	PHE	A	81	-37.734	-0.267	-7.206	1.00	39.01	C
[14291]	ATOM	477	CE2	PHE	A	81	-39.882	-1.012	-6.372	1.00	38.87	C
[14292]	ATOM	478	CZ	PHE	A	81	-39.137	-0.249	-7.259	1.00	38.70	C
[14293]	ATOM	479	N	VAL	A	82	-34.623	-4.607	-3.734	1.00	40.48	N
[14294]	ATOM	480	CA	VAL	A	82	-33.757	-4.814	-2.585	1.00	40.96	C
[14295]	ATOM	481	C	VAL	A	82	-33.699	-3.471	-1.829	1.00	41.54	C
[14296]	ATOM	482	O	VAL	A	82	-33.811	-2.409	-2.441	1.00	41.18	O
[14297]	ATOM	483	CB	VAL	A	82	-32.346	-5.322	-2.988	1.00	41.19	C
[14298]	ATOM	484	CG1	VAL	A	82	-31.602	-4.304	-3.847	1.00	41.48	C
[14299]	ATOM	485	CG2	VAL	A	82	-31.521	-5.718	-1.751	1.00	42.20	C
[14300]	ATOM	486	N	ARG	A	83	-33.582	-3.532	-0.501	1.00	41.88	N
[14301]	ATOM	487	CA	ARG	A	83	-33.598	-2.326	0.346	1.00	41.43	C
[14302]	ATOM	488	C	ARG	A	83	-32.386	-2.301	1.269	1.00	41.34	C
[14303]	ATOM	489	O	ARG	A	83	-32.041	-3.317	1.854	1.00	41.16	O
[14304]	ATOM	490	CB	ARG	A	83	-34.892	-2.242	1.176	1.00	41.53	C
[14305]	ATOM	491	CG	ARG	A	83	-36.191	-2.155	0.358	1.00	41.03	C
[14306]	ATOM	492	CD	ARG	A	83	-36.718	-3.559	0.001	1.00	40.02	C
[14307]	ATOM	493	NE	ARG	A	83	-37.289	-4.234	1.171	1.00	40.96	N
[14308]	ATOM	494	CZ	ARG	A	83	-37.784	-5.472	1.183	1.00	40.23	C
[14309]	ATOM	495	NH1	ARG	A	83	-37.771	-6.212	0.083	1.00	39.26	N
[14310]	ATOM	496	NH2	ARG	A	83	-38.293	-5.969	2.306	1.00	36.92	N
[14311]	ATOM	497	N	VAL	A	84	-31.755	-1.131	1.390	1.00	41.02	N

[14312]	ATOM	498	CA	VAL	A	84	-30.547	-0.935	2.184	1.00	40.81	C
[14313]	ATOM	499	C	VAL	A	84	-30.874	0.185	3.174	1.00	40.73	C
[14314]	ATOM	500	O	VAL	A	84	-31.065	1.345	2.761	1.00	40.69	O
[14315]	ATOM	501	CB	VAL	A	84	-29.353	-0.464	1.293	1.00	41.27	C
[14316]	ATOM	502	CG1	VAL	A	84	-28.068	-0.299	2.123	1.00	39.60	C
[14317]	ATOM	503	CG2	VAL	A	84	-29.136	-1.420	0.119	1.00	41.50	C
[14318]	ATOM	504	N	HIS	A	85	-30.989	-0.156	4.457	1.00	39.93	N
[14319]	ATOM	505	CA	HIS	A	85	-31.338	0.847	5.461	1.00	40.36	C
[14320]	ATOM	506	C	HIS	A	85	-30.107	1.264	6.221	1.00	40.88	C
[14321]	ATOM	507	O	HIS	A	85	-29.536	0.477	6.972	1.00	40.67	O
[14322]	ATOM	508	CB	HIS	A	85	-32.393	0.306	6.404	1.00	39.61	C
[14323]	ATOM	509	CG	HIS	A	85	-33.684	-0.012	5.728	1.00	40.09	C
[14324]	ATOM	510	ND1	HIS	A	85	-34.574	0.966	5.343	1.00	40.26	N
[14325]	ATOM	511	CD2	HIS	A	85	-34.230	-1.191	5.352	1.00	40.83	C
[14326]	ATOM	512	CE1	HIS	A	85	-35.624	0.398	4.774	1.00	41.41	C
[14327]	ATOM	513	NE2	HIS	A	85	-35.437	-0.906	4.758	1.00	38.88	N
[14328]	ATOM	514	N	VAL	A	86	-29.666	2.487	5.984	1.00	41.26	N
[14329]	ATOM	515	CA	VAL	A	86	-28.439	2.977	6.622	1.00	41.43	C
[14330]	ATOM	516	C	VAL	A	86	-28.726	3.548	8.028	1.00	41.13	C
[14331]	ATOM	517	O	VAL	A	86	-29.712	4.269	8.210	1.00	39.98	O
[14332]	ATOM	518	CB	VAL	A	86	-27.729	4.057	5.736	1.00	41.53	C
[14333]	ATOM	519	CG1	VAL	A	86	-26.372	4.482	6.374	1.00	41.31	C
[14334]	ATOM	520	CG2	VAL	A	86	-27.516	3.526	4.309	1.00	41.37	C
[14335]	ATOM	521	N	ASP	A	87	-27.878	3.180	9.003	1.00	41.04	N
[14336]	ATOM	522	CA	ASP	A	87	-27.830	3.797	10.332	1.00	41.39	C
[14337]	ATOM	523	C	ASP	A	87	-26.643	4.761	10.365	1.00	41.26	C
[14338]	ATOM	524	O	ASP	A	87	-25.506	4.350	10.112	1.00	41.52	O
[14339]	ATOM	525	CB	ASP	A	87	-27.644	2.736	11.429	1.00	42.05	C
[14340]	ATOM	526	CG	ASP	A	87	-28.931	2.017	11.791	1.00	42.57	C
[14341]	ATOM	527	OD1	ASP	A	87	-30.000	2.668	11.854	1.00	41.63	O
[14342]	ATOM	528	OD2	ASP	A	87	-28.854	0.797	12.063	1.00	43.86	O
[14343]	ATOM	529	N	ALA	A	88	-26.890	6.037	10.656	1.00	41.31	N
[14344]	ATOM	530	CA	ALA	A	88	-25.804	7.006	10.794	1.00	41.35	C
[14345]	ATOM	531	C	ALA	A	88	-24.760	6.438	11.780	1.00	41.38	C
[14346]	ATOM	532	O	ALA	A	88	-25.125	5.670	12.674	1.00	41.76	O
[14347]	ATOM	533	CB	ALA	A	88	-26.339	8.355	11.275	1.00	41.51	C

[14348]	ATOM	534	N	PRO	A	89	-23.463	6.781	11.611	1.00	41.26	N
[14349]	ATOM	535	CA	PRO	A	89	-22.451	6.313	12.575	1.00	41.17	C
[14350]	ATOM	536	C	PRO	A	89	-22.845	6.622	14.030	1.00	41.53	C
[14351]	ATOM	537	O	PRO	A	89	-23.293	7.742	14.345	1.00	41.48	O
[14352]	ATOM	538	CB	PRO	A	89	-21.201	7.105	12.174	1.00	41.05	C
[14353]	ATOM	539	CG	PRO	A	89	-21.368	7.326	10.728	1.00	41.11	C
[14354]	ATOM	540	CD	PRO	A	89	-22.854	7.600	10.551	1.00	41.31	C
[14355]	ATOM	541	N	GLY	A	90	-22.665	5.636	14.906	1.00	42.16	N
[14356]	ATOM	542	CA	GLY	A	90	-23.090	5.728	16.295	1.00	41.15	C
[14357]	ATOM	543	C	GLY	A	90	-24.537	5.335	16.564	1.00	41.85	C
[14358]	ATOM	544	O	GLY	A	90	-24.921	5.263	17.723	1.00	41.91	O
[14359]	ATOM	545	N	MET	A	91	-25.352	5.114	15.518	1.00	42.22	N
[14360]	ATOM	546	CA	MET	A	91	-26.800	4.807	15.697	1.00	42.67	C
[14361]	ATOM	547	C	MET	A	91	-27.146	3.339	15.527	1.00	43.79	C
[14362]	ATOM	548	O	MET	A	91	-28.258	2.913	15.870	1.00	44.03	O
[14363]	ATOM	549	CB	MET	A	91	-27.694	5.614	14.755	1.00	41.82	C
[14364]	ATOM	550	CG	MET	A	91	-27.381	7.073	14.675	1.00	41.43	C
[14365]	ATOM	551	SD	MET	A	91	-27.301	7.901	16.272	1.00	39.63	S
[14366]	ATOM	552	CE	MET	A	91	-25.956	9.019	15.872	1.00	40.52	C
[14367]	ATOM	553	N	GLU	A	92	-26.189	2.586	14.997	1.00	44.22	N
[14368]	ATOM	554	CA	GLU	A	92	-26.337	1.168	14.771	1.00	45.66	C
[14369]	ATOM	555	C	GLU	A	92	-26.576	0.408	16.089	1.00	47.37	C
[14370]	ATOM	556	O	GLU	A	92	-26.230	0.893	17.185	1.00	46.80	O
[14371]	ATOM	557	CB	GLU	A	92	-25.120	0.636	13.992	1.00	45.43	C
[14372]	ATOM	558	CG	GLU	A	92	-23.771	0.465	14.766	1.00	45.13	C
[14373]	ATOM	559	CD	GLU	A	92	-22.877	1.723	14.844	1.00	48.09	C
[14374]	ATOM	560	OE1	GLU	A	92	-23.228	2.815	14.314	1.00	48.26	O
[14375]	ATOM	561	OE2	GLU	A	92	-21.800	1.620	15.484	1.00	49.19	O
[14376]	ATOM	562	N	GLU	A	93	-27.193	-0.766	15.986	1.00	48.92	N
[14377]	ATOM	563	CA	GLU	A	93	-27.469	-1.565	17.161	1.00	50.74	C
[14378]	ATOM	564	C	GLU	A	93	-26.150	-1.874	17.852	1.00	51.18	C
[14379]	ATOM	565	O	GLU	A	93	-25.210	-2.357	17.214	1.00	51.22	O
[14380]	ATOM	566	CB	GLU	A	93	-28.195	-2.851	16.783	1.00	51.44	C
[14381]	ATOM	567	CG	GLU	A	93	-28.863	-3.565	17.969	1.00	55.12	C
[14382]	ATOM	568	CD	GLU	A	93	-29.859	-4.631	17.523	1.00	59.76	C
[14383]	ATOM	569	OE1	GLU	A	93	-30.087	-5.593	18.296	1.00	61.82	O

[14384]	ATOM	570	OE2	GLU	A	93	-30.412	-4.514	16.403	1.00	61.76	O
[14385]	ATOM	571	N	GLY	A	94	-26.072	-1.537	19.140	1.00	51.55	N
[14386]	ATOM	572	CA	GLY	A	94	-24.897	-1.834	19.939	1.00	51.83	C
[14387]	ATOM	573	C	GLY	A	94	-23.711	-0.924	19.682	1.00	52.01	C
[14388]	ATOM	574	O	GLY	A	94	-22.582	-1.270	20.024	1.00	52.05	O
[14389]	ATOM	575	N	ALA	A	95	-23.952	0.240	19.076	1.00	51.97	N
[14390]	ATOM	576	CA	ALA	A	95	-22.892	1.232	18.876	1.00	51.80	C
[14391]	ATOM	577	C	ALA	A	95	-22.233	1.629	20.212	1.00	51.84	C
[14392]	ATOM	578	O	ALA	A	95	-22.940	1.857	21.207	1.00	51.56	O
[14393]	ATOM	579	CB	ALA	A	95	-23.446	2.449	18.206	1.00	51.65	C
[14394]	ATOM	580	N	PRO	A	96	-20.880	1.700	20.239	1.00	51.89	N
[14395]	ATOM	581	CA	PRO	A	96	-20.192	2.315	21.378	1.00	51.79	C
[14396]	ATOM	582	C	PRO	A	96	-20.447	3.828	21.420	1.00	51.98	C
[14397]	ATOM	583	O	PRO	A	96	-20.772	4.436	20.397	1.00	51.91	O
[14398]	ATOM	584	CB	PRO	A	96	-18.712	2.044	21.084	1.00	51.64	C
[14399]	ATOM	585	CG	PRO	A	96	-18.641	1.866	19.599	1.00	51.92	C
[14400]	ATOM	586	CD	PRO	A	96	-19.929	1.195	19.225	1.00	51.94	C
[14401]	ATOM	587	N	VAL	A	97	-20.315	4.421	22.598	1.00	52.07	N
[14402]	ATOM	588	CA	VAL	A	97	-20.389	5.867	22.733	1.00	52.32	C
[14403]	ATOM	589	C	VAL	A	97	-19.037	6.408	22.274	1.00	52.43	C
[14404]	ATOM	590	O	VAL	A	97	-18.013	6.061	22.852	1.00	52.11	O
[14405]	ATOM	591	CB	VAL	A	97	-20.677	6.269	24.200	1.00	52.33	C
[14406]	ATOM	592	CG1	VAL	A	97	-20.751	7.780	24.356	1.00	51.75	C
[14407]	ATOM	593	CG2	VAL	A	97	-21.968	5.614	24.681	1.00	52.65	C
[14408]	ATOM	594	N	PHE	A	98	-19.033	7.220	21.215	1.00	52.41	N
[14409]	ATOM	595	CA	PHE	A	98	-17.796	7.834	20.704	1.00	52.61	C
[14410]	ATOM	596	C	PHE	A	98	-17.059	8.600	21.817	1.00	53.08	C
[14411]	ATOM	597	O	PHE	A	98	-17.705	9.187	22.687	1.00	52.42	O
[14412]	ATOM	598	CB	PHE	A	98	-18.107	8.813	19.567	1.00	52.47	C
[14413]	ATOM	599	CG	PHE	A	98	-18.504	8.162	18.275	1.00	52.04	C
[14414]	ATOM	600	CD1	PHE	A	98	-17.596	7.388	17.557	1.00	51.58	C
[14415]	ATOM	601	CD2	PHE	A	98	-19.775	8.362	17.755	1.00	52.62	C
[14416]	ATOM	602	CE1	PHE	A	98	-17.949	6.803	16.369	1.00	51.61	C
[14417]	ATOM	603	CE2	PHE	A	98	-20.144	7.784	16.545	1.00	51.46	C
[14418]	ATOM	604	CZ	PHE	A	98	-19.225	7.001	15.853	1.00	52.52	C
[14419]	ATOM	605	N	PRO	A	99	-15.707	8.612	21.780	1.00	53.71	N

[14420]	ATOM	606	CA	PRO	A	99	-14.945	9.290	22.842	1.00	54.29	C
[14421]	ATOM	607	C	PRO	A	99	-15.248	10.780	22.897	1.00	54.62	C
[14422]	ATOM	608	O	PRO	A	99	-15.536	11.395	21.866	1.00	54.67	O
[14423]	ATOM	609	CB	PRO	A	99	-13.479	9.051	22.440	1.00	54.30	C
[14424]	ATOM	610	CG	PRO	A	99	-13.524	8.746	20.970	1.00	54.42	C
[14425]	ATOM	611	CD	PRO	A	99	-14.817	8.006	20.767	1.00	53.97	C
[14426]	ATOM	612	N	LEU	A	100	-15.222	11.344	24.100	1.00	55.11	N
[14427]	ATOM	613	CA	LEU	A	100	-15.339	12.794	24.289	1.00	55.62	C
[14428]	ATOM	614	C	LEU	A	100	-14.356	13.499	23.344	1.00	55.45	C
[14429]	ATOM	615	O	LEU	A	100	-13.181	13.105	23.242	1.00	55.61	O
[14430]	ATOM	616	CB	LEU	A	100	-15.019	13.165	25.749	1.00	55.93	C
[14431]	ATOM	617	CG	LEU	A	100	-15.891	14.199	26.470	1.00	57.11	C
[14432]	ATOM	618	CD1	LEU	A	100	-15.390	14.407	27.925	1.00	59.21	C
[14433]	ATOM	619	CD2	LEU	A	100	-15.991	15.546	25.726	1.00	58.86	C
[14434]	ATOM	620	N	GLY	A	101	-14.840	14.521	22.640	1.00	55.26	N
[14435]	ATOM	621	CA	GLY	A	101	-14.017	15.250	21.670	1.00	54.81	C
[14436]	ATOM	622	C	GLY	A	101	-13.880	14.594	20.304	1.00	54.54	C
[14437]	ATOM	623	O	GLY	A	101	-13.110	15.066	19.463	1.00	55.24	O
[14438]	ATOM	624	N	TYR	A	102	-14.611	13.503	20.077	1.00	53.54	N
[14439]	ATOM	625	CA	TYR	A	102	-14.637	12.855	18.762	1.00	52.70	C
[14440]	ATOM	626	C	TYR	A	102	-15.061	13.827	17.657	1.00	52.21	C
[14441]	ATOM	627	O	TYR	A	102	-15.969	14.647	17.861	1.00	52.24	O
[14442]	ATOM	628	CB	TYR	A	102	-15.579	11.653	18.774	1.00	52.52	C
[14443]	ATOM	629	CG	TYR	A	102	-15.535	10.828	17.511	1.00	52.10	C
[14444]	ATOM	630	CD1	TYR	A	102	-14.426	10.015	17.223	1.00	51.82	C
[14445]	ATOM	631	CD2	TYR	A	102	-16.602	10.845	16.606	1.00	51.79	C
[14446]	ATOM	632	CE1	TYR	A	102	-14.379	9.243	16.059	1.00	51.47	C
[14447]	ATOM	633	CE2	TYR	A	102	-16.568	10.067	15.427	1.00	51.52	C
[14448]	ATOM	634	CZ	TYR	A	102	-15.451	9.276	15.172	1.00	52.11	C
[14449]	ATOM	635	OH	TYR	A	102	-15.389	8.511	14.033	1.00	53.29	O
[14450]	ATOM	636	N	GLN	A	103	-14.403	13.738	16.498	1.00	51.42	N
[14451]	ATOM	637	CA	GLN	A	103	-14.764	14.564	15.339	1.00	51.26	C
[14452]	ATOM	638	C	GLN	A	103	-15.759	13.805	14.464	1.00	49.86	C
[14453]	ATOM	639	O	GLN	A	103	-15.364	13.055	13.562	1.00	50.16	O
[14454]	ATOM	640	CB	GLN	A	103	-13.530	14.969	14.525	1.00	51.64	C
[14455]	ATOM	641	CG	GLN	A	103	-12.549	15.844	15.313	1.00	56.90	C



[14456]	ATOM	642	CD	GLN	A	103	-11.761	16.788	14.418	1.00	61.73	C
[14457]	ATOM	643	OE1	GLN	A	103	-10.894	16.363	13.631	1.00	62.31	O
[14458]	ATOM	644	NE2	GLN	A	103	-12.066	18.087	14.531	1.00	63.07	N
[14459]	ATOM	645	N	TYR	A	104	-17.041	13.975	14.764	1.00	47.56	N
[14460]	ATOM	646	CA	TYR	A	104	-18.116	13.302	14.019	1.00	45.90	C
[14461]	ATOM	647	C	TYR	A	104	-18.188	13.783	12.555	1.00	44.49	C
[14462]	ATOM	648	O	TYR	A	104	-17.963	14.957	12.301	1.00	44.19	O
[14463]	ATOM	649	CB	TYR	A	104	-19.446	13.556	14.735	1.00	45.28	C
[14464]	ATOM	650	CG	TYR	A	104	-20.561	12.619	14.309	1.00	44.12	C
[14465]	ATOM	651	CD1	TYR	A	104	-20.645	11.325	14.826	1.00	42.62	C
[14466]	ATOM	652	CD2	TYR	A	104	-21.531	13.033	13.401	1.00	43.43	C
[14467]	ATOM	653	CE1	TYR	A	104	-21.664	10.466	14.454	1.00	41.40	C
[14468]	ATOM	654	CE2	TYR	A	104	-22.571	12.165	12.995	1.00	43.74	C
[14469]	ATOM	655	CZ	TYR	A	104	-22.622	10.889	13.536	1.00	43.14	C
[14470]	ATOM	656	OH	TYR	A	104	-23.625	10.040	13.170	1.00	43.20	O
[14471]	ATOM	657	N	PRO	A	105	-18.507	12.886	11.589	1.00	43.60	N
[14472]	ATOM	658	CA	PRO	A	105	-18.626	13.367	10.192	1.00	43.08	C
[14473]	ATOM	659	C	PRO	A	105	-19.608	14.545	10.001	1.00	42.74	C
[14474]	ATOM	660	O	PRO	A	105	-20.658	14.574	10.645	1.00	42.75	O
[14475]	ATOM	661	CB	PRO	A	105	-19.137	12.127	9.443	1.00	42.98	C
[14476]	ATOM	662	CG	PRO	A	105	-18.641	10.973	10.273	1.00	42.96	C
[14477]	ATOM	663	CD	PRO	A	105	-18.762	11.436	11.686	1.00	42.77	C
[14478]	ATOM	664	N	SER	A	106	-19.271	15.508	9.142	1.00	41.92	N
[14479]	ATOM	665	CA	SER	A	106	-20.248	16.516	8.728	1.00	41.89	C
[14480]	ATOM	666	C	SER	A	106	-21.300	15.783	7.870	1.00	41.73	C
[14481]	ATOM	667	O	SER	A	106	-21.104	14.623	7.532	1.00	41.60	O
[14482]	ATOM	668	CB	SER	A	106	-19.574	17.617	7.915	1.00	41.77	C
[14483]	ATOM	669	OG	SER	A	106	-19.109	17.088	6.681	1.00	43.60	O
[14484]	ATOM	670	N	LEU	A	107	-22.406	16.436	7.528	1.00	41.09	N
[14485]	ATOM	671	CA	LEU	A	107	-23.416	15.789	6.683	1.00	40.97	C
[14486]	ATOM	672	C	LEU	A	107	-22.845	15.460	5.298	1.00	41.96	C
[14487]	ATOM	673	O	LEU	A	107	-23.242	14.479	4.659	1.00	41.02	O
[14488]	ATOM	674	CB	LEU	A	107	-24.660	16.669	6.544	1.00	40.46	C
[14489]	ATOM	675	CG	LEU	A	107	-25.491	16.937	7.810	1.00	39.10	C
[14490]	ATOM	676	CD1	LEU	A	107	-26.889	17.368	7.370	1.00	38.38	C
[14491]	ATOM	677	CD2	LEU	A	107	-25.570	15.690	8.725	1.00	38.72	C

[14492]	ATOM	678	N	ASP	A	108	-21.919	16.298	4.837	1.00	41.91	N
[14493]	ATOM	679	CA	ASP	A	108	-21.252	16.069	3.570	1.00	43.48	C
[14494]	ATOM	680	C	ASP	A	108	-20.372	14.831	3.626	1.00	43.03	C
[14495]	ATOM	681	O	ASP	A	108	-20.275	14.085	2.655	1.00	43.39	O
[14496]	ATOM	682	CB	ASP	A	108	-20.402	17.294	3.208	1.00	44.12	C
[14497]	ATOM	683	CG	ASP	A	108	-21.239	18.465	2.693	1.00	46.25	C
[14498]	ATOM	684	OD1	ASP	A	108	-22.505	18.427	2.724	1.00	44.91	O
[14499]	ATOM	685	OD2	ASP	A	108	-20.597	19.429	2.236	1.00	48.97	O
[14500]	ATOM	686	N	GLN	A	109	-19.715	14.624	4.763	1.00	42.64	N
[14501]	ATOM	687	CA	GLN	A	109	-18.885	13.438	4.941	1.00	42.06	C
[14502]	ATOM	688	C	GLN	A	109	-19.774	12.183	5.060	1.00	41.62	C
[14503]	ATOM	689	O	GLN	A	109	-19.455	11.149	4.494	1.00	41.48	O
[14504]	ATOM	690	CB	GLN	A	109	-17.913	13.618	6.119	1.00	41.66	C
[14505]	ATOM	691	CG	GLN	A	109	-16.780	14.607	5.796	1.00	41.61	C
[14506]	ATOM	692	CD	GLN	A	109	-16.011	15.091	7.022	1.00	43.25	C
[14507]	ATOM	693	OE1	GLN	A	109	-16.532	15.102	8.133	1.00	45.91	O
[14508]	ATOM	694	NE2	GLN	A	109	-14.773	15.522	6.814	1.00	41.63	N
[14509]	ATOM	695	N	LEU	A	110	-20.903	12.307	5.747	1.00	40.81	N
[14510]	ATOM	696	CA	LEU	A	110	-21.901	11.242	5.803	1.00	41.38	C
[14511]	ATOM	697	C	LEU	A	110	-22.396	10.835	4.407	1.00	41.53	C
[14512]	ATOM	698	O	LEU	A	110	-22.492	9.632	4.097	1.00	41.54	O
[14513]	ATOM	699	CB	LEU	A	110	-23.081	11.629	6.710	1.00	40.91	C
[14514]	ATOM	700	CG	LEU	A	110	-22.718	11.877	8.183	1.00	40.72	C
[14515]	ATOM	701	CD1	LEU	A	110	-23.919	12.364	8.978	1.00	38.44	C
[14516]	ATOM	702	CD2	LEU	A	110	-22.141	10.601	8.819	1.00	40.21	C
[14517]	ATOM	703	N	ALA	A	111	-22.673	11.834	3.564	1.00	41.32	N
[14518]	ATOM	704	CA	ALA	A	111	-23.057	11.609	2.173	1.00	41.47	C
[14519]	ATOM	705	C	ALA	A	111	-21.979	10.853	1.420	1.00	42.01	C
[14520]	ATOM	706	O	ALA	A	111	-22.279	9.997	0.593	1.00	42.09	O
[14521]	ATOM	707	CB	ALA	A	111	-23.379	12.938	1.475	1.00	40.61	C
[14522]	ATOM	708	N	ASP	A	112	-20.725	11.162	1.748	1.00	42.89	N
[14523]	ATOM	709	CA	ASP	A	112	-19.540	10.533	1.170	1.00	43.92	C
[14524]	ATOM	710	C	ASP	A	112	-19.255	9.109	1.632	1.00	43.41	C
[14525]	ATOM	711	O	ASP	A	112	-18.322	8.481	1.132	1.00	43.68	O
[14526]	ATOM	712	CB	ASP	A	112	-18.325	11.361	1.546	1.00	45.16	C
[14527]	ATOM	713	CG	ASP	A	112	-17.723	12.070	0.382	1.00	50.56	C

[14528]	ATOM	714	OD1	ASP	A	112	-17.244	11.375	-0.568	1.00	51.51	O
[14529]	ATOM	715	OD2	ASP	A	112	-17.684	13.333	0.461	1.00	56.01	O
[14530]	ATOM	716	N	MET	A	113	-19.998	8.616	2.617	1.00	43.19	N
[14531]	ATOM	717	CA	MET	A	113	-19.871	7.215	3.028	1.00	43.28	C
[14532]	ATOM	718	C	MET	A	113	-20.681	6.278	2.131	1.00	42.95	C
[14533]	ATOM	719	O	MET	A	113	-20.478	5.056	2.159	1.00	42.35	O
[14534]	ATOM	720	CB	MET	A	113	-20.294	7.037	4.488	1.00	43.50	C
[14535]	ATOM	721	CG	MET	A	113	-19.305	7.634	5.461	1.00	44.00	C
[14536]	ATOM	722	SD	MET	A	113	-19.947	7.661	7.118	1.00	46.42	S
[14537]	ATOM	723	CE	MET	A	113	-18.571	7.058	8.078	1.00	47.51	C
[14538]	ATOM	724	N	ILE	A	114	-21.608	6.850	1.353	1.00	42.65	N
[14539]	ATOM	725	CA	ILE	A	114	-22.566	6.044	0.588	1.00	41.86	C
[14540]	ATOM	726	C	ILE	A	114	-21.922	5.322	-0.609	1.00	41.81	C
[14541]	ATOM	727	O	ILE	A	114	-22.277	4.177	-0.865	1.00	41.80	O
[14542]	ATOM	728	CB	ILE	A	114	-23.879	6.816	0.218	1.00	42.46	C
[14543]	ATOM	729	CG1	ILE	A	114	-24.637	7.232	1.489	1.00	41.37	C
[14544]	ATOM	730	CG2	ILE	A	114	-24.806	5.956	-0.682	1.00	40.79	C
[14545]	ATOM	731	CD1	ILE	A	114	-25.757	8.196	1.245	1.00	42.91	C
[14546]	ATOM	732	N	PRO	A	115	-20.972	5.977	-1.325	1.00	41.71	N
[14547]	ATOM	733	CA	PRO	A	115	-20.248	5.267	-2.383	1.00	42.07	C
[14548]	ATOM	734	C	PRO	A	115	-19.605	3.979	-1.853	1.00	42.54	C
[14549]	ATOM	735	O	PRO	A	115	-19.693	2.948	-2.517	1.00	41.88	O
[14550]	ATOM	736	CB	PRO	A	115	-19.169	6.273	-2.819	1.00	42.77	C
[14551]	ATOM	737	CG	PRO	A	115	-19.739	7.632	-2.410	1.00	42.17	C
[14552]	ATOM	738	CD	PRO	A	115	-20.525	7.380	-1.192	1.00	41.21	C
[14553]	ATOM	739	N	CYS	A	116	-19.007	4.031	-0.651	1.00	43.02	N
[14554]	ATOM	740	CA	CYS	A	116	-18.441	2.833	-0.012	1.00	43.50	C
[14555]	ATOM	741	C	CYS	A	116	-19.484	1.740	0.232	1.00	42.75	C
[14556]	ATOM	742	O	CYS	A	116	-19.192	0.558	0.031	1.00	42.13	O
[14557]	ATOM	743	CB	CYS	A	116	-17.747	3.179	1.302	1.00	44.04	C
[14558]	ATOM	744	SG	CYS	A	116	-16.661	4.646	1.233	1.00	49.91	S
[14559]	ATOM	745	N	VAL	A	117	-20.689	2.135	0.658	1.00	41.84	N
[14560]	ATOM	746	CA	VAL	A	117	-21.786	1.187	0.918	1.00	41.55	C
[14561]	ATOM	747	C	VAL	A	117	-22.203	0.456	-0.363	1.00	42.44	C
[14562]	ATOM	748	O	VAL	A	117	-22.365	-0.775	-0.378	1.00	42.25	O
[14563]	ATOM	749	CB	VAL	A	117	-23.057	1.887	1.489	1.00	41.51	C

[14564]	ATOM	750	CG1	VAL	A	117	-24.204	0.907	1.568	1.00	40.05	C
[14565]	ATOM	751	CG2	VAL	A	117	-22.790	2.552	2.850	1.00	39.52	C
[14566]	ATOM	752	N	LEU	A	118	-22.401	1.228	-1.425	1.00	42.88	N
[14567]	ATOM	753	CA	LEU	A	118	-22.873	0.696	-2.695	1.00	43.75	C
[14568]	ATOM	754	C	LEU	A	118	-21.823	-0.190	-3.349	1.00	44.71	C
[14569]	ATOM	755	O	LEU	A	118	-22.164	-1.234	-3.885	1.00	44.59	O
[14570]	ATOM	756	CB	LEU	A	118	-23.310	1.829	-3.627	1.00	43.56	C
[14571]	ATOM	757	CG	LEU	A	118	-24.497	2.649	-3.084	1.00	43.08	C
[14572]	ATOM	758	CD1	LEU	A	118	-24.812	3.781	-3.993	1.00	42.70	C
[14573]	ATOM	759	CD2	LEU	A	118	-25.738	1.757	-2.905	1.00	42.47	C
[14574]	ATOM	760	N	GLN	A	119	-20.560	0.233	-3.296	1.00	46.12	N
[14575]	ATOM	761	CA	GLN	A	119	-19.427	-0.547	-3.841	1.00	48.20	C
[14576]	ATOM	762	C	GLN	A	119	-19.305	-1.908	-3.157	1.00	47.57	C
[14577]	ATOM	763	O	GLN	A	119	-19.148	-2.921	-3.816	1.00	47.94	O
[14578]	ATOM	764	CB	GLN	A	119	-18.113	0.237	-3.712	1.00	49.05	C
[14579]	ATOM	765	CG	GLN	A	119	-17.788	1.093	-4.951	1.00	54.39	C
[14580]	ATOM	766	CD	GLN	A	119	-17.365	2.537	-4.612	1.00	60.37	C
[14581]	ATOM	767	OE1	GLN	A	119	-17.869	3.496	-5.221	1.00	62.85	O
[14582]	ATOM	768	NE2	GLN	A	119	-16.458	2.698	-3.628	1.00	61.34	N
[14583]	ATOM	769	N	TYR	A	120	-19.394	-1.905	-1.830	1.00	47.45	N
[14584]	ATOM	770	CA	TYR	A	120	-19.458	-3.117	-1.018	1.00	47.21	C
[14585]	ATOM	771	C	TYR	A	120	-20.603	-4.049	-1.411	1.00	46.53	C
[14586]	ATOM	772	O	TYR	A	120	-20.428	-5.249	-1.437	1.00	45.89	O
[14587]	ATOM	773	CB	TYR	A	120	-19.576	-2.747	0.467	1.00	47.64	C
[14588]	ATOM	774	CG	TYR	A	120	-19.820	-3.918	1.391	1.00	48.66	C
[14589]	ATOM	775	CD1	TYR	A	120	-21.104	-4.423	1.582	1.00	49.14	C
[14590]	ATOM	776	CD2	TYR	A	120	-18.768	-4.513	2.085	1.00	49.57	C
[14591]	ATOM	777	CE1	TYR	A	120	-21.340	-5.503	2.419	1.00	49.43	C
[14592]	ATOM	778	CE2	TYR	A	120	-18.997	-5.581	2.947	1.00	51.42	C
[14593]	ATOM	779	CZ	TYR	A	120	-20.291	-6.074	3.100	1.00	51.09	C
[14594]	ATOM	780	OH	TYR	A	120	-20.538	-7.136	3.942	1.00	51.61	O
[14595]	ATOM	781	N	LEU	A	121	-21.781	-3.505	-1.687	1.00	46.09	N
[14596]	ATOM	782	CA	LEU	A	121	-22.905	-4.349	-2.068	1.00	45.92	C
[14597]	ATOM	783	C	LEU	A	121	-22.924	-4.685	-3.569	1.00	46.42	C
[14598]	ATOM	784	O	LEU	A	121	-23.680	-5.568	-4.001	1.00	46.54	O
[14599]	ATOM	785	CB	LEU	A	121	-24.226	-3.691	-1.648	1.00	46.26	C

[14600]	ATOM	786	CG	LEU	A	121	-24.511	-3.606	-0.148	1.00	44.38	C
[14601]	ATOM	787	CD1	LEU	A	121	-25.655	-2.668	0.084	1.00	43.70	C
[14602]	ATOM	788	CD2	LEU	A	121	-24.795	-5.007	0.457	1.00	44.07	C
[14603]	ATOM	789	N	ASN	A	122	-22.078	-3.998	-4.347	1.00	46.46	N
[14604]	ATOM	790	CA	ASN	A	122	-22.097	-4.038	-5.829	1.00	47.06	C
[14605]	ATOM	791	C	ASN	A	122	-23.461	-3.610	-6.425	1.00	46.49	C
[14606]	ATOM	792	O	ASN	A	122	-23.938	-4.192	-7.399	1.00	45.94	O
[14607]	ATOM	793	CB	ASN	A	122	-21.609	-5.396	-6.397	1.00	46.87	C
[14608]	ATOM	794	CG	ASN	A	122	-20.180	-5.731	-5.974	1.00	50.42	C
[14609]	ATOM	795	OD1	ASN	A	122	-19.879	-6.873	-5.588	1.00	53.84	O
[14610]	ATOM	796	ND2	ASN	A	122	-19.290	-4.731	-6.017	1.00	52.51	N
[14611]	ATOM	797	N	PHE	A	123	-24.072	-2.587	-5.824	1.00	46.30	N
[14612]	ATOM	798	CA	PHE	A	123	-25.320	-2.014	-6.353	1.00	45.96	C
[14613]	ATOM	799	C	PHE	A	123	-24.935	-0.757	-7.110	1.00	46.13	C
[14614]	ATOM	800	O	PHE	A	123	-24.159	0.069	-6.598	1.00	47.39	O
[14615]	ATOM	801	CB	PHE	A	123	-26.310	-1.650	-5.237	1.00	45.46	C
[14616]	ATOM	802	CG	PHE	A	123	-26.876	-2.837	-4.484	1.00	45.45	C
[14617]	ATOM	803	CD1	PHE	A	123	-26.707	-4.149	-4.946	1.00	46.52	C
[14618]	ATOM	804	CD2	PHE	A	123	-27.623	-2.628	-3.320	1.00	45.71	C
[14619]	ATOM	805	CE1	PHE	A	123	-27.247	-5.245	-4.238	1.00	47.68	C
[14620]	ATOM	806	CE2	PHE	A	123	-28.179	-3.706	-2.604	1.00	46.30	C
[14621]	ATOM	807	CZ	PHE	A	123	-27.988	-5.025	-3.058	1.00	46.45	C
[14622]	ATOM	808	N	SER	A	124	-25.449	-0.588	-8.318	1.00	45.29	N
[14623]	ATOM	809	CA	SER	A	124	-25.010	0.554	-9.110	1.00	45.05	C
[14624]	ATOM	810	C	SER	A	124	-25.940	1.797	-9.056	1.00	44.33	C
[14625]	ATOM	811	O	SER	A	124	-25.467	2.911	-9.285	1.00	44.23	O
[14626]	ATOM	812	CB	SER	A	124	-24.718	0.123	-10.544	1.00	45.21	C
[14627]	ATOM	813	OG	SER	A	124	-25.919	-0.283	-11.135	1.00	47.73	O
[14628]	ATOM	814	N	THR	A	125	-27.233	1.607	-8.755	1.00	42.52	N
[14629]	ATOM	815	CA	THR	A	125	-28.166	2.733	-8.658	1.00	41.47	C
[14630]	ATOM	816	C	THR	A	125	-29.158	2.579	-7.481	1.00	40.99	C
[14631]	ATOM	817	O	THR	A	125	-29.434	1.451	-7.018	1.00	40.10	O
[14632]	ATOM	818	CB	THR	A	125	-28.981	3.011	-9.978	1.00	41.49	C
[14633]	ATOM	819	OG1	THR	A	125	-29.974	2.011	-10.154	1.00	41.99	O
[14634]	ATOM	820	CG2	THR	A	125	-28.102	3.109	-11.275	1.00	41.40	C
[14635]	ATOM	821	N	ILE	A	126	-29.691	3.715	-7.018	1.00	39.48	N

[14636]	ATOM	822	CA	ILE A 126	-30.625	3.743	-5.893	1.00	38.99	C
[14637]	ATOM	823	C	ILE A 126	-31.806	4.674	-6.150	1.00	38.62	C
[14638]	ATOM	824	O	ILE A 126	-31.748	5.546	-7.013	1.00	38.24	O
[14639]	ATOM	825	CB	ILE A 126	-29.932	4.208	-4.557	1.00	39.51	C
[14640]	ATOM	826	CG1	ILE A 126	-29.459	5.688	-4.628	1.00	39.39	C
[14641]	ATOM	827	CG2	ILE A 126	-28.795	3.260	-4.149	1.00	37.69	C
[14642]	ATOM	828	CD1	ILE A 126	-29.127	6.287	-3.232	1.00	40.07	C
[14643]	ATOM	829	N	ILE A 127	-32.877	4.466	-5.382	1.00	38.75	N
[14644]	ATOM	830	CA	ILE A 127	-33.873	5.485	-5.110	0.80	37.11	C
[14645]	ATOM	831	C	ILE A 127	-33.664	5.796	-3.625	1.00	38.81	C
[14646]	ATOM	832	O	ILE A 127	-33.770	4.919	-2.765	1.00	39.25	O
[14647]	ATOM	833	CB	ILE A 127	-35.301	4.984	-5.371	0.80	37.09	C
[14648]	ATOM	834	CG1	ILE A 127	-35.526	4.732	-6.879	0.80	33.82	C
[14649]	ATOM	835	CG2	ILE A 127	-36.349	5.975	-4.776	0.80	33.79	C
[14650]	ATOM	836	CD1	ILE A 127	-36.730	3.832	-7.183	0.80	34.93	C
[14651]	ATOM	837	N	GLY A 128	-33.314	7.035	-3.319	1.00	39.48	N
[14652]	ATOM	838	CA	GLY A 128	-33.028	7.409	-1.920	1.00	39.48	C
[14653]	ATOM	839	C	GLY A 128	-34.303	7.875	-1.248	1.00	39.71	C
[14654]	ATOM	840	O	GLY A 128	-35.102	8.600	-1.852	1.00	39.87	O
[14655]	ATOM	841	N	VAL A 129	-34.519	7.440	-0.004	1.00	39.53	N
[14656]	ATOM	842	CA	VAL A 129	-35.631	7.940	0.795	1.00	38.67	C
[14657]	ATOM	843	C	VAL A 129	-35.021	8.497	2.085	1.00	39.35	C
[14658]	ATOM	844	O	VAL A 129	-34.444	7.746	2.860	1.00	40.34	O
[14659]	ATOM	845	CB	VAL A 129	-36.668	6.821	1.124	1.00	38.63	C
[14660]	ATOM	846	CG1	VAL A 129	-37.832	7.387	1.998	1.00	35.74	C
[14661]	ATOM	847	CG2	VAL A 129	-37.169	6.108	-0.184	1.00	37.47	C
[14662]	ATOM	848	N	GLY A 130	-35.125	9.797	2.326	1.00	39.41	N
[14663]	ATOM	849	CA	GLY A 130	-34.517	10.356	3.555	1.00	39.33	C
[14664]	ATOM	850	C	GLY A 130	-35.511	11.197	4.341	1.00	39.18	C
[14665]	ATOM	851	O	GLY A 130	-36.441	11.737	3.752	1.00	38.79	O
[14666]	ATOM	852	N	VAL A 131	-35.325	11.265	5.665	1.00	39.14	N
[14667]	ATOM	853	CA	VAL A 131	-36.067	12.182	6.541	1.00	38.51	C
[14668]	ATOM	854	C	VAL A 131	-35.133	13.179	7.227	1.00	38.79	C
[14669]	ATOM	855	O	VAL A 131	-34.160	12.775	7.898	1.00	39.38	O
[14670]	ATOM	856	CB	VAL A 131	-36.891	11.437	7.641	1.00	39.62	C
[14671]	ATOM	857	CG1	VAL A 131	-37.749	12.408	8.437	1.00	36.67	C

[14672]	ATOM	858	CG2	VAL	A	131	-37.752	10.345	7.031	1.00	37.64	C
[14673]	ATOM	859	N	GLY	A	132	-35.402	14.472	7.043	1.00	37.70	N
[14674]	ATOM	860	CA	GLY	A	132	-34.720	15.519	7.822	1.00	37.89	C
[14675]	ATOM	861	C	GLY	A	132	-33.254	15.530	7.447	1.00	38.91	C
[14676]	ATOM	862	O	GLY	A	132	-32.933	15.709	6.272	1.00	39.75	O
[14677]	ATOM	863	N	ALA	A	133	-32.350	15.329	8.406	1.00	38.46	N
[14678]	ATOM	864	CA	ALA	A	133	-30.920	15.267	8.063	1.00	38.43	C
[14679]	ATOM	865	C	ALA	A	133	-30.627	14.203	7.014	1.00	38.31	C
[14680]	ATOM	866	O	ALA	A	133	-29.756	14.384	6.185	1.00	39.58	O
[14681]	ATOM	867	CB	ALA	A	133	-30.085	15.012	9.314	1.00	38.71	C
[14682]	ATOM	868	N	GLY	A	134	-31.336	13.077	7.060	1.00	39.18	N
[14683]	ATOM	869	CA	GLY	A	134	-31.150	12.000	6.069	1.00	38.88	C
[14684]	ATOM	870	C	GLY	A	134	-31.543	12.402	4.665	1.00	38.85	C
[14685]	ATOM	871	O	GLY	A	134	-30.942	11.941	3.677	1.00	40.40	O
[14686]	ATOM	872	N	ALA	A	135	-32.550	13.260	4.550	1.00	38.20	N
[14687]	ATOM	873	CA	ALA	A	135	-32.927	13.833	3.257	1.00	37.88	C
[14688]	ATOM	874	C	ALA	A	135	-31.851	14.785	2.720	1.00	38.28	C
[14689]	ATOM	875	O	ALA	A	135	-31.592	14.827	1.507	1.00	37.54	O
[14690]	ATOM	876	CB	ALA	A	135	-34.282	14.564	3.351	1.00	36.70	C
[14691]	ATOM	877	N	TYR	A	136	-31.247	15.576	3.604	1.00	38.72	N
[14692]	ATOM	878	CA	TYR	A	136	-30.167	16.464	3.190	1.00	38.67	C
[14693]	ATOM	879	C	TYR	A	136	-29.015	15.623	2.651	1.00	38.94	C
[14694]	ATOM	880	O	TYR	A	136	-28.503	15.860	1.567	1.00	39.55	O
[14695]	ATOM	881	CB	TYR	A	136	-29.674	17.305	4.378	1.00	39.00	C
[14696]	ATOM	882	CG	TYR	A	136	-28.524	18.246	4.006	1.00	39.05	C
[14697]	ATOM	883	CD1	TYR	A	136	-27.200	17.772	3.864	1.00	37.36	C
[14698]	ATOM	884	CD2	TYR	A	136	-28.769	19.585	3.739	1.00	38.46	C
[14699]	ATOM	885	CE1	TYR	A	136	-26.147	18.637	3.478	1.00	36.17	C
[14700]	ATOM	886	CE2	TYR	A	136	-27.719	20.462	3.394	1.00	37.24	C
[14701]	ATOM	887	CZ	TYR	A	136	-26.419	19.966	3.263	1.00	37.15	C
[14702]	ATOM	888	OH	TYR	A	136	-25.406	20.836	2.920	1.00	40.76	O
[14703]	ATOM	889	N	ILE	A	137	-28.615	14.629	3.423	1.00	40.17	N
[14704]	ATOM	890	CA	ILE	A	137	-27.536	13.723	3.039	1.00	40.75	C
[14705]	ATOM	891	C	ILE	A	137	-27.749	13.061	1.678	1.00	40.79	C
[14706]	ATOM	892	O	ILE	A	137	-26.848	13.033	0.833	1.00	41.28	O
[14707]	ATOM	893	CB	ILE	A	137	-27.353	12.648	4.138	1.00	41.24	C

[14708]	ATOM	894	CG1	ILE	A	137	-26.828	13.341	5.411	1.00	39.82	C
[14709]	ATOM	895	CG2	ILE	A	137	-26.419	11.501	3.647	1.00	41.13	C
[14710]	ATOM	896	CD1	ILE	A	137	-26.970	12.481	6.671	1.00	39.52	C
[14711]	ATOM	897	N	LEU	A	138	-28.950	12.551	1.453	1.00	40.64	N
[14712]	ATOM	898	CA	LEU	A	138	-29.264	11.875	0.181	1.00	40.44	C
[14713]	ATOM	899	C	LEU	A	138	-29.293	12.848	-1.006	1.00	40.30	C
[14714]	ATOM	900	O	LEU	A	138	-28.887	12.476	-2.096	1.00	39.69	O
[14715]	ATOM	901	CB	LEU	A	138	-30.577	11.095	0.282	1.00	40.64	C
[14716]	ATOM	902	CG	LEU	A	138	-30.456	9.852	1.188	1.00	41.07	C
[14717]	ATOM	903	CD1	LEU	A	138	-31.743	9.156	1.337	1.00	37.64	C
[14718]	ATOM	904	CD2	LEU	A	138	-29.413	8.876	0.662	1.00	43.02	C
[14719]	ATOM	905	N	ALA	A	139	-29.769	14.074	-0.777	1.00	39.42	N
[14720]	ATOM	906	CA	ALA	A	139	-29.695	15.149	-1.764	1.00	40.45	C
[14721]	ATOM	907	C	ALA	A	139	-28.248	15.525	-2.102	1.00	40.39	C
[14722]	ATOM	908	O	ALA	A	139	-27.901	15.683	-3.280	1.00	40.41	O
[14723]	ATOM	909	CB	ALA	A	139	-30.500	16.386	-1.306	1.00	39.81	C
[14724]	ATOM	910	N	ARG	A	140	-27.410	15.665	-1.073	1.00	40.92	N
[14725]	ATOM	911	CA	ARG	A	140	-25.993	15.961	-1.274	1.00	40.50	C
[14726]	ATOM	912	C	ARG	A	140	-25.372	14.819	-2.062	1.00	40.80	C
[14727]	ATOM	913	O	ARG	A	140	-24.707	15.048	-3.075	1.00	39.71	O
[14728]	ATOM	914	CB	ARG	A	140	-25.263	16.180	0.074	1.00	40.59	C
[14729]	ATOM	915	CG	ARG	A	140	-23.754	16.364	-0.035	1.00	40.88	C
[14730]	ATOM	916	CD	ARG	A	140	-23.350	17.621	-0.817	1.00	40.42	C
[14731]	ATOM	917	NE	ARG	A	140	-23.747	18.816	-0.072	1.00	42.99	N
[14732]	ATOM	918	CZ	ARG	A	140	-23.909	20.023	-0.604	1.00	42.89	C
[14733]	ATOM	919	NH1	ARG	A	140	-23.736	20.196	-1.914	1.00	42.14	N
[14734]	ATOM	920	NH2	ARG	A	140	-24.263	21.048	0.177	1.00	38.19	N
[14735]	ATOM	921	N	TYR	A	141	-25.585	13.587	-1.596	1.00	41.04	N
[14736]	ATOM	922	CA	TYR	A	141	-25.096	12.420	-2.327	1.00	41.60	C
[14737]	ATOM	923	C	TYR	A	141	-25.464	12.491	-3.822	1.00	41.32	C
[14738]	ATOM	924	O	TYR	A	141	-24.605	12.318	-4.701	1.00	40.38	O
[14739]	ATOM	925	CB	TYR	A	141	-25.612	11.103	-1.714	1.00	42.22	C
[14740]	ATOM	926	CG	TYR	A	141	-25.200	9.918	-2.555	1.00	43.53	C
[14741]	ATOM	927	CD1	TYR	A	141	-23.900	9.380	-2.457	1.00	44.41	C
[14742]	ATOM	928	CD2	TYR	A	141	-26.071	9.376	-3.494	1.00	42.64	C
[14743]	ATOM	929	CE1	TYR	A	141	-23.506	8.315	-3.259	1.00	45.06	C



[14744]	ATOM	930	CE2	TYR	A	141	-25.688	8.300	-4.291	1.00	44.11	C
[14745]	ATOM	931	CZ	TYR	A	141	-24.408	7.774	-4.172	1.00	44.56	C
[14746]	ATOM	932	OH	TYR	A	141	-24.027	6.727	-4.985	1.00	44.83	O
[14747]	ATOM	933	N	ALA	A	142	-26.748	12.763	-4.095	1.00	40.78	N
[14748]	ATOM	934	CA	ALA	A	142	-27.257	12.827	-5.473	1.00	40.24	C
[14749]	ATOM	935	C	ALA	A	142	-26.583	13.925	-6.289	1.00	40.29	C
[14750]	ATOM	936	O	ALA	A	142	-26.377	13.765	-7.493	1.00	40.74	O
[14751]	ATOM	937	CB	ALA	A	142	-28.768	13.004	-5.488	1.00	39.19	C
[14752]	ATOM	938	N	LEU	A	143	-26.244	15.048	-5.664	1.00	40.34	N
[14753]	ATOM	939	CA	LEU	A	143	-25.503	16.087	-6.393	1.00	39.70	C
[14754]	ATOM	940	C	LEU	A	143	-24.110	15.613	-6.790	1.00	39.49	C
[14755]	ATOM	941	O	LEU	A	143	-23.597	15.954	-7.871	1.00	38.86	O
[14756]	ATOM	942	CB	LEU	A	143	-25.398	17.370	-5.567	1.00	40.22	C
[14757]	ATOM	943	CG	LEU	A	143	-26.679	18.173	-5.386	1.00	42.48	C
[14758]	ATOM	944	CD1	LEU	A	143	-26.380	19.272	-4.345	1.00	44.18	C
[14759]	ATOM	945	CD2	LEU	A	143	-27.225	18.774	-6.697	1.00	43.95	C
[14760]	ATOM	946	N	ASN	A	144	-23.483	14.855	-5.897	1.00	39.52	N
[14761]	ATOM	947	CA	ASN	A	144	-22.118	14.398	-6.116	1.00	40.61	C
[14762]	ATOM	948	C	ASN	A	144	-22.060	13.172	-7.042	1.00	40.70	C
[14763]	ATOM	949	O	ASN	A	144	-21.070	12.949	-7.713	1.00	40.51	O
[14764]	ATOM	950	CB	ASN	A	144	-21.423	14.099	-4.783	1.00	39.78	C
[14765]	ATOM	951	CG	ASN	A	144	-21.271	15.325	-3.906	1.00	41.04	C
[14766]	ATOM	952	OD1	ASN	A	144	-21.151	16.458	-4.386	1.00	42.03	O
[14767]	ATOM	953	ND2	ASN	A	144	-21.251	15.101	-2.600	1.00	41.46	N
[14768]	ATOM	954	N	HIS	A	145	-23.119	12.364	-7.050	1.00	41.08	N
[14769]	ATOM	955	CA	HIS	A	145	-23.115	11.138	-7.848	1.00	40.39	C
[14770]	ATOM	956	C	HIS	A	145	-24.419	10.960	-8.603	1.00	40.19	C
[14771]	ATOM	957	O	HIS	A	145	-25.132	9.962	-8.405	1.00	40.42	O
[14772]	ATOM	958	CB	HIS	A	145	-22.813	9.948	-6.940	1.00	40.38	C
[14773]	ATOM	959	CG	HIS	A	145	-21.578	10.148	-6.117	1.00	40.76	C
[14774]	ATOM	960	ND1	HIS	A	145	-20.331	9.739	-6.534	1.00	40.74	N
[14775]	ATOM	961	CD2	HIS	A	145	-21.395	10.775	-4.926	1.00	40.94	C
[14776]	ATOM	962	CE1	HIS	A	145	-19.432	10.086	-5.628	1.00	41.94	C
[14777]	ATOM	963	NE2	HIS	A	145	-20.056	10.709	-4.639	1.00	40.90	N
[14778]	ATOM	964	N	PRO	A	146	-24.722	11.916	-9.505	1.00	39.97	N
[14779]	ATOM	965	CA	PRO	A	146	-26.068	11.977	-10.116	1.00	40.06	C

[14780]	ATOM	966	C	PRO	A	146	-26.440	10.754	-10.962	1.00	40.92	C
[14781]	ATOM	967	O	PRO	A	146	-27.619	10.400	-11.018	1.00	42.13	O
[14782]	ATOM	968	CB	PRO	A	146	-26.019	13.249	-10.974	1.00	39.65	C
[14783]	ATOM	969	CG	PRO	A	146	-24.526	13.484	-11.250	1.00	40.33	C
[14784]	ATOM	970	CD	PRO	A	146	-23.816	12.965	-10.019	1.00	39.12	C
[14785]	ATOM	971	N	ASP	A	147	-25.456	10.098	-11.580	1.00	41.12	N
[14786]	ATOM	972	CA	ASP	A	147	-25.709	8.903	-12.419	1.00	41.73	C
[14787]	ATOM	973	C	ASP	A	147	-25.982	7.646	-11.609	1.00	40.78	C
[14788]	ATOM	974	O	ASP	A	147	-26.286	6.616	-12.178	1.00	40.01	O
[14789]	ATOM	975	CB	ASP	A	147	-24.535	8.621	-13.375	1.00	42.58	C
[14790]	ATOM	976	CG	ASP	A	147	-24.399	9.667	-14.444	1.00	46.20	C
[14791]	ATOM	977	OD1	ASP	A	147	-25.298	10.546	-14.561	1.00	50.36	O
[14792]	ATOM	978	OD2	ASP	A	147	-23.372	9.631	-15.155	1.00	51.16	O
[14793]	ATOM	979	N	THR	A	148	-25.875	7.732	-10.285	1.00	40.34	N
[14794]	ATOM	980	CA	THR	A	148	-26.219	6.592	-9.433	1.00	40.55	C
[14795]	ATOM	981	C	THR	A	148	-27.603	6.760	-8.796	1.00	40.37	C
[14796]	ATOM	982	O	THR	A	148	-28.055	5.878	-8.077	1.00	40.97	O
[14797]	ATOM	983	CB	THR	A	148	-25.183	6.354	-8.299	1.00	40.01	C
[14798]	ATOM	984	OG1	THR	A	148	-25.201	7.463	-7.395	1.00	42.01	O
[14799]	ATOM	985	CG2	THR	A	148	-23.772	6.148	-8.836	1.00	40.48	C
[14800]	ATOM	986	N	VAL	A	149	-28.282	7.875	-9.065	1.00	39.97	N
[14801]	ATOM	987	CA	VAL	A	149	-29.559	8.157	-8.396	1.00	39.58	C
[14802]	ATOM	988	C	VAL	A	149	-30.759	8.201	-9.359	1.00	40.05	C
[14803]	ATOM	989	O	VAL	A	149	-30.883	9.109	-10.180	1.00	41.28	O
[14804]	ATOM	990	CB	VAL	A	149	-29.509	9.448	-7.526	1.00	39.98	C
[14805]	ATOM	991	CG1	VAL	A	149	-30.860	9.648	-6.816	1.00	38.41	C
[14806]	ATOM	992	CG2	VAL	A	149	-28.387	9.361	-6.497	1.00	36.98	C
[14807]	ATOM	993	N	GLU	A	150	-31.664	7.237	-9.234	1.00	38.95	N
[14808]	ATOM	994	CA	GLU	A	150	-32.825	7.208	-10.130	1.00	38.31	C
[14809]	ATOM	995	C	GLU	A	150	-33.967	8.092	-9.669	1.00	37.71	C
[14810]	ATOM	996	O	GLU	A	150	-34.788	8.507	-10.483	1.00	37.59	O
[14811]	ATOM	997	CB	GLU	A	150	-33.316	5.767	-10.325	1.00	37.72	C
[14812]	ATOM	998	CG	GLU	A	150	-32.219	4.855	-10.885	1.00	38.24	C
[14813]	ATOM	999	CD	GLU	A	150	-32.738	3.568	-11.490	1.00	37.70	C
[14814]	ATOM	1000	OE1	GLU	A	150	-33.874	3.510	-12.011	1.00	39.83	O
[14815]	ATOM	1001	OE2	GLU	A	150	-31.975	2.602	-11.442	1.00	41.68	O

[14816]	ATOM	1002	N	GLY	A	151	-34.051	8.337	-8.363	1.00	38.15	N
[14817]	ATOM	1003	CA	GLY	A	151	-35.108	9.188	-7.805	1.00	37.33	C
[14818]	ATOM	1004	C	GLY	A	151	-34.830	9.394	-6.333	1.00	38.13	C
[14819]	ATOM	1005	O	GLY	A	151	-34.014	8.693	-5.742	1.00	38.53	O
[14820]	ATOM	1006	N	LEU	A	152	-35.480	10.396	-5.752	1.00	38.33	N
[14821]	ATOM	1007	CA	LEU	A	152	-35.340	10.719	-4.331	1.00	37.80	C
[14822]	ATOM	1008	C	LEU	A	152	-36.684	11.026	-3.724	1.00	37.86	C
[14823]	ATOM	1009	O	LEU	A	152	-37.525	11.729	-4.322	1.00	37.21	O
[14824]	ATOM	1010	CB	LEU	A	152	-34.406	11.910	-4.121	1.00	37.51	C
[14825]	ATOM	1011	CG	LEU	A	152	-32.920	11.748	-4.481	1.00	37.45	C
[14826]	ATOM	1012	CD1	LEU	A	152	-32.260	13.145	-4.586	1.00	35.56	C
[14827]	ATOM	1013	CD2	LEU	A	152	-32.192	10.839	-3.450	1.00	38.33	C
[14828]	ATOM	1014	N	VAL	A	153	-36.924	10.451	-2.550	1.00	37.81	N
[14829]	ATOM	1015	CA	VAL	A	153	-38.058	10.896	-1.736	1.00	37.40	C
[14830]	ATOM	1016	C	VAL	A	153	-37.429	11.652	-0.557	1.00	38.20	C
[14831]	ATOM	1017	O	VAL	A	153	-36.716	11.060	0.254	1.00	39.14	O
[14832]	ATOM	1018	CB	VAL	A	153	-38.896	9.708	-1.223	1.00	37.23	C
[14833]	ATOM	1019	CG1	VAL	A	153	-40.032	10.190	-0.339	1.00	35.25	C
[14834]	ATOM	1020	CG2	VAL	A	153	-39.425	8.900	-2.415	1.00	35.62	C
[14835]	ATOM	1021	N	LEU	A	154	-37.728	12.936	-0.458	1.00	37.56	N
[14836]	ATOM	1022	CA	LEU	A	154	-37.061	13.823	0.469	1.00	37.82	C
[14837]	ATOM	1023	C	LEU	A	154	-38.109	14.376	1.417	1.00	38.42	C
[14838]	ATOM	1024	O	LEU	A	154	-38.939	15.222	1.037	1.00	38.38	O
[14839]	ATOM	1025	CB	LEU	A	154	-36.390	14.947	-0.305	1.00	36.62	C
[14840]	ATOM	1026	CG	LEU	A	154	-35.310	14.545	-1.318	1.00	36.80	C
[14841]	ATOM	1027	CD1	LEU	A	154	-34.625	15.756	-1.991	1.00	36.92	C
[14842]	ATOM	1028	CD2	LEU	A	154	-34.263	13.679	-0.580	1.00	38.56	C
[14843]	ATOM	1029	N	ILE	A	155	-38.075	13.886	2.646	1.00	38.15	N
[14844]	ATOM	1030	CA	ILE	A	155	-39.089	14.220	3.637	1.00	38.72	C
[14845]	ATOM	1031	C	ILE	A	155	-38.465	15.241	4.586	1.00	39.02	C
[14846]	ATOM	1032	O	ILE	A	155	-37.374	15.011	5.126	1.00	38.41	O
[14847]	ATOM	1033	CB	ILE	A	155	-39.551	12.943	4.395	1.00	39.72	C
[14848]	ATOM	1034	CG1	ILE	A	155	-40.067	11.885	3.384	1.00	39.09	C
[14849]	ATOM	1035	CG2	ILE	A	155	-40.587	13.295	5.491	1.00	38.12	C
[14850]	ATOM	1036	CD1	ILE	A	155	-40.195	10.435	3.945	1.00	41.13	C
[14851]	ATOM	1037	N	ASN	A	156	-39.133	16.383	4.751	1.00	38.65	N

[14852]	ATOM	1038	CA	ASN	A	156	-38.674	17.435	5.715	1.00	39.27	C
[14853]	ATOM	1039	C	ASN	A	156	-37.338	18.040	5.362	1.00	39.37	C
[14854]	ATOM	1040	O	ASN	A	156	-36.598	18.464	6.264	1.00	40.87	O
[14855]	ATOM	1041	CB	ASN	A	156	-38.556	16.884	7.151	1.00	38.41	C
[14856]	ATOM	1042	CG	ASN	A	156	-39.876	16.462	7.722	1.00	39.05	C
[14857]	ATOM	1043	OD1	ASN	A	156	-40.914	16.634	7.091	1.00	40.22	O
[14858]	ATOM	1044	ND2	ASN	A	156	-39.852	15.899	8.931	1.00	41.02	N
[14859]	ATOM	1045	N	ILE	A	157	-36.990	18.078	4.082	1.00	38.86	N
[14860]	ATOM	1046	CA	ILE	A	157	-35.646	18.538	3.718	1.00	38.53	C
[14861]	ATOM	1047	C	ILE	A	157	-35.517	20.046	3.940	1.00	38.74	C
[14862]	ATOM	1048	O	ILE	A	157	-36.387	20.836	3.515	1.00	39.44	O
[14863]	ATOM	1049	CB	ILE	A	157	-35.278	18.203	2.272	1.00	37.96	C
[14864]	ATOM	1050	CG1	ILE	A	157	-33.844	18.731	1.982	1.00	39.89	C
[14865]	ATOM	1051	CG2	ILE	A	157	-36.351	18.800	1.314	1.00	38.37	C
[14866]	ATOM	1052	CD1	ILE	A	157	-33.131	18.092	0.861	1.00	40.23	C
[14867]	ATOM	1053	N	ASP	A	158	-34.421	20.445	4.576	1.00	38.74	N
[14868]	ATOM	1054	CA	ASP	A	158	-34.121	21.870	4.750	1.00	39.38	C
[14869]	ATOM	1055	C	ASP	A	158	-32.703	22.144	4.204	1.00	39.56	C
[14870]	ATOM	1056	O	ASP	A	158	-31.721	21.891	4.886	1.00	39.69	O
[14871]	ATOM	1057	CB	ASP	A	158	-34.227	22.260	6.232	1.00	38.62	C
[14872]	ATOM	1058	CG	ASP	A	158	-34.031	23.760	6.449	1.00	39.76	C
[14873]	ATOM	1059	OD1	ASP	A	158	-33.463	24.423	5.567	1.00	36.94	O
[14874]	ATOM	1060	OD2	ASP	A	158	-34.477	24.274	7.486	1.00	42.50	O
[14875]	ATOM	1061	N	PRO	A	159	-32.604	22.627	2.958	1.00	39.82	N
[14876]	ATOM	1062	CA	PRO	A	159	-31.319	22.714	2.314	1.00	40.71	C
[14877]	ATOM	1063	C	PRO	A	159	-30.505	23.987	2.688	1.00	41.67	C
[14878]	ATOM	1064	O	PRO	A	159	-29.443	24.191	2.109	1.00	42.39	O
[14879]	ATOM	1065	CB	PRO	A	159	-31.709	22.789	0.843	1.00	41.22	C
[14880]	ATOM	1066	CG	PRO	A	159	-32.958	23.617	0.888	1.00	41.32	C
[14881]	ATOM	1067	CD	PRO	A	159	-33.691	23.101	2.082	1.00	39.03	C
[14882]	ATOM	1068	N	ASN	A	160	-31.001	24.812	3.616	1.00	40.99	N
[14883]	ATOM	1069	CA	ASN	A	160	-30.354	26.078	3.975	1.00	41.74	C
[14884]	ATOM	1070	C	ASN	A	160	-29.514	25.962	5.239	1.00	40.85	C
[14885]	ATOM	1071	O	ASN	A	160	-30.017	25.466	6.245	1.00	40.89	O
[14886]	ATOM	1072	CB	ASN	A	160	-31.407	27.169	4.197	1.00	41.83	C
[14887]	ATOM	1073	CG	ASN	A	160	-32.118	27.568	2.917	1.00	44.58	C

[14888]	ATOM	1074	OD1	ASN	A	160	-33.350	27.523	2.843	1.00	49.04	O
[14889]	ATOM	1075	ND2	ASN	A	160	-31.353	27.923	1.896	1.00	45.23	N
[14890]	ATOM	1076	N	ALA	A	161	-28.269	26.454	5.204	1.00	39.59	N
[14891]	ATOM	1077	CA	ALA	A	161	-27.470	26.635	6.439	1.00	39.14	C
[14892]	ATOM	1078	C	ALA	A	161	-28.244	27.592	7.359	1.00	38.66	C
[14893]	ATOM	1079	O	ALA	A	161	-29.015	28.413	6.875	1.00	38.43	O
[14894]	ATOM	1080	CB	ALA	A	161	-26.078	27.256	6.100	1.00	38.93	C
[14895]	ATOM	1081	N	LYS	A	162	-28.051	27.500	8.675	1.00	38.19	N
[14896]	ATOM	1082	CA	LYS	A	162	-28.585	28.522	9.561	1.00	37.04	C
[14897]	ATOM	1083	C	LYS	A	162	-27.847	29.836	9.301	1.00	36.99	C
[14898]	ATOM	1084	O	LYS	A	162	-26.616	29.842	9.147	1.00	37.42	O
[14899]	ATOM	1085	CB	LYS	A	162	-28.383	28.147	11.036	1.00	37.41	C
[14900]	ATOM	1086	CG	LYS	A	162	-29.096	26.902	11.547	1.00	36.59	C
[14901]	ATOM	1087	CD	LYS	A	162	-28.976	26.853	13.122	1.00	34.81	C
[14902]	ATOM	1088	CE	LYS	A	162	-29.441	25.494	13.614	1.00	37.36	C
[14903]	ATOM	1089	NZ	LYS	A	162	-30.925	25.368	13.428	1.00	37.85	N
[14904]	ATOM	1090	N	GLY	A	163	-28.593	30.937	9.245	1.00	35.56	N
[14905]	ATOM	1091	CA	GLY	A	163	-27.995	32.262	9.137	1.00	34.86	C
[14906]	ATOM	1092	C	GLY	A	163	-27.836	32.802	10.538	1.00	33.74	C
[14907]	ATOM	1093	O	GLY	A	163	-28.222	32.122	11.493	1.00	33.81	O
[14908]	ATOM	1094	N	TRP	A	164	-27.312	34.008	10.696	1.00	32.15	N
[14909]	ATOM	1095	CA	TRP	A	164	-27.114	34.501	12.075	1.00	32.54	C
[14910]	ATOM	1096	C	TRP	A	164	-28.386	34.594	12.936	1.00	33.83	C
[14911]	ATOM	1097	O	TRP	A	164	-28.322	34.484	14.172	1.00	33.46	O
[14912]	ATOM	1098	CB	TRP	A	164	-26.399	35.845	12.102	1.00	30.24	C
[14913]	ATOM	1099	CG	TRP	A	164	-26.980	36.978	11.265	1.00	27.92	C
[14914]	ATOM	1100	CD1	TRP	A	164	-26.635	37.314	9.967	1.00	26.42	C
[14915]	ATOM	1101	CD2	TRP	A	164	-27.955	37.953	11.682	1.00	24.20	C
[14916]	ATOM	1102	NE1	TRP	A	164	-27.340	38.422	9.562	1.00	26.62	N
[14917]	ATOM	1103	CE2	TRP	A	164	-28.145	38.844	10.596	1.00	25.81	C
[14918]	ATOM	1104	CE3	TRP	A	164	-28.702	38.141	12.856	1.00	22.89	C
[14919]	ATOM	1105	CZ2	TRP	A	164	-29.028	39.927	10.660	1.00	25.51	C
[14920]	ATOM	1106	CZ3	TRP	A	164	-29.567	39.200	12.924	1.00	23.86	C
[14921]	ATOM	1107	CH2	TRP	A	164	-29.734	40.090	11.823	1.00	24.98	C
[14922]	ATOM	1108	N	MET	A	165	-29.528	34.858	12.295	1.00	35.35	N
[14923]	ATOM	1109	CA	MET	A	165	-30.784	35.055	13.029	1.00	37.35	C

[14924]	ATOM	1110	C	MET	A	165	-31.226	33.695	13.543	1.00	36.29	C
[14925]	ATOM	1111	O	MET	A	165	-31.744	33.573	14.638	1.00	35.61	O
[14926]	ATOM	1112	CB	MET	A	165	-31.831	35.595	12.087	1.00	37.87	C
[14927]	ATOM	1113	CG	MET	A	165	-32.607	36.767	12.587	1.00	41.14	C
[14928]	ATOM	1114	SD	MET	A	165	-33.382	37.460	11.124	1.00	46.62	S
[14929]	ATOM	1115	CE	MET	A	165	-33.422	39.206	11.512	1.00	43.57	C
[14930]	ATOM	1116	N	ASP	A	166	-31.012	32.676	12.731	1.00	36.17	N
[14931]	ATOM	1117	CA	ASP	A	166	-31.304	31.307	13.111	1.00	37.26	C
[14932]	ATOM	1118	C	ASP	A	166	-30.430	30.851	14.271	1.00	36.57	C
[14933]	ATOM	1119	O	ASP	A	166	-30.931	30.272	15.213	1.00	37.47	O
[14934]	ATOM	1120	CB	ASP	A	166	-31.073	30.354	11.918	1.00	37.72	C
[14935]	ATOM	1121	CG	ASP	A	166	-31.921	30.717	10.688	1.00	43.05	C
[14936]	ATOM	1122	OD1	ASP	A	166	-33.120	31.027	10.866	1.00	46.22	O
[14937]	ATOM	1123	OD2	ASP	A	166	-31.374	30.700	9.546	1.00	46.52	O
[14938]	ATOM	1124	N	TRP	A	167	-29.113	31.051	14.167	1.00	35.72	N
[14939]	ATOM	1125	CA	TRP	A	167	-28.187	30.706	15.249	1.00	35.04	C
[14940]	ATOM	1126	C	TRP	A	167	-28.561	31.384	16.580	1.00	34.87	C
[14941]	ATOM	1127	O	TRP	A	167	-28.591	30.705	17.608	1.00	34.62	O
[14942]	ATOM	1128	CB	TRP	A	167	-26.730	31.018	14.884	1.00	34.67	C
[14943]	ATOM	1129	CG	TRP	A	167	-26.075	29.916	14.080	1.00	35.35	C
[14944]	ATOM	1130	CD1	TRP	A	167	-25.567	30.009	12.805	1.00	34.31	C
[14945]	ATOM	1131	CD2	TRP	A	167	-25.889	28.552	14.492	1.00	35.10	C
[14946]	ATOM	1132	NE1	TRP	A	167	-25.074	28.770	12.401	1.00	36.30	N
[14947]	ATOM	1133	CE2	TRP	A	167	-25.261	27.867	13.417	1.00	34.58	C
[14948]	ATOM	1134	CE3	TRP	A	167	-26.178	27.844	15.677	1.00	35.34	C
[14949]	ATOM	1135	CZ2	TRP	A	167	-24.891	26.520	13.498	1.00	35.44	C
[14950]	ATOM	1136	CZ3	TRP	A	167	-25.837	26.486	15.740	1.00	37.03	C
[14951]	ATOM	1137	CH2	TRP	A	167	-25.203	25.840	14.649	1.00	35.14	C
[14952]	ATOM	1138	N	ALA	A	168	-28.844	32.699	16.552	1.00	33.60	N
[14953]	ATOM	1139	CA	ALA	A	168	-29.232	33.445	17.749	1.00	33.51	C
[14954]	ATOM	1140	C	ALA	A	168	-30.477	32.802	18.412	1.00	35.09	C
[14955]	ATOM	1141	O	ALA	A	168	-30.499	32.606	19.634	1.00	34.77	O
[14956]	ATOM	1142	CB	ALA	A	168	-29.488	34.900	17.404	1.00	32.55	C
[14957]	ATOM	1143	N	ALA	A	169	-31.501	32.467	17.604	1.00	36.20	N
[14958]	ATOM	1144	CA	ALA	A	169	-32.760	31.889	18.130	1.00	36.92	C
[14959]	ATOM	1145	C	ALA	A	169	-32.534	30.497	18.722	1.00	36.93	C

[14960]	ATOM	1146	O	ALA A 169	-33.074	30.177	19.790	1.00	37.67	O
[14961]	ATOM	1147	CB	ALA A 169	-33.844	31.827	17.040	1.00	36.60	C
[14962]	ATOM	1148	N	HIS A 170	-31.764	29.683	18.001	1.00	37.45	N
[14963]	ATOM	1149	CA	HIS A 170	-31.389	28.315	18.388	1.00	37.11	C
[14964]	ATOM	1150	C	HIS A 170	-30.651	28.312	19.738	1.00	37.21	C
[14965]	ATOM	1151	O	HIS A 170	-31.010	27.571	20.688	1.00	36.40	O
[14966]	ATOM	1152	CB	HIS A 170	-30.505	27.725	17.284	1.00	37.70	C
[14967]	ATOM	1153	CG	HIS A 170	-29.962	26.361	17.582	1.00	39.07	C
[14968]	ATOM	1154	ND1	HIS A 170	-30.636	25.198	17.254	1.00	41.40	N
[14969]	ATOM	1155	CD2	HIS A 170	-28.802	25.973	18.168	1.00	39.71	C
[14970]	ATOM	1156	CE1	HIS A 170	-29.923	24.158	17.649	1.00	40.71	C
[14971]	ATOM	1157	NE2	HIS A 170	-28.805	24.598	18.197	1.00	41.68	N
[14972]	ATOM	1158	N	LYS A 171	-29.638	29.170	19.846	1.00	36.15	N
[14973]	ATOM	1159	CA	LYS A 171	-28.865	29.242	21.058	1.00	35.31	C
[14974]	ATOM	1160	C	LYS A 171	-29.716	29.783	22.225	1.00	35.45	C
[14975]	ATOM	1161	O	LYS A 171	-29.541	29.341	23.365	1.00	34.31	O
[14976]	ATOM	1162	CB	LYS A 171	-27.601	30.054	20.839	1.00	35.04	C
[14977]	ATOM	1163	CG	LYS A 171	-26.571	29.410	19.850	1.00	36.59	C
[14978]	ATOM	1164	CD	LYS A 171	-25.348	30.316	19.754	1.00	39.68	C
[14979]	ATOM	1165	CE	LYS A 171	-24.431	29.928	18.604	1.00	42.42	C
[14980]	ATOM	1166	NZ	LYS A 171	-23.688	31.208	18.241	1.00	45.08	N
[14981]	ATOM	1167	N	LEU A 172	-30.626	30.730	21.958	1.00	35.00	N
[14982]	ATOM	1168	CA	LEU A 172	-31.498	31.253	23.038	1.00	35.46	C
[14983]	ATOM	1169	C	LEU A 172	-32.417	30.118	23.534	1.00	35.15	C
[14984]	ATOM	1170	O	LEU A 172	-32.562	29.895	24.724	1.00	34.56	O
[14985]	ATOM	1171	CB	LEU A 172	-32.332	32.449	22.565	1.00	35.10	C
[14986]	ATOM	1172	CG	LEU A 172	-32.685	33.533	23.571	1.00	37.08	C
[14987]	ATOM	1173	CD1	LEU A 172	-33.423	34.651	22.858	1.00	39.09	C
[14988]	ATOM	1174	CD2	LEU A 172	-33.502	33.015	24.727	1.00	39.69	C
[14989]	ATOM	1175	N	THR A 173	-33.031	29.413	22.594	1.00	35.72	N
[14990]	ATOM	1176	CA	THR A 173	-33.861	28.242	22.902	1.00	36.88	C
[14991]	ATOM	1177	C	THR A 173	-33.069	27.223	23.745	1.00	37.08	C
[14992]	ATOM	1178	O	THR A 173	-33.583	26.713	24.743	1.00	36.79	O
[14993]	ATOM	1179	CB	THR A 173	-34.409	27.613	21.614	1.00	37.43	C
[14994]	ATOM	1180	OG1	THR A 173	-35.298	28.567	20.987	1.00	36.98	O
[14995]	ATOM	1181	CG2	THR A 173	-35.172	26.306	21.915	1.00	38.17	C

[14996]	ATOM	1182	N	GLY A 174	-31.808	27.000	23.371	1.00	36.65	N
[14997]	ATOM	1183	CA	GLY A 174	-30.949	26.013	24.014	1.00	36.80	C
[14998]	ATOM	1184	C	GLY A 174	-30.665	26.260	25.479	1.00	36.36	C
[14999]	ATOM	1185	O	GLY A 174	-30.285	25.339	26.190	1.00	37.10	O
[15000]	ATOM	1186	N	LEU A 175	-30.844	27.501	25.941	1.00	35.36	N
[15001]	ATOM	1187	CA	LEU A 175	-30.548	27.845	27.314	1.00	34.27	C
[15002]	ATOM	1188	C	LEU A 175	-31.542	27.219	28.285	1.00	34.99	C
[15003]	ATOM	1189	O	LEU A 175	-31.233	27.054	29.457	1.00	33.70	O
[15004]	ATOM	1190	CB	LEU A 175	-30.511	29.385	27.508	1.00	33.40	C
[15005]	ATOM	1191	CG	LEU A 175	-29.411	30.191	26.796	1.00	32.30	C
[15006]	ATOM	1192	CD1	LEU A 175	-29.603	31.704	27.003	1.00	29.55	C
[15007]	ATOM	1193	CD2	LEU A 175	-28.039	29.802	27.316	1.00	31.00	C
[15008]	ATOM	1194	N	THR A 176	-32.753	26.905	27.814	1.00	35.98	N
[15009]	ATOM	1195	CA	THR A 176	-33.782	26.360	28.723	1.00	37.41	C
[15010]	ATOM	1196	C	THR A 176	-34.415	25.082	28.192	1.00	38.06	C
[15011]	ATOM	1197	O	THR A 176	-35.372	24.600	28.763	1.00	37.93	O
[15012]	ATOM	1198	CB	THR A 176	-34.897	27.403	29.075	1.00	37.80	C
[15013]	ATOM	1199	OG1	THR A 176	-35.581	27.787	27.875	1.00	37.98	O
[15014]	ATOM	1200	CG2	THR A 176	-34.330	28.630	29.765	1.00	35.71	C
[15015]	ATOM	1201	N	SER A 177	-33.857	24.540	27.108	1.00	38.94	N
[15016]	ATOM	1202	CA	SER A 177	-34.254	23.253	26.568	1.00	40.96	C
[15017]	ATOM	1203	C	SER A 177	-33.099	22.293	26.612	1.00	41.60	C
[15018]	ATOM	1204	O	SER A 177	-31.968	22.651	26.271	1.00	43.09	O
[15019]	ATOM	1205	CB	SER A 177	-34.684	23.360	25.102	1.00	40.69	C
[15020]	ATOM	1206	OG	SER A 177	-35.888	24.080	24.984	1.00	43.65	O
[15021]	ATOM	1207	N	SER A 178	-33.397	21.055	26.976	1.00	41.65	N
[15022]	ATOM	1208	CA	SER A 178	-32.420	19.988	26.939	1.00	41.82	C
[15023]	ATOM	1209	C	SER A 178	-32.131	19.579	25.496	1.00	41.89	C
[15024]	ATOM	1210	O	SER A 178	-32.853	19.924	24.549	1.00	40.73	O
[15025]	ATOM	1211	CB	SER A 178	-32.930	18.762	27.746	1.00	42.30	C
[15026]	ATOM	1212	OG	SER A 178	-33.925	18.066	26.981	1.00	42.03	O
[15027]	ATOM	1213	N	ILE A 179	-31.071	18.804	25.320	1.00	42.65	N
[15028]	ATOM	1214	CA	ILE A 179	-30.794	18.301	23.998	1.00	43.43	C
[15029]	ATOM	1215	C	ILE A 179	-31.948	17.442	23.433	1.00	42.64	C
[15030]	ATOM	1216	O	ILE A 179	-32.378	17.670	22.305	1.00	42.76	O
[15031]	ATOM	1217	CB	ILE A 179	-29.347	17.756	23.873	1.00	44.20	C



[15032]	ATOM	1218	CG1	ILE	A	179	-28.458	18.960	23.510	1.00	45.47	C
[15033]	ATOM	1219	CG2	ILE	A	179	-29.256	16.684	22.765	1.00	43.79	C
[15034]	ATOM	1220	CD1	ILE	A	179	-27.090	18.883	24.030	1.00	48.67	C
[15035]	ATOM	1221	N	PRO	A	180	-32.470	16.475	24.215	1.00	41.95	N
[15036]	ATOM	1222	CA	PRO	A	180	-33.641	15.737	23.697	1.00	41.15	C
[15037]	ATOM	1223	C	PRO	A	180	-34.854	16.604	23.343	1.00	40.00	C
[15038]	ATOM	1224	O	PRO	A	180	-35.506	16.333	22.344	1.00	39.93	O
[15039]	ATOM	1225	CB	PRO	A	180	-33.977	14.770	24.849	1.00	40.67	C
[15040]	ATOM	1226	CG	PRO	A	180	-32.677	14.597	25.545	1.00	41.28	C
[15041]	ATOM	1227	CD	PRO	A	180	-32.039	15.936	25.521	1.00	41.44	C
[15042]	ATOM	1228	N	GLU	A	181	-35.153	17.634	24.128	1.00	39.71	N
[15043]	ATOM	1229	CA	GLU	A	181	-36.297	18.503	23.834	1.00	40.24	C
[15044]	ATOM	1230	C	GLU	A	181	-36.124	19.250	22.495	1.00	40.82	C
[15045]	ATOM	1231	O	GLU	A	181	-37.078	19.461	21.742	1.00	41.34	O
[15046]	ATOM	1232	CB	GLU	A	181	-36.549	19.500	24.971	1.00	39.82	C
[15047]	ATOM	1233	CG	GLU	A	181	-37.199	18.874	26.214	1.00	40.69	C
[15048]	ATOM	1234	CD	GLU	A	181	-37.184	19.799	27.467	1.00	43.67	C
[15049]	ATOM	1235	OE1	GLU	A	181	-36.287	20.664	27.615	1.00	44.60	O
[15050]	ATOM	1236	OE2	GLU	A	181	-38.072	19.643	28.345	1.00	47.92	O
[15051]	ATOM	1237	N	MET	A	182	-34.901	19.652	22.214	1.00	40.58	N
[15052]	ATOM	1238	CA	MET	A	182	-34.602	20.281	20.960	1.00	41.82	C
[15053]	ATOM	1239	C	MET	A	182	-34.616	19.369	19.745	1.00	41.57	C
[15054]	ATOM	1240	O	MET	A	182	-35.103	19.765	18.701	1.00	42.23	O
[15055]	ATOM	1241	CB	MET	A	182	-33.319	21.036	21.102	1.00	41.39	C
[15056]	ATOM	1242	CG	MET	A	182	-33.699	22.321	21.846	1.00	42.89	C
[15057]	ATOM	1243	SD	MET	A	182	-32.389	23.412	21.879	1.00	46.63	S
[15058]	ATOM	1244	CE	MET	A	182	-32.381	24.055	20.186	1.00	42.25	C
[15059]	ATOM	1245	N	ILE	A	183	-34.106	18.154	19.896	1.00	41.08	N
[15060]	ATOM	1246	CA	ILE	A	183	-34.231	17.155	18.859	1.00	40.81	C
[15061]	ATOM	1247	C	ILE	A	183	-35.719	16.834	18.605	1.00	40.64	C
[15062]	ATOM	1248	O	ILE	A	183	-36.159	16.804	17.474	1.00	40.11	O
[15063]	ATOM	1249	CB	ILE	A	183	-33.391	15.916	19.192	1.00	41.06	C
[15064]	ATOM	1250	CG1	ILE	A	183	-31.902	16.315	19.163	1.00	40.48	C
[15065]	ATOM	1251	CG2	ILE	A	183	-33.723	14.757	18.185	1.00	40.95	C
[15066]	ATOM	1252	CD1	ILE	A	183	-30.948	15.260	19.549	1.00	38.37	C
[15067]	ATOM	1253	N	LEU	A	184	-36.493	16.650	19.671	1.00	40.85	N

[15068]	ATOM	1254	CA	LEU	A	184	-37.946	16.450	19.554	1.00	40.94	C
[15069]	ATOM	1255	C	LEU	A	184	-38.680	17.563	18.802	1.00	41.32	C
[15070]	ATOM	1256	O	LEU	A	184	-39.643	17.295	18.086	1.00	40.87	O
[15071]	ATOM	1257	CB	LEU	A	184	-38.580	16.235	20.944	1.00	40.81	C
[15072]	ATOM	1258	CG	LEU	A	184	-38.369	14.803	21.472	1.00	41.42	C
[15073]	ATOM	1259	CD1	LEU	A	184	-38.665	14.733	22.937	1.00	40.67	C
[15074]	ATOM	1260	CD2	LEU	A	184	-39.173	13.734	20.663	1.00	40.94	C
[15075]	ATOM	1261	N	GLY	A	185	-38.243	18.804	19.015	1.00	41.73	N
[15076]	ATOM	1262	CA	GLY	A	185	-38.784	19.977	18.326	1.00	42.38	C
[15077]	ATOM	1263	C	GLY	A	185	-38.378	20.068	16.844	1.00	42.24	C
[15078]	ATOM	1264	O	GLY	A	185	-39.028	20.760	16.070	1.00	42.28	O
[15079]	ATOM	1265	N	HIS	A	186	-37.272	19.413	16.479	1.00	41.50	N
[15080]	ATOM	1266	CA	HIS	A	186	-36.874	19.212	15.094	1.00	40.45	C
[15081]	ATOM	1267	C	HIS	A	186	-37.743	18.139	14.393	1.00	40.59	C
[15082]	ATOM	1268	O	HIS	A	186	-38.071	18.260	13.198	1.00	40.99	O
[15083]	ATOM	1269	CB	HIS	A	186	-35.382	18.851	15.060	1.00	40.47	C
[15084]	ATOM	1270	CG	HIS	A	186	-34.919	18.204	13.785	1.00	40.74	C
[15085]	ATOM	1271	ND1	HIS	A	186	-34.686	18.913	12.622	1.00	41.73	N
[15086]	ATOM	1272	CD2	HIS	A	186	-34.599	16.922	13.509	1.00	39.27	C
[15087]	ATOM	1273	CE1	HIS	A	186	-34.267	18.087	11.681	1.00	42.05	C
[15088]	ATOM	1274	NE2	HIS	A	186	-34.223	16.868	12.187	1.00	38.81	N
[15089]	ATOM	1275	N	LEU	A	187	-38.125	17.105	15.131	1.00	40.04	N
[15090]	ATOM	1276	CA	LEU	A	187	-38.912	15.989	14.584	1.00	40.17	C
[15091]	ATOM	1277	C	LEU	A	187	-40.418	16.244	14.530	1.00	40.65	C
[15092]	ATOM	1278	O	LEU	A	187	-41.068	15.840	13.573	1.00	40.34	O
[15093]	ATOM	1279	CB	LEU	A	187	-38.668	14.720	15.413	1.00	39.63	C
[15094]	ATOM	1280	CG	LEU	A	187	-37.227	14.189	15.449	1.00	39.92	C
[15095]	ATOM	1281	CD1	LEU	A	187	-37.091	13.101	16.507	1.00	38.47	C
[15096]	ATOM	1282	CD2	LEU	A	187	-36.777	13.664	14.091	1.00	37.70	C
[15097]	ATOM	1283	N	PHE	A	188	-40.961	16.906	15.557	1.00	40.22	N
[15098]	ATOM	1284	CA	PHE	A	188	-42.406	17.036	15.736	1.00	41.34	C
[15099]	ATOM	1285	C	PHE	A	188	-42.806	18.476	15.881	1.00	41.75	C
[15100]	ATOM	1286	O	PHE	A	188	-41.990	19.299	16.315	1.00	42.06	O
[15101]	ATOM	1287	CB	PHE	A	188	-42.862	16.260	16.984	1.00	41.31	C
[15102]	ATOM	1288	CG	PHE	A	188	-42.604	14.782	16.890	1.00	40.89	C
[15103]	ATOM	1289	CD1	PHE	A	188	-43.357	13.988	16.024	1.00	39.78	C

[15104]	ATOM	1290	CD2	PHE	A	188	-41.591	14.192	17.644	1.00	39.14	C
[15105]	ATOM	1291	CE1	PHE	A	188	-43.129	12.605	15.925	1.00	37.99	C
[15106]	ATOM	1292	CE2	PHE	A	188	-41.352	12.810	17.547	1.00	39.68	C
[15107]	ATOM	1293	CZ	PHE	A	188	-42.129	12.021	16.680	1.00	38.90	C
[15108]	ATOM	1294	N	SER	A	189	-44.042	18.801	15.520	1.00	42.52	N
[15109]	ATOM	1295	CA	SER	A	189	-44.517	20.186	15.756	1.00	44.30	C
[15110]	ATOM	1296	C	SER	A	189	-44.738	20.433	17.240	1.00	45.62	C
[15111]	ATOM	1297	O	SER	A	189	-44.963	19.482	18.012	1.00	44.59	O
[15112]	ATOM	1298	CB	SER	A	189	-45.811	20.489	14.994	1.00	44.20	C
[15113]	ATOM	1299	OG	SER	A	189	-46.907	19.774	15.524	1.00	45.40	O
[15114]	ATOM	1300	N	GLN	A	190	-44.682	21.711	17.634	1.00	47.46	N
[15115]	ATOM	1301	CA	GLN	A	190	-44.981	22.108	19.009	1.00	48.93	C
[15116]	ATOM	1302	C	GLN	A	190	-46.355	21.611	19.439	1.00	49.24	C
[15117]	ATOM	1303	O	GLN	A	190	-46.517	21.128	20.564	1.00	49.90	O
[15118]	ATOM	1304	CB	GLN	A	190	-44.863	23.626	19.185	1.00	49.15	C
[15119]	ATOM	1305	CG	GLN	A	190	-43.411	24.122	19.147	1.00	52.24	C
[15120]	ATOM	1306	CD	GLN	A	190	-42.472	23.346	20.093	1.00	54.64	C
[15121]	ATOM	1307	OE1	GLN	A	190	-41.524	22.678	19.643	1.00	56.01	O
[15122]	ATOM	1308	NE2	GLN	A	190	-42.730	23.436	21.399	1.00	52.96	N
[15123]	ATOM	1309	N	GLU	A	191	-47.323	21.690	18.529	1.00	49.44	N
[15124]	ATOM	1310	CA	GLU	A	191	-48.686	21.232	18.796	1.00	50.05	C
[15125]	ATOM	1311	C	GLU	A	191	-48.773	19.712	19.049	1.00	49.23	C
[15126]	ATOM	1312	O	GLU	A	191	-49.545	19.278	19.906	1.00	48.66	O
[15127]	ATOM	1313	CB	GLU	A	191	-49.601	21.631	17.637	1.00	50.80	C
[15128]	ATOM	1314	CG	GLU	A	191	-51.069	21.755	17.998	1.00	55.14	C
[15129]	ATOM	1315	CD	GLU	A	191	-51.977	21.668	16.769	1.00	61.96	C
[15130]	ATOM	1316	OE1	GLU	A	191	-51.726	22.394	15.770	1.00	64.43	O
[15131]	ATOM	1317	OE2	GLU	A	191	-52.943	20.864	16.797	1.00	63.88	O
[15132]	ATOM	1318	N	GLU	A	192	-47.996	18.908	18.307	1.00	48.10	N
[15133]	ATOM	1319	CA	GLU	A	192	-47.883	17.463	18.583	1.00	47.07	C
[15134]	ATOM	1320	C	GLU	A	192	-47.221	17.221	19.933	1.00	47.20	C
[15135]	ATOM	1321	O	GLU	A	192	-47.616	16.331	20.688	1.00	47.19	O
[15136]	ATOM	1322	CB	GLU	A	192	-47.045	16.744	17.521	1.00	47.25	C
[15137]	ATOM	1323	CG	GLU	A	192	-47.743	16.408	16.222	1.00	46.62	C
[15138]	ATOM	1324	CD	GLU	A	192	-46.777	15.804	15.220	1.00	46.39	C
[15139]	ATOM	1325	OE1	GLU	A	192	-45.788	16.466	14.830	1.00	45.93	O

[15140]	ATOM	1326	OE2	GLU	A	192	-46.995	14.649	14.832	1.00	48.21	O
[15141]	ATOM	1327	N	LEU	A	193	-46.197	18.009	20.232	1.00	47.25	N
[15142]	ATOM	1328	CA	LEU	A	193	-45.484	17.855	21.484	1.00	47.58	C
[15143]	ATOM	1329	C	LEU	A	193	-46.342	18.261	22.697	1.00	48.24	C
[15144]	ATOM	1330	O	LEU	A	193	-46.246	17.623	23.745	1.00	47.95	O
[15145]	ATOM	1331	CB	LEU	A	193	-44.146	18.586	21.442	1.00	47.85	C
[15146]	ATOM	1332	CG	LEU	A	193	-43.071	17.951	20.524	1.00	47.09	C
[15147]	ATOM	1333	CD1	LEU	A	193	-41.909	18.915	20.375	1.00	48.16	C
[15148]	ATOM	1334	CD2	LEU	A	193	-42.592	16.581	21.043	1.00	46.19	C
[15149]	ATOM	1335	N	SER	A	194	-47.185	19.284	22.534	1.00	48.76	N
[15150]	ATOM	1336	CA	SER	A	194	-48.157	19.694	23.573	1.00	50.20	C
[15151]	ATOM	1337	C	SER	A	194	-49.323	18.732	23.733	1.00	50.40	C
[15152]	ATOM	1338	O	SER	A	194	-49.757	18.474	24.845	1.00	50.95	O
[15153]	ATOM	1339	CB	SER	A	194	-48.744	21.072	23.277	1.00	50.20	C
[15154]	ATOM	1340	OG	SER	A	194	-47.713	22.025	23.153	1.00	52.09	O
[15155]	ATOM	1341	N	GLY	A	195	-49.851	18.243	22.618	1.00	50.79	N
[15156]	ATOM	1342	CA	GLY	A	195	-50.974	17.315	22.628	1.00	51.24	C
[15157]	ATOM	1343	C	GLY	A	195	-50.596	15.978	23.240	1.00	51.99	C
[15158]	ATOM	1344	O	GLY	A	195	-51.457	15.263	23.747	1.00	51.54	O
[15159]	ATOM	1345	N	ASN	A	196	-49.307	15.633	23.167	1.00	52.63	N
[15160]	ATOM	1346	CA	ASN	A	196	-48.765	14.453	23.853	1.00	53.19	C
[15161]	ATOM	1347	C	ASN	A	196	-49.496	13.118	23.559	1.00	52.85	C
[15162]	ATOM	1348	O	ASN	A	196	-49.895	12.394	24.472	1.00	53.67	O
[15163]	ATOM	1349	CB	ASN	A	196	-48.705	14.746	25.361	1.00	53.77	C
[15164]	ATOM	1350	CG	ASN	A	196	-47.672	13.910	26.088	1.00	55.14	C
[15165]	ATOM	1351	OD1	ASN	A	196	-46.585	13.645	25.566	1.00	56.94	O
[15166]	ATOM	1352	ND2	ASN	A	196	-48.002	13.498	27.310	1.00	54.83	N
[15167]	ATOM	1353	N	SER	A	197	-49.674	12.797	22.278	1.00	52.66	N
[15168]	ATOM	1354	CA	SER	A	197	-50.284	11.526	21.850	1.00	51.36	C
[15169]	ATOM	1355	C	SER	A	197	-49.419	10.362	22.269	1.00	51.00	C
[15170]	ATOM	1356	O	SER	A	197	-48.261	10.541	22.643	1.00	51.06	O
[15171]	ATOM	1357	CB	SER	A	197	-50.393	11.476	20.324	1.00	51.65	C
[15172]	ATOM	1358	OG	SER	A	197	-49.096	11.400	19.734	1.00	50.82	O
[15173]	ATOM	1359	N	GLU	A	198	-49.965	9.157	22.153	1.00	50.58	N
[15174]	ATOM	1360	CA	GLU	A	198	-49.198	7.940	22.385	1.00	50.18	C
[15175]	ATOM	1361	C	GLU	A	198	-47.898	7.854	21.549	1.00	49.13	C

[15176]	ATOM	1362	O	GLU	A	198	-46.858	7.465	22.078	1.00	48.91	O
[15177]	ATOM	1363	CB	GLU	A	198	-50.090	6.732	22.144	1.00	50.94	C
[15178]	ATOM	1364	CG	GLU	A	198	-49.386	5.392	22.246	1.00	53.82	C
[15179]	ATOM	1365	CD	GLU	A	198	-50.366	4.233	22.196	1.00	56.76	C
[15180]	ATOM	1366	OE1	GLU	A	198	-50.427	3.547	21.145	1.00	58.04	O
[15181]	ATOM	1367	OE2	GLU	A	198	-51.087	4.041	23.199	1.00	56.34	O
[15182]	ATOM	1368	N	LEU	A	199	-47.947	8.228	20.268	1.00	47.61	N
[15183]	ATOM	1369	CA	LEU	A	199	-46.725	8.245	19.447	1.00	46.50	C
[15184]	ATOM	1370	C	LEU	A	199	-45.660	9.184	20.015	1.00	45.33	C
[15185]	ATOM	1371	O	LEU	A	199	-44.495	8.814	20.124	1.00	44.13	O
[15186]	ATOM	1372	CB	LEU	A	199	-47.022	8.616	17.979	1.00	46.92	C
[15187]	ATOM	1373	CG	LEU	A	199	-45.808	8.553	17.020	1.00	47.55	C
[15188]	ATOM	1374	CD1	LEU	A	199	-45.713	7.173	16.382	1.00	47.77	C
[15189]	ATOM	1375	CD2	LEU	A	199	-45.903	9.618	15.963	1.00	47.07	C
[15190]	ATOM	1376	N	ILE	A	200	-46.074	10.400	20.361	1.00	45.42	N
[15191]	ATOM	1377	CA	ILE	A	200	-45.192	11.404	20.992	1.00	45.77	C
[15192]	ATOM	1378	C	ILE	A	200	-44.564	10.929	22.318	1.00	45.05	C
[15193]	ATOM	1379	O	ILE	A	200	-43.367	11.130	22.550	1.00	44.79	O
[15194]	ATOM	1380	CB	ILE	A	200	-45.934	12.763	21.207	1.00	45.95	C
[15195]	ATOM	1381	CG1	ILE	A	200	-46.412	13.348	19.865	1.00	48.25	C
[15196]	ATOM	1382	CG2	ILE	A	200	-45.090	13.746	22.005	1.00	45.63	C
[15197]	ATOM	1383	CD1	ILE	A	200	-45.338	13.757	18.892	1.00	49.88	C
[15198]	ATOM	1384	N	GLN	A	201	-45.373	10.315	23.185	1.00	44.92	N
[15199]	ATOM	1385	CA	GLN	A	201	-44.866	9.737	24.438	1.00	44.29	C
[15200]	ATOM	1386	C	GLN	A	201	-43.759	8.707	24.172	1.00	43.75	C
[15201]	ATOM	1387	O	GLN	A	201	-42.702	8.764	24.793	1.00	43.21	O
[15202]	ATOM	1388	CB	GLN	A	201	-45.999	9.098	25.230	1.00	44.71	C
[15203]	ATOM	1389	CG	GLN	A	201	-47.027	10.087	25.747	1.00	46.09	C
[15204]	ATOM	1390	CD	GLN	A	201	-48.160	9.387	26.453	1.00	47.96	C
[15205]	ATOM	1391	OE1	GLN	A	201	-47.950	8.730	27.468	1.00	48.58	O
[15206]	ATOM	1392	NE2	GLN	A	201	-49.369	9.500	25.906	1.00	48.54	N
[15207]	ATOM	1393	N	LYS	A	202	-44.006	7.798	23.221	1.00	42.93	N
[15208]	ATOM	1394	CA	LYS	A	202	-43.057	6.752	22.846	1.00	42.87	C
[15209]	ATOM	1395	C	LYS	A	202	-41.746	7.345	22.316	1.00	41.93	C
[15210]	ATOM	1396	O	LYS	A	202	-40.675	6.951	22.754	1.00	42.05	O
[15211]	ATOM	1397	CB	LYS	A	202	-43.693	5.794	21.822	1.00	43.16	C

[15212]	ATOM	1398	CG	LYS	A	202	-42.745	4.718	21.256	1.00	44.13	C
[15213]	ATOM	1399	CD	LYS	A	202	-43.344	4.066	20.009	1.00	45.62	C
[15214]	ATOM	1400	CE	LYS	A	202	-42.445	2.962	19.463	1.00	47.93	C
[15215]	ATOM	1401	NZ	LYS	A	202	-43.086	2.232	18.322	1.00	47.15	N
[15216]	ATOM	1402	N	TYR	A	203	-41.841	8.300	21.393	1.00	41.62	N
[15217]	ATOM	1403	CA	TYR	A	203	-40.655	8.964	20.793	1.00	40.52	C
[15218]	ATOM	1404	C	TYR	A	203	-39.875	9.854	21.780	1.00	40.56	C
[15219]	ATOM	1405	O	TYR	A	203	-38.638	9.877	21.758	1.00	40.00	O
[15220]	ATOM	1406	CB	TYR	A	203	-41.022	9.657	19.460	1.00	40.45	C
[15221]	ATOM	1407	CG	TYR	A	203	-41.038	8.618	18.352	1.00	39.80	C
[15222]	ATOM	1408	CD1	TYR	A	203	-42.083	7.690	18.258	1.00	39.63	C
[15223]	ATOM	1409	CD2	TYR	A	203	-39.956	8.477	17.488	1.00	38.33	C
[15224]	ATOM	1410	CE1	TYR	A	203	-42.085	6.671	17.288	1.00	37.56	C
[15225]	ATOM	1411	CE2	TYR	A	203	-39.953	7.479	16.500	1.00	40.28	C
[15226]	ATOM	1412	CZ	TYR	A	203	-41.016	6.566	16.428	1.00	39.56	C
[15227]	ATOM	1413	OH	TYR	A	203	-41.008	5.579	15.473	1.00	39.09	O
[15228]	ATOM	1414	N	ARG	A	204	-40.593	10.521	22.685	1.00	40.37	N
[15229]	ATOM	1415	CA	ARG	A	204	-39.978	11.216	23.825	1.00	40.95	C
[15230]	ATOM	1416	C	ARG	A	204	-39.098	10.306	24.712	1.00	41.90	C
[15231]	ATOM	1417	O	ARG	A	204	-37.963	10.673	25.056	1.00	41.29	O
[15232]	ATOM	1418	CB	ARG	A	204	-41.047	11.916	24.680	1.00	40.71	C
[15233]	ATOM	1419	CG	ARG	A	204	-40.463	12.773	25.797	1.00	41.70	C
[15234]	ATOM	1420	CD	ARG	A	204	-41.539	13.509	26.557	1.00	45.23	C
[15235]	ATOM	1421	NE	ARG	A	204	-41.948	14.721	25.849	1.00	47.53	N
[15236]	ATOM	1422	CZ	ARG	A	204	-43.174	14.978	25.393	1.00	47.61	C
[15237]	ATOM	1423	NH1	ARG	A	204	-44.160	14.113	25.568	1.00	47.22	N
[15238]	ATOM	1424	NH2	ARG	A	204	-43.410	16.137	24.781	1.00	48.36	N
[15239]	ATOM	1425	N	ASN	A	205	-39.627	9.137	25.084	1.00	42.96	N
[15240]	ATOM	1426	CA	ASN	A	205	-38.865	8.139	25.849	1.00	44.49	C
[15241]	ATOM	1427	C	ASN	A	205	-37.665	7.624	25.053	1.00	44.19	C
[15242]	ATOM	1428	O	ASN	A	205	-36.543	7.620	25.556	1.00	44.42	O
[15243]	ATOM	1429	CB	ASN	A	205	-39.747	6.957	26.228	1.00	45.23	C
[15244]	ATOM	1430	CG	ASN	A	205	-40.264	7.021	27.649	1.00	50.37	C
[15245]	ATOM	1431	OD1	ASN	A	205	-39.637	7.608	28.565	1.00	55.98	O
[15246]	ATOM	1432	ND2	ASN	A	205	-41.405	6.363	27.868	1.00	54.56	N
[15247]	ATOM	1433	N	ILE	A	206	-37.907	7.189	23.825	1.00	43.68	N

[15248]	ATOM	1434	CA	ILE A 206	-36.836	6.781	22.909	1.00	45.21	C
[15249]	ATOM	1435	C	ILE A 206	-35.654	7.755	22.917	1.00	44.92	C
[15250]	ATOM	1436	O	ILE A 206	-34.522	7.355	23.160	1.00	46.00	O
[15251]	ATOM	1437	CB	ILE A 206	-37.345	6.631	21.431	1.00	45.30	C
[15252]	ATOM	1438	CG1	ILE A 206	-38.072	5.304	21.220	1.00	46.43	C
[15253]	ATOM	1439	CG2	ILE A 206	-36.209	6.736	20.409	1.00	46.90	C
[15254]	ATOM	1440	CD1	ILE A 206	-38.713	5.223	19.823	1.00	46.14	C
[15255]	ATOM	1441	N	ILE A 207	-35.907	9.026	22.641	1.00	44.03	N
[15256]	ATOM	1442	CA	ILE A 207	-34.813	9.979	22.562	1.00	43.78	C
[15257]	ATOM	1443	C	ILE A 207	-34.248	10.336	23.952	1.00	43.35	C
[15258]	ATOM	1444	O	ILE A 207	-33.051	10.191	24.170	1.00	43.23	O
[15259]	ATOM	1445	CB	ILE A 207	-35.187	11.207	21.700	1.00	43.71	C
[15260]	ATOM	1446	CG1	ILE A 207	-35.365	10.753	20.245	1.00	44.54	C
[15261]	ATOM	1447	CG2	ILE A 207	-34.084	12.268	21.777	1.00	43.27	C
[15262]	ATOM	1448	CD1	ILE A 207	-36.505	11.380	19.500	1.00	44.71	C
[15263]	ATOM	1449	N	THR A 208	-35.106	10.750	24.885	1.00	42.94	N
[15264]	ATOM	1450	CA	THR A 208	-34.664	11.158	26.231	1.00	43.95	C
[15265]	ATOM	1451	C	THR A 208	-33.831	10.070	26.921	1.00	44.20	C
[15266]	ATOM	1452	O	THR A 208	-32.824	10.359	27.577	1.00	43.67	O
[15267]	ATOM	1453	CB	THR A 208	-35.867	11.537	27.131	1.00	43.96	C
[15268]	ATOM	1454	OG1	THR A 208	-36.689	12.482	26.435	1.00	44.54	O
[15269]	ATOM	1455	CG2	THR A 208	-35.416	12.120	28.486	1.00	43.61	C
[15270]	ATOM	1456	N	HIS A 209	-34.229	8.816	26.743	1.00	44.85	N
[15271]	ATOM	1457	CA	HIS A 209	-33.549	7.724	27.436	1.00	46.33	C
[15272]	ATOM	1458	C	HIS A 209	-32.664	6.845	26.551	1.00	46.68	C
[15273]	ATOM	1459	O	HIS A 209	-32.238	5.772	26.972	1.00	47.06	O
[15274]	ATOM	1460	CB	HIS A 209	-34.561	6.912	28.254	1.00	46.53	C
[15275]	ATOM	1461	CG	HIS A 209	-35.264	7.733	29.289	1.00	48.08	C
[15276]	ATOM	1462	ND1	HIS A 209	-34.609	8.266	30.384	1.00	51.34	N
[15277]	ATOM	1463	CD2	HIS A 209	-36.552	8.141	29.383	1.00	48.44	C
[15278]	ATOM	1464	CE1	HIS A 209	-35.466	8.961	31.111	1.00	51.63	C
[15279]	ATOM	1465	NE2	HIS A 209	-36.649	8.908	30.521	1.00	51.96	N
[15280]	ATOM	1466	N	ALA A 210	-32.373	7.317	25.335	1.00	47.11	N
[15281]	ATOM	1467	CA	ALA A 210	-31.469	6.609	24.420	1.00	46.84	C
[15282]	ATOM	1468	C	ALA A 210	-30.123	6.373	25.105	1.00	46.69	C
[15283]	ATOM	1469	O	ALA A 210	-29.579	7.298	25.716	1.00	45.86	O

[15284]	ATOM	1470	CB	ALA	A	210	-31.269	7.404	23.154	1.00	46.72	C
[15285]	ATOM	1471	N	PRO	A	211	-29.580	5.140	24.990	1.00	46.70	N
[15286]	ATOM	1472	CA	PRO	A	211	-28.246	4.853	25.559	1.00	47.11	C
[15287]	ATOM	1473	C	PRO	A	211	-27.114	5.519	24.747	1.00	46.83	C
[15288]	ATOM	1474	O	PRO	A	211	-26.020	5.762	25.273	1.00	46.31	O
[15289]	ATOM	1475	CB	PRO	A	211	-28.149	3.319	25.501	1.00	47.26	C
[15290]	ATOM	1476	CG	PRO	A	211	-29.496	2.847	25.010	1.00	47.53	C
[15291]	ATOM	1477	CD	PRO	A	211	-30.163	3.965	24.328	1.00	46.13	C
[15292]	ATOM	1478	N	ASN	A	212	-27.410	5.853	23.490	1.00	46.57	N
[15293]	ATOM	1479	CA	ASN	A	212	-26.452	6.505	22.604	1.00	45.92	C
[15294]	ATOM	1480	C	ASN	A	212	-26.726	8.002	22.424	1.00	45.76	C
[15295]	ATOM	1481	O	ASN	A	212	-26.405	8.567	21.375	1.00	45.21	O
[15296]	ATOM	1482	CB	ASN	A	212	-26.425	5.784	21.240	1.00	46.11	C
[15297]	ATOM	1483	CG	ASN	A	212	-27.740	5.915	20.475	1.00	46.58	C
[15298]	ATOM	1484	OD1	ASN	A	212	-28.828	5.928	21.071	1.00	48.49	O
[15299]	ATOM	1485	ND2	ASN	A	212	-27.645	6.032	19.153	1.00	42.93	N
[15300]	ATOM	1486	N	LEU	A	213	-27.299	8.654	23.441	1.00	45.04	N
[15301]	ATOM	1487	CA	LEU	A	213	-27.699	10.063	23.308	1.00	44.54	C
[15302]	ATOM	1488	C	LEU	A	213	-26.507	10.960	22.981	1.00	44.12	C
[15303]	ATOM	1489	O	LEU	A	213	-26.647	11.936	22.253	1.00	44.19	O
[15304]	ATOM	1490	CB	LEU	A	213	-28.417	10.571	24.571	1.00	44.46	C
[15305]	ATOM	1491	CG	LEU	A	213	-28.996	11.995	24.503	1.00	45.32	C
[15306]	ATOM	1492	CD1	LEU	A	213	-29.995	12.149	23.347	1.00	44.31	C
[15307]	ATOM	1493	CD2	LEU	A	213	-29.618	12.398	25.838	1.00	44.66	C
[15308]	ATOM	1494	N	ASP	A	214	-25.339	10.624	23.514	1.00	43.73	N
[15309]	ATOM	1495	CA	ASP	A	214	-24.114	11.371	23.228	1.00	43.89	C
[15310]	ATOM	1496	C	ASP	A	214	-23.769	11.276	21.724	1.00	43.29	C
[15311]	ATOM	1497	O	ASP	A	214	-23.298	12.253	21.122	1.00	43.00	O
[15312]	ATOM	1498	CB	ASP	A	214	-22.947	10.862	24.094	1.00	44.50	C
[15313]	ATOM	1499	CG	ASP	A	214	-23.007	11.348	25.568	1.00	46.58	C
[15314]	ATOM	1500	OD1	ASP	A	214	-22.246	10.797	26.398	1.00	49.41	O
[15315]	ATOM	1501	OD2	ASP	A	214	-23.784	12.268	25.918	1.00	49.65	O
[15316]	ATOM	1502	N	ASN	A	215	-24.000	10.101	21.125	1.00	42.25	N
[15317]	ATOM	1503	CA	ASN	A	215	-23.826	9.917	19.680	1.00	41.52	C
[15318]	ATOM	1504	C	ASN	A	215	-24.864	10.734	18.885	1.00	41.33	C
[15319]	ATOM	1505	O	ASN	A	215	-24.532	11.410	17.892	1.00	40.80	O



[15320]	ATOM	1506	CB	ASN	A	215	-23.897	8.434	19.293	1.00	41.15	C
[15321]	ATOM	1507	CG	ASN	A	215	-22.665	7.641	19.736	1.00	40.91	C
[15322]	ATOM	1508	OD1	ASN	A	215	-21.734	8.202	20.300	1.00	41.29	O
[15323]	ATOM	1509	ND2	ASN	A	215	-22.663	6.328	19.477	1.00	37.97	N
[15324]	ATOM	1510	N	ILE	A	216	-26.110	10.675	19.345	1.00	40.74	N
[15325]	ATOM	1511	CA	ILE	A	216	-27.219	11.413	18.731	1.00	41.00	C
[15326]	ATOM	1512	C	ILE	A	216	-26.935	12.920	18.708	1.00	41.18	C
[15327]	ATOM	1513	O	ILE	A	216	-27.227	13.607	17.734	1.00	41.63	O
[15328]	ATOM	1514	CB	ILE	A	216	-28.547	11.127	19.483	1.00	40.92	C
[15329]	ATOM	1515	CG1	ILE	A	216	-29.003	9.675	19.233	1.00	40.18	C
[15330]	ATOM	1516	CG2	ILE	A	216	-29.610	12.146	19.086	1.00	41.34	C
[15331]	ATOM	1517	CD1	ILE	A	216	-30.180	9.218	20.080	1.00	40.18	C
[15332]	ATOM	1518	N	GLU	A	217	-26.319	13.419	19.774	1.00	41.43	N
[15333]	ATOM	1519	CA	GLU	A	217	-26.040	14.830	19.892	1.00	41.98	C
[15334]	ATOM	1520	C	GLU	A	217	-25.005	15.271	18.855	1.00	41.76	C
[15335]	ATOM	1521	O	GLU	A	217	-25.108	16.361	18.300	1.00	42.80	O
[15336]	ATOM	1522	CB	GLU	A	217	-25.585	15.169	21.309	1.00	41.98	C
[15337]	ATOM	1523	CG	GLU	A	217	-25.276	16.647	21.480	1.00	44.33	C
[15338]	ATOM	1524	CD	GLU	A	217	-24.790	16.981	22.881	1.00	48.89	C
[15339]	ATOM	1525	OE1	GLU	A	217	-25.054	16.189	23.845	1.00	48.23	O
[15340]	ATOM	1526	OE2	GLU	A	217	-24.146	18.052	23.005	1.00	50.75	O
[15341]	ATOM	1527	N	LEU	A	218	-24.033	14.418	18.573	1.00	41.29	N
[15342]	ATOM	1528	CA	LEU	A	218	-23.025	14.695	17.556	1.00	41.26	C
[15343]	ATOM	1529	C	LEU	A	218	-23.651	14.807	16.148	1.00	41.22	C
[15344]	ATOM	1530	O	LEU	A	218	-23.254	15.651	15.350	1.00	41.00	O
[15345]	ATOM	1531	CB	LEU	A	218	-21.907	13.632	17.591	1.00	41.05	C
[15346]	ATOM	1532	CG	LEU	A	218	-21.068	13.459	18.877	1.00	41.95	C
[15347]	ATOM	1533	CD1	LEU	A	218	-20.006	12.382	18.736	1.00	41.16	C
[15348]	ATOM	1534	CD2	LEU	A	218	-20.403	14.769	19.272	1.00	44.37	C
[15349]	ATOM	1535	N	TYR	A	219	-24.638	13.955	15.869	1.00	41.54	N
[15350]	ATOM	1536	CA	TYR	A	219	-25.361	13.941	14.587	1.00	40.65	C
[15351]	ATOM	1537	C	TYR	A	219	-26.211	15.225	14.486	1.00	40.17	C
[15352]	ATOM	1538	O	TYR	A	219	-26.299	15.866	13.430	1.00	39.12	O
[15353]	ATOM	1539	CB	TYR	A	219	-26.180	12.619	14.474	1.00	40.43	C
[15354]	ATOM	1540	CG	TYR	A	219	-26.969	12.378	13.173	1.00	40.10	C
[15355]	ATOM	1541	CD1	TYR	A	219	-26.573	12.954	11.947	1.00	41.00	C

[15356]	ATOM	1542	CD2	TYR	A	219	-28.094	11.551	13.175	1.00	39.29	C
[15357]	ATOM	1543	CE1	TYR	A	219	-27.295	12.706	10.741	1.00	40.41	C
[15358]	ATOM	1544	CE2	TYR	A	219	-28.830	11.300	11.995	1.00	37.83	C
[15359]	ATOM	1545	CZ	TYR	A	219	-28.428	11.894	10.790	1.00	40.14	C
[15360]	ATOM	1546	OH	TYR	A	219	-29.150	11.656	9.631	1.00	42.50	O
[15361]	ATOM	1547	N	TRP	A	220	-26.811	15.595	15.611	1.00	40.69	N
[15362]	ATOM	1548	CA	TRP	A	220	-27.598	16.836	15.755	1.00	40.82	C
[15363]	ATOM	1549	C	TRP	A	220	-26.730	18.048	15.440	1.00	41.55	C
[15364]	ATOM	1550	O	TRP	A	220	-27.120	18.925	14.677	1.00	42.03	O
[15365]	ATOM	1551	CB	TRP	A	220	-28.145	16.903	17.180	1.00	40.14	C
[15366]	ATOM	1552	CG	TRP	A	220	-28.862	18.178	17.605	1.00	39.22	C
[15367]	ATOM	1553	CD1	TRP	A	220	-28.575	18.941	18.704	1.00	39.31	C
[15368]	ATOM	1554	CD2	TRP	A	220	-30.018	18.783	16.989	1.00	37.22	C
[15369]	ATOM	1555	NE1	TRP	A	220	-29.454	20.002	18.792	1.00	39.23	N
[15370]	ATOM	1556	CE2	TRP	A	220	-30.354	19.919	17.756	1.00	40.08	C
[15371]	ATOM	1557	CE3	TRP	A	220	-30.793	18.477	15.853	1.00	40.35	C
[15372]	ATOM	1558	CZ2	TRP	A	220	-31.439	20.754	17.430	1.00	40.10	C
[15373]	ATOM	1559	CZ3	TRP	A	220	-31.859	19.309	15.523	1.00	38.49	C
[15374]	ATOM	1560	CH2	TRP	A	220	-32.171	20.438	16.303	1.00	39.58	C
[15375]	ATOM	1561	N	ASN	A	221	-25.520	18.067	15.973	1.00	42.22	N
[15376]	ATOM	1562	CA	ASN	A	221	-24.606	19.141	15.693	1.00	42.91	C
[15377]	ATOM	1563	C	ASN	A	221	-24.155	19.242	14.254	1.00	42.76	C
[15378]	ATOM	1564	O	ASN	A	221	-24.194	20.299	13.686	1.00	43.12	O
[15379]	ATOM	1565	CB	ASN	A	221	-23.304	18.992	16.488	1.00	42.85	C
[15380]	ATOM	1566	CG	ASN	A	221	-23.462	19.214	17.963	1.00	45.07	C
[15381]	ATOM	1567	OD1	ASN	A	221	-22.574	18.859	18.715	1.00	49.55	O
[15382]	ATOM	1568	ND2	ASN	A	221	-24.562	19.786	18.391	1.00	43.36	N
[15383]	ATOM	1569	N	SER	A	222	-23.719	18.131	13.669	1.00	43.64	N
[15384]	ATOM	1570	CA	SER	A	222	-23.800	17.955	12.199	1.00	43.61	C
[15385]	ATOM	1571	C	SER	A	222	-24.907	18.568	11.400	1.00	42.44	C
[15386]	ATOM	1572	O	SER	A	222	-24.650	19.334	10.507	1.00	42.64	O
[15387]	ATOM	1573	CB	SER	A	222	-23.539	16.510	11.800	1.00	45.01	C
[15388]	ATOM	1574	OG	SER	A	222	-22.178	16.356	11.535	1.00	48.80	O
[15389]	ATOM	1575	N	TYR	A	223	-26.131	18.204	11.707	1.00	41.35	N
[15390]	ATOM	1576	CA	TYR	A	223	-27.252	18.779	11.058	1.00	40.32	C
[15391]	ATOM	1577	C	TYR	A	223	-27.209	20.301	11.204	1.00	40.32	C

[15392]	ATOM	1578	O	TYR	A	223	-27.315	21.018	10.212	1.00	40.80	O
[15393]	ATOM	1579	CB	TYR	A	223	-28.529	18.169	11.628	1.00	39.17	C
[15394]	ATOM	1580	CG	TYR	A	223	-29.737	18.833	11.052	1.00	39.31	C
[15395]	ATOM	1581	CD1	TYR	A	223	-30.111	18.592	9.715	1.00	38.54	C
[15396]	ATOM	1582	CD2	TYR	A	223	-30.486	19.743	11.804	1.00	36.46	C
[15397]	ATOM	1583	CE1	TYR	A	223	-31.228	19.243	9.138	1.00	37.88	C
[15398]	ATOM	1584	CE2	TYR	A	223	-31.598	20.408	11.230	1.00	37.65	C
[15399]	ATOM	1585	CZ	TYR	A	223	-31.958	20.144	9.914	1.00	38.63	C
[15400]	ATOM	1586	OH	TYR	A	223	-33.062	20.746	9.360	1.00	38.92	O
[15401]	ATOM	1587	N	ASN	A	224	-27.058	20.805	12.427	1.00	40.30	N
[15402]	ATOM	1588	CA	ASN	A	224	-27.122	22.251	12.650	1.00	40.32	C
[15403]	ATOM	1589	C	ASN	A	224	-26.040	23.021	11.909	1.00	40.30	C
[15404]	ATOM	1590	O	ASN	A	224	-26.242	24.171	11.528	1.00	41.39	O
[15405]	ATOM	1591	CB	ASN	A	224	-27.052	22.577	14.145	1.00	40.41	C
[15406]	ATOM	1592	CG	ASN	A	224	-28.249	22.058	14.910	1.00	39.73	C
[15407]	ATOM	1593	OD1	ASN	A	224	-28.099	21.590	16.035	1.00	41.68	O
[15408]	ATOM	1594	ND2	ASN	A	224	-29.449	22.158	14.317	1.00	36.82	N
[15409]	ATOM	1595	N	ASN	A	225	-24.897	22.377	11.700	1.00	39.99	N
[15410]	ATOM	1596	CA	ASN	A	225	-23.776	23.021	11.050	1.00	40.21	C
[15411]	ATOM	1597	C	ASN	A	225	-23.680	22.798	9.525	1.00	40.65	C
[15412]	ATOM	1598	O	ASN	A	225	-22.715	23.242	8.896	1.00	40.85	O
[15413]	ATOM	1599	CB	ASN	A	225	-22.481	22.646	11.788	1.00	40.04	C
[15414]	ATOM	1600	CG	ASN	A	225	-22.379	23.342	13.147	1.00	42.39	C
[15415]	ATOM	1601	OD1	ASN	A	225	-22.162	24.561	13.213	1.00	43.10	O
[15416]	ATOM	1602	ND2	ASN	A	225	-22.572	22.585	14.232	1.00	42.20	N
[15417]	ATOM	1603	N	ARG	A	226	-24.690	22.145	8.933	1.00	40.32	N
[15418]	ATOM	1604	CA	ARG	A	226	-24.669	21.824	7.499	1.00	40.63	C
[15419]	ATOM	1605	C	ARG	A	226	-24.559	23.093	6.637	1.00	41.43	C
[15420]	ATOM	1606	O	ARG	A	226	-24.946	24.200	7.063	1.00	41.52	O
[15421]	ATOM	1607	CB	ARG	A	226	-25.910	21.005	7.099	1.00	39.69	C
[15422]	ATOM	1608	CG	ARG	A	226	-27.204	21.789	7.188	1.00	38.93	C
[15423]	ATOM	1609	CD	ARG	A	226	-28.476	20.919	7.139	1.00	38.98	C
[15424]	ATOM	1610	NE	ARG	A	226	-29.658	21.773	6.960	1.00	39.03	N
[15425]	ATOM	1611	CZ	ARG	A	226	-30.186	22.534	7.920	1.00	39.65	C
[15426]	ATOM	1612	NH1	ARG	A	226	-29.644	22.572	9.152	1.00	38.53	N
[15427]	ATOM	1613	NH2	ARG	A	226	-31.242	23.283	7.647	1.00	38.37	N

[15428]	ATOM	1614	N	ARG	A	227	-24.043	22.925	5.426	1.00	42.29	N
[15429]	ATOM	1615	CA	ARG	A	227	-23.901	24.050	4.518	1.00	42.94	C
[15430]	ATOM	1616	C	ARG	A	227	-25.080	24.095	3.561	1.00	43.13	C
[15431]	ATOM	1617	O	ARG	A	227	-25.846	23.147	3.475	1.00	42.63	O
[15432]	ATOM	1618	CB	ARG	A	227	-22.549	24.025	3.797	1.00	42.47	C
[15433]	ATOM	1619	CG	ARG	A	227	-22.349	22.846	2.888	1.00	43.21	C
[15434]	ATOM	1620	CD	ARG	A	227	-21.010	22.973	2.128	1.00	44.31	C
[15435]	ATOM	1621	NE	ARG	A	227	-20.810	21.794	1.305	1.00	46.32	N
[15436]	ATOM	1622	CZ	ARG	A	227	-20.866	21.760	-0.025	1.00	47.73	C
[15437]	ATOM	1623	NH1	ARG	A	227	-21.078	22.869	-0.738	1.00	46.62	N
[15438]	ATOM	1624	NH2	ARG	A	227	-20.674	20.599	-0.647	1.00	49.90	N
[15439]	ATOM	1625	N	ASP	A	228	-25.247	25.221	2.886	1.00	44.45	N
[15440]	ATOM	1626	CA	ASP	A	228	-26.251	25.359	1.849	1.00	46.27	C
[15441]	ATOM	1627	C	ASP	A	228	-26.120	24.229	0.825	1.00	47.96	C
[15442]	ATOM	1628	O	ASP	A	228	-25.013	23.884	0.382	1.00	47.62	O
[15443]	ATOM	1629	CB	ASP	A	228	-26.070	26.709	1.136	1.00	45.82	C
[15444]	ATOM	1630	CG	ASP	A	228	-26.701	27.876	1.888	1.00	46.26	C
[15445]	ATOM	1631	OD1	ASP	A	228	-27.429	27.658	2.885	1.00	46.48	O
[15446]	ATOM	1632	OD2	ASP	A	228	-26.457	29.034	1.478	1.00	47.12	O
[15447]	ATOM	1633	N	LEU	A	229	-27.261	23.647	0.480	1.00	50.61	N
[15448]	ATOM	1634	CA	LEU	A	229	-27.391	22.713	-0.626	1.00	53.40	C
[15449]	ATOM	1635	C	LEU	A	229	-27.962	23.631	-1.662	1.00	55.64	C
[15450]	ATOM	1636	O	LEU	A	229	-29.105	24.109	-1.496	1.00	56.95	O
[15451]	ATOM	1637	CB	LEU	A	229	-28.446	21.696	-0.258	1.00	53.39	C
[15452]	ATOM	1638	CG	LEU	A	229	-28.575	20.294	-0.770	1.00	53.76	C
[15453]	ATOM	1639	CD1	LEU	A	229	-27.292	19.523	-0.656	1.00	53.29	C
[15454]	ATOM	1640	CD2	LEU	A	229	-29.676	19.670	0.111	1.00	52.20	C
[15455]	ATOM	1641	N	ASN	A	230	-27.207	23.925	-2.706	1.00	56.69	N
[15456]	ATOM	1642	CA	ASN	A	230	-27.477	25.216	-3.334	1.00	59.92	C
[15457]	ATOM	1643	C	ASN	A	230	-28.281	25.214	-4.620	1.00	60.13	C
[15458]	ATOM	1644	O	ASN	A	230	-27.899	25.900	-5.570	1.00	59.97	O
[15459]	ATOM	1645	CB	ASN	A	230	-26.201	26.086	-3.457	1.00	59.97	C
[15460]	ATOM	1646	CG	ASN	A	230	-26.397	27.467	-2.872	1.00	63.55	C
[15461]	ATOM	1647	OD1	ASN	A	230	-27.338	28.183	-3.240	1.00	68.15	O
[15462]	ATOM	1648	ND2	ASN	A	230	-25.523	27.851	-1.934	1.00	64.95	N
[15463]	ATOM	1649	N	PHE	A	231	-29.401	24.473	-4.615	1.00	60.93	N

[15464]	ATOM	1650	CA	PHE	A	231	-30.334	24.395	-5.753	1.00	61.71	C
[15465]	ATOM	1651	C	PHE	A	231	-30.658	25.781	-6.309	1.00	62.53	C
[15466]	ATOM	1652	O	PHE	A	231	-30.969	26.724	-5.548	1.00	62.18	O
[15467]	ATOM	1653	CB	PHE	A	231	-31.672	23.724	-5.395	1.00	61.47	C
[15468]	ATOM	1654	CG	PHE	A	231	-31.550	22.409	-4.686	1.00	61.45	C
[15469]	ATOM	1655	CD1	PHE	A	231	-30.681	21.420	-5.145	1.00	60.74	C
[15470]	ATOM	1656	CD2	PHE	A	231	-32.351	22.149	-3.574	1.00	60.37	C
[15471]	ATOM	1657	CE1	PHE	A	231	-30.585	20.206	-4.482	1.00	61.06	C
[15472]	ATOM	1658	CE2	PHE	A	231	-32.280	20.934	-2.905	1.00	59.99	C
[15473]	ATOM	1659	CZ	PHE	A	231	-31.395	19.955	-3.354	1.00	61.83	C
[15474]	ATOM	1660	N	GLU	A	232	-30.573	25.877	-7.634	1.00	63.24	N
[15475]	ATOM	1661	CA	GLU	A	232	-31.014	27.039	-8.398	1.00	64.64	C
[15476]	ATOM	1662	C	GLU	A	232	-31.848	26.497	-9.562	1.00	65.75	C
[15477]	ATOM	1663	O	GLU	A	232	-31.365	25.640	-10.329	1.00	65.52	O
[15478]	ATOM	1664	CB	GLU	A	232	-29.808	27.842	-8.910	1.00	64.53	C
[15479]	ATOM	1665	CG	GLU	A	232	-28.516	27.014	-9.009	1.00	64.60	C
[15480]	ATOM	1666	CD	GLU	A	232	-27.412	27.621	-9.897	1.00	66.21	C
[15481]	ATOM	1667	OE1	GLU	A	232	-27.610	28.710	-10.540	1.00	63.94	O
[15482]	ATOM	1668	OE2	GLU	A	232	-26.332	26.963	-9.948	1.00	65.82	O
[15483]	ATOM	1669	N	ARG	A	233	-33.101	26.953	-9.687	1.00	67.17	N
[15484]	ATOM	1670	CA	ARG	A	233	-33.947	26.504	-10.808	1.00	68.76	C
[15485]	ATOM	1671	C	ARG	A	233	-33.357	26.954	-12.169	1.00	69.33	C
[15486]	ATOM	1672	O	ARG	A	233	-33.426	28.129	-12.526	1.00	69.35	O
[15487]	ATOM	1673	CB	ARG	A	233	-35.415	26.947	-10.655	1.00	68.90	C
[15488]	ATOM	1674	CG	ARG	A	233	-36.343	26.316	-11.730	1.00	69.54	C
[15489]	ATOM	1675	CD	ARG	A	233	-37.804	26.632	-11.494	1.00	69.63	C
[15490]	ATOM	1676	NE	ARG	A	233	-38.400	25.738	-10.501	1.00	69.07	N
[15491]	ATOM	1677	CZ	ARG	A	233	-39.679	25.772	-10.132	1.00	69.40	C
[15492]	ATOM	1678	NH1	ARG	A	233	-40.512	26.661	-10.674	1.00	69.47	N
[15493]	ATOM	1679	NH2	ARG	A	233	-40.132	24.904	-9.230	1.00	67.34	N
[15494]	ATOM	1680	N	GLY	A	234	-32.760	26.004	-12.893	1.00	70.10	N
[15495]	ATOM	1681	CA	GLY	A	234	-32.075	26.277	-14.166	1.00	70.86	C
[15496]	ATOM	1682	C	GLY	A	234	-30.599	25.882	-14.188	1.00	71.23	C
[15497]	ATOM	1683	O	GLY	A	234	-29.805	26.530	-14.883	1.00	71.01	O
[15498]	ATOM	1684	N	GLY	A	235	-30.240	24.822	-13.437	1.00	71.36	N
[15499]	ATOM	1685	CA	GLY	A	235	-28.850	24.321	-13.327	1.00	71.00	C

[15500]	ATOM	1686	C	GLY	A	235	-27.953	25.441	-12.841	1.00	70.89	C
[15501]	ATOM	1687	O	GLY	A	235	-28.431	26.573	-12.748	1.00	71.59	O
[15502]	ATOM	1688	N	ASP	A	236	-26.669	25.202	-12.535	1.00	70.17	N
[15503]	ATOM	1689	CA	ASP	A	236	-25.958	23.925	-12.631	1.00	68.99	C
[15504]	ATOM	1690	C	ASP	A	236	-26.210	23.042	-11.419	1.00	67.95	C
[15505]	ATOM	1691	O	ASP	A	236	-26.298	21.824	-11.554	1.00	68.32	O
[15506]	ATOM	1692	CB	ASP	A	236	-24.446	24.187	-12.740	1.00	69.11	C
[15507]	ATOM	1693	CG	ASP	A	236	-24.056	24.880	-14.041	1.00	69.92	C
[15508]	ATOM	1694	OD1	ASP	A	236	-24.517	24.426	-15.114	1.00	71.02	O
[15509]	ATOM	1695	OD2	ASP	A	236	-23.284	25.871	-13.990	1.00	69.68	O
[15510]	ATOM	1696	N	ILE	A	237	-26.299	23.663	-10.236	1.00	66.65	N
[15511]	ATOM	1697	CA	ILE	A	237	-26.615	22.954	-8.982	1.00	64.94	C
[15512]	ATOM	1698	C	ILE	A	237	-28.104	22.666	-8.944	1.00	64.07	C
[15513]	ATOM	1699	O	ILE	A	237	-28.913	23.456	-8.427	1.00	64.00	O
[15514]	ATOM	1700	CB	ILE	A	237	-26.181	23.726	-7.689	1.00	64.93	C
[15515]	ATOM	1701	CG1	ILE	A	237	-24.768	24.324	-7.843	1.00	64.56	C
[15516]	ATOM	1702	CG2	ILE	A	237	-26.301	22.800	-6.436	1.00	63.46	C
[15517]	ATOM	1703	CD1	ILE	A	237	-24.465	25.468	-6.884	1.00	65.09	C
[15518]	ATOM	1704	N	THR	A	238	-28.462	21.535	-9.536	1.00	62.81	N
[15519]	ATOM	1705	CA	THR	A	238	-29.848	21.086	-9.530	1.00	61.30	C
[15520]	ATOM	1706	C	THR	A	238	-29.896	19.567	-9.508	1.00	59.42	C
[15521]	ATOM	1707	O	THR	A	238	-28.955	18.915	-9.940	1.00	58.53	O
[15522]	ATOM	1708	CB	THR	A	238	-30.666	21.688	-10.728	1.00	62.10	C
[15523]	ATOM	1709	OG1	THR	A	238	-32.050	21.300	-10.613	1.00	62.37	O
[15524]	ATOM	1710	CG2	THR	A	238	-30.087	21.265	-12.089	1.00	61.17	C
[15525]	ATOM	1711	N	LEU	A	239	-30.975	19.022	-8.956	1.00	57.70	N
[15526]	ATOM	1712	CA	LEU	A	239	-31.193	17.592	-8.984	1.00	56.57	C
[15527]	ATOM	1713	C	LEU	A	239	-31.704	17.200	-10.379	1.00	55.93	C
[15528]	ATOM	1714	O	LEU	A	239	-32.565	17.876	-10.965	1.00	55.70	O
[15529]	ATOM	1715	CB	LEU	A	239	-32.135	17.120	-7.847	1.00	55.73	C
[15530]	ATOM	1716	CG	LEU	A	239	-31.656	17.239	-6.381	1.00	54.33	C
[15531]	ATOM	1717	CD1	LEU	A	239	-32.808	17.084	-5.413	1.00	51.14	C
[15532]	ATOM	1718	CD2	LEU	A	239	-30.522	16.274	-6.009	1.00	49.74	C
[15533]	ATOM	1719	N	ARG	A	240	-31.144	16.108	-10.896	1.00	54.66	N
[15534]	ATOM	1720	CA	ARG	A	240	-31.382	15.666	-12.258	1.00	53.93	C
[15535]	ATOM	1721	C	ARG	A	240	-32.344	14.480	-12.328	1.00	51.55	C

[15536]	ATOM	1722	O	ARG A 240	-32.434	13.822	-13.357	1.00	52.65	O
[15537]	ATOM	1723	CB	ARG A 240	-30.047	15.235	-12.903	1.00	54.74	C
[15538]	ATOM	1724	CG	ARG A 240	-28.892	16.208	-12.722	1.00	58.17	C
[15539]	ATOM	1725	CD	ARG A 240	-28.667	17.072	-13.971	1.00	64.96	C
[15540]	ATOM	1726	NE	ARG A 240	-27.697	18.127	-13.679	1.00	69.84	N
[15541]	ATOM	1727	CZ	ARG A 240	-27.746	19.365	-14.172	1.00	72.71	C
[15542]	ATOM	1728	NH1	ARG A 240	-28.724	19.720	-15.008	1.00	73.46	N
[15543]	ATOM	1729	NH2	ARG A 240	-26.811	20.254	-13.827	1.00	72.49	N
[15544]	ATOM	1730	N	CYS A 241	-33.040	14.178	-11.247	1.00	48.38	N
[15545]	ATOM	1731	CA	CYS A 241	-33.800	12.948	-11.192	1.00	45.37	C
[15546]	ATOM	1732	C	CYS A 241	-35.183	13.319	-10.684	1.00	42.61	C
[15547]	ATOM	1733	O	CYS A 241	-35.344	14.401	-10.170	1.00	42.56	O
[15548]	ATOM	1734	CB	CYS A 241	-33.096	11.941	-10.266	1.00	45.07	C
[15549]	ATOM	1735	SG	CYS A 241	-32.876	12.538	-8.554	1.00	46.18	S
[15550]	ATOM	1736	N	PRO A 242	-36.175	12.436	-10.853	1.00	40.52	N
[15551]	ATOM	1737	CA	PRO A 242	-37.462	12.611	-10.194	1.00	39.14	C
[15552]	ATOM	1738	C	PRO A 242	-37.295	12.784	-8.680	1.00	38.59	C
[15553]	ATOM	1739	O	PRO A 242	-36.480	12.092	-8.011	1.00	37.09	O
[15554]	ATOM	1740	CB	PRO A 242	-38.220	11.305	-10.522	1.00	38.94	C
[15555]	ATOM	1741	CG	PRO A 242	-37.569	10.818	-11.814	1.00	39.38	C
[15556]	ATOM	1742	CD	PRO A 242	-36.136	11.216	-11.703	1.00	40.45	C
[15557]	ATOM	1743	N	VAL A 243	-38.040	13.733	-8.130	1.00	37.98	N
[15558]	ATOM	1744	CA	VAL A 243	-37.961	13.952	-6.697	1.00	38.39	C
[15559]	ATOM	1745	C	VAL A 243	-39.361	14.041	-6.161	1.00	38.38	C
[15560]	ATOM	1746	O	VAL A 243	-40.188	14.752	-6.741	1.00	38.06	O
[15561]	ATOM	1747	CB	VAL A 243	-37.242	15.281	-6.376	1.00	39.61	C
[15562]	ATOM	1748	CG1	VAL A 243	-37.448	15.670	-4.857	1.00	36.64	C
[15563]	ATOM	1749	CG2	VAL A 243	-35.739	15.226	-6.785	1.00	37.19	C
[15564]	ATOM	1750	N	MET A 244	-39.621	13.338	-5.067	1.00	38.08	N
[15565]	ATOM	1751	CA	MET A 244	-40.851	13.572	-4.325	1.00	38.89	C
[15566]	ATOM	1752	C	MET A 244	-40.547	14.258	-3.003	1.00	38.65	C
[15567]	ATOM	1753	O	MET A 244	-39.923	13.667	-2.122	1.00	38.93	O
[15568]	ATOM	1754	CB	MET A 244	-41.620	12.284	-4.046	1.00	37.76	C
[15569]	ATOM	1755	CG	MET A 244	-43.027	12.594	-3.569	1.00	38.07	C
[15570]	ATOM	1756	SD	MET A 244	-44.134	11.195	-3.521	1.00	42.40	S
[15571]	ATOM	1757	CE	MET A 244	-43.419	10.098	-2.322	1.00	41.56	C

[15572]	ATOM	1758	N	LEU A 245	-41.006	15.491	-2.872	1.00	38.43	N
[15573]	ATOM	1759	CA	LEU A 245	-40.825	16.268	-1.649	1.00	38.47	C
[15574]	ATOM	1760	C	LEU A 245	-42.003	16.005	-0.758	1.00	38.43	C
[15575]	ATOM	1761	O	LEU A 245	-43.148	15.971	-1.240	1.00	39.35	O
[15576]	ATOM	1762	CB	LEU A 245	-40.795	17.760	-1.985	1.00	38.54	C
[15577]	ATOM	1763	CG	LEU A 245	-39.586	18.215	-2.804	1.00	39.51	C
[15578]	ATOM	1764	CD1	LEU A 245	-39.805	19.674	-3.238	1.00	37.88	C
[15579]	ATOM	1765	CD2	LEU A 245	-38.299	18.006	-1.980	1.00	35.61	C
[15580]	ATOM	1766	N	VAL A 246	-41.746	15.833	0.534	1.00	38.22	N
[15581]	ATOM	1767	CA	VAL A 246	-42.806	15.473	1.494	1.00	37.73	C
[15582]	ATOM	1768	C	VAL A 246	-42.681	16.326	2.749	1.00	37.83	C
[15583]	ATOM	1769	O	VAL A 246	-41.595	16.465	3.302	1.00	38.54	O
[15584]	ATOM	1770	CB	VAL A 246	-42.794	13.942	1.882	1.00	37.03	C
[15585]	ATOM	1771	CG1	VAL A 246	-44.007	13.589	2.769	1.00	35.12	C
[15586]	ATOM	1772	CG2	VAL A 246	-42.832	13.053	0.639	1.00	36.71	C
[15587]	ATOM	1773	N	VAL A 247	-43.793	16.888	3.207	1.00	38.26	N
[15588]	ATOM	1774	CA	VAL A 247	-43.781	17.598	4.464	1.00	38.33	C
[15589]	ATOM	1775	C	VAL A 247	-45.202	17.633	5.045	1.00	40.04	C
[15590]	ATOM	1776	O	VAL A 247	-46.203	17.590	4.289	1.00	40.03	O
[15591]	ATOM	1777	CB	VAL A 247	-43.188	19.042	4.327	1.00	38.06	C
[15592]	ATOM	1778	CG1	VAL A 247	-44.258	20.058	3.749	1.00	36.14	C
[15593]	ATOM	1779	CG2	VAL A 247	-42.549	19.529	5.670	1.00	36.76	C
[15594]	ATOM	1780	N	GLY A 248	-45.287	17.742	6.380	1.00	40.13	N
[15595]	ATOM	1781	CA	GLY A 248	-46.568	17.944	7.040	1.00	41.20	C
[15596]	ATOM	1782	C	GLY A 248	-47.057	19.388	6.989	1.00	42.32	C
[15597]	ATOM	1783	O	GLY A 248	-46.291	20.352	7.143	1.00	41.83	O
[15598]	ATOM	1784	N	ASP A 249	-48.357	19.533	6.778	1.00	43.71	N
[15599]	ATOM	1785	CA	ASP A 249	-49.022	20.835	6.827	1.00	45.43	C
[15600]	ATOM	1786	C	ASP A 249	-48.795	21.434	8.229	1.00	45.33	C
[15601]	ATOM	1787	O	ASP A 249	-48.977	20.754	9.244	1.00	44.79	O
[15602]	ATOM	1788	CB	ASP A 249	-50.503	20.638	6.472	1.00	46.61	C
[15603]	ATOM	1789	CG	ASP A 249	-51.291	21.915	6.472	1.00	51.16	C
[15604]	ATOM	1790	OD1	ASP A 249	-50.786	22.947	5.971	1.00	56.48	O
[15605]	ATOM	1791	OD2	ASP A 249	-52.438	21.886	6.979	1.00	56.76	O
[15606]	ATOM	1792	N	GLN A 250	-48.304	22.673	8.266	1.00	45.43	N
[15607]	ATOM	1793	CA	GLN A 250	-47.965	23.374	9.503	1.00	45.84	C



[15608]	ATOM	1794	C	GLN	A	250	-46.882	22.749	10.372	1.00	45.20	C
[15609]	ATOM	1795	O	GLN	A	250	-46.769	23.092	11.537	1.00	44.34	O
[15610]	ATOM	1796	CB	GLN	A	250	-49.211	23.614	10.341	1.00	46.58	C
[15611]	ATOM	1797	CG	GLN	A	250	-50.034	24.754	9.805	1.00	51.75	C
[15612]	ATOM	1798	CD	GLN	A	250	-51.366	24.817	10.471	1.00	57.70	C
[15613]	ATOM	1799	OE1	GLN	A	250	-52.152	23.864	10.389	1.00	60.18	O
[15614]	ATOM	1800	NE2	GLN	A	250	-51.639	25.934	11.156	1.00	59.41	N
[15615]	ATOM	1801	N	ALA	A	251	-46.111	21.817	9.812	1.00	44.23	N
[15616]	ATOM	1802	CA	ALA	A	251	-45.033	21.156	10.537	1.00	43.51	C
[15617]	ATOM	1803	C	ALA	A	251	-43.773	22.057	10.541	1.00	43.01	C
[15618]	ATOM	1804	O	ALA	A	251	-43.681	22.968	9.729	1.00	42.53	O
[15619]	ATOM	1805	CB	ALA	A	251	-44.748	19.801	9.872	1.00	43.21	C
[15620]	ATOM	1806	N	PRO	A	252	-42.795	21.797	11.435	1.00	43.42	N
[15621]	ATOM	1807	CA	PRO	A	252	-41.584	22.641	11.527	1.00	43.36	C
[15622]	ATOM	1808	C	PRO	A	252	-40.885	22.925	10.203	1.00	43.04	C
[15623]	ATOM	1809	O	PRO	A	252	-40.425	24.042	10.012	1.00	42.82	O
[15624]	ATOM	1810	CB	PRO	A	252	-40.635	21.801	12.389	1.00	43.62	C
[15625]	ATOM	1811	CG	PRO	A	252	-41.531	21.029	13.278	1.00	44.15	C
[15626]	ATOM	1812	CD	PRO	A	252	-42.760	20.703	12.436	1.00	43.71	C
[15627]	ATOM	1813	N	HIS	A	253	-40.804	21.927	9.302	1.00	42.28	N
[15628]	ATOM	1814	CA	HIS	A	253	-40.021	22.093	8.079	1.00	41.65	C
[15629]	ATOM	1815	C	HIS	A	253	-40.817	22.532	6.873	1.00	41.13	C
[15630]	ATOM	1816	O	HIS	A	253	-40.297	22.533	5.744	1.00	40.84	O
[15631]	ATOM	1817	CB	HIS	A	253	-39.142	20.856	7.807	1.00	42.01	C
[15632]	ATOM	1818	CG	HIS	A	253	-38.230	20.554	8.946	1.00	41.71	C
[15633]	ATOM	1819	ND1	HIS	A	253	-37.250	21.433	9.352	1.00	41.51	N
[15634]	ATOM	1820	CD2	HIS	A	253	-38.218	19.534	9.836	1.00	40.70	C
[15635]	ATOM	1821	CE1	HIS	A	253	-36.638	20.944	10.416	1.00	39.30	C
[15636]	ATOM	1822	NE2	HIS	A	253	-37.202	19.787	10.724	1.00	39.20	N
[15637]	ATOM	1823	N	GLU	A	254	-42.065	22.919	7.101	1.00	40.44	N
[15638]	ATOM	1824	CA	GLU	A	254	-42.947	23.248	5.977	1.00	40.87	C
[15639]	ATOM	1825	C	GLU	A	254	-42.383	24.322	5.037	1.00	40.79	C
[15640]	ATOM	1826	O	GLU	A	254	-42.334	24.100	3.824	1.00	39.63	O
[15641]	ATOM	1827	CB	GLU	A	254	-44.341	23.647	6.455	1.00	40.82	C
[15642]	ATOM	1828	CG	GLU	A	254	-45.304	23.888	5.304	1.00	43.16	C
[15643]	ATOM	1829	CD	GLU	A	254	-46.624	24.493	5.755	1.00	46.96	C

[15644]	ATOM	1830	OE1	GLU	A	254	-46.793	24.781	6.943	1.00	49.87	O
[15645]	ATOM	1831	OE2	GLU	A	254	-47.500	24.688	4.911	1.00	51.16	O
[15646]	ATOM	1832	N	ASP	A	255	-41.980	25.479	5.585	1.00	41.16	N
[15647]	ATOM	1833	CA	ASP	A	255	-41.478	26.595	4.761	1.00	41.87	C
[15648]	ATOM	1834	C	ASP	A	255	-40.234	26.180	3.948	1.00	41.50	C
[15649]	ATOM	1835	O	ASP	A	255	-40.098	26.577	2.796	1.00	41.46	O
[15650]	ATOM	1836	CB	ASP	A	255	-41.110	27.806	5.619	1.00	42.35	C
[15651]	ATOM	1837	CG	ASP	A	255	-42.318	28.437	6.316	1.00	45.82	C
[15652]	ATOM	1838	OD1	ASP	A	255	-43.478	28.144	5.940	1.00	47.81	O
[15653]	ATOM	1839	OD2	ASP	A	255	-42.084	29.252	7.242	1.00	49.14	O
[15654]	ATOM	1840	N	ALA	A	256	-39.324	25.419	4.561	1.00	40.77	N
[15655]	ATOM	1841	CA	ALA	A	256	-38.100	24.959	3.865	1.00	41.08	C
[15656]	ATOM	1842	C	ALA	A	256	-38.460	24.006	2.714	1.00	41.34	C
[15657]	ATOM	1843	O	ALA	A	256	-37.890	24.101	1.623	1.00	42.22	O
[15658]	ATOM	1844	CB	ALA	A	256	-37.147	24.267	4.834	1.00	40.16	C
[15659]	ATOM	1845	N	VAL	A	257	-39.385	23.074	2.941	1.00	41.05	N
[15660]	ATOM	1846	CA	VAL	A	257	-39.783	22.180	1.845	1.00	40.99	C
[15661]	ATOM	1847	C	VAL	A	257	-40.507	22.925	0.674	1.00	41.79	C
[15662]	ATOM	1848	O	VAL	A	257	-40.274	22.636	-0.513	1.00	41.39	O
[15663]	ATOM	1849	CB	VAL	A	257	-40.566	20.953	2.361	1.00	40.73	C
[15664]	ATOM	1850	CG1	VAL	A	257	-40.896	20.008	1.209	1.00	39.84	C
[15665]	ATOM	1851	CG2	VAL	A	257	-39.713	20.179	3.428	1.00	40.04	C
[15666]	ATOM	1852	N	VAL	A	258	-41.367	23.883	1.027	1.00	42.46	N
[15667]	ATOM	1853	CA	VAL	A	258	-42.074	24.732	0.076	1.00	43.78	C
[15668]	ATOM	1854	C	VAL	A	258	-41.092	25.519	-0.804	1.00	45.12	C
[15669]	ATOM	1855	O	VAL	A	258	-41.259	25.602	-2.024	1.00	44.84	O
[15670]	ATOM	1856	CB	VAL	A	258	-43.067	25.689	0.794	1.00	43.17	C
[15671]	ATOM	1857	CG1	VAL	A	258	-43.569	26.806	-0.169	1.00	42.71	C
[15672]	ATOM	1858	CG2	VAL	A	258	-44.244	24.889	1.346	1.00	42.33	C
[15673]	ATOM	1859	N	GLU	A	259	-40.072	26.068	-0.158	1.00	47.15	N
[15674]	ATOM	1860	CA	GLU	A	259	-39.031	26.844	-0.810	1.00	49.39	C
[15675]	ATOM	1861	C	GLU	A	259	-38.212	25.940	-1.719	1.00	49.51	C
[15676]	ATOM	1862	O	GLU	A	259	-37.890	26.281	-2.852	1.00	49.17	O
[15677]	ATOM	1863	CB	GLU	A	259	-38.135	27.453	0.251	1.00	49.70	C
[15678]	ATOM	1864	CG	GLU	A	259	-37.154	28.455	-0.312	1.00	56.89	C
[15679]	ATOM	1865	CD	GLU	A	259	-35.942	28.649	0.587	1.00	66.30	C

[15680]	ATOM	1866	OE1	GLU	A	259	-36.114	28.898	1.819	1.00	68.46	O
[15681]	ATOM	1867	OE2	GLU	A	259	-34.811	28.547	0.045	1.00	69.97	O
[15682]	ATOM	1868	N	CYS	A	260	-37.891	24.761	-1.197	1.00	50.36	N
[15683]	ATOM	1869	CA	CYS	A	260	-37.219	23.713	-1.954	1.00	49.69	C
[15684]	ATOM	1870	C	CYS	A	260	-38.001	23.349	-3.238	1.00	48.54	C
[15685]	ATOM	1871	O	CYS	A	260	-37.445	23.276	-4.356	1.00	48.99	O
[15686]	ATOM	1872	CB	CYS	A	260	-37.001	22.517	-1.010	1.00	49.72	C
[15687]	ATOM	1873	SG	CYS	A	260	-35.675	21.515	-1.488	1.00	55.74	S
[15688]	ATOM	1874	N	ASN	A	261	-39.305	23.173	-3.103	1.00	46.93	N
[15689]	ATOM	1875	CA	ASN	A	261	-40.143	22.968	-4.263	1.00	45.84	C
[15690]	ATOM	1876	C	ASN	A	261	-40.026	24.059	-5.339	1.00	46.45	C
[15691]	ATOM	1877	O	ASN	A	261	-40.115	23.759	-6.515	1.00	46.49	O
[15692]	ATOM	1878	CB	ASN	A	261	-41.603	22.785	-3.838	1.00	44.76	C
[15693]	ATOM	1879	CG	ASN	A	261	-42.473	22.253	-4.956	1.00	44.29	C
[15694]	ATOM	1880	OD1	ASN	A	261	-42.147	21.251	-5.588	1.00	40.96	O
[15695]	ATOM	1881	ND2	ASN	A	261	-43.582	22.935	-5.219	1.00	39.95	N
[15696]	ATOM	1882	N	SER	A	262	-39.821	25.319	-4.959	1.00	47.13	N
[15697]	ATOM	1883	CA	SER	A	262	-39.693	26.377	-5.971	1.00	47.77	C
[15698]	ATOM	1884	C	SER	A	262	-38.325	26.404	-6.672	1.00	48.59	C
[15699]	ATOM	1885	O	SER	A	262	-38.185	27.059	-7.680	1.00	48.90	O
[15700]	ATOM	1886	CB	SER	A	262	-39.985	27.747	-5.361	1.00	47.55	C
[15701]	ATOM	1887	OG	SER	A	262	-39.026	28.052	-4.361	1.00	45.96	O
[15702]	ATOM	1888	N	LYS	A	263	-37.318	25.725	-6.126	1.00	50.04	N
[15703]	ATOM	1889	CA	LYS	A	263	-35.963	25.695	-6.705	1.00	51.31	C
[15704]	ATOM	1890	C	LYS	A	263	-35.792	24.529	-7.667	1.00	51.82	C
[15705]	ATOM	1891	O	LYS	A	263	-34.932	24.565	-8.548	1.00	52.98	O
[15706]	ATOM	1892	CB	LYS	A	263	-34.891	25.539	-5.615	1.00	52.02	C
[15707]	ATOM	1893	CG	LYS	A	263	-34.891	26.575	-4.480	1.00	54.29	C
[15708]	ATOM	1894	CD	LYS	A	263	-34.341	27.918	-4.914	1.00	58.57	C
[15709]	ATOM	1895	CE	LYS	A	263	-33.935	28.756	-3.694	1.00	60.70	C
[15710]	ATOM	1896	NZ	LYS	A	263	-32.594	28.335	-3.147	1.00	62.17	N
[15711]	ATOM	1897	N	LEU	A	264	-36.579	23.475	-7.481	1.00	51.67	N
[15712]	ATOM	1898	CA	LEU	A	264	-36.414	22.251	-8.272	1.00	51.46	C
[15713]	ATOM	1899	C	LEU	A	264	-37.164	22.324	-9.592	1.00	51.35	C
[15714]	ATOM	1900	O	LEU	A	264	-38.083	23.108	-9.735	1.00	51.44	O
[15715]	ATOM	1901	CB	LEU	A	264	-36.854	21.023	-7.472	1.00	50.78	C

[15716]	ATOM	1902	CG	LEU	A	264	-36.001	20.723	-6.239	1.00	51.46	C
[15717]	ATOM	1903	CD1	LEU	A	264	-36.515	19.487	-5.493	1.00	50.13	C
[15718]	ATOM	1904	CD2	LEU	A	264	-34.538	20.565	-6.622	1.00	52.22	C
[15719]	ATOM	1905	N	ASP	A	265	-36.771	21.479	-10.542	1.00	51.63	N
[15720]	ATOM	1906	CA	ASP	A	265	-37.423	21.360	-11.848	1.00	51.67	C
[15721]	ATOM	1907	C	ASP	A	265	-38.834	20.795	-11.695	1.00	50.65	C
[15722]	ATOM	1908	O	ASP	A	265	-38.985	19.627	-11.354	1.00	51.20	O
[15723]	ATOM	1909	CB	ASP	A	265	-36.543	20.424	-12.685	1.00	52.66	C
[15724]	ATOM	1910	CG	ASP	A	265	-37.106	20.078	-14.055	1.00	54.05	C
[15725]	ATOM	1911	OD1	ASP	A	265	-38.138	20.598	-14.547	1.00	55.06	O
[15726]	ATOM	1912	OD2	ASP	A	265	-36.440	19.227	-14.662	1.00	58.44	O
[15727]	ATOM	1913	N	PRO	A	266	-39.870	21.620	-11.950	1.00	50.05	N
[15728]	ATOM	1914	CA	PRO	A	266	-41.295	21.228	-11.878	1.00	49.48	C
[15729]	ATOM	1915	C	PRO	A	266	-41.711	20.022	-12.706	1.00	49.25	C
[15730]	ATOM	1916	O	PRO	A	266	-42.654	19.315	-12.330	1.00	49.26	O
[15731]	ATOM	1917	CB	PRO	A	266	-42.054	22.491	-12.379	1.00	49.98	C
[15732]	ATOM	1918	CG	PRO	A	266	-41.028	23.383	-12.985	1.00	49.10	C
[15733]	ATOM	1919	CD	PRO	A	266	-39.719	23.046	-12.317	1.00	50.30	C
[15734]	ATOM	1920	N	THR	A	267	-41.037	19.786	-13.834	1.00	49.03	N
[15735]	ATOM	1921	CA	THR	A	267	-41.389	18.650	-14.706	1.00	48.78	C
[15736]	ATOM	1922	C	THR	A	267	-40.998	17.311	-14.068	1.00	48.24	C
[15737]	ATOM	1923	O	THR	A	267	-41.488	16.270	-14.474	1.00	48.56	O
[15738]	ATOM	1924	CB	THR	A	267	-40.729	18.766	-16.118	1.00	48.96	C
[15739]	ATOM	1925	OG1	THR	A	267	-39.297	18.717	-15.991	1.00	49.31	O
[15740]	ATOM	1926	CG2	THR	A	267	-41.130	20.086	-16.797	1.00	48.78	C
[15741]	ATOM	1927	N	GLN	A	268	-40.122	17.365	-13.062	1.00	47.79	N
[15742]	ATOM	1928	CA	GLN	A	268	-39.499	16.183	-12.450	1.00	47.80	C
[15743]	ATOM	1929	C	GLN	A	268	-39.786	16.055	-10.942	1.00	47.02	C
[15744]	ATOM	1930	O	GLN	A	268	-39.266	15.155	-10.292	1.00	46.33	O
[15745]	ATOM	1931	CB	GLN	A	268	-37.978	16.314	-12.609	1.00	48.32	C
[15746]	ATOM	1932	CG	GLN	A	268	-37.437	16.076	-13.990	1.00	51.62	C
[15747]	ATOM	1933	CD	GLN	A	268	-36.569	14.853	-13.988	1.00	55.82	C
[15748]	ATOM	1934	OE1	GLN	A	268	-37.034	13.750	-14.249	1.00	51.16	O
[15749]	ATOM	1935	NE2	GLN	A	268	-35.286	15.041	-13.628	1.00	58.83	N
[15750]	ATOM	1936	N	THR	A	269	-40.570	16.975	-10.393	1.00	46.38	N
[15751]	ATOM	1937	CA	THR	A	269	-40.663	17.165	-8.950	1.00	46.63	C

[15752]	ATOM	1938	C	THR A 269	-42.110	17.091	-8.520	1.00	47.17	C
[15753]	ATOM	1939	O	THR A 269	-42.965	17.800	-9.054	1.00	47.84	O
[15754]	ATOM	1940	CB	THR A 269	-40.052	18.522	-8.506	1.00	46.10	C
[15755]	ATOM	1941	OG1	THR A 269	-38.662	18.533	-8.838	1.00	45.97	O
[15756]	ATOM	1942	CG2	THR A 269	-40.182	18.744	-6.960	1.00	45.77	C
[15757]	ATOM	1943	N	SER A 270	-42.413	16.252	-7.543	1.00	46.92	N
[15758]	ATOM	1944	CA	SER A 270	-43.761	16.354	-6.988	1.00	47.85	C
[15759]	ATOM	1945	C	SER A 270	-43.733	16.670	-5.498	1.00	47.03	C
[15760]	ATOM	1946	O	SER A 270	-42.756	16.390	-4.813	1.00	46.20	O
[15761]	ATOM	1947	CB	SER A 270	-44.644	15.175	-7.381	1.00	47.66	C
[15762]	ATOM	1948	OG	SER A 270	-43.959	13.995	-7.164	1.00	51.46	O
[15763]	ATOM	1949	N	PHE A 271	-44.763	17.375	-5.045	1.00	47.00	N
[15764]	ATOM	1950	CA	PHE A 271	-44.770	17.918	-3.696	1.00	46.29	C
[15765]	ATOM	1951	C	PHE A 271	-45.986	17.338	-2.973	1.00	45.86	C
[15766]	ATOM	1952	O	PHE A 271	-47.118	17.604	-3.343	1.00	45.35	O
[15767]	ATOM	1953	CB	PHE A 271	-44.757	19.453	-3.730	1.00	46.70	C
[15768]	ATOM	1954	CG	PHE A 271	-44.718	20.114	-2.359	1.00	46.42	C
[15769]	ATOM	1955	CD1	PHE A 271	-44.153	19.480	-1.256	1.00	48.77	C
[15770]	ATOM	1956	CD2	PHE A 271	-45.268	21.368	-2.175	1.00	47.21	C
[15771]	ATOM	1957	CE1	PHE A 271	-44.151	20.105	0.004	1.00	48.18	C
[15772]	ATOM	1958	CE2	PHE A 271	-45.241	21.995	-0.927	1.00	47.37	C
[15773]	ATOM	1959	CZ	PHE A 271	-44.691	21.365	0.150	1.00	46.29	C
[15774]	ATOM	1960	N	LEU A 272	-45.721	16.514	-1.962	1.00	45.13	N
[15775]	ATOM	1961	CA	LEU A 272	-46.768	15.877	-1.186	1.00	44.07	C
[15776]	ATOM	1962	C	LEU A 272	-46.830	16.579	0.179	1.00	44.09	C
[15777]	ATOM	1963	O	LEU A 272	-46.104	16.223	1.119	1.00	42.61	O
[15778]	ATOM	1964	CB	LEU A 272	-46.452	14.394	-1.025	1.00	44.09	C
[15779]	ATOM	1965	CG	LEU A 272	-47.508	13.443	-0.448	1.00	44.67	C
[15780]	ATOM	1966	CD1	LEU A 272	-48.482	13.041	-1.530	1.00	41.54	C
[15781]	ATOM	1967	CD2	LEU A 272	-46.840	12.184	0.169	1.00	43.97	C
[15782]	ATOM	1968	N	LYS A 273	-47.669	17.598	0.265	1.00	43.90	N
[15783]	ATOM	1969	CA	LYS A 273	-47.842	18.323	1.497	1.00	45.09	C
[15784]	ATOM	1970	C	LYS A 273	-49.092	17.766	2.179	1.00	45.24	C
[15785]	ATOM	1971	O	LYS A 273	-50.220	18.059	1.773	1.00	44.21	O
[15786]	ATOM	1972	CB	LYS A 273	-48.009	19.809	1.232	1.00	45.80	C
[15787]	ATOM	1973	CG	LYS A 273	-48.063	20.639	2.507	1.00	47.38	C

[15788]	ATOM	1974	CD	LYS	A	273	-48.945	21.834	2.305	1.00	53.91	C
[15789]	ATOM	1975	CE	LYS	A	273	-48.115	23.058	2.157	1.00	57.98	C
[15790]	ATOM	1976	NZ	LYS	A	273	-48.904	24.204	2.672	1.00	61.40	N
[15791]	ATOM	1977	N	MET	A	274	-48.879	16.991	3.234	1.00	45.30	N
[15792]	ATOM	1978	CA	MET	A	274	-49.949	16.209	3.821	1.00	46.72	C
[15793]	ATOM	1979	C	MET	A	274	-50.630	16.920	5.008	1.00	46.47	C
[15794]	ATOM	1980	O	MET	A	274	-49.950	17.397	5.915	1.00	46.45	O
[15795]	ATOM	1981	CB	MET	A	274	-49.392	14.869	4.263	1.00	46.57	C
[15796]	ATOM	1982	CG	MET	A	274	-48.499	14.179	3.244	1.00	48.61	C
[15797]	ATOM	1983	SD	MET	A	274	-47.902	12.553	3.810	1.00	53.71	S
[15798]	ATOM	1984	CE	MET	A	274	-49.383	11.638	3.639	1.00	50.44	C
[15799]	ATOM	1985	N	ALA	A	275	-51.963	17.000	4.982	1.00	46.33	N
[15800]	ATOM	1986	CA	ALA	A	275	-52.753	17.466	6.121	1.00	46.58	C
[15801]	ATOM	1987	C	ALA	A	275	-52.731	16.369	7.198	1.00	46.94	C
[15802]	ATOM	1988	O	ALA	A	275	-52.648	15.186	6.872	1.00	47.08	O
[15803]	ATOM	1989	CB	ALA	A	275	-54.199	17.741	5.671	1.00	46.49	C
[15804]	ATOM	1990	N	ASP	A	276	-52.773	16.751	8.475	1.00	47.56	N
[15805]	ATOM	1991	CA	ASP	A	276	-52.881	15.766	9.587	1.00	47.88	C
[15806]	ATOM	1992	C	ASP	A	276	-51.746	14.737	9.675	1.00	47.40	C
[15807]	ATOM	1993	O	ASP	A	276	-51.957	13.616	10.120	1.00	47.47	O
[15808]	ATOM	1994	CB	ASP	A	276	-54.235	15.029	9.530	1.00	48.41	C
[15809]	ATOM	1995	CG	ASP	A	276	-55.422	15.982	9.528	1.00	51.71	C
[15810]	ATOM	1996	OD1	ASP	A	276	-55.321	17.093	10.106	1.00	56.78	O
[15811]	ATOM	1997	OD2	ASP	A	276	-56.469	15.623	8.947	1.00	56.92	O
[15812]	ATOM	1998	N	SER	A	277	-50.552	15.095	9.227	1.00	46.81	N
[15813]	ATOM	1999	CA	SER	A	277	-49.429	14.166	9.335	1.00	46.93	C
[15814]	ATOM	2000	C	SER	A	277	-48.389	14.631	10.363	1.00	46.18	C
[15815]	ATOM	2001	O	SER	A	277	-47.680	13.805	10.932	1.00	46.98	O
[15816]	ATOM	2002	CB	SER	A	277	-48.783	13.879	7.965	1.00	46.29	C
[15817]	ATOM	2003	OG	SER	A	277	-48.173	15.038	7.435	1.00	48.97	O
[15818]	ATOM	2004	N	GLY	A	278	-48.333	15.939	10.614	1.00	45.00	N
[15819]	ATOM	2005	CA	GLY	A	278	-47.438	16.494	11.614	1.00	43.48	C
[15820]	ATOM	2006	C	GLY	A	278	-45.994	16.433	11.180	1.00	42.63	C
[15821]	ATOM	2007	O	GLY	A	278	-45.690	16.417	9.974	1.00	43.10	O
[15822]	ATOM	2008	N	GLY	A	279	-45.097	16.399	12.164	1.00	41.71	N
[15823]	ATOM	2009	CA	GLY	A	279	-43.674	16.475	11.936	1.00	40.76	C

[15824]	ATOM	2010	C	GLY A 279	-43.009	15.267	11.270	1.00	40.75	C
[15825]	ATOM	2011	O	GLY A 279	-41.991	15.443	10.592	1.00	40.89	O
[15826]	ATOM	2012	N	GLN A 280	-43.545	14.059	11.488	1.00	39.43	N
[15827]	ATOM	2013	CA	GLN A 280	-42.996	12.816	10.906	1.00	39.65	C
[15828]	ATOM	2014	C	GLN A 280	-44.078	12.059	10.112	1.00	39.30	C
[15829]	ATOM	2015	O	GLN A 280	-44.677	11.092	10.627	1.00	39.33	O
[15830]	ATOM	2016	CB	GLN A 280	-42.402	11.885	11.989	1.00	39.06	C
[15831]	ATOM	2017	CG	GLN A 280	-41.247	12.475	12.801	1.00	39.36	C
[15832]	ATOM	2018	CD	GLN A 280	-39.970	12.549	12.013	1.00	40.08	C
[15833]	ATOM	2019	OE1	GLN A 280	-39.423	13.645	11.735	1.00	42.58	O
[15834]	ATOM	2020	NE2	GLN A 280	-39.481	11.398	11.620	1.00	36.65	N
[15835]	ATOM	2021	N	PRO A 281	-44.336	12.493	8.864	1.00	38.69	N
[15836]	ATOM	2022	CA	PRO A 281	-45.411	11.949	8.019	1.00	38.74	C
[15837]	ATOM	2023	C	PRO A 281	-45.261	10.449	7.760	1.00	38.50	C
[15838]	ATOM	2024	O	PRO A 281	-46.276	9.751	7.625	1.00	38.59	O
[15839]	ATOM	2025	CB	PRO A 281	-45.261	12.719	6.687	1.00	38.51	C
[15840]	ATOM	2026	CG	PRO A 281	-44.403	13.883	6.990	1.00	40.51	C
[15841]	ATOM	2027	CD	PRO A 281	-43.575	13.559	8.194	1.00	38.53	C
[15842]	ATOM	2028	N	GLN A 282	-44.014	9.965	7.687	1.00	37.99	N
[15843]	ATOM	2029	CA	GLN A 282	-43.739	8.526	7.479	1.00	37.93	C
[15844]	ATOM	2030	C	GLN A 282	-44.147	7.687	8.689	1.00	38.41	C
[15845]	ATOM	2031	O	GLN A 282	-44.278	6.453	8.575	1.00	38.63	O
[15846]	ATOM	2032	CB	GLN A 282	-42.262	8.316	7.119	1.00	38.37	C
[15847]	ATOM	2033	CG	GLN A 282	-41.270	8.155	8.310	1.00	36.87	C
[15848]	ATOM	2034	CD	GLN A 282	-40.922	9.466	9.034	1.00	37.49	C
[15849]	ATOM	2035	OE1	GLN A 282	-40.124	9.468	9.975	1.00	39.74	O
[15850]	ATOM	2036	NE2	GLN A 282	-41.513	10.554	8.621	1.00	33.60	N
[15851]	ATOM	2037	N	LEU A 283	-44.343	8.348	9.845	1.00	37.79	N
[15852]	ATOM	2038	CA	LEU A 283	-44.810	7.659	11.048	1.00	38.35	C
[15853]	ATOM	2039	C	LEU A 283	-46.309	7.752	11.189	1.00	38.14	C
[15854]	ATOM	2040	O	LEU A 283	-46.907	6.856	11.695	1.00	38.27	O
[15855]	ATOM	2041	CB	LEU A 283	-44.162	8.227	12.339	1.00	37.63	C
[15856]	ATOM	2042	CG	LEU A 283	-42.644	8.224	12.408	1.00	37.20	C
[15857]	ATOM	2043	CD1	LEU A 283	-42.190	8.750	13.758	1.00	36.64	C
[15858]	ATOM	2044	CD2	LEU A 283	-42.146	6.787	12.209	1.00	37.59	C
[15859]	ATOM	2045	N	THR A 284	-46.923	8.858	10.776	1.00	39.22	N

[15860]	ATOM	2046	CA	THR	A	284	-48.349	9.041	11.067	1.00	39.80	C
[15861]	ATOM	2047	C	THR	A	284	-49.241	8.692	9.885	1.00	39.95	C
[15862]	ATOM	2048	O	THR	A	284	-50.406	8.310	10.057	1.00	40.91	O
[15863]	ATOM	2049	CB	THR	A	284	-48.636	10.462	11.493	1.00	40.33	C
[15864]	ATOM	2050	OG1	THR	A	284	-48.191	11.322	10.440	1.00	41.46	O
[15865]	ATOM	2051	CG2	THR	A	284	-47.881	10.812	12.831	1.00	39.39	C
[15866]	ATOM	2052	N	GLN	A	285	-48.714	8.828	8.674	1.00	39.94	N
[15867]	ATOM	2053	CA	GLN	A	285	-49.528	8.545	7.505	1.00	39.75	C
[15868]	ATOM	2054	C	GLN	A	285	-48.792	7.617	6.547	1.00	38.90	C
[15869]	ATOM	2055	O	GLN	A	285	-48.638	7.964	5.379	1.00	37.41	O
[15870]	ATOM	2056	CB	GLN	A	285	-49.923	9.845	6.771	1.00	40.79	C
[15871]	ATOM	2057	CG	GLN	A	285	-50.725	10.881	7.560	1.00	41.11	C
[15872]	ATOM	2058	CD	GLN	A	285	-52.123	10.438	7.925	1.00	44.61	C
[15873]	ATOM	2059	OE1	GLN	A	285	-52.738	9.618	7.231	1.00	46.58	O
[15874]	ATOM	2060	NE2	GLN	A	285	-52.655	10.994	9.033	1.00	47.29	N
[15875]	ATOM	2061	N	PRO	A	286	-48.355	6.428	7.031	1.00	38.68	N
[15876]	ATOM	2062	CA	PRO	A	286	-47.579	5.562	6.127	1.00	38.10	C
[15877]	ATOM	2063	C	PRO	A	286	-48.402	5.030	4.934	1.00	38.54	C
[15878]	ATOM	2064	O	PRO	A	286	-47.825	4.706	3.896	1.00	38.81	O
[15879]	ATOM	2065	CB	PRO	A	286	-47.132	4.408	7.020	1.00	37.50	C
[15880]	ATOM	2066	CG	PRO	A	286	-48.152	4.392	8.217	1.00	37.99	C
[15881]	ATOM	2067	CD	PRO	A	286	-48.542	5.831	8.381	1.00	38.55	C
[15882]	ATOM	2068	N	GLY	A	287	-49.718	4.937	5.093	1.00	38.58	N
[15883]	ATOM	2069	CA	GLY	A	287	-50.599	4.441	4.032	1.00	38.47	C
[15884]	ATOM	2070	C	GLY	A	287	-50.663	5.388	2.851	1.00	39.00	C
[15885]	ATOM	2071	O	GLY	A	287	-50.480	4.948	1.728	1.00	38.73	O
[15886]	ATOM	2072	N	LYS	A	288	-50.932	6.677	3.097	1.00	39.07	N
[15887]	ATOM	2073	CA	LYS	A	288	-50.940	7.676	2.021	1.00	39.61	C
[15888]	ATOM	2074	C	LYS	A	288	-49.542	7.878	1.425	1.00	39.25	C
[15889]	ATOM	2075	O	LYS	A	288	-49.397	8.046	0.219	1.00	39.65	O
[15890]	ATOM	2076	CB	LYS	A	288	-51.507	9.020	2.495	1.00	39.12	C
[15891]	ATOM	2077	CG	LYS	A	288	-51.422	10.124	1.418	1.00	40.85	C
[15892]	ATOM	2078	CD	LYS	A	288	-52.090	11.449	1.879	1.00	43.73	C
[15893]	ATOM	2079	CE	LYS	A	288	-53.616	11.302	1.844	1.00	47.33	C
[15894]	ATOM	2080	NZ	LYS	A	288	-54.252	12.556	2.296	1.00	52.20	N
[15895]	ATOM	2081	N	ALEU	A	289	-48.550	7.889	2.297	0.50	39.11	N



[15896]	ATOM	2082	CA	ALEU	A	289	-47.113	7.944	1.710	0.00	32.84	C
[15897]	ATOM	2083	C	ALEU	A	289	-46.654	6.729	0.646	0.50	37.64	C
[15898]	ATOM	2084	O	ALEU	A	289	-45.716	6.763	-0.152	0.50	37.13	O
[15899]	ATOM	2085	CB	ALEU	A	289	-46.131	8.073	2.857	0.00	31.90	C
[15900]	ATOM	2086	CG	ALEU	A	289	-44.669	8.300	2.521	0.00	30.68	C
[15901]	ATOM	2087	CD1	ALEU	A	289	-44.443	9.358	1.513	0.00	24.76	C
[15902]	ATOM	2088	CD2	ALEU	A	289	-43.831	8.515	3.693	0.00	30.61	C
[15903]	ATOM	2089	N	BLEU	A	289	-48.497	7.850	2.260	0.50	38.92	N
[15904]	ATOM	2090	CA	BLEU	A	289	-47.117	7.998	1.782	1.00	38.82	C
[15905]	ATOM	2091	C	BLEU	A	289	-46.798	6.846	0.795	0.50	38.40	C
[15906]	ATOM	2092	O	BLEU	A	289	-46.280	7.094	-0.282	0.50	37.80	O
[15907]	ATOM	2093	CB	BLEU	A	289	-46.096	8.017	2.935	1.00	39.18	C
[15908]	ATOM	2094	CG	BLEU	A	289	-44.836	8.899	2.857	1.00	43.21	C
[15909]	ATOM	2095	CD1	BLEU	A	289	-43.713	8.272	3.662	1.00	44.02	C
[15910]	ATOM	2096	CD2	BLEU	A	289	-44.340	9.358	1.426	1.00	41.28	C
[15911]	ATOM	2097	N	THR	A	290	-47.118	5.602	1.180	1.00	37.55	N
[15912]	ATOM	2098	CA	THR	A	290	-47.012	4.396	0.357	1.00	38.33	C
[15913]	ATOM	2099	C	THR	A	290	-47.695	4.560	-0.996	1.00	38.56	C
[15914]	ATOM	2100	O	THR	A	290	-47.126	4.206	-2.031	1.00	39.17	O
[15915]	ATOM	2101	CB	THR	A	290	-47.616	3.167	1.049	1.00	38.12	C
[15916]	ATOM	2102	OG1	THR	A	290	-46.890	2.926	2.242	1.00	38.89	O
[15917]	ATOM	2103	CG2	THR	A	290	-47.497	1.958	0.166	1.00	38.67	C
[15918]	ATOM	2104	N	GLU	A	291	-48.927	5.058	-0.968	1.00	37.40	N
[15919]	ATOM	2105	CA	GLU	A	291	-49.670	5.268	-2.193	1.00	38.44	C
[15920]	ATOM	2106	C	GLU	A	291	-48.996	6.324	-3.066	1.00	37.04	C
[15921]	ATOM	2107	O	GLU	A	291	-48.935	6.157	-4.266	1.00	36.31	O
[15922]	ATOM	2108	CB	GLU	A	291	-51.112	5.636	-1.895	1.00	37.81	C
[15923]	ATOM	2109	CG	GLU	A	291	-52.019	5.308	-3.038	1.00	42.39	C
[15924]	ATOM	2110	CD	GLU	A	291	-53.445	5.778	-2.787	1.00	46.27	C
[15925]	ATOM	2111	OE1	GLU	A	291	-53.759	6.101	-1.620	1.00	46.16	O
[15926]	ATOM	2112	OE2	GLU	A	291	-54.254	5.808	-3.754	1.00	49.84	O
[15927]	ATOM	2113	N	ALA	A	292	-48.488	7.399	-2.456	1.00	36.57	N
[15928]	ATOM	2114	CA	ALA	A	292	-47.697	8.398	-3.181	1.00	37.00	C
[15929]	ATOM	2115	C	ALA	A	292	-46.449	7.771	-3.820	1.00	37.61	C
[15930]	ATOM	2116	O	ALA	A	292	-46.134	8.063	-4.978	1.00	37.38	O
[15931]	ATOM	2117	CB	ALA	A	292	-47.289	9.559	-2.259	1.00	35.66	C

[15932]	ATOM	2118	N	PHE A 293	-45.763	6.907	-3.065	1.00	37.55	N
[15933]	ATOM	2119	CA	PHE A 293	-44.563	6.212	-3.542	1.00	38.60	C
[15934]	ATOM	2120	C	PHE A 293	-44.866	5.343	-4.768	1.00	38.24	C
[15935]	ATOM	2121	O	PHE A 293	-44.080	5.272	-5.722	1.00	39.01	O
[15936]	ATOM	2122	CB	PHE A 293	-43.958	5.352	-2.406	1.00	38.20	C
[15937]	ATOM	2123	CG	PHE A 293	-42.588	4.773	-2.728	1.00	39.32	C
[15938]	ATOM	2124	CD1	PHE A 293	-41.528	5.601	-3.086	1.00	40.25	C
[15939]	ATOM	2125	CD2	PHE A 293	-42.368	3.407	-2.679	1.00	40.00	C
[15940]	ATOM	2126	CE1	PHE A 293	-40.266	5.059	-3.389	1.00	39.70	C
[15941]	ATOM	2127	CE2	PHE A 293	-41.106	2.865	-2.967	1.00	40.67	C
[15942]	ATOM	2128	CZ	PHE A 293	-40.063	3.711	-3.319	1.00	38.31	C
[15943]	ATOM	2129	N	LYS A 294	-46.020	4.696	-4.744	1.00	37.35	N
[15944]	ATOM	2130	CA	LYS A 294	-46.448	3.902	-5.862	1.00	37.43	C
[15945]	ATOM	2131	C	LYS A 294	-46.568	4.719	-7.157	1.00	36.42	C
[15946]	ATOM	2132	O	LYS A 294	-46.090	4.302	-8.190	1.00	35.80	O
[15947]	ATOM	2133	CB	LYS A 294	-47.780	3.260	-5.522	1.00	38.04	C
[15948]	ATOM	2134	CG	LYS A 294	-48.403	2.563	-6.693	1.00	40.07	C
[15949]	ATOM	2135	CD	LYS A 294	-49.421	1.604	-6.199	1.00	44.80	C
[15950]	ATOM	2136	CE	LYS A 294	-50.787	2.214	-6.196	1.00	51.35	C
[15951]	ATOM	2137	NZ	LYS A 294	-51.722	1.142	-6.691	1.00	58.59	N
[15952]	ATOM	2138	N	TYR A 295	-47.237	5.865	-7.079	1.00	36.02	N
[15953]	ATOM	2139	CA	TYR A 295	-47.421	6.759	-8.222	1.00	36.51	C
[15954]	ATOM	2140	C	TYR A 295	-46.129	7.422	-8.629	1.00	36.93	C
[15955]	ATOM	2141	O	TYR A 295	-45.950	7.724	-9.806	1.00	38.01	O
[15956]	ATOM	2142	CB	TYR A 295	-48.465	7.847	-7.909	1.00	35.77	C
[15957]	ATOM	2143	CG	TYR A 295	-49.808	7.255	-7.549	1.00	34.98	C
[15958]	ATOM	2144	CD1	TYR A 295	-50.328	6.162	-8.244	1.00	34.91	C
[15959]	ATOM	2145	CD2	TYR A 295	-50.562	7.817	-6.530	1.00	34.79	C
[15960]	ATOM	2146	CE1	TYR A 295	-51.612	5.623	-7.898	1.00	35.55	C
[15961]	ATOM	2147	CE2	TYR A 295	-51.790	7.303	-6.174	1.00	36.03	C
[15962]	ATOM	2148	CZ	TYR A 295	-52.305	6.215	-6.845	1.00	36.16	C
[15963]	ATOM	2149	OH	TYR A 295	-53.546	5.775	-6.430	1.00	38.45	O
[15964]	ATOM	2150	N	PHE A 296	-45.258	7.678	-7.648	1.00	36.80	N
[15965]	ATOM	2151	CA	PHE A 296	-43.946	8.208	-7.892	1.00	37.08	C
[15966]	ATOM	2152	C	PHE A 296	-43.139	7.192	-8.739	1.00	37.26	C
[15967]	ATOM	2153	O	PHE A 296	-42.521	7.571	-9.715	1.00	36.76	O

[15968]	ATOM	2154	CB	PHE	A	296	-43.238	8.481	-6.546	1.00	38.22	C
[15969]	ATOM	2155	CG	PHE	A	296	-41.829	9.003	-6.690	1.00	39.77	C
[15970]	ATOM	2156	CD1	PHE	A	296	-41.592	10.259	-7.259	1.00	41.27	C
[15971]	ATOM	2157	CD2	PHE	A	296	-40.743	8.226	-6.291	1.00	40.35	C
[15972]	ATOM	2158	CE1	PHE	A	296	-40.274	10.762	-7.391	1.00	41.60	C
[15973]	ATOM	2159	CE2	PHE	A	296	-39.425	8.712	-6.425	1.00	40.59	C
[15974]	ATOM	2160	CZ	PHE	A	296	-39.194	9.977	-6.982	1.00	39.67	C
[15975]	ATOM	2161	N	LEU	A	297	-43.158	5.912	-8.367	1.00	36.16	N
[15976]	ATOM	2162	CA	LEU	A	297	-42.493	4.852	-9.148	1.00	36.45	C
[15977]	ATOM	2163	C	LEU	A	297	-43.099	4.697	-10.531	1.00	36.44	C
[15978]	ATOM	2164	O	LEU	A	297	-42.392	4.558	-11.547	1.00	38.10	O
[15979]	ATOM	2165	CB	LEU	A	297	-42.619	3.500	-8.434	1.00	36.00	C
[15980]	ATOM	2166	CG	LEU	A	297	-41.790	3.400	-7.155	1.00	37.89	C
[15981]	ATOM	2167	CD1	LEU	A	297	-42.150	2.077	-6.363	1.00	35.75	C
[15982]	ATOM	2168	CD2	LEU	A	297	-40.283	3.428	-7.513	1.00	37.09	C
[15983]	ATOM	2169	N	GLN	A	298	-44.416	4.689	-10.594	1.00	35.49	N
[15984]	ATOM	2170	CA	GLN	A	298	-45.051	4.639	-11.870	1.00	34.88	C
[15985]	ATOM	2171	C	GLN	A	298	-44.635	5.795	-12.778	1.00	36.15	C
[15986]	ATOM	2172	O	GLN	A	298	-44.333	5.557	-13.939	1.00	36.19	O
[15987]	ATOM	2173	CB	GLN	A	298	-46.553	4.587	-11.716	1.00	35.05	C
[15988]	ATOM	2174	CG	GLN	A	298	-47.046	3.284	-11.117	1.00	33.56	C
[15989]	ATOM	2175	CD	GLN	A	298	-48.541	3.317	-10.891	1.00	38.05	C
[15990]	ATOM	2176	OE1	GLN	A	298	-49.164	4.349	-11.073	1.00	39.60	O
[15991]	ATOM	2177	NE2	GLN	A	298	-49.124	2.185	-10.495	1.00	40.55	N
[15992]	ATOM	2178	N	GLY	A	299	-44.620	7.032	-12.272	1.00	35.77	N
[15993]	ATOM	2179	CA	GLY	A	299	-44.205	8.189	-13.105	1.00	36.29	C
[15994]	ATOM	2180	C	GLY	A	299	-42.734	8.100	-13.511	1.00	37.36	C
[15995]	ATOM	2181	O	GLY	A	299	-42.374	8.535	-14.581	1.00	37.92	O
[15996]	ATOM	2182	N	MET	A	300	-41.897	7.479	-12.689	1.00	38.01	N
[15997]	ATOM	2183	CA	MET	A	300	-40.510	7.168	-13.084	1.00	39.94	C
[15998]	ATOM	2184	C	MET	A	300	-40.443	6.129	-14.227	1.00	38.98	C
[15999]	ATOM	2185	O	MET	A	300	-39.467	6.076	-14.961	1.00	40.34	O
[16000]	ATOM	2186	CB	MET	A	300	-39.721	6.610	-11.891	1.00	39.50	C
[16001]	ATOM	2187	CG	MET	A	300	-39.422	7.617	-10.794	1.00	43.56	C
[16002]	ATOM	2188	SD	MET	A	300	-38.524	6.786	-9.458	1.00	48.14	S
[16003]	ATOM	2189	CE	MET	A	300	-37.364	5.828	-10.442	1.00	42.10	C

[16004]	ATOM	2190	N	GLY A 301	-41.469	5.293	-14.359	1.00	38.17	N
[16005]	ATOM	2191	CA	GLY A 301	-41.532	4.295	-15.448	1.00	36.93	C
[16006]	ATOM	2192	C	GLY A 301	-41.400	2.860	-14.976	1.00	36.62	C
[16007]	ATOM	2193	O	GLY A 301	-41.229	1.947	-15.802	1.00	37.37	O
[16008]	ATOM	2194	N	TYR A 302	-41.474	2.654	-13.651	1.00	36.17	N
[16009]	ATOM	2195	CA	TYR A 302	-41.497	1.315	-13.047	1.00	36.05	C
[16010]	ATOM	2196	C	TYR A 302	-42.922	0.921	-12.652	1.00	36.64	C
[16011]	ATOM	2197	O	TYR A 302	-43.630	1.704	-12.002	1.00	36.18	O
[16012]	ATOM	2198	CB	TYR A 302	-40.577	1.255	-11.808	1.00	35.95	C
[16013]	ATOM	2199	CG	TYR A 302	-39.105	1.344	-12.163	1.00	38.27	C
[16014]	ATOM	2200	CD1	TYR A 302	-38.502	0.356	-12.952	1.00	36.45	C
[16015]	ATOM	2201	CD2	TYR A 302	-38.317	2.404	-11.721	1.00	38.39	C
[16016]	ATOM	2202	CE1	TYR A 302	-37.163	0.425	-13.296	1.00	36.11	C
[16017]	ATOM	2203	CE2	TYR A 302	-36.965	2.477	-12.067	1.00	40.22	C
[16018]	ATOM	2204	CZ	TYR A 302	-36.399	1.471	-12.851	1.00	38.38	C
[16019]	ATOM	2205	OH	TYR A 302	-35.071	1.519	-13.203	1.00	36.67	O
[16020]	ATOM	2206	N	MET A 303	-43.349	-0.280	-13.048	1.00	36.54	N
[16021]	ATOM	2207	CA	MET A 303	-44.621	-0.845	-12.566	1.00	36.98	C
[16022]	ATOM	2208	C	MET A 303	-44.579	-0.952	-11.048	1.00	36.57	C
[16023]	ATOM	2209	O	MET A 303	-43.561	-1.373	-10.469	1.00	36.06	O
[16024]	ATOM	2210	CB	MET A 303	-44.843	-2.247	-13.146	1.00	36.89	C
[16025]	ATOM	2211	CG	MET A 303	-44.849	-2.284	-14.671	1.00	37.84	C
[16026]	ATOM	2212	SD	MET A 303	-46.438	-1.792	-15.359	1.00	40.56	S
[16027]	ATOM	2213	CE	MET A 303	-47.525	-3.082	-14.757	1.00	38.78	C
[16028]	ATOM	2214	N	ALA A 304	-45.656	-0.539	-10.399	1.00	37.13	N
[16029]	ATOM	2215	CA	ALA A 304	-45.754	-0.639	-8.923	1.00	38.39	C
[16030]	ATOM	2216	C	ALA A 304	-47.203	-0.823	-8.556	1.00	39.39	C
[16031]	ATOM	2217	O	ALA A 304	-47.547	-1.452	-7.540	1.00	40.50	O
[16032]	ATOM	2218	CB	ALA A 304	-45.216	0.607	-8.257	1.00	38.08	C
[16033]	ATOM	2219	OXT	ALA A 304	-48.059	-0.286	-9.294	1.00	41.06	O
[16034]	TER	2220		ALA A 304						
[16035]	HETATM	2221	CL	CL A1305	-37.562	-3.195	4.218	1.00	41.91	CL
[16036]	HETATM	2222	N1	IMD A1306	-37.328	-2.000	7.192	1.00	53.30	N
[16037]	HETATM	2223	C2	IMD A1306	-37.056	-0.831	7.815	1.00	54.34	C
[16038]	HETATM	2224	N3	IMD A1306	-37.623	-0.841	9.041	1.00	53.84	N
[16039]	HETATM	2225	C4	IMD A1306	-38.257	-2.021	9.190	1.00	54.59	C

[16040]	HETATM	2226	C5	IMD	A1306	-38.079	-2.750	8.022	1.00	53.97	C
[16041]	HETATM	2227	N1	IMD	A1307	-30.241	-0.099	14.146	1.00	58.27	N
[16042]	HETATM	2228	C2	IMD	A1307	-30.195	0.158	15.476	1.00	57.90	C
[16043]	HETATM	2229	N3	IMD	A1307	-31.327	-0.306	16.050	1.00	57.68	N
[16044]	HETATM	2230	C4	IMD	A1307	-32.103	-0.862	15.077	1.00	59.82	C
[16045]	HETATM	2231	C5	IMD	A1307	-31.410	-0.732	13.879	1.00	58.18	C
[16046]	HETATM	2232	0	HOH	A2001	-27.088	-8.871	2.174	1.00	61.54	0
[16047]	HETATM	2233	0	HOH	A2002	-37.536	-10.426	-7.218	1.00	55.89	0
[16048]	HETATM	2234	0	HOH	A2003	-30.066	-9.627	2.836	1.00	68.08	0
[16049]	HETATM	2235	0	HOH	A2004	-36.741	-5.941	10.941	1.00	61.83	0
[16050]	HETATM	2236	0	HOH	A2005	-30.239	-9.390	-0.638	1.00	66.71	0
[16051]	HETATM	2237	0	HOH	A2006	-36.835	-8.327	-5.669	1.00	51.39	0
[16052]	HETATM	2238	0	HOH	A2007	-35.981	-3.836	-14.358	1.00	37.54	0
[16053]	HETATM	2239	0	HOH	A2008	-33.482	-0.002	-15.034	0.50	30.87	0
[16054]	HETATM	2240	0	HOH	A2009	-30.124	-10.586	-17.306	1.00	51.54	0
[16055]	HETATM	2241	0	HOH	A2010	-29.150	-5.438	-11.958	1.00	49.43	0
[16056]	HETATM	2242	0	HOH	A2011	-38.227	-3.136	-13.990	1.00	32.70	0
[16057]	HETATM	2243	0	HOH	A2012	-33.936	-3.431	-6.406	1.00	43.68	0
[16058]	HETATM	2244	0	HOH	A2013	-50.733	1.821	-2.143	1.00	45.02	0
[16059]	HETATM	2245	0	HOH	A2014	-23.156	7.781	6.192	1.00	45.57	0
[16060]	HETATM	2246	0	HOH	A2015	-25.344	25.873	19.778	1.00	55.59	0
[16061]	HETATM	2247	0	HOH	A2016	-37.587	16.353	10.705	1.00	37.08	0
[16062]	HETATM	2248	0	HOH	A2017	-32.656	6.589	18.754	1.00	51.43	0
[16063]	HETATM	2249	0	HOH	A2018	-29.907	9.563	15.417	1.00	38.74	0
[16064]	HETATM	2250	0	HOH	A2019	-31.385	-4.387	12.590	1.00	59.33	0
[16065]	HETATM	2251	0	HOH	A2020	-34.538	5.028	17.833	1.00	52.47	0
[16066]	HETATM	2252	0	HOH	A2021	-43.405	-2.641	16.396	1.00	72.72	0
[16067]	HETATM	2253	0	HOH	A2022	-44.433	-0.143	13.343	1.00	48.58	0
[16068]	HETATM	2254	0	HOH	A2023	-40.731	-6.395	13.485	1.00	63.50	0
[16069]	HETATM	2255	0	HOH	A2024	-50.543	-2.458	7.740	1.00	48.86	0
[16070]	HETATM	2256	0	HOH	A2025	-49.606	-0.850	-2.707	1.00	49.47	0
[16071]	HETATM	2257	0	HOH	A2026	-49.697	-1.992	-5.743	1.00	58.49	0
[16072]	HETATM	2258	0	HOH	A2027	-37.269	-8.251	-2.560	1.00	47.78	0
[16073]	HETATM	2259	0	HOH	A2028	-38.973	-9.111	-0.060	1.00	50.74	0
[16074]	HETATM	2260	0	HOH	A2029	-28.084	25.524	21.855	1.00	51.49	0
[16075]	HETATM	2261	0	HOH	A2030	-32.222	4.719	7.552	1.00	34.46	0

[16076]	HETATM	2262	0	HOH A2031	-23.608	3.123	11.585	1.00	51.29	0
[16077]	HETATM	2263	0	HOH A2032	-29.987	3.411	17.622	1.00	48.99	0
[16078]	HETATM	2264	0	HOH A2033	-17.314	18.398	5.474	1.00	49.77	0
[16079]	HETATM	2265	0	HOH A2034	-22.498	19.792	5.390	1.00	47.45	0
[16080]	HETATM	2266	0	HOH A2035	-16.610	15.562	1.804	1.00	64.81	0
[16081]	HETATM	2267	0	HOH A2036	-41.070	29.751	-1.052	1.00	55.62	0
[16082]	HETATM	2268	0	HOH A2037	-24.801	-7.764	-2.557	1.00	63.12	0
[16083]	HETATM	2269	0	HOH A2038	-19.921	-3.716	-8.692	1.00	74.64	0
[16084]	HETATM	2270	0	HOH A2039	-41.621	12.227	-12.233	1.00	61.55	0
[16085]	HETATM	2271	0	HOH A2040	-55.882	13.428	5.891	1.00	64.77	0
[16086]	HETATM	2272	0	HOH A2041	-32.618	18.497	5.876	1.00	34.48	0
[16087]	HETATM	2273	0	HOH A2042	-24.341	22.813	-3.207	1.00	40.77	0
[16088]	HETATM	2274	0	HOH A2043	-21.334	6.010	-5.655	1.00	55.77	0
[16089]	HETATM	2275	0	HOH A2044	-24.918	17.247	-9.961	1.00	53.91	0
[16090]	HETATM	2276	0	HOH A2045	-21.284	12.427	-1.704	1.00	47.84	0
[16091]	HETATM	2277	0	HOH A2046	-20.242	13.831	-10.839	1.00	63.05	0
[16092]	HETATM	2278	0	HOH A2047	-18.365	14.452	-6.951	1.00	57.76	0
[16093]	HETATM	2279	0	HOH A2048	-22.260	18.913	-3.935	1.00	50.41	0
[16094]	HETATM	2280	0	HOH A2049	-29.719	11.945	-10.563	1.00	46.67	0
[16095]	HETATM	2281	0	HOH A2050	-22.138	9.824	-10.937	1.00	31.48	0
[16096]	HETATM	2282	0	HOH A2051	-35.111	8.124	-13.056	1.00	33.79	0
[16097]	HETATM	2283	0	HOH A2052	-31.600	0.750	-13.561	1.00	34.24	0
[16098]	HETATM	2284	0	HOH A2053	-35.541	5.464	-13.403	1.00	33.83	0
[16099]	HETATM	2285	0	HOH A2054	-36.773	24.126	8.576	1.00	36.76	0
[16100]	HETATM	2286	0	HOH A2055	-31.939	26.928	8.417	1.00	54.35	0
[16101]	HETATM	2287	0	HOH A2056	-32.383	27.667	14.051	1.00	54.31	0
[16102]	HETATM	2288	0	HOH A2057	-31.392	24.359	10.827	1.00	42.29	0
[16103]	HETATM	2289	0	HOH A2058	-26.039	34.512	15.654	1.00	39.09	0
[16104]	HETATM	2290	0	HOH A2059	-25.331	34.376	8.438	1.00	41.33	0
[16105]	HETATM	2291	0	HOH A2060	-29.991	35.523	9.220	1.00	40.99	0
[16106]	HETATM	2292	0	HOH A2061	-24.497	27.879	9.781	1.00	43.36	0
[16107]	HETATM	2293	0	HOH A2062	-35.514	31.411	20.625	1.00	45.85	0
[16108]	HETATM	2294	0	HOH A2063	-27.614	27.581	24.109	1.00	41.22	0
[16109]	HETATM	2295	0	HOH A2064	-35.088	27.754	17.899	1.00	49.41	0
[16110]	HETATM	2296	0	HOH A2065	-30.457	23.889	29.631	1.00	60.64	0
[16111]	HETATM	2297	0	HOH A2066	-34.723	29.647	26.249	1.00	42.21	0

[16112]	HETATM	2298	0	HOH A2067	-38.073	28.478	28.098	1.00	55.24	0
[16113]	HETATM	2299	0	HOH A2068	-37.565	23.390	22.471	1.00	56.39	0
[16114]	HETATM	2300	0	HOH A2069	-37.985	23.786	27.271	1.00	65.25	0
[16115]	HETATM	2301	0	HOH A2070	-29.282	22.803	25.497	1.00	54.78	0
[16116]	HETATM	2302	0	HOH A2071	-35.311	16.317	28.661	1.00	46.10	0
[16117]	HETATM	2303	0	HOH A2072	-29.255	18.197	27.558	1.00	46.08	0
[16118]	HETATM	2304	0	HOH A2073	-35.599	21.834	29.923	1.00	57.82	0
[16119]	HETATM	2305	0	HOH A2074	-35.452	22.479	17.941	1.00	46.99	0
[16120]	HETATM	2306	0	HOH A2075	-41.186	21.912	16.867	1.00	52.65	0
[16121]	HETATM	2307	0	HOH A2076	-37.608	23.043	14.676	1.00	58.37	0
[16122]	HETATM	2308	0	HOH A2077	-40.501	18.027	11.757	1.00	36.23	0
[16123]	HETATM	2309	0	HOH A2078	-34.299	21.669	13.138	1.00	38.60	0
[16124]	HETATM	2310	0	HOH A2079	-49.199	19.417	14.028	1.00	60.56	0
[16125]	HETATM	2311	0	HOH A2080	-43.691	23.872	15.391	1.00	46.35	0
[16126]	HETATM	2312	0	HOH A2081	-47.377	23.492	16.129	1.00	56.09	0
[16127]	HETATM	2313	0	HOH A2082	-45.732	13.343	13.055	1.00	39.99	0
[16128]	HETATM	2314	0	HOH A2083	-49.512	14.681	20.111	1.00	61.34	0
[16129]	HETATM	2315	0	HOH A2084	-50.012	10.955	16.672	1.00	52.56	0
[16130]	HETATM	2316	0	HOH A2085	-50.667	8.030	18.528	1.00	52.39	0
[16131]	HETATM	2317	0	HOH A2086	-43.071	10.348	27.458	1.00	56.22	0
[16132]	HETATM	2318	0	HOH A2087	-40.952	18.003	24.362	1.00	52.81	0
[16133]	HETATM	2319	0	HOH A2088	-37.488	14.934	27.321	1.00	56.99	0
[16134]	HETATM	2320	0	HOH A2089	-28.595	22.002	20.680	1.00	47.07	0
[16135]	HETATM	2321	0	HOH A2090	-25.474	22.191	17.436	1.00	51.86	0
[16136]	HETATM	2322	0	HOH A2091	-22.491	19.281	8.800	1.00	40.28	0
[16137]	HETATM	2323	0	HOH A2092	-33.651	22.994	10.265	1.00	43.43	0
[16138]	HETATM	2324	0	HOH A2093	-34.537	18.806	8.069	1.00	37.37	0
[16139]	HETATM	2325	0	HOH A2094	-31.955	22.946	14.306	1.00	37.97	0
[16140]	HETATM	2326	0	HOH A2095	-25.853	25.462	9.338	1.00	41.60	0
[16141]	HETATM	2327	0	HOH A2096	-21.725	25.727	7.877	1.00	69.69	0
[16142]	HETATM	2328	0	HOH A2097	-21.485	26.125	11.383	1.00	58.65	0
[16143]	HETATM	2329	0	HOH A2098	-19.646	17.570	-0.761	1.00	44.46	0
[16144]	HETATM	2330	0	HOH A2099	-23.434	27.604	3.382	1.00	47.84	0
[16145]	HETATM	2331	0	HOH A2100	-22.701	25.179	-0.155	1.00	52.64	0
[16146]	HETATM	2332	0	HOH A2101	-31.573	25.293	-1.989	1.00	41.75	0
[16147]	HETATM	2333	0	HOH A2102	-29.474	26.516	-0.041	1.00	50.17	0

[16148]	HETATM	2334	0	HOH	A2103	-33.546	29.192	-8.332	1.00	59.09	0
[16149]	HETATM	2335	0	HOH	A2104	-34.369	23.735	-12.427	1.00	60.74	0
[16150]	HETATM	2336	0	HOH	A2105	-43.315	17.309	8.226	1.00	29.67	0
[16151]	HETATM	2337	0	HOH	A2106	-50.004	18.212	9.480	1.00	48.15	0
[16152]	HETATM	2338	0	HOH	A2107	-53.066	19.721	8.844	1.00	65.32	0
[16153]	HETATM	2339	0	HOH	A2108	-38.886	25.452	7.710	1.00	40.84	0
[16154]	HETATM	2340	0	HOH	A2109	-41.960	26.039	8.600	1.00	46.48	0
[16155]	HETATM	2341	0	HOH	A2110	-41.539	19.167	9.457	1.00	32.15	0
[16156]	HETATM	2342	0	HOH	A2111	-41.545	28.930	2.188	1.00	59.03	0
[16157]	HETATM	2343	0	HOH	A2112	-37.327	27.821	6.444	1.00	58.32	0
[16158]	HETATM	2344	0	HOH	A2113	-41.491	13.611	-16.058	1.00	72.58	0
[16159]	HETATM	2345	0	HOH	A2114	-36.386	17.061	-9.476	1.00	42.75	0
[16160]	HETATM	2346	0	HOH	A2115	-44.564	18.744	-10.543	1.00	56.63	0
[16161]	HETATM	2347	0	HOH	A2116	-41.867	13.167	-9.410	1.00	55.51	0
[16162]	HETATM	2348	0	HOH	A2117	-46.459	18.931	-7.253	1.00	53.49	0
[16163]	HETATM	2349	0	HOH	A2118	-47.584	16.497	-6.988	1.00	50.79	0
[16164]	HETATM	2350	0	HOH	A2119	-52.787	13.444	5.294	1.00	47.21	0
[16165]	HETATM	2351	0	HOH	A2120	-53.645	15.860	2.436	1.00	34.90	0
[16166]	HETATM	2352	0	HOH	A2121	-52.261	18.856	11.291	1.00	63.13	0
[16167]	HETATM	2353	0	HOH	A2122	-41.883	5.017	8.964	1.00	46.00	0
[16168]	HETATM	2354	0	HOH	A2123	-52.067	8.645	12.090	1.00	57.68	0
[16169]	HETATM	2355	0	HOH	A2124	-52.746	6.613	9.844	1.00	60.96	0
[16170]	HETATM	2356	0	HOH	A2125	-52.361	7.333	5.634	1.00	43.18	0
[16171]	HETATM	2357	0	HOH	A2126	-55.402	11.058	9.849	1.00	63.72	0
[16172]	HETATM	2358	0	HOH	A2127	-51.205	2.651	0.449	1.00	41.46	0
[16173]	HETATM	2359	0	HOH	A2128	-51.900	5.063	7.448	1.00	37.21	0
[16174]	HETATM	2360	0	HOH	A2129	-56.624	4.052	-4.189	1.00	64.78	0
[16175]	HETATM	2361	0	HOH	A2130	-52.447	2.065	-9.611	1.00	34.91	0
[16176]	HETATM	2362	0	HOH	A2131	-45.951	10.461	-10.930	1.00	36.64	0
[16177]	HETATM	2363	0	HOH	A2132	-42.578	10.125	-10.691	1.00	39.86	0
[16178]	HETATM	2364	0	HOH	A2133	-51.295	5.030	-12.337	1.00	48.90	0
[16179]	HETATM	2365	0	HOH	A2134	-37.323	8.405	-14.447	1.00	43.45	0
[16180]	HETATM	2366	0	HOH	A2135	-42.546	-2.132	-8.231	1.00	39.06	0
[16181]	HETATM	2367	0	HOH	A2136	-47.899	-0.140	-12.510	1.00	41.11	0
[16182]	HETATM	2368	0	HOH	A2137	-46.004	-3.361	-6.863	1.00	43.58	0



- [16183] 추가적으로, 본 발명의 일 실시예에서는 NDRG군 단백질 사이에는 53 내지 65%의 상동성을 갖고 있으며, 특히 모든 NDRG군 단백질에 있어서 6번째 알파-헬릭스 구조가 잘 보존되어 있음을 확인하였고(도 1), 상기의 삼차-원자좌표를 기초로 인간 NDRG2 및 이의 변이체들의 구조를 분석하여 6번째 알파-헬릭스가 NDRG2의 분자 결합에 중요한 모티프(motif)로 작용할 수 있고(도 3), NDRG2 단백질의 기능에 있어 6번째 알파-헬릭스가 중요한 역할을 하는 것을 대장암세포를 이용하여 확인하였다(도 4). 이와 같은 실시예는 NDRG2 단백질이 대장암 세포 내에서 그 발현이 감소되어 있고, GSK-3 $\beta$ 의 인산화 조절을 통해 TCF/ $\beta$ -카테닌 신호전달을 조절하여 대장암의 발생에 관여함 뒷받침하는 것이다.
- [16184] 이러한 결과들을 바탕으로 NDRG2 유래의 6번째 헬릭스를 합성한 펩타이드를 사용하여 정상세포 및 간암, 자궁경부암, 유방암과 같은 타 암세포에는 영향을 미치지 않고, 대장암세포에만 선택적으로 작용하여 암세포의 증식을 억제하는 것을 확인하고(도 5 내지 8), 본 발명에 따른 펩타이드인 헬릭스6 펩타이드로 명명하였다.
- [16185] 한편, 상기 표 2 내지 4에 나타난 인간 NDRG2 및 이의 변이체들의 삼차-원자좌표는 컴퓨터(즉, 슈퍼컴퓨터, 메인프레임, 미니컴퓨터, 또는 미니프로세서 등과 같은 장치)와 같은 계산장치로의 연속적인 사용을 위한 매체에 저장될 수 있다. 전형적으로 좌표는 자기 또는 광학매체와 같은 다량의 데이터를 저장하는데 유용한 매체(즉, 플로피 디스크, 하드 디스크, 콤팩트 디스크, 마그네토-광학 매체(자기 디스크 또는 자기 테이프) 또는 전자 매체(즉, 랜덤 액세스 메모리(RAM), 또는 판독 전용 기억 장치(ROM) 등과 같은 장치)에 저장될 수 있다. 이와 관련한 컴퓨터, 저장매체, 네트워킹, 및 다른 장치 또는 기술의 선택은 구조/계산 화학 분야의 당업자에게 익숙할 것이다.
- [16186] 따라서, 본 발명에서는 인간 NDRG2 및 이의 변이체들의 삼차-원자좌표 및/또는 3차원 구조를 결정하는 데이터를 포함하는 저장 매체를 제공한다. 본 발명에서 원자좌표는 바람직하게는 상기 원자 좌표이거나 그것의 변형이 될 수 있으며, 상기 저장 매체는 바람직하게 컴퓨터로 판독 가능한 매체이다.
- [16187] 또 하나의 양태로서, 본 발명은 상기 펩타이드를 유효성분으로 포함하고 약제학적 담체를 더 포함하는 치료용 조성물을 제공한다.
- [16188] 본 발명에서 용어, "예방"이란 본 발명에 따른 펩타이드 또는 조성물의 투여로 대장암을 억제시키거나 발병을 지연시키는 모든 행위를 의미한다.
- [16189] 본 발명에서 용어, "치료"란 본 발명에 따른 펩타이드 또는 조성물의 투여로 대장암이 호전되거나 이롭게 변경하는 모든 행위를 의미한다.
- [16190] 본 발명에서 용어 "약학적으로 유효한 양"은 의학적 치료에 적용가능한 합리적인 수혜/위험 비율로 질환을 치료하기에 충분한 양을 의미하며, 유효용량 수준은 환자의 성별, 연령, 질병의 종류, 중증도, 약물의 활성, 약물에 대한 민감도, 투여 시간, 투여 경로 및 배출 비율, 치료기간, 동시 사용되는 약물을 포함한 요소 및 기타 의학 분야에 잘 알려진 요소에 따라 결정될 수 있다. 본 발명의 약학적 조성물은 개별 치료제로 투여하거나 다른 치료제와 병용하여 투여될 수 있고 종래의 치료제와 순차적으로 또는 동시에 투여될 수 있다. 또한 본 발명의 약학적 조성물은 단일 또는 다중 투여될 수 있다. 상기 요소를 모두 고려하여 부작용 없이 최소한의 양으로 최대 효과를 얻을 수 있는 양을 투여하는 것이 중요하며, 당업자에 의해 용이하게 결정될 수 있다. 구체적으로 본 발명의 약학적 조성물은 경구투여 또는 정맥투여가 바람직하다.
- [16191] 본 발명의 약학적 조성물에 사용될 수 있는 약학적으로 허용가능한 담체, 부형제 및 희석제의 예로는, 락토즈, 텍스트로즈, 수크로즈, 솔비톨, 만니톨, 자일리톨, 에리스리톨, 말티톨, 전분, 아카시아 고무, 알지네이트, 젤라틴, 칼슘 포스페이트, 칼슘 실리케이트, 칼슘 카보네이트, 셀룰로즈, 메틸 셀룰로즈, 폴리비닐피롤리돈, 물, 메틸하이드록시벤조에이트, 프로필하이드록시 벤조에이트, 탈크, 마그네슘 스테아레이트, 광물유 등을 들 수 있다.
- [16192] 본 발명의 약학적 조성물은 통상의 방법에 따라 산제, 과립제, 정제, 캡슐제, 현탁액, 에멀전, 시럽, 에어로졸 등의 경구형 제형, 외용제, 좌제 및 멸균 주사용액의 형태로 제형화하여 사용될 수 있다. 제형화할 경우에는 보통 사용하는 충전제, 증량제, 결합제, 습윤제, 붕해제, 계면활성제 등의 희석제 또는 부형제를 사용하여 조제된다. 경구투여를 위한 고형제제에는 정제, 환제, 산제, 과립제, 캡슐제 등이 포함되며, 이러한 고형제제는 상기

강황 또는 울금 추출물, 이로부터 분리된 리나로올 화합물 또는 이의 약학적으로 허용가능한 염에 적어도 하나 이상의 부형제 예를 들면, 전분, 칼슘 카보네이트, 수크로즈 또는 락토스, 젤라틴 등을 혼합하여 조제된다. 또한 단순한 부형제 이외에 마그네슘 스테아레이트, 탈크 같은 윤활제들도 사용된다. 경구투여를 위한 액상제제로는 현탁제, 내용액제, 유제, 시럽제 등이 해당되는데, 흔히 사용되는 단순 희석제인 물, 리퀴드 파라핀 이외에 여러 가지 부형제, 예를 들면 습윤제, 감미제, 방향제, 보존제 등이 포함될 수 있다. 비경구 투여를 위한 제제에는 멸균된 수용액, 비수성용제, 현탁제, 유제, 동결건조 제제, 좌제가 포함된다. 비수성용제, 현탁제로는 프로필렌글리콜(propylene glycol), 폴리에틸렌글리콜, 올리브 오일과 같은 식물성 기름, 에틸올레이트와 같은 주사가능한 에스테르 등이 사용될 수 있다. 좌제의 기제로는 위텡솔(witepsol), 마크로골, 트윈(tween) 61, 카카오지, 라우린지, 글리세로젤라틴 등이 사용될 수 있다.

[16193] 또 하나의 양태로서, 본 발명은 상기 펩타이드 또는 조성물을 치료를 필요로 하는 개체에 투여하는 단계를 포함하는 인간을 제외한 동물의 대장암을 치료하는 방법을 제공한다.

[16194] 본 발명에 따른 상기 치료방법은 비록 인간을 제외한 동물을 치료하는 방법이나, 인간에 있어 이러한 치료방법이 효과가 없음을 의미하는 것은 아니다. 또한, 인간의 경우 있어서 본 발명에 따른 치료용 조성물의 투여에 의해 증상이 호전될 수 있는 대장암을 가지는 것을 고려할 때, 인간의 치료에 있어서도 충분히 사용되어 질 수 있다.

[16195] 본 발명에서 용어 "인간을 제외한 동물"은 본 발명에 따른 치료용 조성물의 투여에 의해 증상이 호전될 수 있는 대장암을 가진 인간만을 제외한 말, 양, 돼지, 염소, 낙타, 영양, 개 등의 동물을 의미한다. 본 발명에 따른 치료용 조성물을 인간을 제외한 동물에게 투여함으로써, 대장암을 효과적으로 예방 및 치료할 수 있다.

[16196] 본 발명에서 용어 "투여"는 어떠한 적절한 방법으로 동물에게 소정의 물질을 도입하는 것을 의미하며, 본 발명에 따른 치료용 조성물의 투여 경로는 목적 조직에 도달할 수 있는 한 어떠한 일반적인 경로를 통하여 경구 또는 비경구 투여될 수 있다. 또한, 본 발명에 따른 치료용 조성물은 유효성분이 표적 세포로 이동할 수 있는 임의의 장치에 의해 투여될 수 있다.

[16197] 본 발명에 따른 치료용 조성물의 바람직한 투여량은 환자의 상태 및 체중, 질병의 정도, 약물형태, 투여경로 및 기간에 따라 다르지만, 당업자에 의해 적절하게 선택될 수 있다. 그러나, 바람직한 효과를 위해서, 본 발명의 약학적 조성물은 1일 1 내지 10 mg/kg으로, 바람직하게는 1 내지 5 mg/kg으로 투여하는 것이 좋다. 투여는 하루에 한번 투여할 수도 있고, 수회 나누어 투여할 수도 있다.

**발명의 효과**

[16198] 본 발명의 펩타이드를 포함하는 대장암 예방 또는 치료용 조성물, 이를 유효성분으로 포함하는 약학적 조성물은 대장암 세포주에만 뛰어난 선별력을 가지고 작용하므로, 대장암에 대한 항암제의 효과적인 유효성분으로 유용하게 사용될 수 있다.

**도면의 간단한 설명**

- [16199] 도 1은 NDRG 패밀리 단백질들의 아미노산 서열에 보존된 서열을 확인하여 나타낸 계략도이다.
- 도 2는 인간 NDRG2 (아미노산 23에서 304) 단백질을 대량 생산하기 위한 발현 벡터 지도를 나타낸 계략도이다.
- 도 3은 인간 NDRG2 (아미노산 23에서 304), 이의 변이체 단백질인 K2A 및 K2Y의 삼차-입체구조를 비교하여 나타낸 계략도이다.
- 도 4는 NDRG2 및 그 변이체들의 루시퍼라아제 리포터 분석 방법을 통한 TCF/LEF 전사 활성을 나타낸 그래프이다.
- 도 5는 본 발명에 따른 헬릭스6 펩타이드가 인간의 간암 세포(Hep3B)의 생육에 미치는 효과를 나타낸 그래프이다.

도 6은 본 발명에 따른 헬릭스6 펩타이드가 인간의 자궁경부암 세포주(HeLa)의 생육에 미치는 효과를 나타낸 그래프이다.

도 7은 본 발명에 따른 헬릭스6 펩타이드가 인간의 유방암 세포주(MCF7)의 생육에 미치는 효과를 나타낸 그래프이다.

도 8은 본 발명에 따른 헬릭스6 펩타이드가 인간의 대장암 세포주(SW620)의 생육에 미치는 효과를 나타낸 그래프이다.

**발명을 실시하기 위한 구체적인 내용**

[16200] 이하, 본 발명에 따르는 실시예 및 본 발명에 따르지 않는 비교예를 통하여 본 발명을 보다 상세히 설명하나, 본 발명의 범위가 하기 제시된 실시예에 의해 제한되는 것은 아니다.

**실시예 1. NDRG2 단백질의 상동성 비교**

[16201] 대장암 세포 내에서 그 발현이 감소되어 있고, GSK-3β의 인산화 조절을 통해 TCF/β-카테닌 신호전달을 조절하여 대장암의 발생에 관여하는 것으로 확인된 NDRG2 단백질의 핵심작용 부위를 확인하기 위해 NDRG 패밀리에 속하는 NDRG2b(gi:42544224), NDRG2a(gi:42544222), NDRG1(gi:48145801), NDRG3(gi:12083721), NDRG4a(gi:13430864), 및 NDRG4b(gi:194440722) 단백질들의 아미노산 서열을 ExPASy 프로테오믹스 서버 상에서 T-COFFEE 프로그램과 ESPript 프로그램을 동시에 사용해 그들의 상동성을 비교하여 도 1에 나타내었다.

[16203] 도 1은 NDRG 패밀리 단백질들의 아미노산 서열에 보존된 서열을 확인하여 나타낸 계략도이다. 도 1에 나타난 바와 같이 NDRG 패밀리 단백질 사이에는 53 내지 65%의 상동성을 갖고 있으며, 특히 모든 NDRG 패밀리 단백질에 있어서 6번째 알파-헬릭스 구조가 잘 보존되어 있음을 확인할 수 있었다.

**실시예 2. NDRG2의 구조 분석**

[16205] NDRG 단백질 패밀리 간에 잘 보존되어 있는 6번째 알파-헬릭스의 기능을 확인하기 위해 하기와 같은 방법을 통해 우선 그 구조를 확인하였다.

[16206] 한국생명공학연구원의 김재화 박사에게서 제공받은 인간 NDRG2 유전자를 이용하여 NDRG2 (아미노산 23에서 304) 단백질 (서열번호 5)을 암호화하는 뉴클레오타이드 서열 (서열번호 6) 및 이 단백질의 45 및 47번 라이신 아미노산을 각각 알라닌으로 치환한 K2A 변이체(서열번호 7)와 각각 타이로신으로 치환한 K2Y 변이체(서열번호 8)를 암호화하는 뉴클레오타이드 서열을 PCR을 통해 증폭한 후, 히스티딘-표지와 박테리아 헤모글로빈 그리고 TEV 프로테아제 절단 부위를 함유하는 pPosKJ 벡터로 클로닝 (도 2) 하여 대장균에 형질전환하여 발현시켰다. 발현된 NDRG2 단백질을 함유하는 대장균을 초음파 파쇄한 후 원심분리에 의해 NDRG2가 포함된 상층액이 분리되었다. 분리된 상층액은 Ni-NTA 크로마토그래피, TEV 프로테아제 처리, 이차 Ni-NTA 크로마토그래피를 통해 90%이상의 순도로 정제되었다. 정제된 NDRG2는 9% PEG 8000, 0.2 M 칼슘아세테이트 및 0.1 소듐 카코딜레이트 혼합 용액(pH 6.4 내지 7.5)에서 결정화되었고, K2A 단백질은 16% PEG 8000, 0.2 M 칼슘아세테이트 및 0.1 MES 혼합 용액(pH 6.8 내지 7.1)에서 결정화되었다. 또한 K2Y 단백질은 1.5 M NaCl과 0.1 M 이미다졸 혼합 용액 (pH 7.0 내지 8.0)을 사용하여 결정화시켰다. 결정화된 NDRG2 단백질은 포항 입자가속 실험실(PAL)의 빔라인 4A에서 2.8 Å 분해능의 데이터가 수집되었고, K2A 단백질은 PAL 빔라인 6C에서 2.0 Å 분해능의 데이터가 수집되었으며 K2Y 단백질은 빔라인 6C에서 2.15 Å 분해능의 데이터가 수집되었다 (표 1). 얻어진 X-선 회절데이터들은 HKL2000 소프트웨어 패키지를 사용하여 계산되어 구축하여 마우스 NDRG2 단백질 구조 (PDB ID 2QMQ)를 이용하여 구조를 분석하였다.

[16207] 도 3은 NDRG2, K2A 및 K2Y 입체 구조를 비교하여 나타낸 계략도이다. 도 3은 NDRG2와 K2A 단백질의 비대칭성 유닛을 보여주고 있고, chain\_C의 6번째 알파-헬릭스와 또 다른 비대칭 유닛내의 NDRG2 단백질 분자의 알파-헬릭스간에 존재하는 비극성 잔기들의 소수성 결합에 의해 상호결합하는 형태를 취하고 있으며 이러한 구조적 특징은 일반적으로 단백질 분자간 상호작용에 중요한 역할을 하는 활성 부위에 나타나는 특징이다. 즉, 6번째 알파-헬릭스가 NDRG2의 분자 결합에 중요한 모티프(motif)로 작용할 수 있음을 나타낸다.

**실시예 3. NDRG2의 6번째 알파-헬릭스의 기능 분석**

NDRG2의 분자 결합에 중요한 모티프(motif)로 작용할 것이라 예측되는 6번째 알파-헬릭스가 TCF/ $\beta$ -카테닌 신호 전달을 조절하는 NDRG2 기능에 미치는 영향을 조사하기 위해 하기와 같은 방법을 통해 그 기능을 확인하였다.

NDRG2 단백질의 6번째 헬릭스를 구성하는 164번째 아미노산부터 175번째 아미노산 서열이 결실된 변이체 hNDRG2 <sup>$\Delta$ 164-175</sup> 및 172번째 루이신을 아스파르트산으로 치환한 변이체 hNDRG2<sup>L172D</sup>를 암호화하는 뉴클레오타이드 서열을 PCR을 통해 증폭한 후, 각각 pcDNA3 발현 벡터(Invitrogen)로 클로닝한 후, 루시페라아제 리포터 분석(Luciferase reporter assay) 방법을 통해 NDRG2 단백질의 TCF/LEF 전사 활성이 유지되는지를 확인하였다.

루시페라아제 리포터 분석을 위해 각각 재조합 pcDNA3 벡터 구조물, TOPflash (또는 FOPflash, 변이체 TCF 결합 자리를 갖음) 루시페라아제 리포터 플라스미드(Upstate Biotechnology, Inc) 및 트랜스팩션 효율을 정량하기 위한  $\beta$ -갈락토시다아제 플라스미드 리포펙타민(Lipofectamine)을 사용하여 SW620 세포 및 HEK293 세포 내로 형질 감염시켰다. 2 일 후에, 세포를 용해 완충액(20 mM Tris-HCl, pH 7.5, 150 mM NaCl, 1% Triton X-100)을 사용하여 얼음상에서 30 분간 용해시키고, 용해물을 제거한 후 96 웰 플레이트에 옮긴 후 루시페라아제 분석 시약(Promega)을 첨가하였다. 반응에서 광 강도는 plate-reading luminometer (Turner Designs, Sunnyvale, CA, USA)를 사용하여 결정하였고, 루시페라아제 강도는  $\beta$ -갈락토시다아제 활성에 비교하여 계산하여 그 결과를 도 3에 나타내었다.

도 4는 NDRG2 및 그 변이체들의 루시페라아제 리포터 분석 방법을 통한 TCF/LEF 전사 활성을 나타낸 그래프이다. 도 4에 나타난 바와 같이 정상적인 NDRG2 단백질을 도입하여 발현시킨 경우, 대장암에 관련된 SW620 세포 및 HEK293 세포 양쪽 모두에서 TCF/LEF 전사 활성이 감소되는데 비해, hNDRG2 <sup>$\Delta$ 164-175</sup> 및 hNDRG2<sup>L172D</sup> 변이체가 발현되는 경우 NDRG2 단백질이 도입되기 전의 활성과 유사한 수준으로 활성을 나타내는 것을 확인하였다. 이러한 결과를 통해 NDRG2 단백질의 6번째 알파-헬릭스가 그 기능에 중요한 역할을 하는 것을 알 수 있으며, 추가적으로 172번째 아미노산이 핵심적인 역할을 하는 것을 알 수 있었다.

**실시예 4. 본 발명에 따른 헬릭스6 펩타이드가 암세포에 미치는 항암활성**

실험실 조건에서 본 발명에 따른 헬릭스6 펩타이드의 항암활성을 측정하기 위하여 인간의 간암 세포주(Hep3B), 인간의 자궁경부암 세포주(HeLa), 인간의 유방암 세포주(MCF7) 및 인간의 대장암 세포주(SW620)를 각각 배양하고, 각각의 배양한 세포  $5 \times 10^3$  cell을 96웰 플레이트(96 well plate)에 분주한 후, 다시 24시간동안 배양하였다. 이어, 각 웰에 DMSO만 처리한 미처리군, 음성 대조군으로 5 $\mu$ M의 GD-13, 양성 대조군으로 GG-17와 헬릭스6 펩타이드를 각각 0.25 $\mu$ M, 0.5 $\mu$ M, 1 $\mu$ M, 5 $\mu$ M 및 10 $\mu$ M 농도로 첨가하여 48시간 및 72시간 배양 후에 각각 MTT(3-[4,5-dimethylthiazol-2-yl]-2,5-diphenyl tetrazolium bromide)를 첨가하여 발색되는 정도를 분광기(spectrophotometer)로 검출하여 살아있는 세포의 수를 측정하여, 각 세포의 생존율을 확인하여 도 4 내지 7에 나타내었다.

도 5는 본 발명에 따른 헬릭스6 펩타이드가 인간의 간암 세포(Hep3B)의 생육에 미치는 효과를 나타낸 그래프이다. 도 5에 나타난 바와 같이, 본 발명에 따른 헬릭스6 펩타이드는 인간의 간암 세포(Hep3B)의 생육에 아무런 영향을 미치지 않는 것을 확인하였다.

도 6은 본 발명에 따른 헬릭스6 펩타이드가 인간의 자궁경부암 세포주(HeLa)의 생육에 미치는 효과를 나타낸 그래프이다. 도 6에 나타난 바와 같이, 본 발명에 따른 헬릭스6 펩타이드는 인간의 자궁경부암 세포주(HeLa)의 생육에 아무런 영향을 미치지 않는 것을 확인하였다.

도 7은 본 발명에 따른 헬릭스6 펩타이드가 인간의 유방암 세포주(MCF7)의 생육에 미치는 효과를 나타낸 그래프이다. 도 7에 나타난 바와 같이, 본 발명에 따른 헬릭스6 펩타이드는 인간의 유방암 세포주(MCF7)의 생육에 아무런 영향을 미치지 않는 것을 확인하였다.

도 8은 본 발명에 따른 헬릭스6 펩타이드가 인간의 대장암 세포주(SW620)의 생육에 미치는 효과를 나타낸 그래프이다. 도 8에 나타난 바와 같이, 본 발명에 따른 헬릭스6 펩타이드는 인간의 대장암 세포주(SW620)에 처리하여 배양하였을 때, 48시간 및 72시간 양쪽에서 농도의존적으로 생육을 억제하는 것을 확인하였다.

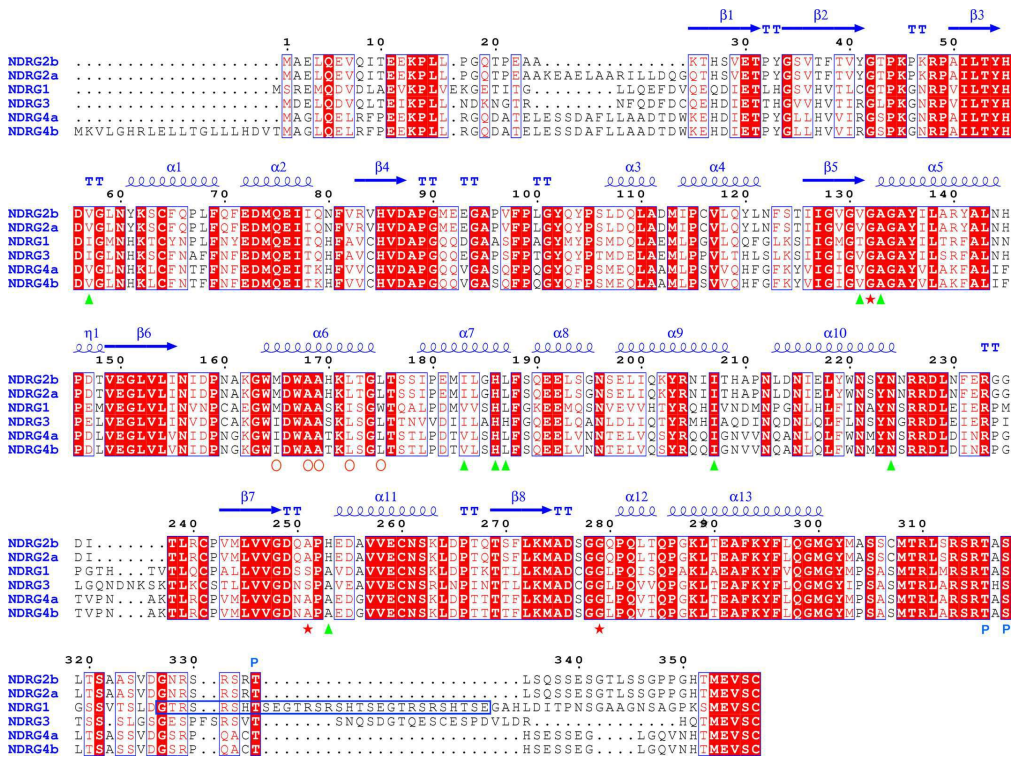
이러한 결과는 본 발명에 따른 헬릭스6 펩타이드가 대장암세포의 생육을 특이적으로 억제하는 효과가 있음을 나



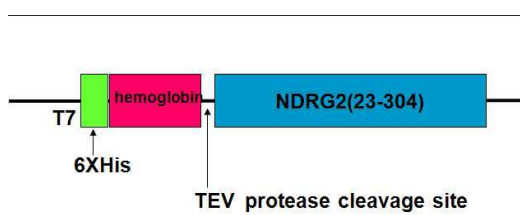
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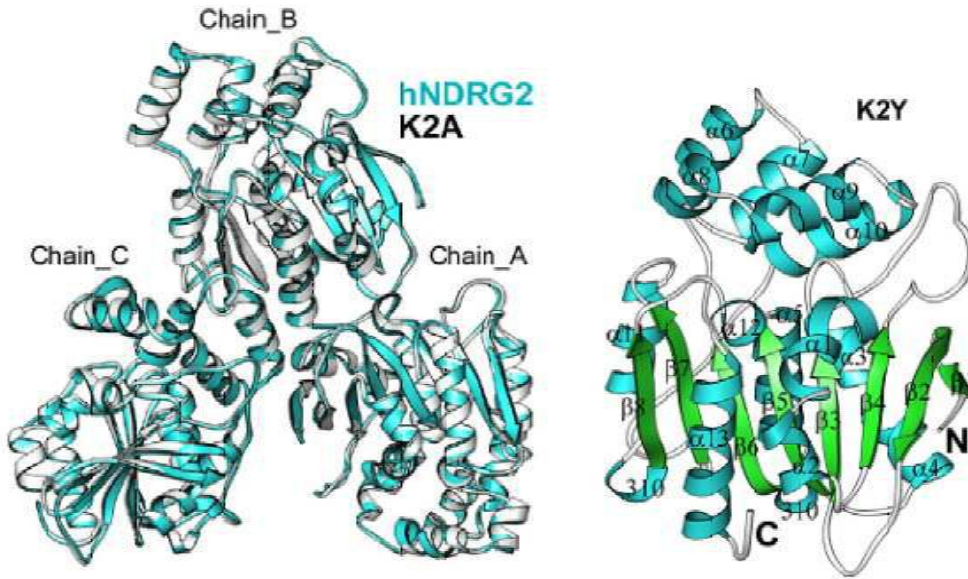
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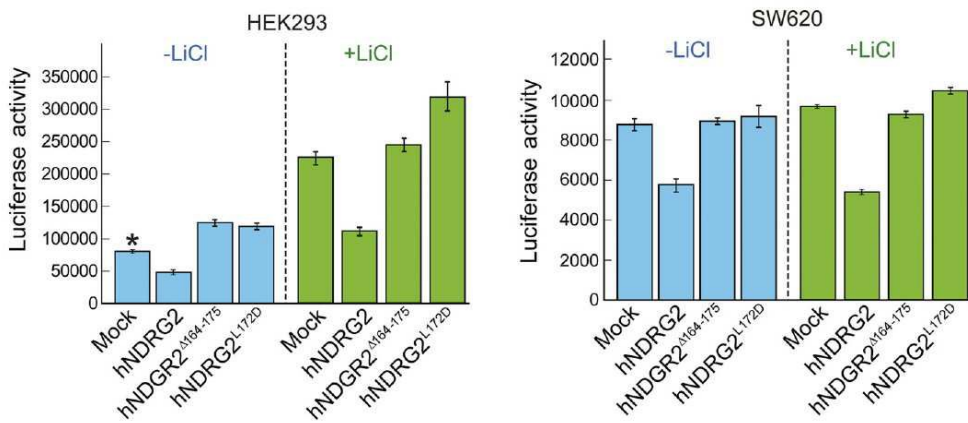
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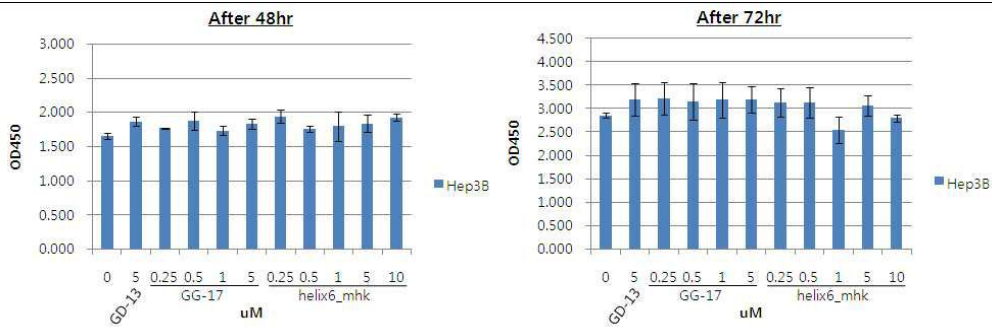
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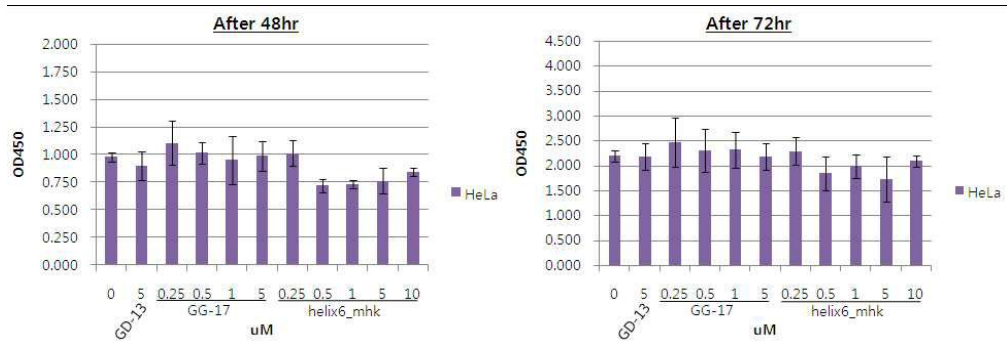
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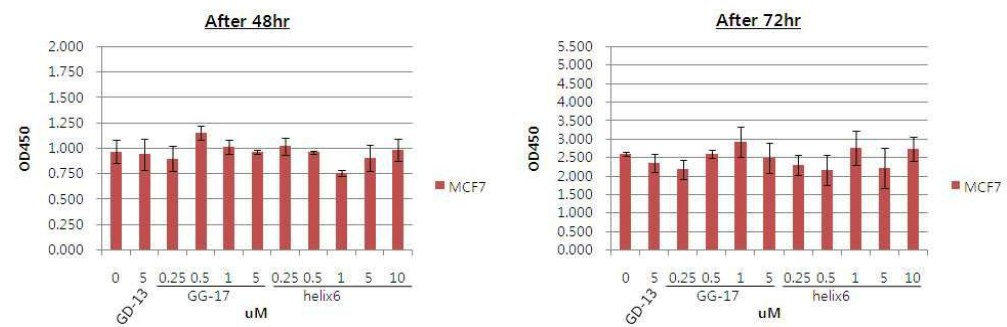
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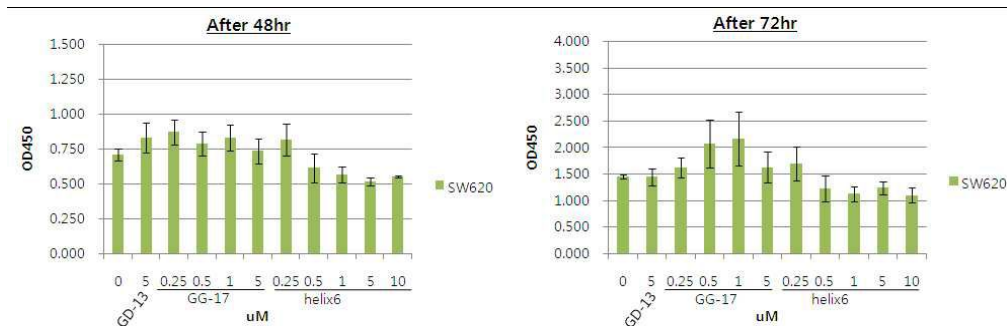
도면6



도면7



도면8



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