

Deciphering the Role of V88L Substitution in NDM-24 metallo- β -lactamase

Zhihai Liu^{a,b}, Alessandra Piccirilli^c, Dejun Liu^b, Wan Li^b, Yang Wang^b and Jianzhong Shen^{b,*}

^a Agricultural Bio-pharmaceutical Laboratory, College of Chemistry and Pharmaceutical Sciences, Qingdao Agricultural University, Qingdao 266109, China

^b Beijing Advanced Innovation Center for Food Nutrition and Human Health, College of Veterinary Medicine, China Agricultural University, Beijing 100193, China.

^c Dipartimento di Scienze Cliniche Applicate e Biotecnologiche, Università degli Studi dell'Aquila, L'Aquila, Italy.

* Correspondence: E-mail: sjz@cau.edu.cn. Tel.: +86-10-62732803; Fax: +86-10-62731032.

Running Title: V88L substitution in NDM-24

Table S1. Oligonucleotides used in this study.

| Primers | Sequence (5'-3') ^a |
|-------------------------|--|
| NDM-F | CGGGATCCATGGAATTGCCCAATATTATG |
| NDM-R | AACTGCAGTCAGCGCAGCTTGTCGGCCAT |
| <i>Bam</i> HI-TEV-NDM-F | ATGGATCCGAAAACCTGTATTTCCAAGGCCAGCAAATGGAAACTGG CGAC |
| <i>Xho</i> I-NDM-R | ATCTCGAGTCAGCGCAGCTTGTCGGCCATG |

^aThe sequences of restriction site were shown with underline and TEV protease recognition sequence was in bold.

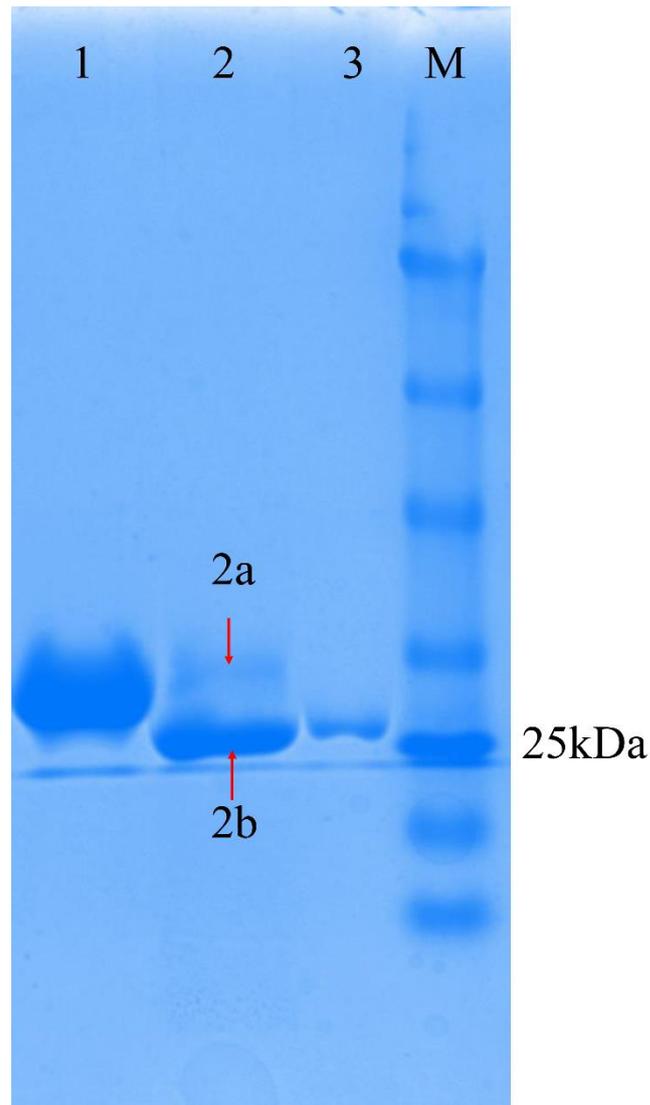


Figure S1. SDS-PAGE of NDM-24. Lane 1: NDM-24 containing His Tags;

Lane 2: NDM was cleaved by using Turbo tobacco etch virus (TEV) protease to remove His Tags (Accelagen, San Diego, CA, USA): tagged protein (2a) and untagged protein (2b); Lane 3: untagged protein; Lane M: Marker

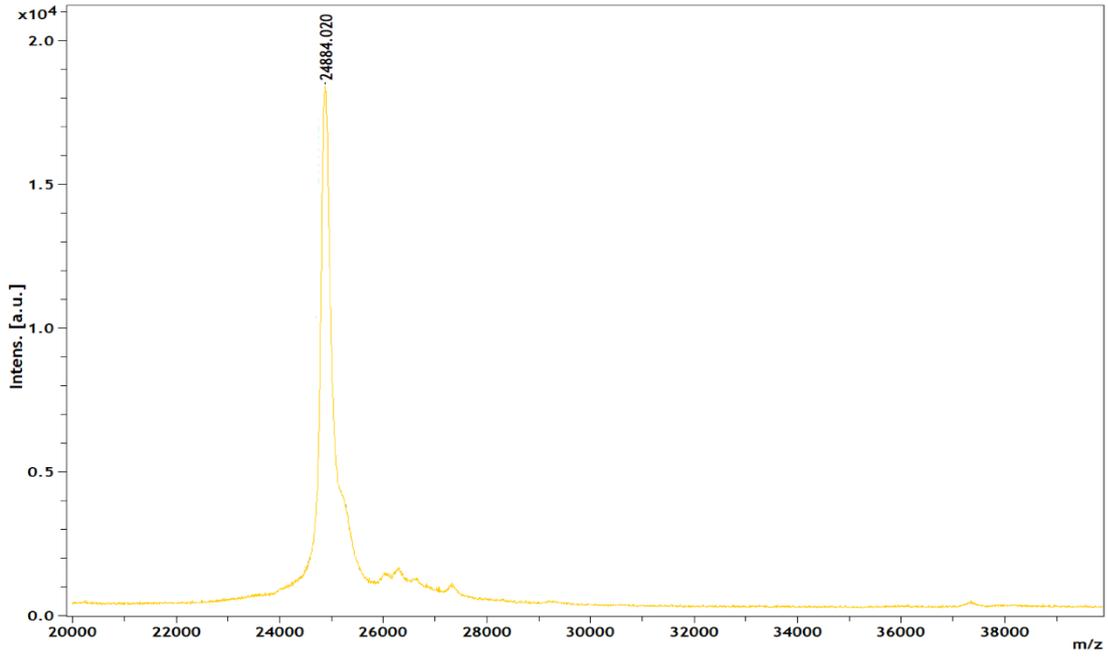


Figure S2. Molecular mass spectrometry of NDM-24 estimated by MALDI-TOF.

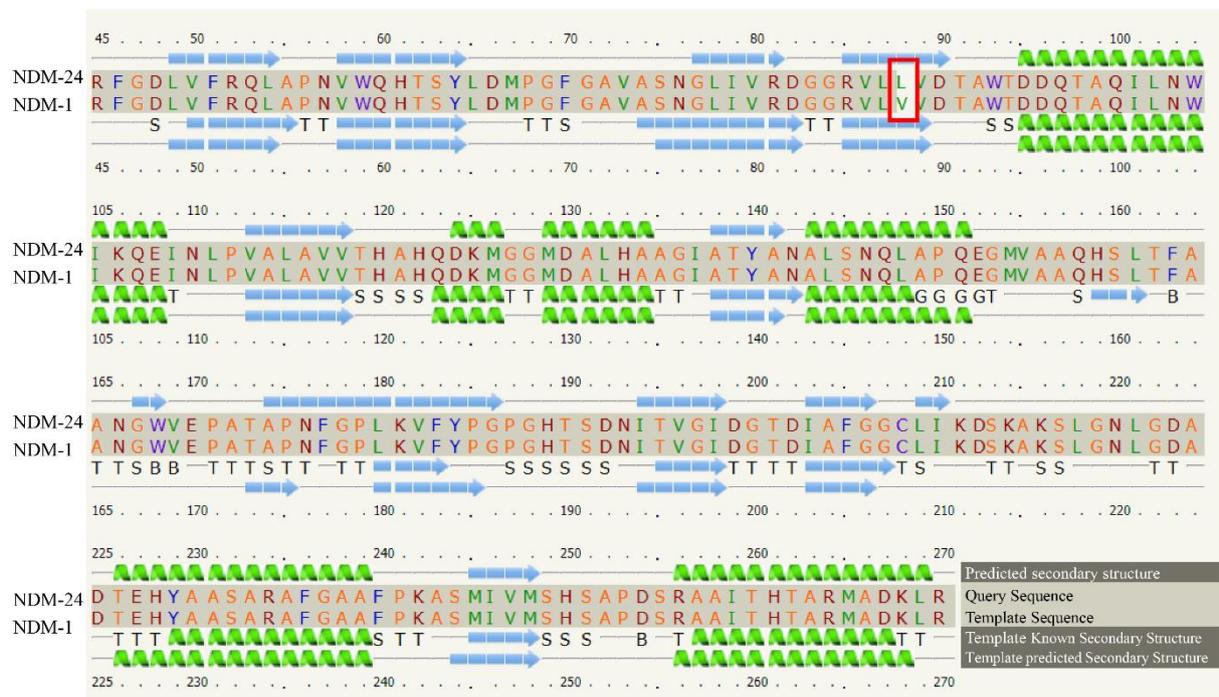


Figure S3. Predicted secondary structure of NDM-24.