

**Reductive inactivation of the hemiaminal pharmacophore for resistance against
tetrahydroisoquinoline antibiotics**

Authors: Wan-Hong Wen¹, Yue Zhang¹, Ying-Ying Zhang¹, Qian Yu², Chu-Chu Jiang², Man-Cheng Tang¹, Jin-Yue Pu¹, Lian Wu¹, Yi-Lei Zhao², Ting Shi^{2*}, Jiahai Zhou^{3*}, and Gong-Li Tang^{1,4*}

¹State Key Laboratory of Bio-organic and Natural Products Chemistry, Center for Excellence in Molecular Synthesis, Shanghai Institute of Organic Chemistry, University of Chinese Academy of Sciences, Chinese Academy of Sciences, 345 Lingling Road, Shanghai 200032, China

²State Key Laboratory of Microbial Metabolism, Joint International Research Laboratory of Metabolic and Developmental Sciences, School of Life Sciences and Biotechnology, Shanghai Jiao Tong University, Shanghai 200240, China.

³CAS Key Laboratory of Quantitative Engineering Biology, Shenzhen Institute of Synthetic Biology, Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences, Shenzhen 518055, China.

⁴School of Chemistry and Material Sciences, Hangzhou Institute for Advanced Study, University of Chinese Academy of Sciences, 1 Sub-lane Xiangshan, Hangzhou 310024, China

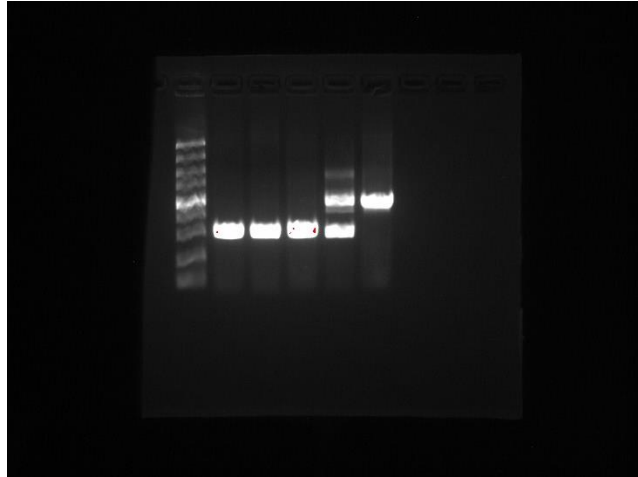
*Correspondence: Gong-Li Tang, Email: gltang@sioc.ac.cn

Jiahai Zhou, Email: jjahai@siat.ac.cn

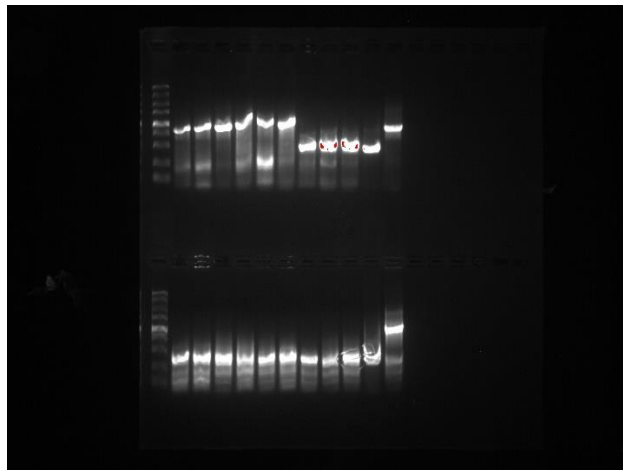
Ting Shi, Email: tshi@sjtu.edu.cn

Source Data – Gel Images of DNA

Original File for Supplementary Figure 1

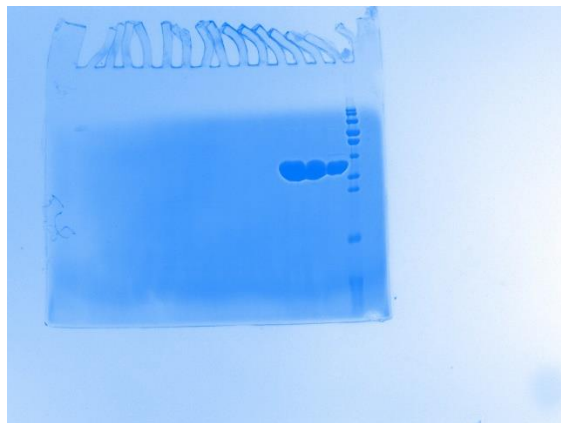


Original File for Supplementary Figure 2

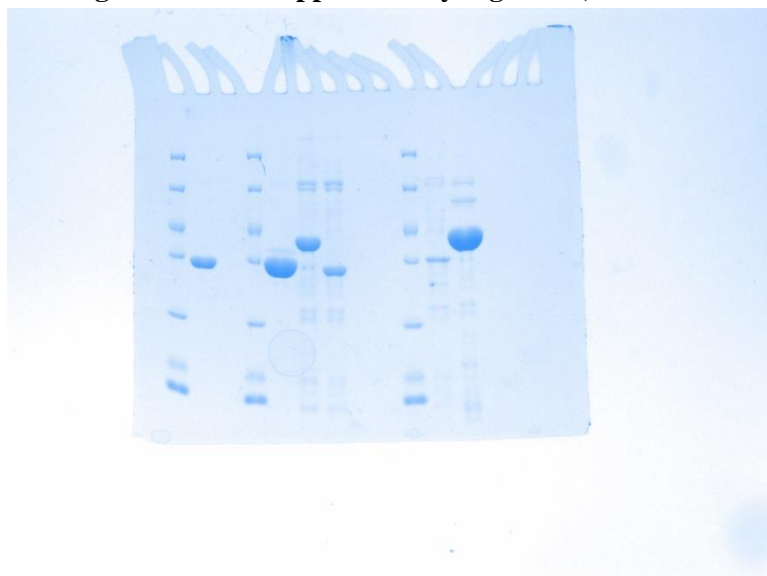


Source Data – Gel Images of protein

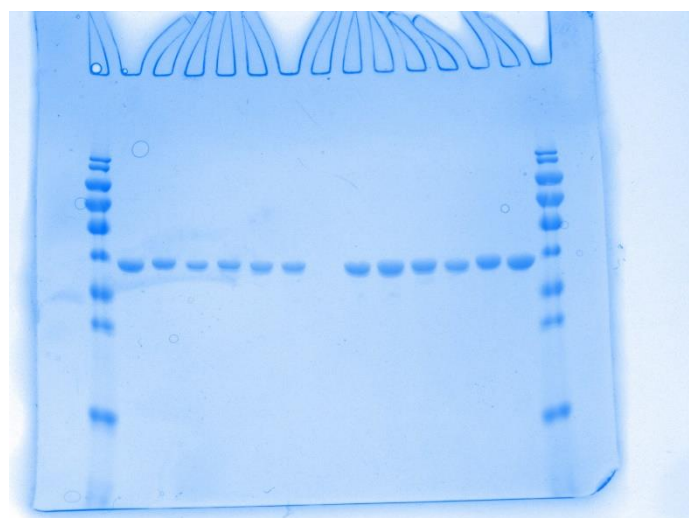
Original File for Supplementary Figure 3b



Original File for Supplementary Figure 3a, 14 and 22a



Original File for Supplementary Figure 6



Original File for Supplementary Figure 22b

