

Supplementary Information

A multi-channel electrochemical biosensor based on polyadenine tetrahedra for the detection of multiple drug resistance genes

Yanan Song,^{†a,b} Jun Feng,^{†c} Xueming Wang,^a Yanli Wen,^b Li Xu,^b Yinbo Huo,^b Lele Wang,^b Qing Tao,^b Zhenzhou Yang,^b Gang Liu,^b Min Chen,^{*c} Lanying Li^{*b} and Juan Yan^{*a}

^aInternational Research Center for Food and Health; Laboratory of Quality and Safety Risk Assessment for Aquatic Products on Storage and Preservation (Shanghai), Ministry of Agriculture; College of Food Science and Technology, Shanghai Ocean University, Shanghai 201306, China.

E-mail: j-yan@shou.edu.cn (J. Yan)

^bLaboratory of Biometrology, Division of Chemistry and Ionizing Radiation Measurement Technology, Shanghai Institute of Measurement and testing technology, Shanghai, 201203, P.R. China. E-mail: lily@simt.com.cn (L. Li)

^cMunicipal Centre For Disease Control & Prevention, Shanghai 200336, China. E-mail: chenmin@scdc.sh.cn (M. Chen)

Content:

1. Figure S1-S3

Figures

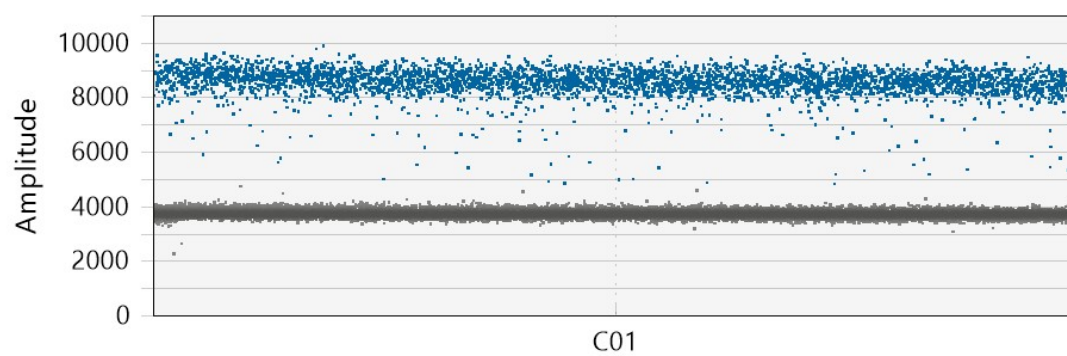


Fig. S1 Accurate quantitative results of MCR-1 plasmid DNA.

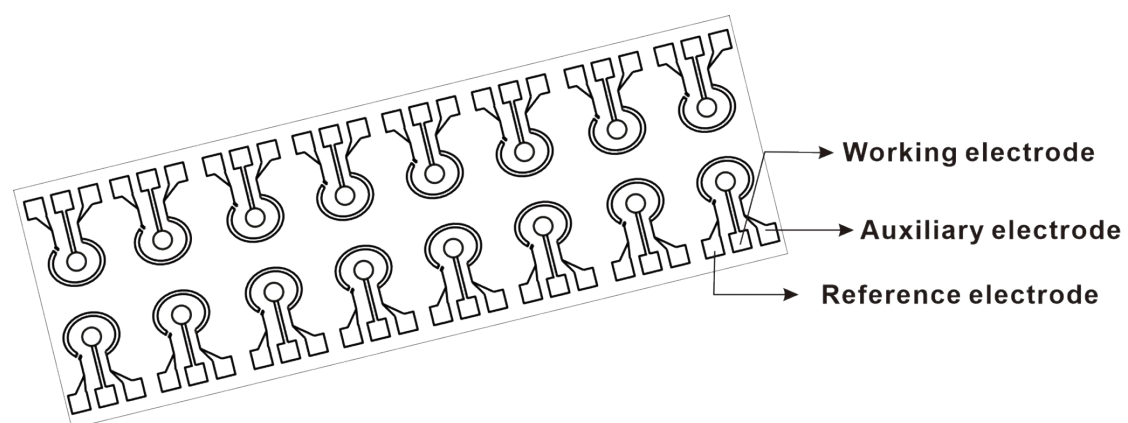


Fig. S2 Schematic diagram of a multi-channel electrochemical chip.

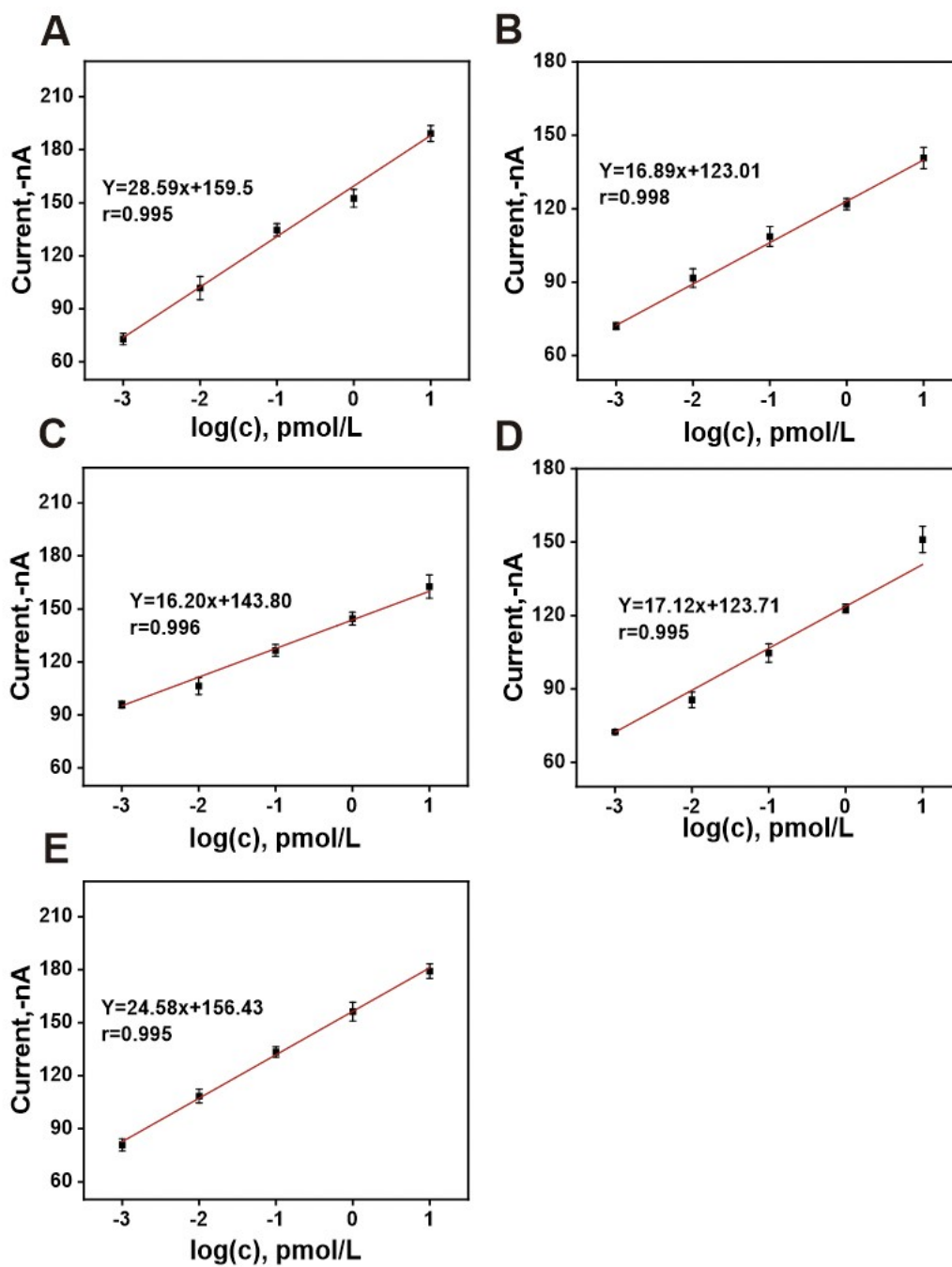


Fig. S3 (A-E) represents the low concentration linear working curves of five resistance genes, blaNDM, blaKPC, blaIMP, blaVIM, and blaOXA, from 1 fM to 10 pM.