Electronic Supplementary Material (ESI) for Analytical Methods.

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Supporting Information

Label-free electrochemical DNA biosensor for kanamycin

detection based on diblock DNA with poly-cytosine as high

affinity anchors on graphene oxide

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Supporting materials: Fig. S1-S3.

S-1

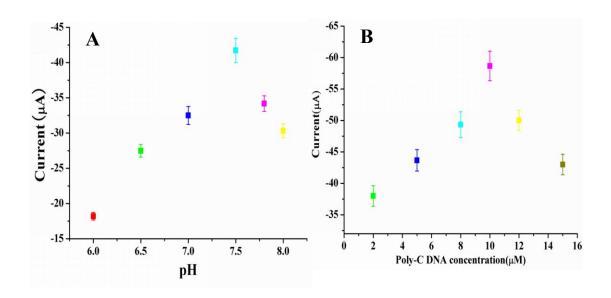


Fig. S1. The influences of the pH during physical adsorption (A) and poly-C DNA concentration (B) on the electrochemical DNA biosensor.

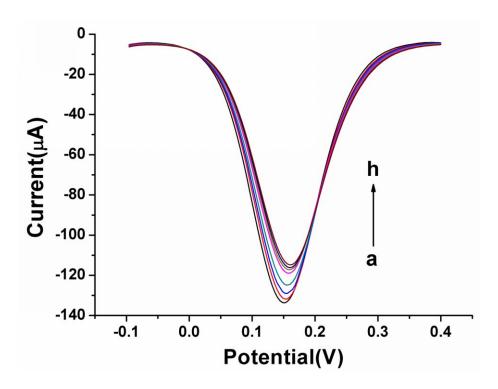


Fig. S2. The DPV curves of the DNA biosensor toward different concentrations of KAN at the optimized conditions. Curve a-h correspond to KAN at the concentrations from 0.05 pM to 100 nM.

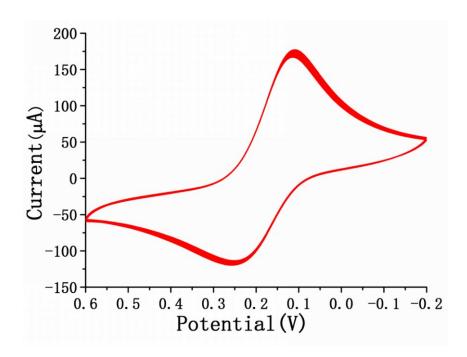


Fig. S3. Cyclic voltammograms of the DNA biosensor in the PBS (0.2 M, pH=7.4) solution containing 5.0 mM $[Fe(CN)_6]^{3-/4}$ and 0.1 M KCl for 50 continuous cycles.