

Supplementary Materials

Highly Sensitive Electrochemical Immunosensor for Ultra-Low-Level Detection of Interleukin-10 using A Cost-Effective Gold Nanoparticle-Modified Electrode

Amalesh Nanda, Thangapandi Kalyani, Hiranmoy Kotal, and Saikat Kumar Jana*

Department of Biotechnology, National Institute of Technology, Papum Pare-791113, Arunachal Pradesh, India

*Corresponding Author, Tel.: +91-9485230608

E-Mail: saikatmicro4@gmail.com

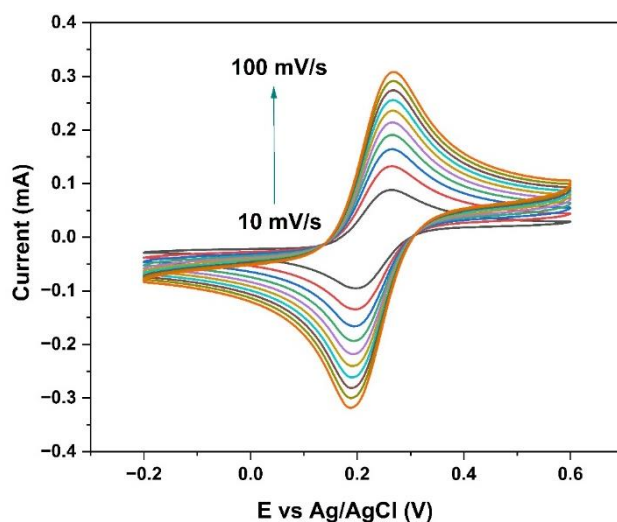


Figure S1. Scan rate study of BSA/IL-10Ab/Glu/Cyst/AuNPs/GCE bioelectrode in 10mM PBS containing 10 mM $[\text{Fe}(\text{CN})_6]^{3-/4-}$ and 1 M KNO_3 solution

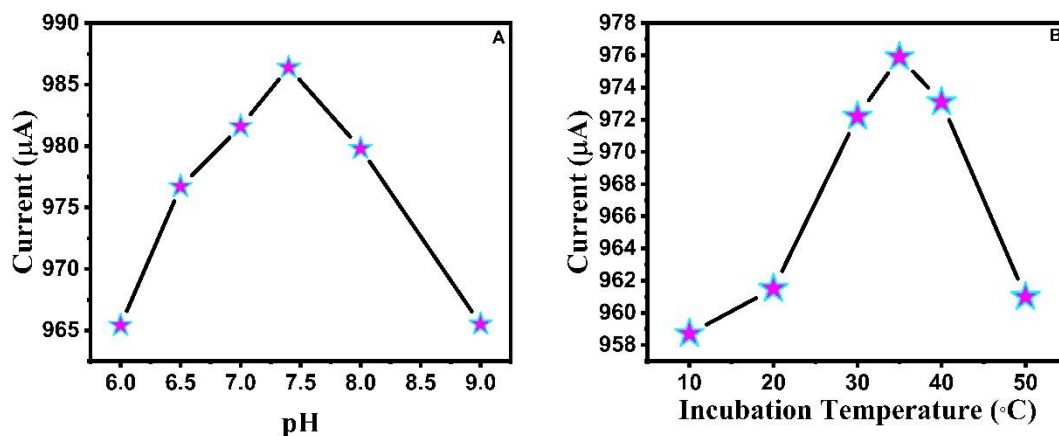


Figure S2. (A) Effect of pH, (B) effect of incubation temperature. All immunosensor signals respond to 1 pg mL^{-1} in 10 mM PBS containing 10 mM $[\text{Fe}(\text{CN})_6]^{3-/4-}$ and 1 M KNO_3 solution. All measurements were repeated three times ($n = 3$).

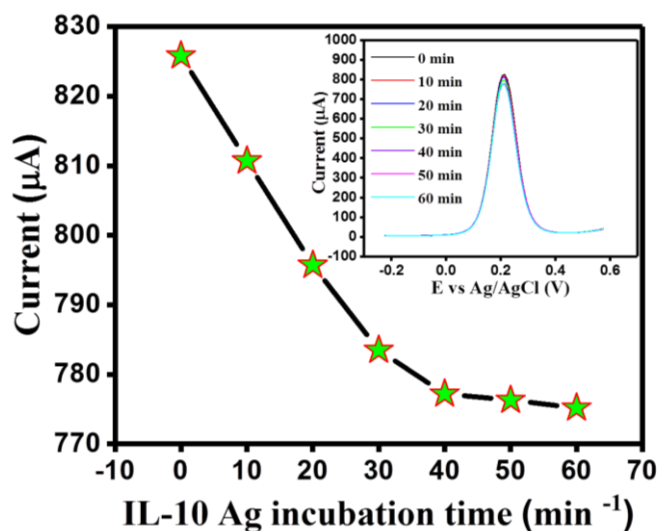


Figure S3. Optimization of immune reaction time in 10 mM PBS containing 10 mM $[\text{Fe}(\text{CN})_6]^{3-/4-}$ and 1 M KNO_3 solution; all measurements were repeated three times ($n = 3$).