

Supporting Information

RESULTS AND DISCUSSION

Electrochemical characterization of the adsorption of A10B scFv-RG3 onto PSS template

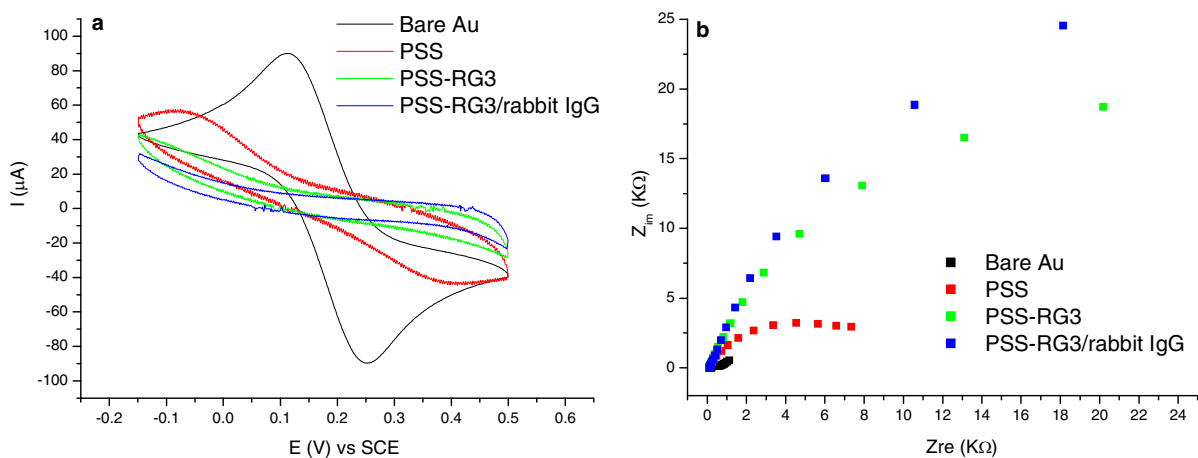


Figure S1. a): CVs of 1 mM $\text{K}_4\text{Fe}(\text{CN})_6/\text{K}_3\text{Fe}(\text{CN})_6$ in 0.1 M NaClO_4 on bare gold electrode (black), PSS (red), PSS/scFv-RG3 (green), and PSS/scFv-RG3 binding with rabbit IgG (blue) modified electrode. Scan rate, 100 mV/s. b): EIS Nyquist plots. Frequency range is 0.1 Hz-100 kHz. Bias potential equals to open circuit potential. AC amplitude is 10 mV.

PSS/scFv RG3 QCM sensor sensitivity and specificity

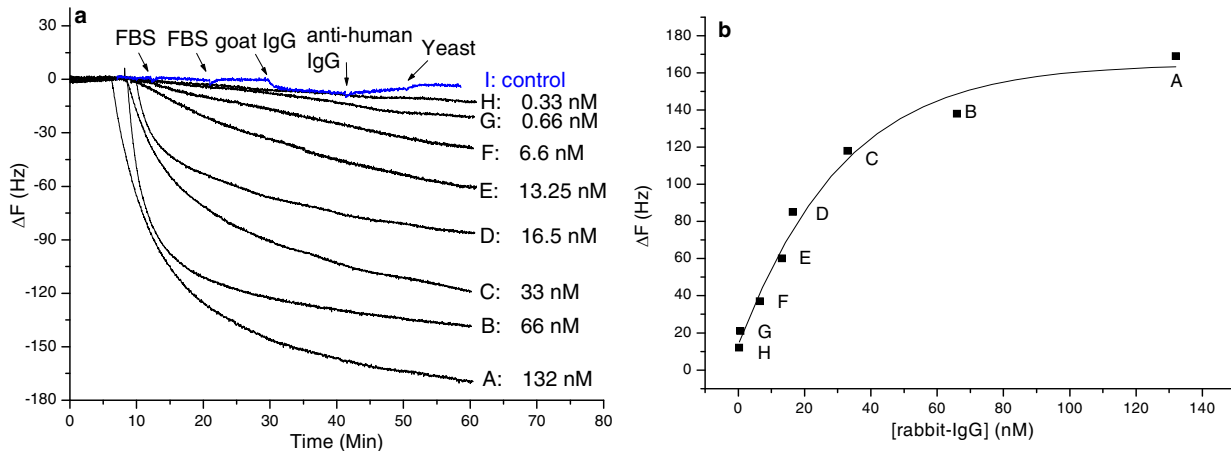


Figure S2 a): PSS/scFv-RG3 modified Au QCM electrodes were exposed to various concentrations of rabbit IgG (0.33 nM to 132 nM); Curve I negative controls (14 $\mu\text{g}/\text{mL}$ fetal bovine serum (FBS), 122 nM goat anti rabbit IgG Fab, 66 nM anti-human IgG, and 20 $\mu\text{g}/\text{mL}$ yeast.); b): Calibration curve, frequency change vs. Rabbit IgG concentration.