Supporting information for

High-Efficient Energy Funneling Based on Electrochemiluminescence Resonance Energy Transfer in Graded-Gap Quantum Dots Bilayers for Immunoassay

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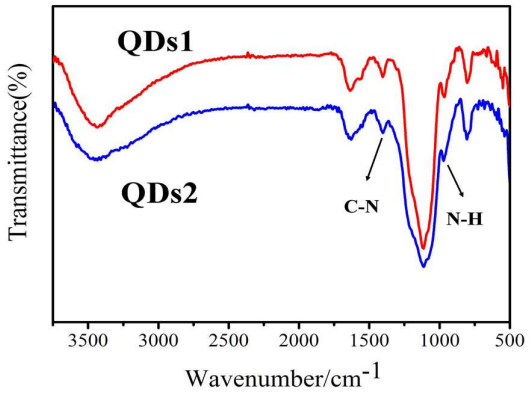

Figure S1. FTIR spectra of QDs1 and QDs2. The peaks at 1398 cm^{-1} and 968 cm^{-1} corresponds to the C-N group and N-H group, respectively.

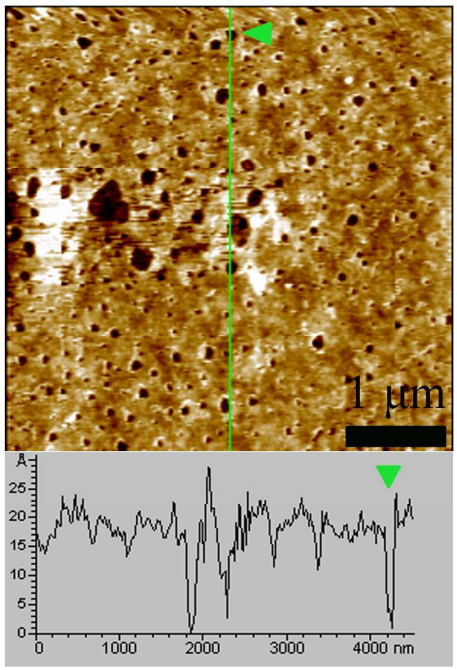

Figure S2. AFM images of chitosan modified gold electrode and the corresponding height profile along the green line. The result showed that CS film was uniformly distributed with topographic heights of about 2 nm.

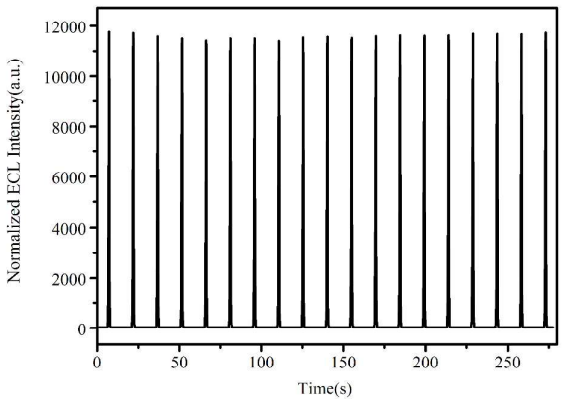

Figure S3. ECL responses of QDs1/QDs2-$S_2O_8^{2-}$ system obtained during a continuous potential scan between -1.5 and 0 V. Scan rate: 200 mV s^{-1}. The voltage of the photomultiplier tube was set at 600 V.

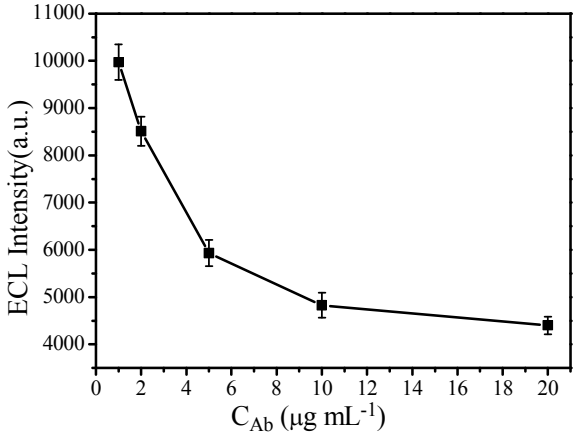

Figure S4. Effect of antibody concentration on ECL intensity of the immunosensor.

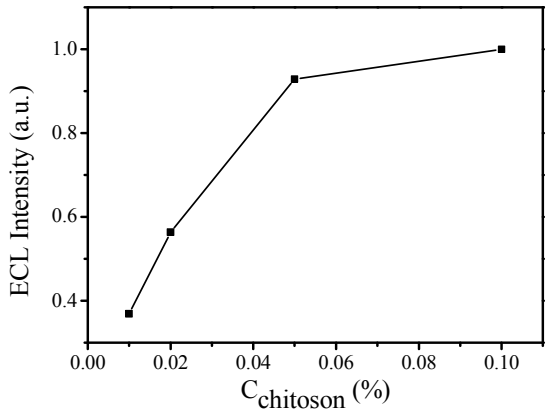

Figure S5. Effect of the concentration of chitosan on ECL intensity of the QDs modified electrode.

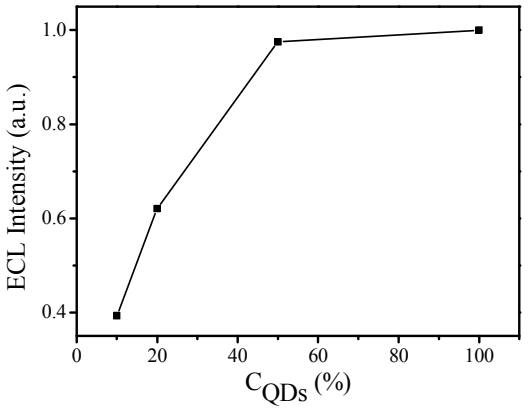

Figure S6. Effect of the concentration of QDs on ECL intensity of the QDs modified electrode.