Supporting information

Homogeneous electrogenerated chemiluminescence peptide-based

method for determination of troponin I

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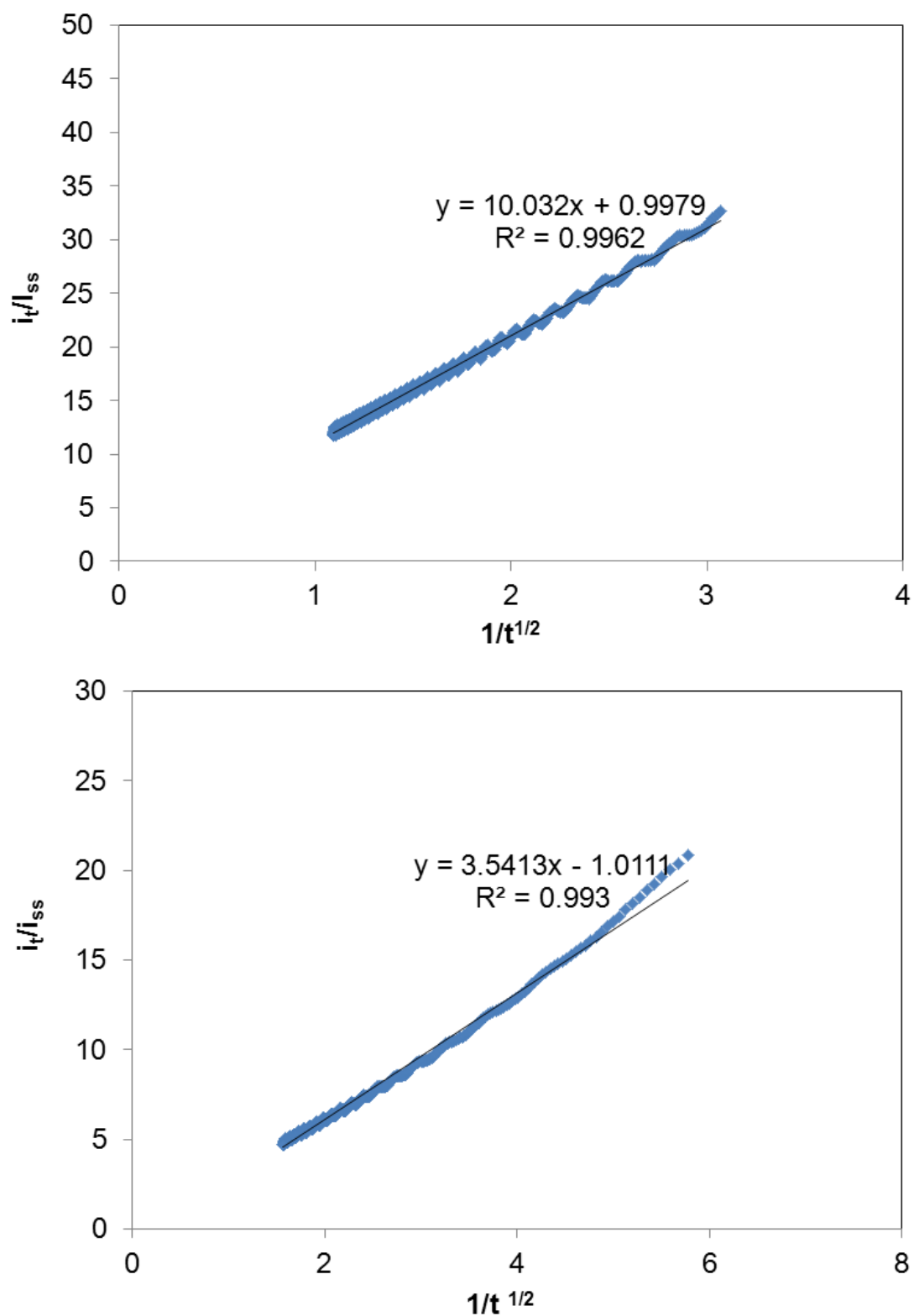E-mail addresses: honglanqi@snnu.edu.cn (H. L. Qi).

Figure S-1 Plot of the experimental ratio i_t/i_{ss} against the inverse square root of time in

0.1 M PBS with 10 μm radius Pt UME. (a) Oxidation at step potential $E_{SP} = +1.3$ V vs

SCE for 7.5×10^{-6} M Ru-peptide, (b) Oxidation at step potential $E_{SP} = +1.3$ V vs SCE

for 7.5×10^{-6} M Ru-peptide-protein conjugate.
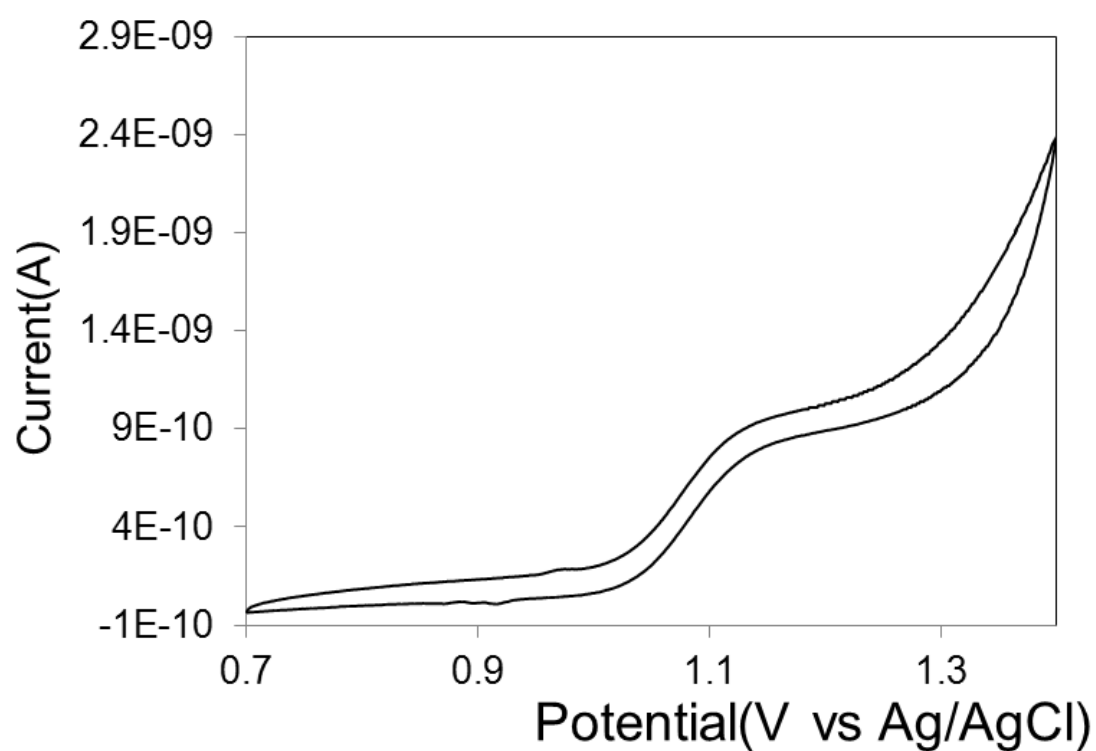

Figure S-2 Cyclic voltammogram of 1 mM Ru(bpy)$_2$(dcbpy)NHS in 0.1 M PBS with

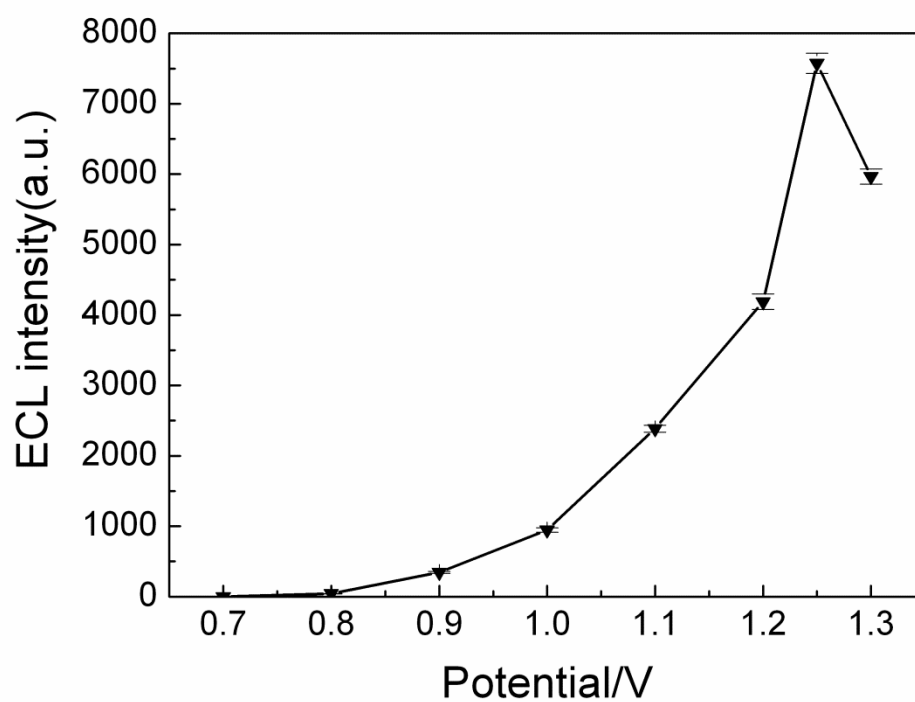10 μm radius Pt ultramicroelectrode. Scan rate = 50 mV/s.

Figure S-3 Dependence of the ECL intensity of 7.5×10^{-8} M ECL probe on applied potential. Experimental condition: binding time, 60 min; detection solution, 0.10 M PBS (pH 7.4) containing 50 mM TPA.
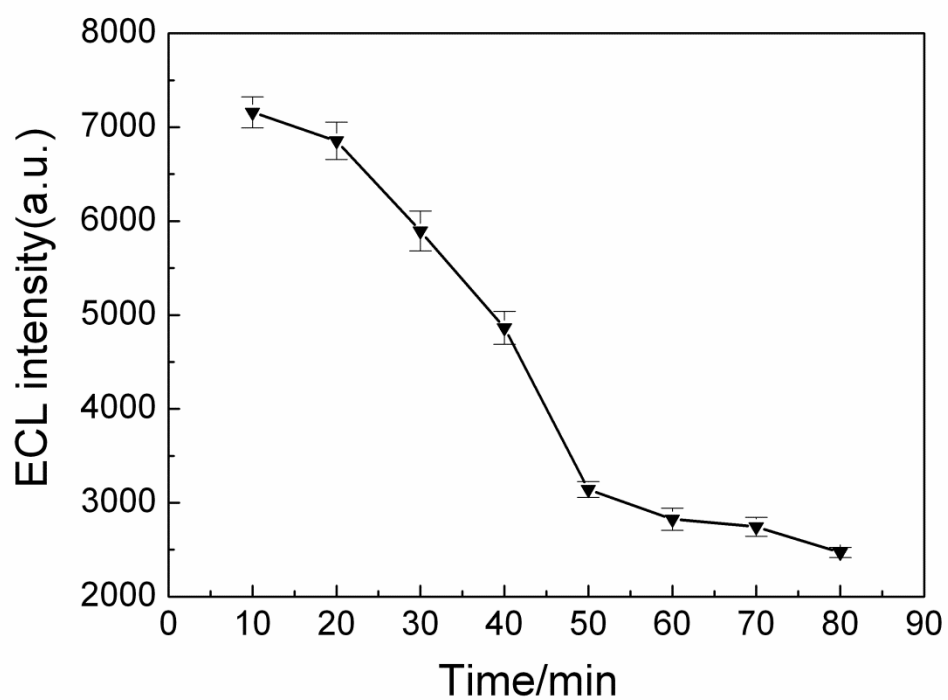
Figure S-4 Dependence of the ECL intensity of 7.5×10^{-8} M ECL probe on the binding

time with 3.9×10^{-8} g/mL TnI.

Experimental condition: applied potential, +1.25 V; detection solution, 0.10 M PBS

(pH 7.4) containing 50 mM TPA.