Supporting information

Homogeneous electrogenerated chemiluminescence peptide-based method for determination of troponin I

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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 $\mu$m radius Pt UME. (a) Oxidation at step potential $E_{SP} = +1.3$ V vs SCE for $7.5 \times 10^{-6}$ 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 $7.5 \times 10^{-8}$ 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 $7.5 \times 10^{-8}$ M ECL probe on the binding time with $3.9 \times 10^{-8}$ g/mL TnI.

Experimental condition: applied potential, +1.25 V; detection solution, 0.10 M PBS (pH 7.4) containing 50 mM TPA.