Supporting Information for

ECL Performance of Ruthenium *tris*-Bipyridyl Complexes Covalently Linked with Phenothiazine through Different Bridge

Shiguo Sun,[*a] Yang Yang,[a] Fengyu Liu,[b] Jiangli Fan,[a] Jan Kehr,[a,c] Licheng Sun,*[d] and Xiaojun Peng*[a]

[a] *State Key Laboratory of Fine Chemicals, Dalian University of Technology, 158 Zhongshan Road, Xigang District, Dalian 116012 , China,Fax & Tel: +86 411 39893906, E-mail: shiguo@dlut.edu.cn*

[b] *State Key Laboratroy of Fine Chemicals, School of Chemistry, Dalian University of Technology, 2 Linggong Road, Ganjingzi District, Dalian 116023, China*

[c] *Department of Physiology and Pharmacology, Pharmacological Neurochemistry, Karolinska Institutet, 171 77 Stockholm, Sweden*

[d] *Department of Chemistry, Organic Chemistry, Royal Institute of Technology(KTH), Teknikringen 30, 100 44 Stockholm, Sweden*

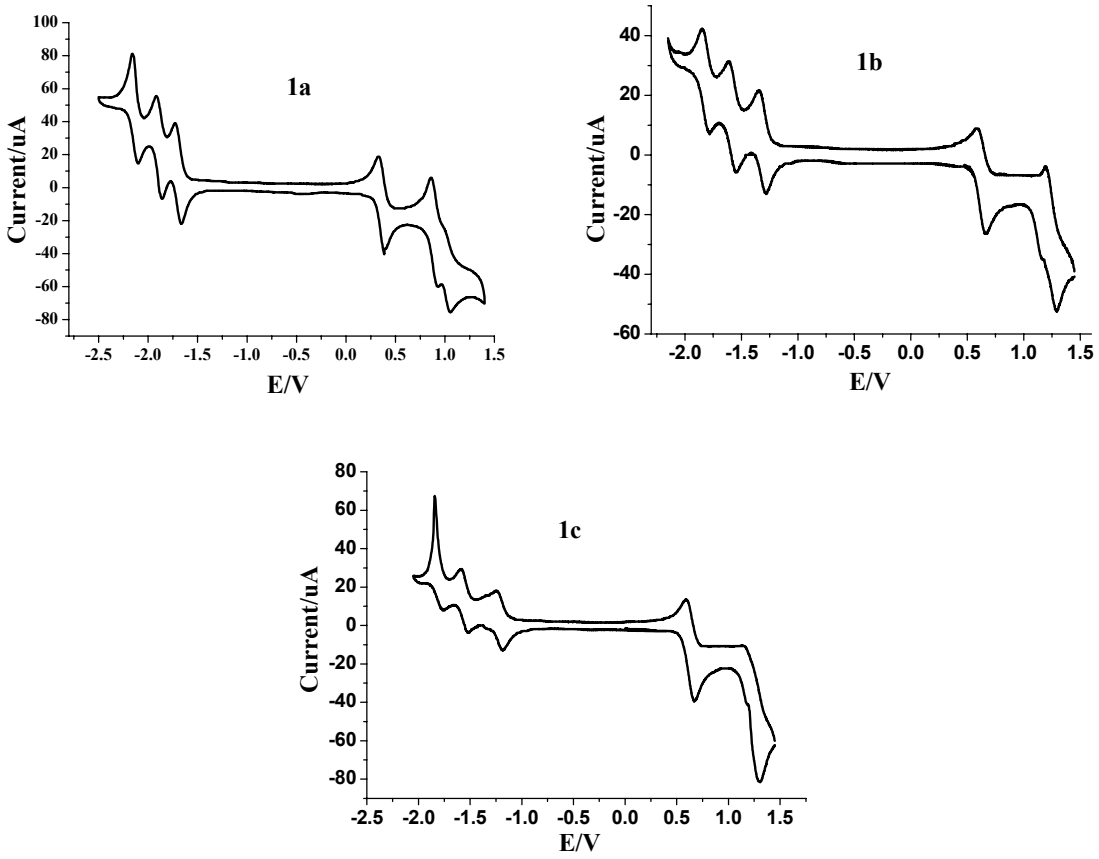

Figure S1. Cyclic voltammograms of complexes **1** alone in CH_3CN with 0.1 M $N(n\text{-}C_4H_9)_4PF_6$, Scan rate: v = 100 mV s^{-1}.

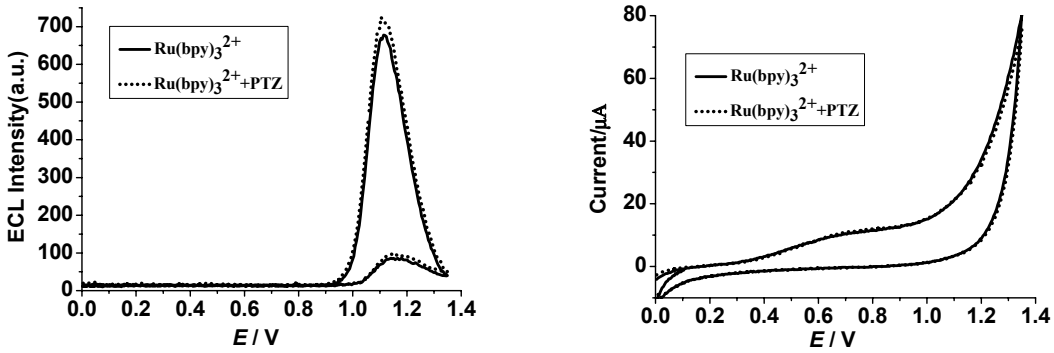

Figure S2 Cyclic ECL (left) and voltammetric curves (right) of 1 μM $Ru(bpy)_3^{2+}$ with 5 mM TPrA (solid) and 1 μM $Ru(bpy)_3^{2+}$+1 μM PTZ with 5 mM TPrA (dot) in 0.1 M phosphate buffer (pH = 7.5) at Pt electrode, Scan rate: 0.1 V/s.

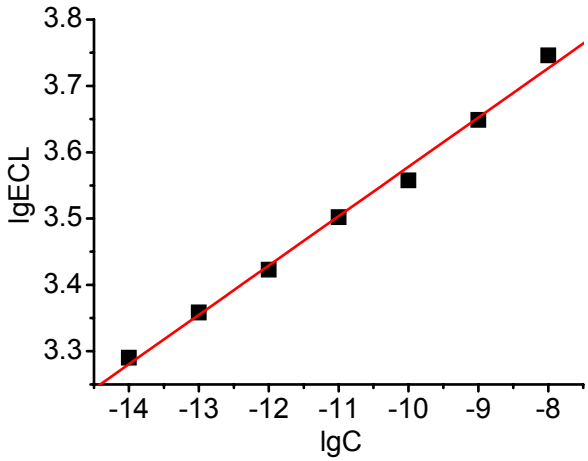

Figure S3 Dependence of the logarithmic plot of ECL versus the concentration of complex **1a** with 20 mM DBAE in 0.1 M phosphate buffer (pH = 7.5) at Au electrode.