The figures which were not showed in manuscript submitted are now as the following, and they are used as supplementary explanation materials.

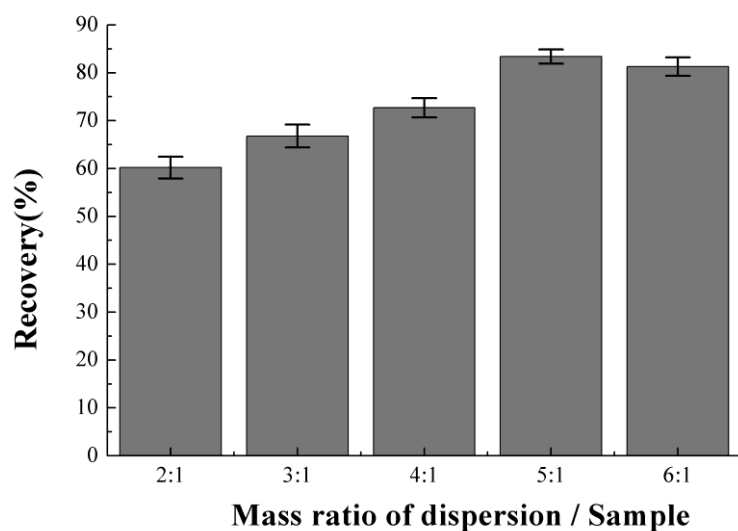1. *Effect of various mass ratios of dispersant to sample matrix on recovery*

Fig. S1 Effect of various mass ratios of dispersant to sample matrix on recovery
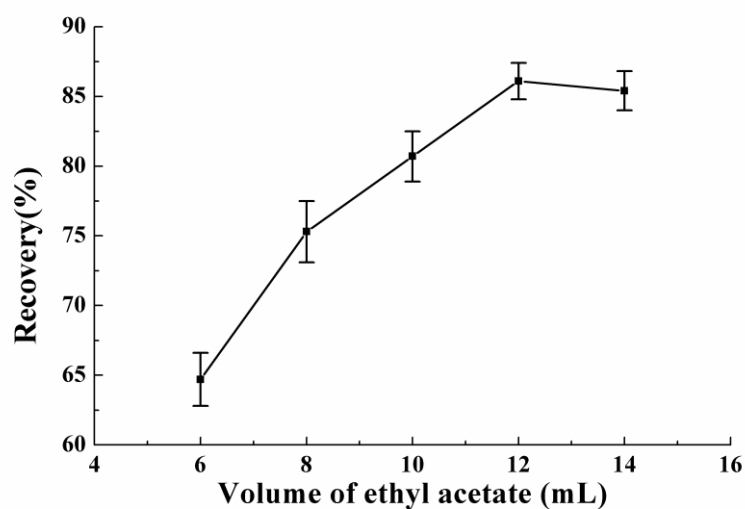
2. *Effect of ethyl acetate volume on recovery*

Fig. S2 Effect of ethyl acetate volume on recovery

3. *Effect of pH (A) and concentration (B) of Tris-HCl buffer on ECL intersity*
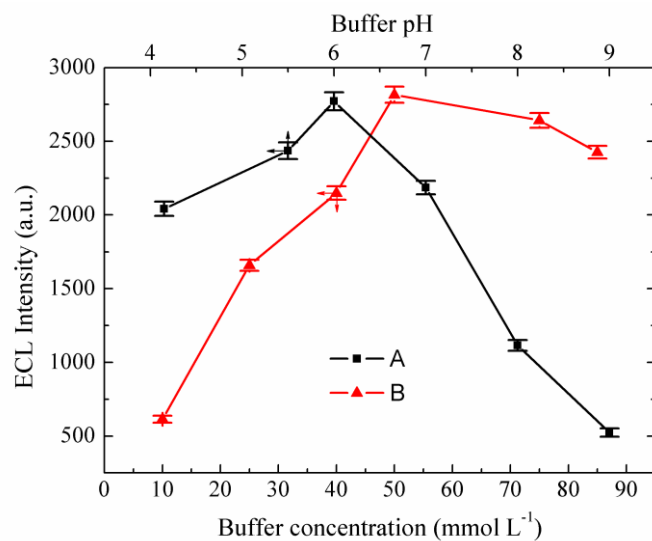
Fig. S3 Effect of pH (A) and concentration (B) of tris-HCl buffer on ECL intersity

Condition: separation voltage 12 kV, detection potential 1.17 V, electrokinetic injection 8 kV×8 s,

ECL solution 5 mmol L^{-1} Ru(bpy)$_3^{2+}$ with 50 mmol L^{-1} phosphate buffer at pH 8.5.