

**Highly sensitive fluorescent detection of glutathione and histidine based on the
Cu(II)-thiamine system**

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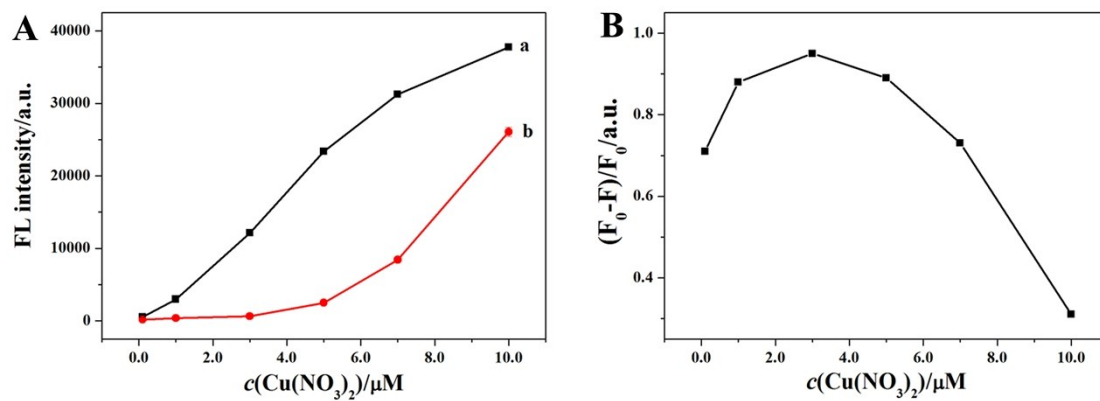


Figure S1 (A) The maximum emission intensity of Cu(II)-GSH system in the absence (a) and presence (b) of GSH (5.0 μM) as a function of $\text{Cu}(\text{NO}_3)_2$ concentration. (B) Effect of $\text{Cu}(\text{NO}_3)_2$ concentration on $(F_0-F)/F_0$. NaOH concentration: 44 mM; TH concentration: 0.1 mM; incubation temperature: 20 $^\circ\text{C}$; incubation time: 15 min.

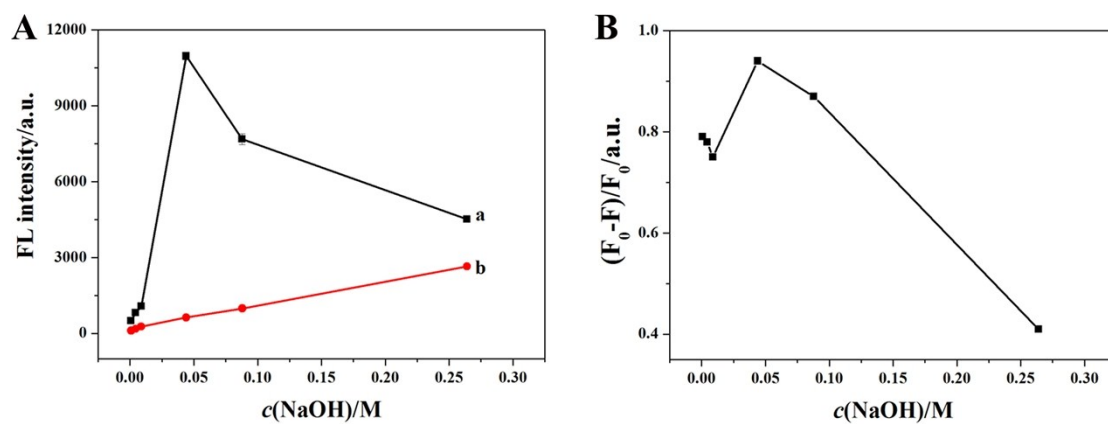


Figure S2 (A) Effect of NaOH concentration on maximum emission intensity of Cu(II)-GSH system in the absence (a) and presence (b) of GSH (5.0 μM). (B) The plot of $(F_0 - F)/F_0$ versus NaOH concentration. Cu²⁺ concentration: 3.0 μM; TH concentration: 0.1 mM; incubation temperature: 20 °C; incubation time: 15 min.

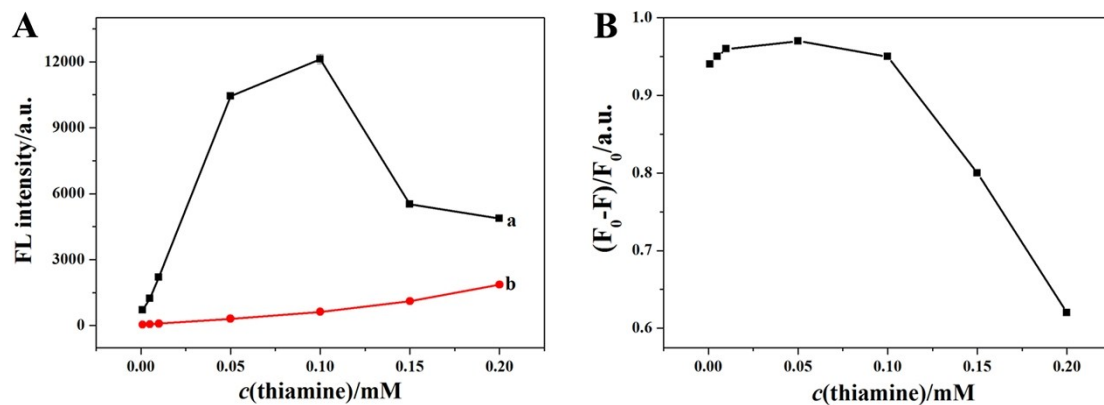


Figure S3 (A) Impact of TH concentration on the maximum emission intensity of Cu(II)-GSH system in the absence (a) and presence (b) of GSH (5.0 μM). (B) The plot of $(F_0 - F)/F_0$ versus TH concentration. NaOH concentration: 44 mM; Cu²⁺ concentration: 3.0 μM; incubation temperature: 20 °C; incubation time: 15 min.

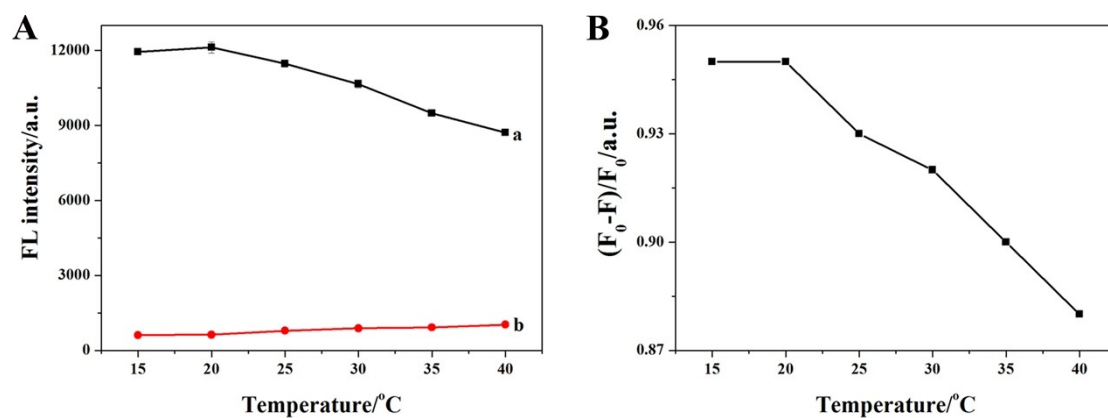


Figure S4 (A) Variation of maximum emission intensity of Cu(II)-GSH system in the absence (a) and presence (b) of GSH (5.0 μM) as a function of incubation temperature. (B) Impact of incubation temperature on $(F_0 - F)/F_0$. NaOH concentration: 44 mM; Cu²⁺ concentration: 3.0 μM; TH concentration: 0.1 mM; incubation time: 15 min.

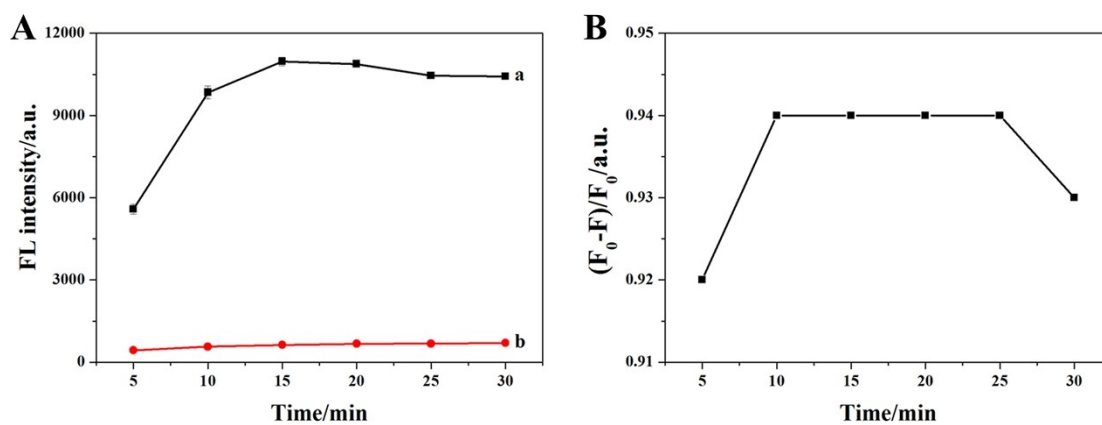


Figure S5 (A) Variation of maximum emission intensity of Cu(II)-GSH system in the absence (a) and presence (b) of GSH (5.0 μM) as a function of incubation time. (B) Effect of incubation time on $(F_0 - F)/F_0$. NaOH concentration: 44 mM; Cu^{2+} concentration: 3.0 μM ; TH concentration: 0.1 mM; incubation temperature: 20 $^\circ\text{C}$.