Supporting Information

A Switch-Based Biosensor for the Detection and Imaging of Hg(II) in vivo by Glutathione Functionalized Gold Nanoparticles

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Captions of Supporting Figures

Figure S1: Speculation diagram of the reaction process between Rh6G2 and GSH.

Figure S2： Mass spectra of GSH-Rh6G2. The fluorescent substance of GSH-Rh6G2 was separated, which proved that m/z is 415 as RGCOOH.

Figure S3: Fluorescence spectra of GSH-RH6G2 in weakly acidic environment without pH adjustment (black curve) and in neutral environment with pH adjustment (red curve).

Figure S4: Fluorescence emission spectra of the GNPs-GSH-Rh6G2 under different excitation wavelengths.

Figure S5: Fluorescence spectra of molecular saturation test of GNPs-GSH-RH6G2.

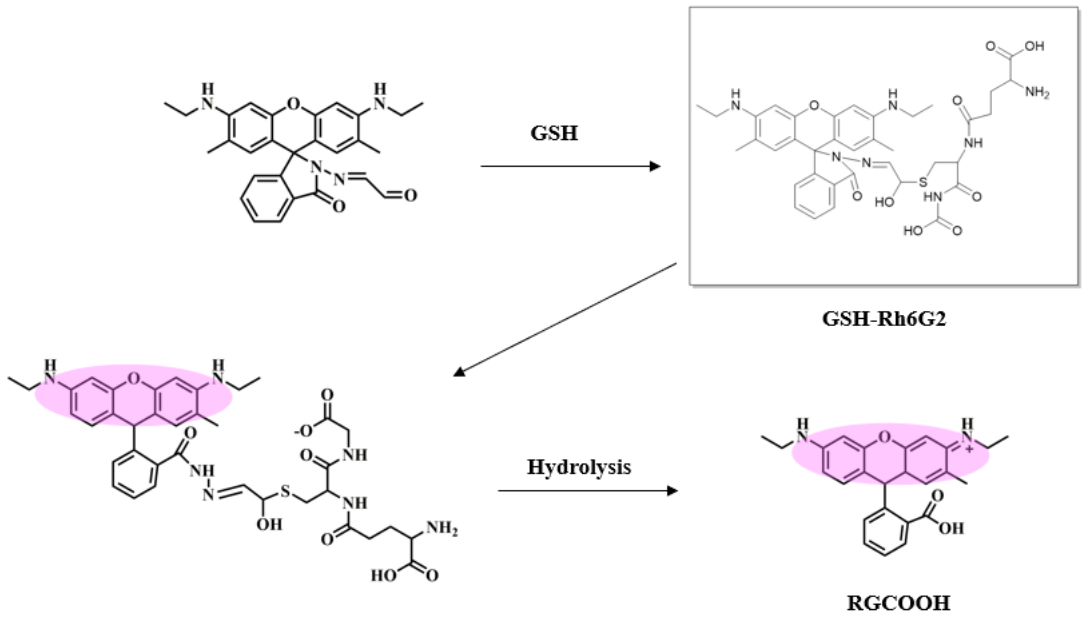

Figure S1: Speculation diagram of the reaction process between Rh6G2 and GSH.

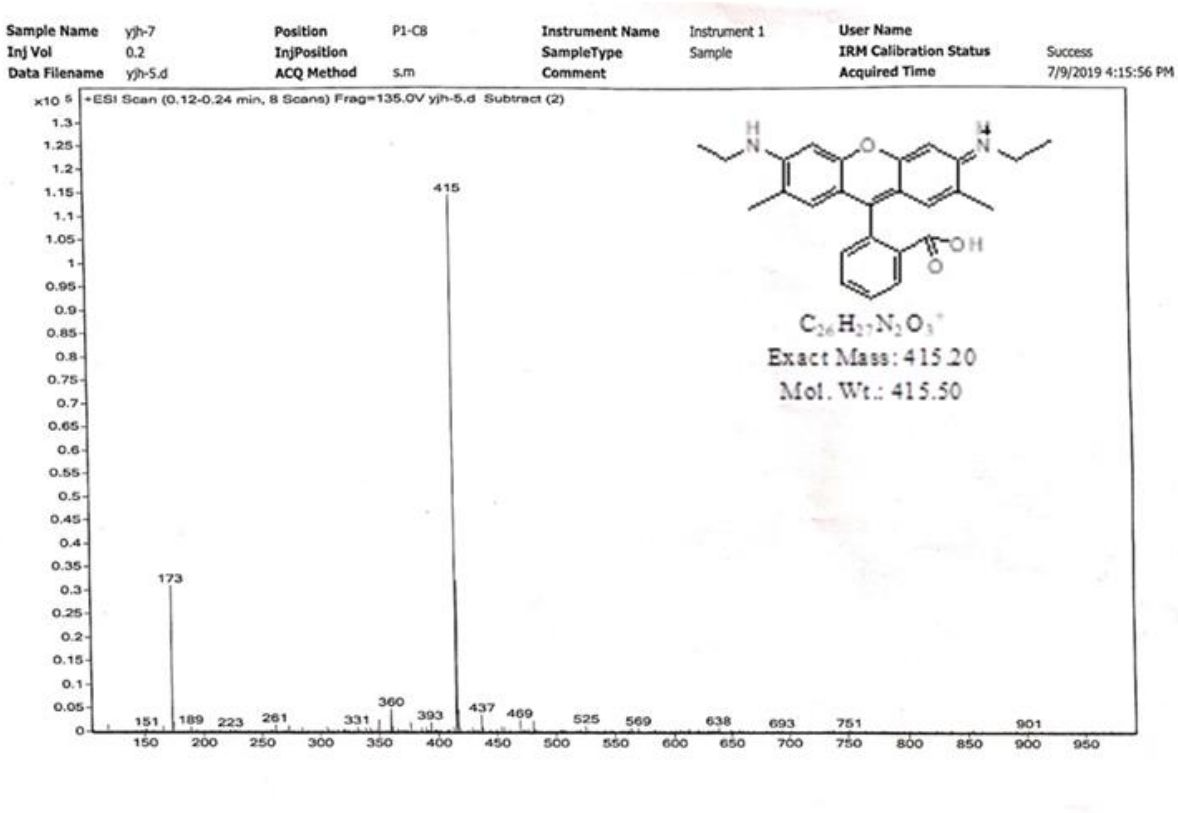

Figure S2： Mass spectra of GSH-Rh6G2. The fluorescent substance of GSH-Rh6G2 was separated, which proved that m/z is 415 as RGCOOH.

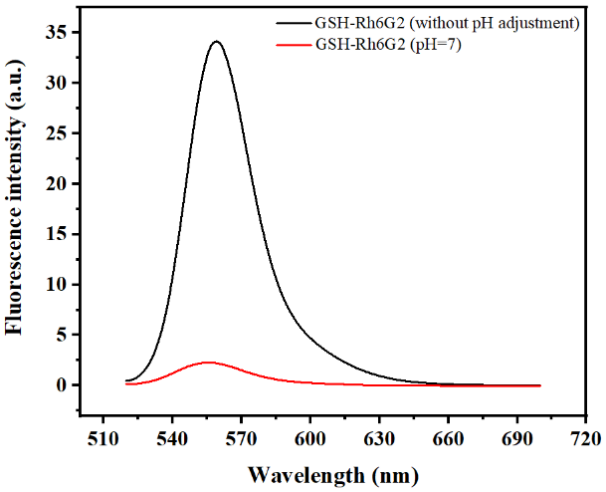

Figure S3: Fluorescence spectra of GSH-RH6G2 in weakly acidic environment without pH adjustment (black curve) and in neutral environment with pH adjustment (red curve).

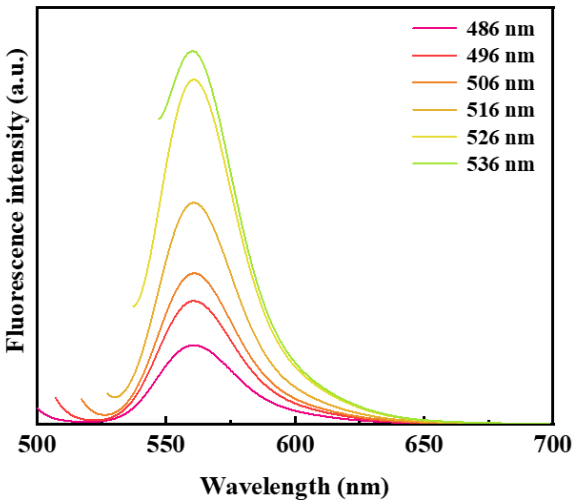

Figure S4: Fluorescence emission spectra of the GNPs-GSH-Rh6G2 under different excitation wavelengths.

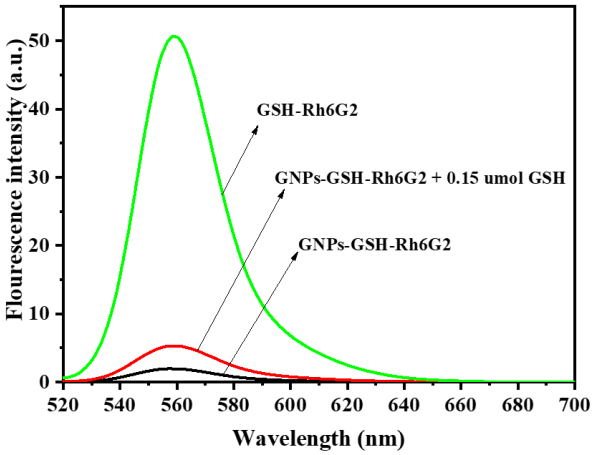

Figure S5: Fluorescence spectra of GNPs-GSH-RH6G2

References:

1. Li, H.; Fan, J.; Wang, J.; Tian, M.; Du, J.; Sun, S.; Sun, P.; Peng, X. *Chem. Commun.* **2009**, 39, 5904–5906. doi: 10.1039/b907511a