Supporting Information

Electrochemical Detection of Glutathione Using Redox Indicators

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Figure S-1. Cyclic voltammograms detailing the response of 1.0×10^{-3} M **1** before (solid line) and after (dashed line) the addition of CYS (1.0×10^{-2} M) in 70:30 MeOH/H₂O (0.050 M phosphate buffer, pH 7.3) solution, v = 0.1 V·s⁻¹. Arrows indicated the direction of the voltammetric scan.



Figure S-2. Cyclic voltammetric response of 1.0×10^{-3} M **2** before and after the addition of GSH, CYS, and HCY (1.0×10^{-2} M each) in 70:30 MeOH/H₂O (0.050 M phosphate buffer, pH 7.3) solution, v = 0.1 V·s⁻¹.



Figure S-3. Cyclic voltammetric response of 1.0×10^{-3} M **3** before and after the addition of GSH, CYS, and HCY (1.0×10^{-2} M each) in 70:30 MeOH/H₂O (0.050 M phosphate buffer, pH 7.3) solution, v = 0.1 V·s⁻¹.



Figure S-4. Cyclic voltammograms detailing the response of 1.0×10^{-3} M **2** upon addition of increasing amounts of GSH (0–10 eq) in 70:30 MeOH/H₂O (0.050 M phosphate buffer, pH 7.3) solution, v = 0.1 V·s⁻¹.



Figure S-5. Cyclic voltammetric responses of 1.0×10^{-3} M **3**, the chemically synthesized **3**-GSH adduct, and the electrochemically generated **3**-GSH and **3**-(GSH)₂ adducts in 70:30 MeOH/H₂O (0.050 M phosphate buffer, pH 7.3) solution, v = 0.1 V·s⁻¹. The behavior of **3** in the presence of 5 eq and 10 eq of GSH is very similar to indicator **1** in Figures 2 and 3.