Supporting Information

Silver nanoprism-based paper as ratiometric sensor for extending biothiol detection in serum

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Supplementary materials:

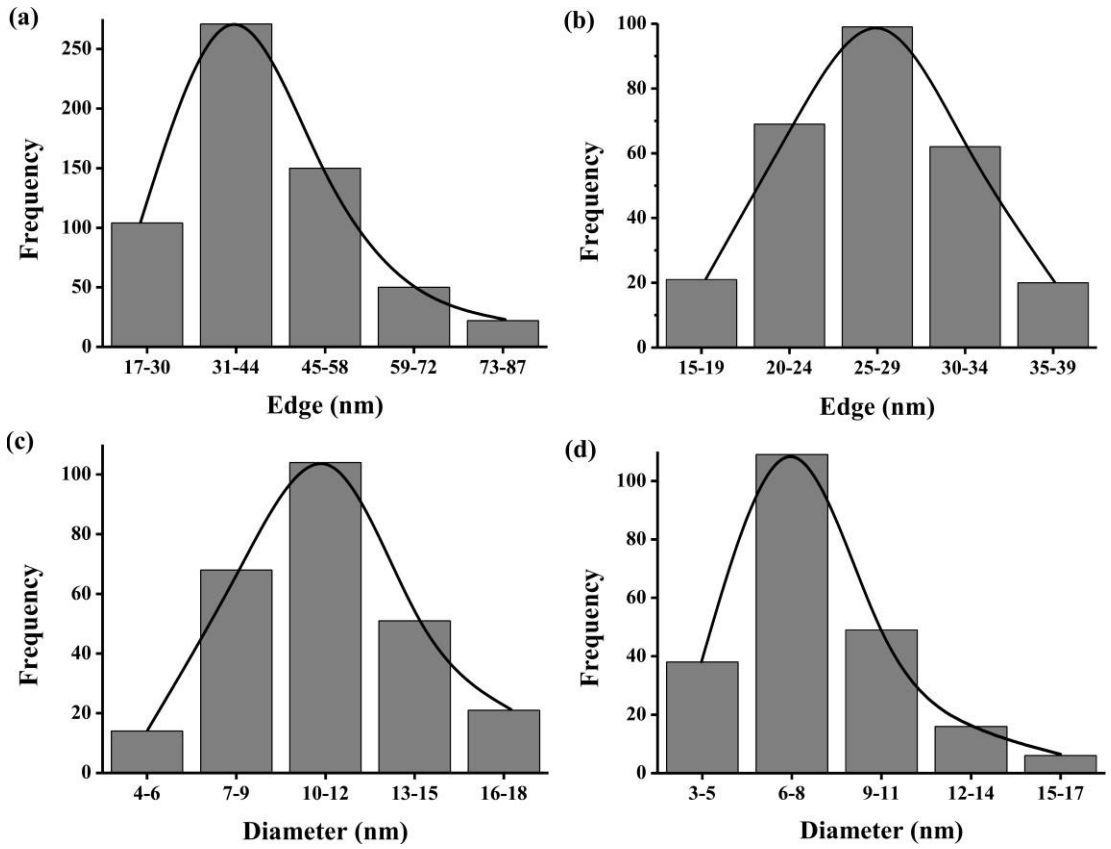

Figure S1 The histogram analysis of the (a) AgP, (b) **AgP-DTNB**, (c) nanodisk, and (d) NP.

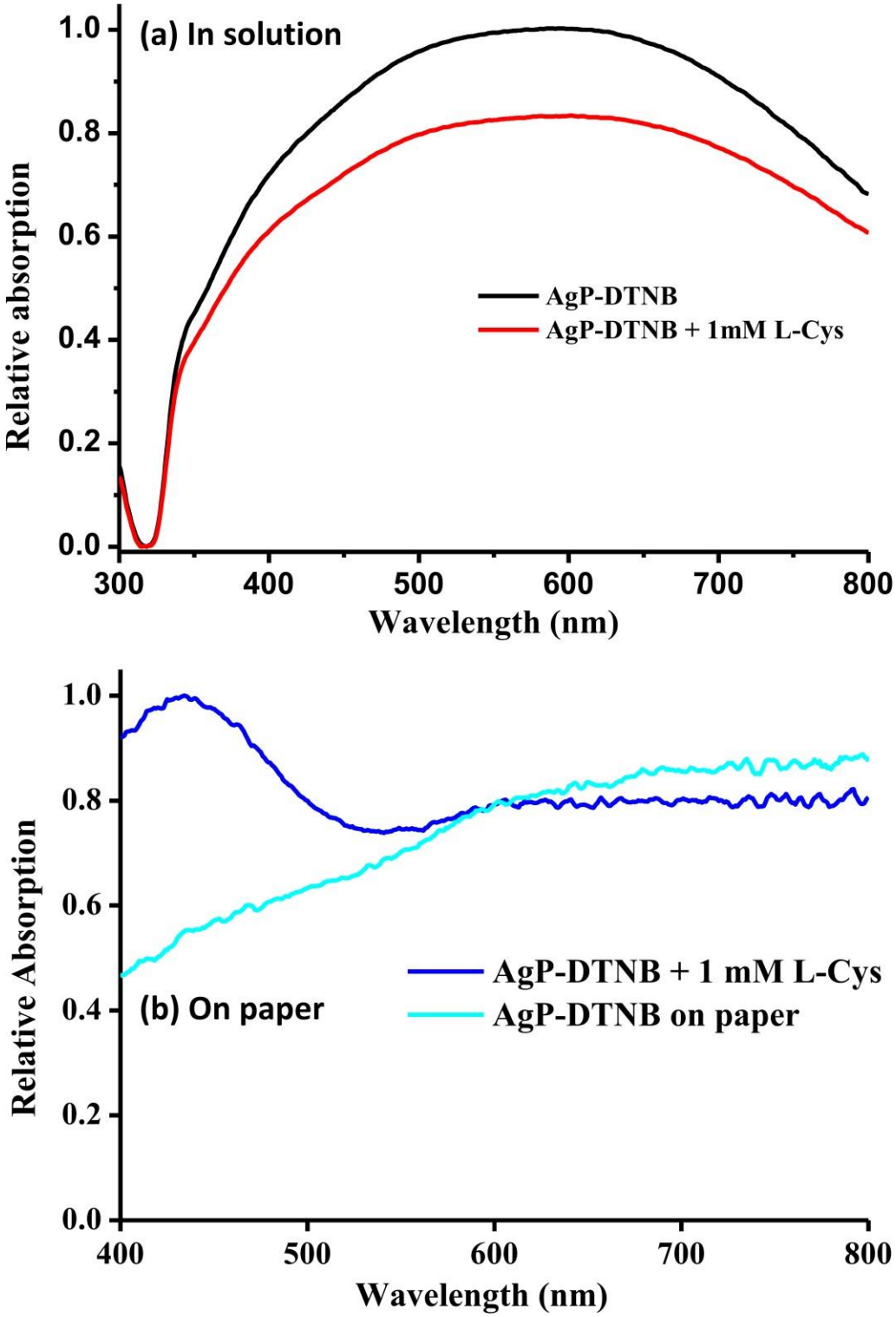

Figure S2. The absorption spectra of **AgP-DTNB** in buffer solution and on paper upon addition of 1 mM L-Cys (10 μL).

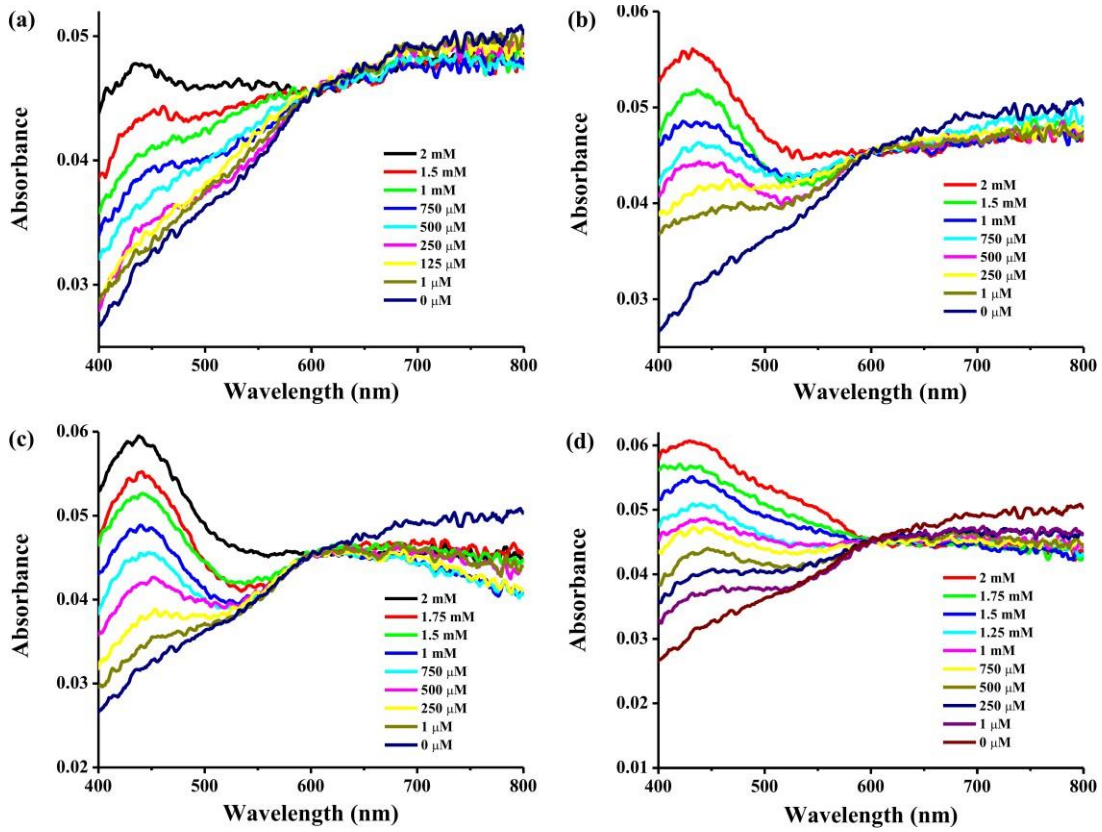

Figure S3. Relative absorbance of paper-based sensor upon addition of different concentrations of (a) GSH, (b) NAC, (c) DTE, and (d) Hcy.

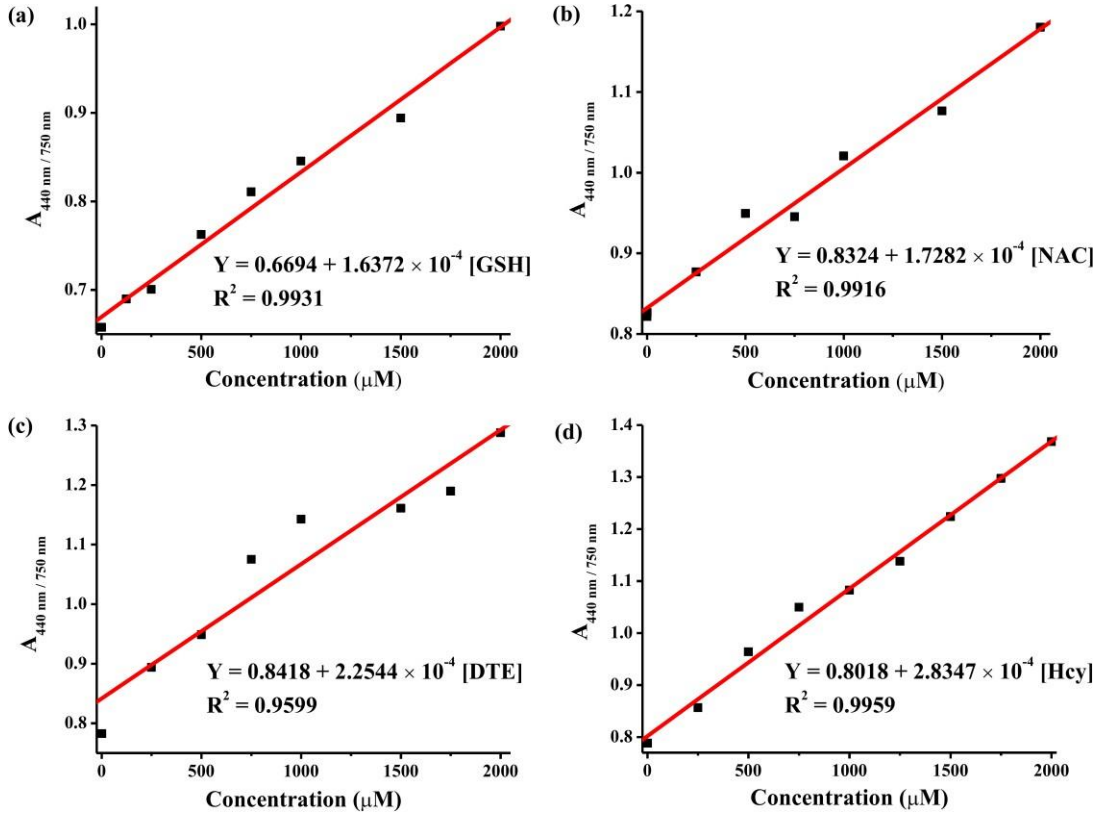

Figure S4 The absorbance ratio of $A_{440\ nm/750\ nm}$–different biothiols (a) GSH, (b) NAC, (c) DTE, and (d) Hcy concentration calibration curve obtained for the paper-based sensor.

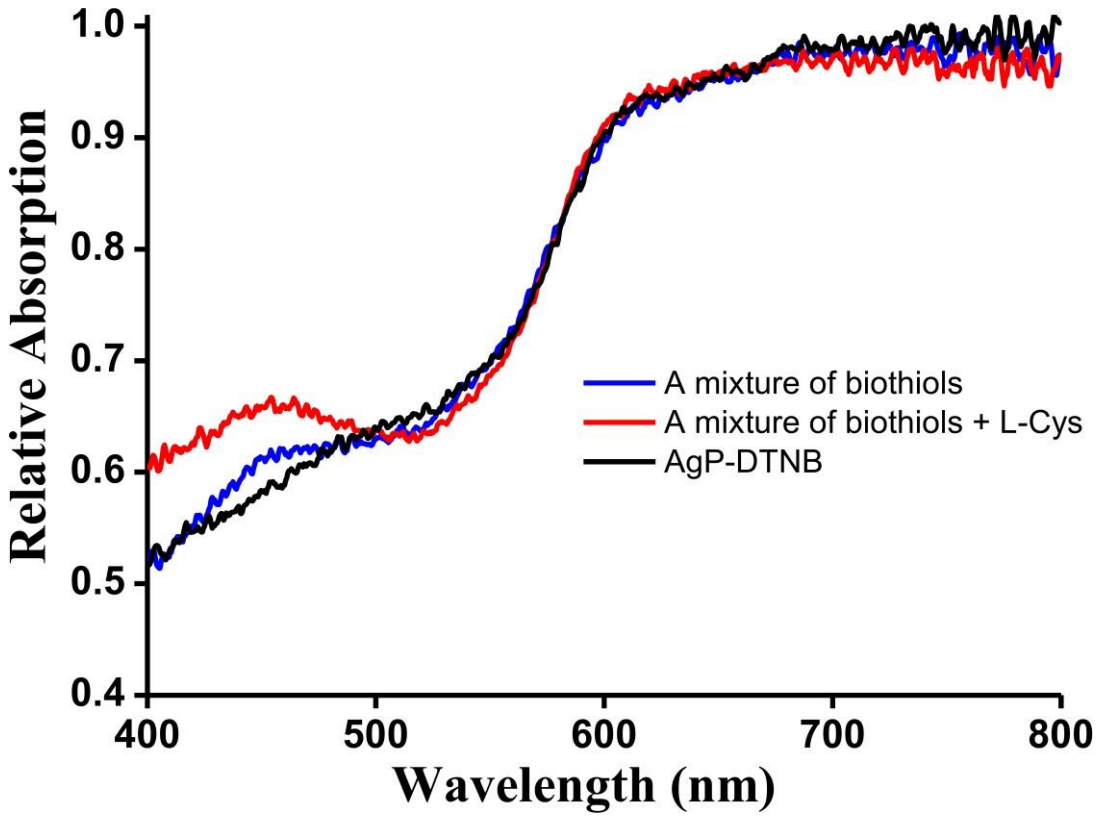

Figure S5 Absorption spectra of **AgP-DTNB** on paper upon addition of a mixture of other biothiols (GSH, NAC, DTE, and Hcy with 1 μM) and L-Cys (1 μM).

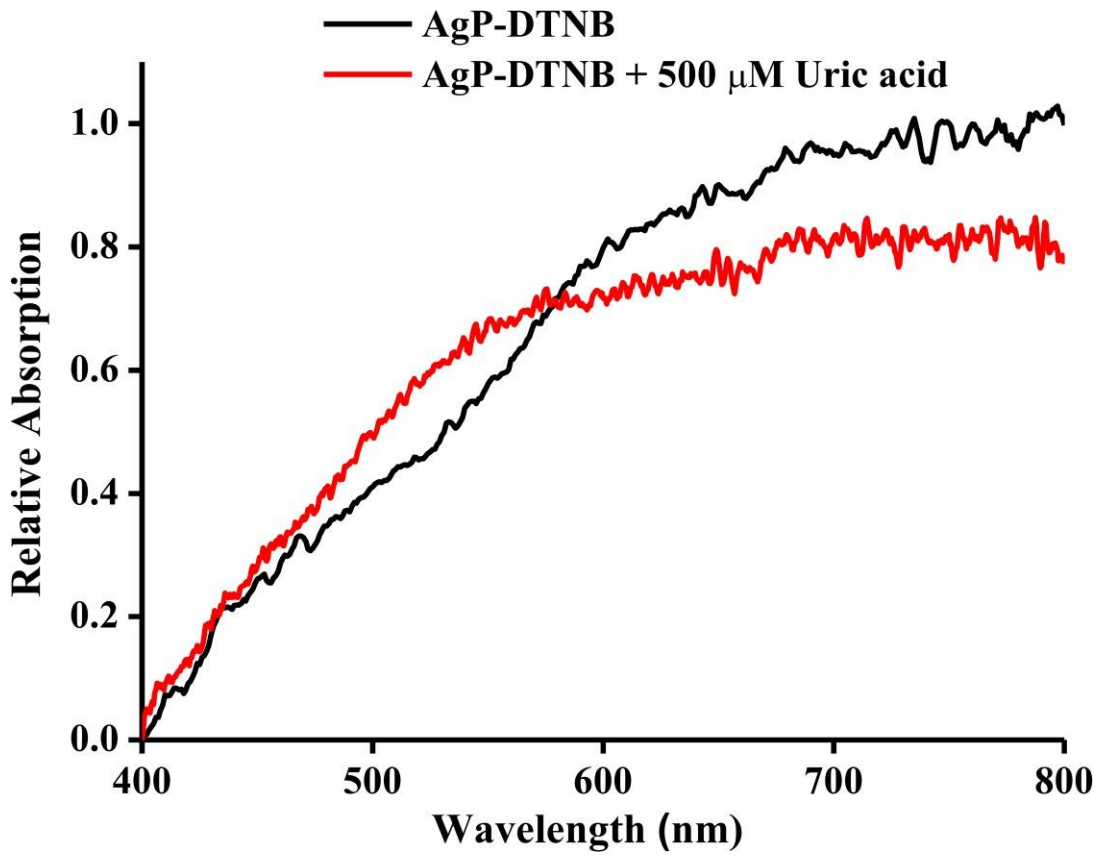

Figure S6 Absorption spectra of **AgP-DTNB** on paper upon addition of 500 μM uric acid (10 μL).

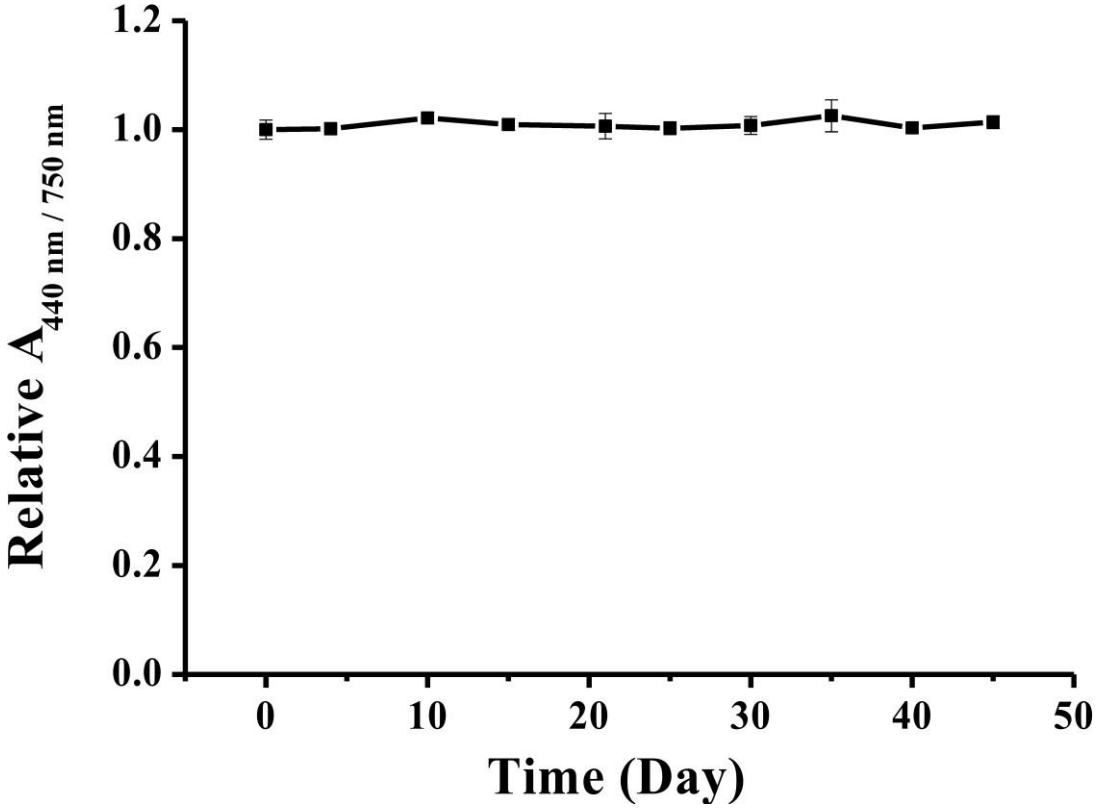

Figure S7 Storage stability of the sensor.

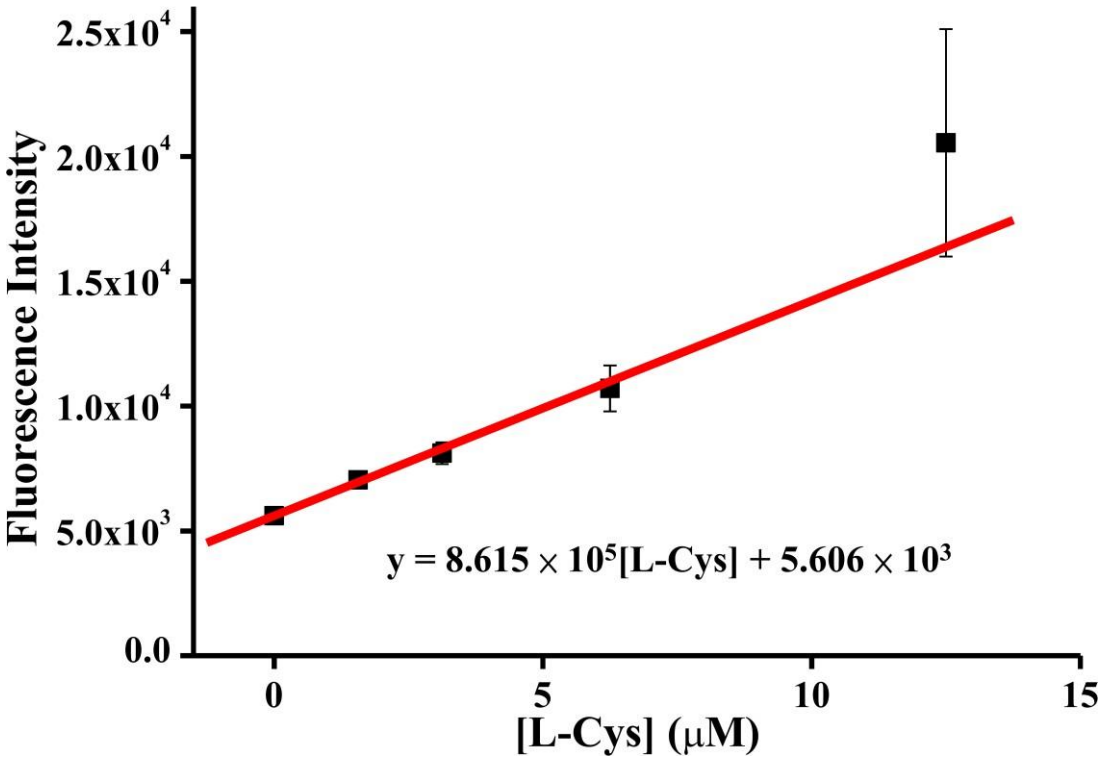

Figure S8 Calibration curve of serum sample constructed by the commercial fluorescence assay kit.