Electronic Supplementary Information

Antibody–biotemplated HgS Nanoparticles: Extremely Sensitive Labels for Atomic Fluorescence Spectrometric Immunoassay

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**Fig. S1** The effect of carrier gas flow rate (a), shielded gas flow rate (b), negative high voltage (c), and sampling time (d) on the fluorescence signal, with 5 ng mL$^{-1}$ Hg$^{2+}$ solution.
Fig. S2 (a) The effect of potassium borohydride concentration on the fluorescence signal, with 5 ng mL\(^{-1}\) Hg\(^{2+}\) solution; (b) the effect of potassium hydroxide concentration on the fluorescence signal, with 5 ng mL\(^{-1}\) Hg\(^{2+}\) solution; and (c) the effect of hydrochloric acid concentration on the fluorescence signal, with 5 ng mL\(^{-1}\) Hg\(^{2+}\) solution.
Fig. S3 Calibration curve of mercury standard solution by CVG–AFS. The concentrations of HgCl$_2$ were 0.05, 0.1, 1, 2, 5, 10, and 20 ng mL$^{-1}$, respectively.