Supplementary information:

Silver-Ion-Mediated Mg²⁺-dependent DNAzyme activity for amplified fluorescence detection of cysteine

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Figure S1. Secondary structures of Mgzyme, Mgzyme-Ag⁺ complex 1 and Mgzyme-Ag⁺ complex 2. The red nucleotides were the highly-conserved nucletedes of Mgzyme.



Figure S2. Fluorescence intensity of the CAMB system under different assay conditions (a) MB+Znzyme+Zn²⁺; (b) MB+Znzyme+Zn²⁺+Ag⁺; (c) MB+Mgzyme+Mg²⁺; (d) MB+Mgzyme +Mg²+Ag⁺; The concentration of MB substrate was 100 nM, the concentrations of Mgzyme and Znzyme were 100 nM, respectively. The concentration of Ag⁺ was 1 μ M.



Figure S3. The effect of Mg^{2+} concentration on the fluorescence response of the sensing system. The concentrations for MB substrate and Mgzyme were 100 nM and 50 nM, respectively. F₀ and F are the fluorescence intensity of the sensing system before and after the treatment of 2.5 μ M Cys, respectively.