

## Electronic Supplementary Material

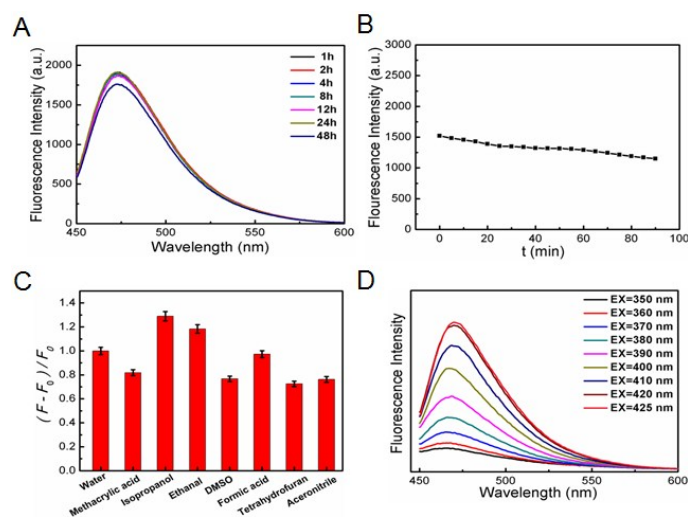
*For*

### Synthesis of dopamine-mediated Cu nanoclusters for sensing and fluorescent coding

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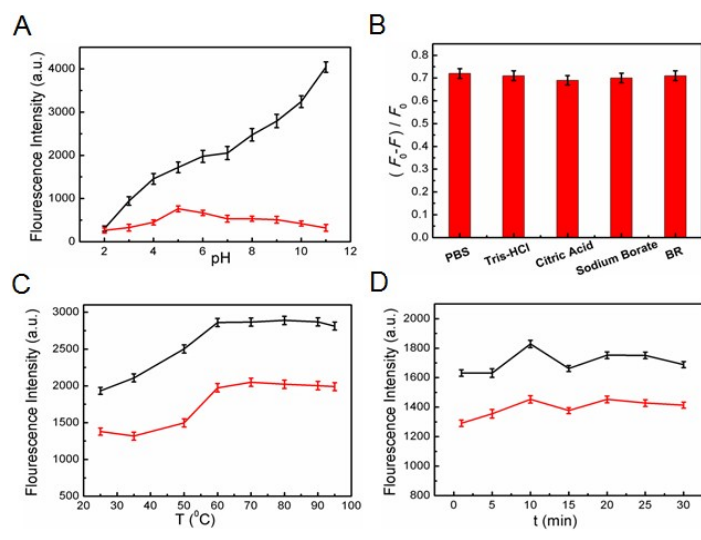
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#### Figures

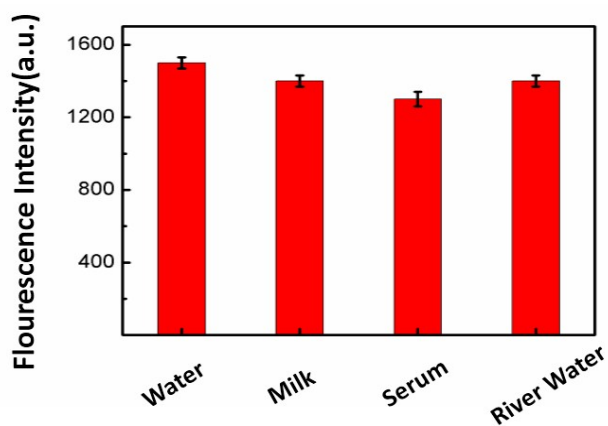


**Fig. S1** (A) Fluorescence intensity of CuNCs exposed to UV light for different hours; (B) Time-dependence of fluorescence intensity at 480 nm ( $\lambda_{ex}=425$  nm) of CuNCs; (C) Emission spectra of CuNCs for varying excitation wavelengths; (D) Effect of different organic solvents on CuNCs ( $F$  represented the fluorescence intensity of the CuNCs in various of organic solvents, and  $F_0$  as CuNCs in water).

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**Fig. S2** (A) Influence of pH on the fluorescence intensities of CuNCs in the absence (black) and presence (red) of TC; (B) The  $(F_0 - F) / F_0$  values in five different buffers ( $F_0$  and  $F$  represent the fluorescence intensities of CuNCs in the absence and presence of TC, respectively); (C, D) Optimization of incubation temperature (25  $^{\circ}\text{C}$ , 35  $^{\circ}\text{C}$ , 45  $^{\circ}\text{C}$ , 55  $^{\circ}\text{C}$ , 65  $^{\circ}\text{C}$ , 75  $^{\circ}\text{C}$ , 85  $^{\circ}\text{C}$ , 98  $^{\circ}\text{C}$ ) and time (5 min, 10 min, 15 min, 20 min, 30 min) for detection of TC successively.



**Fig. S3** The stability of CuNCs for real samples

**Table S1** Zeta potentials of CuNCs in the presence and absence of TC

Samples	CuNCs	CuNCs+TC
Zeta / mV	-36.31±2.14	-31.23±1.98