

**Electronic Supplementary Information (ESI)**  
**for**  
**Poly(thymine)-templated fluorescent copper nanoparticles**  
**for label-free detection of N-acetylcysteine in pharmaceutical**  
**samples**

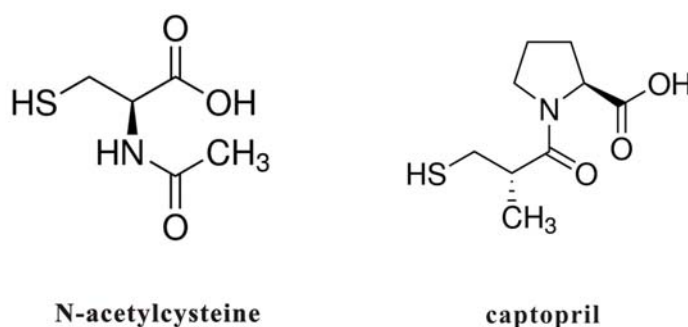
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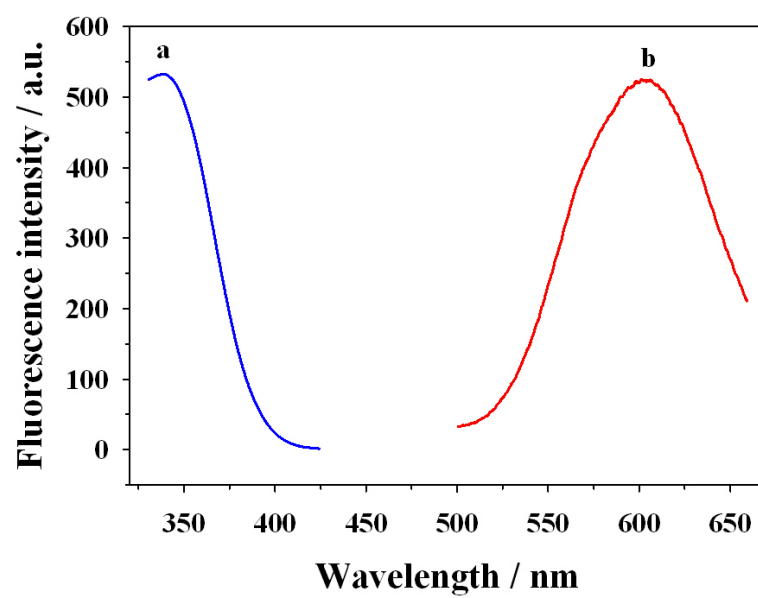
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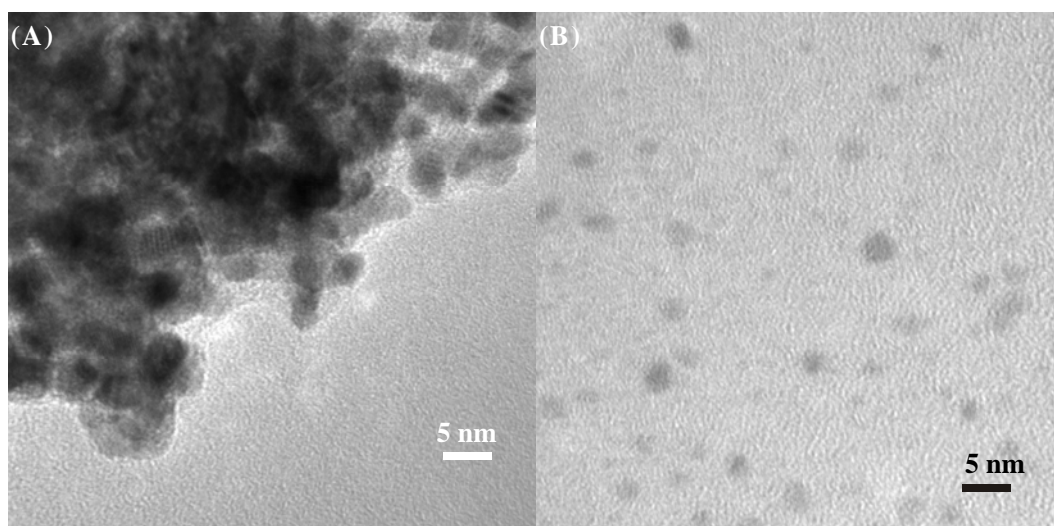
E-mail address: wanghaibohn@163.com (H.-B. Wang); oulijuanann@aliyun.com  
(L.-J. Ou).



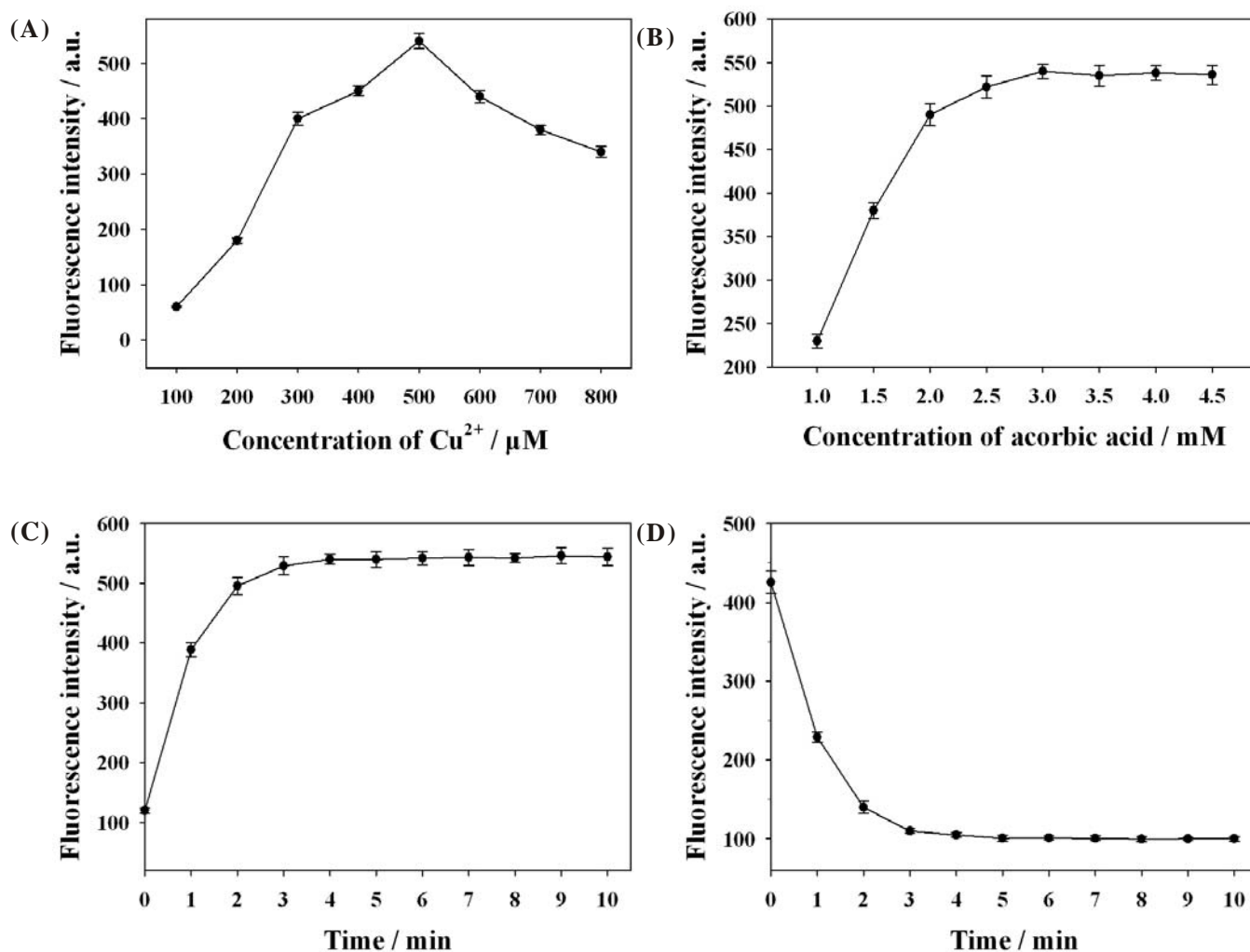
**Fig. S1** The chemical structure of N-acetylcysteine (NAC) and captopril.



**Fig. S2** Fluorescence excitation (a) and emission (b) spectra of the poly T templated copper nanoparticles.



**Fig. S3** (A) Typical TEM image of poly T-templated Cu NPs. (B) TEM image of poly T-templated Cu NPs in the presence of 100  $\mu$ M NAC.



**Fig. S4** (A) The effect of  $\text{Cu}^{2+}$  concentration on the fluorescence intensity of poly T templated Cu NPs. (B) The effect of ascorbic acid concentration on the fluorescence intensity of the poly T templated Cu NPs. (C) The effect of incubation time of ascorbic acid on the fluorescence intensity of the poly T templated Cu NPs. (D) The effect of incubation time of NAC on the fluorescence intensity of the poly T templated Cu NPs.