

## Supporting Information

### **Double strand DNA-templated copper nanoclusters as a novel fluorescent probe for label-free detection of rutin**

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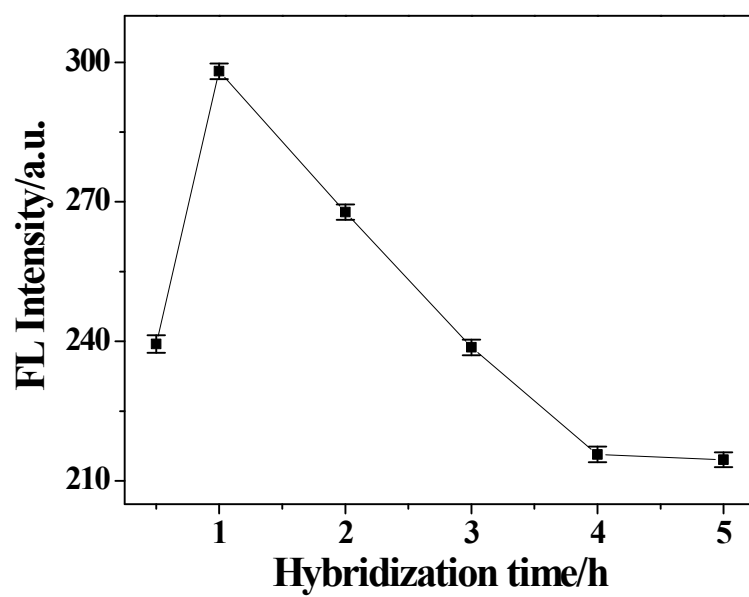
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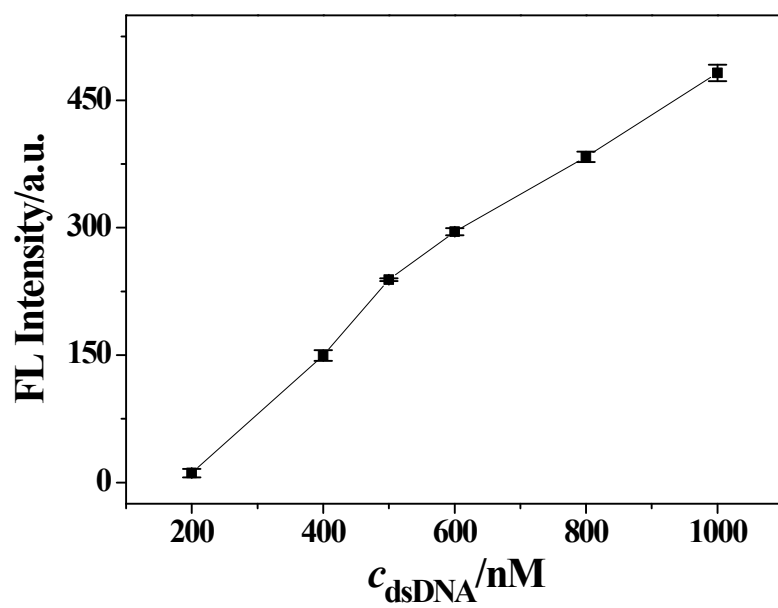
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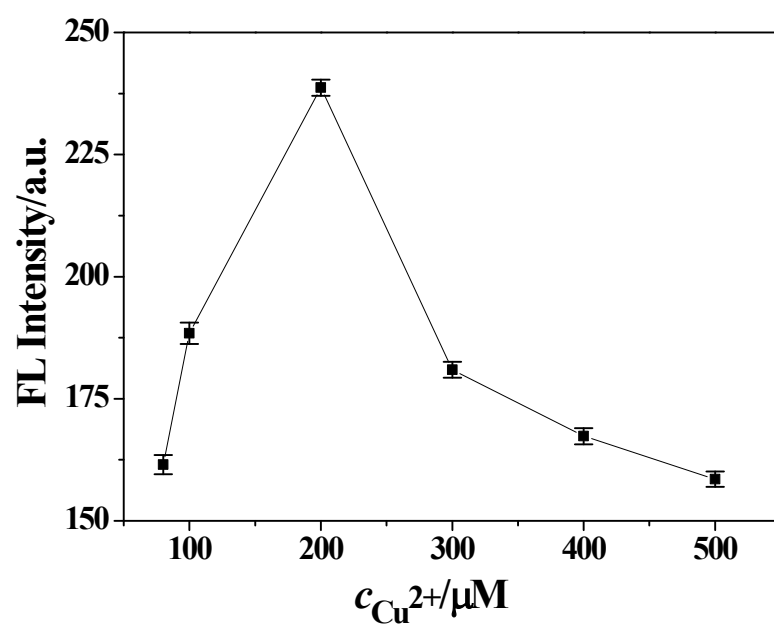
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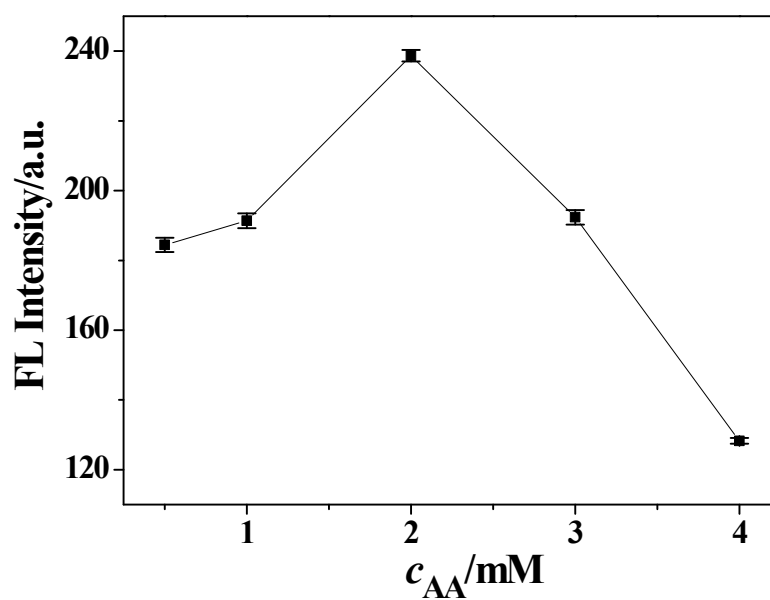
**Fig. S1** Effect of hybridization time of DNA1 and DNA2 on the fluorescent intensity of dsDNA-CuNCs probe.



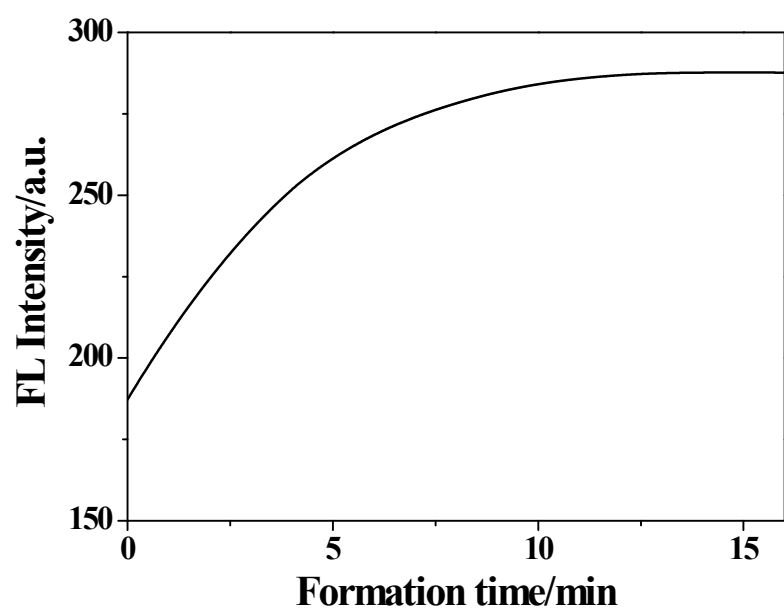
**Fig. S2** Effect of dsDNA concentration on the fluorescent intensity of dsDNA-CuNCs probe.



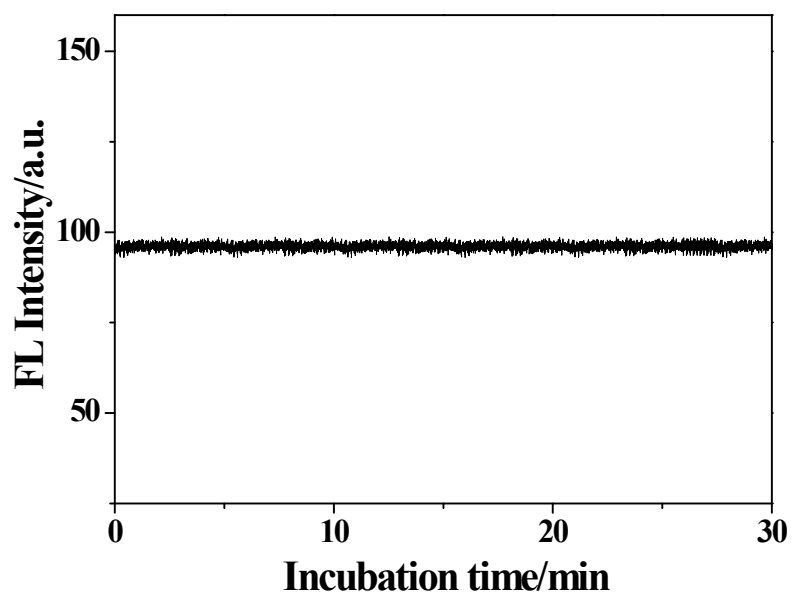
**Fig. S3** Effect of  $\text{Cu}^{2+}$  concentration on the fluorescent intensity of dsDNA-CuNCs probe.



**Fig. S4** Effect AA concentration on the fluorescent intensity of dsDNA-CuNCs probe.



**Fig. S5** Effect of formation time of dsDNA-CuNCs on the fluorescent intensity of dsDNA-CuNCs probe.



**Fig. S6** Effect of incubation time of rutin and dsDNA-CuNCs on the fluorescent intensity of dsDNA-CuNCs probe.