

## Supplementary Information

### A sensitive sandwich structures time-resolved fluorescence method for thrombin detection

Tao Wu, Yuanfu Zhang,\* Tingting Hou, Yinghong Zhang, and Shuhao Wang\*

Shandong Provincial Key Laboratory of Chemical Energy Storage and Novel Cell Technology,  
School of Chemistry and Chemical Engineering, Liaocheng University, Liaocheng 252000, China.

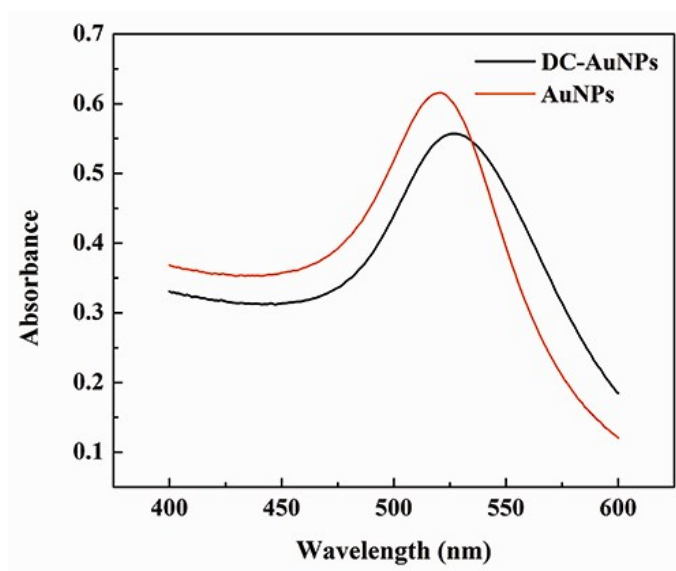


Fig. S1. The UV-vis spectra of AuNPs and DC-AuNPs.

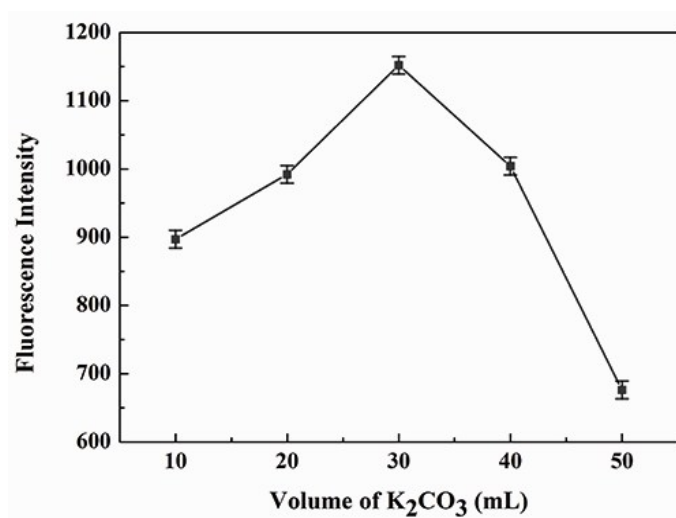


Fig. S2. The effect of the concentration  $K_2CO_3$

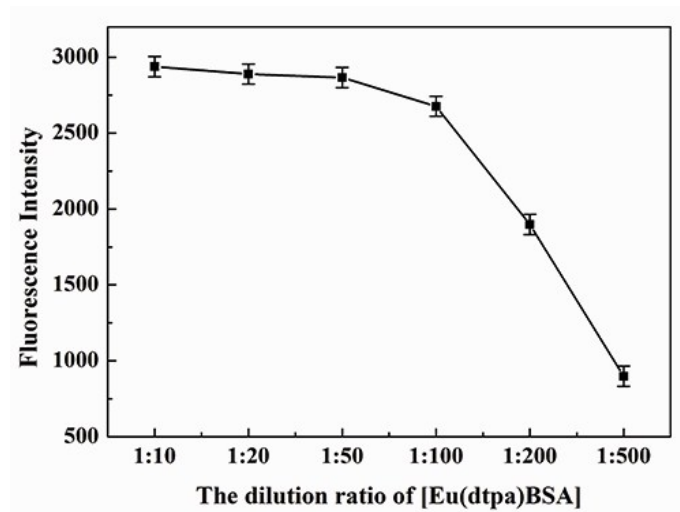


Fig. S3. The effect of the concentration of [Eu(dtpa)(BSA)].

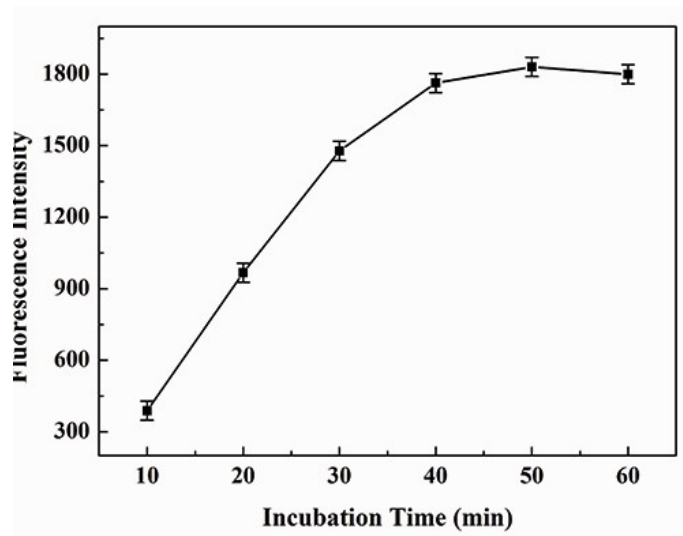


Fig. S4. The effect of the incubation time on the assay

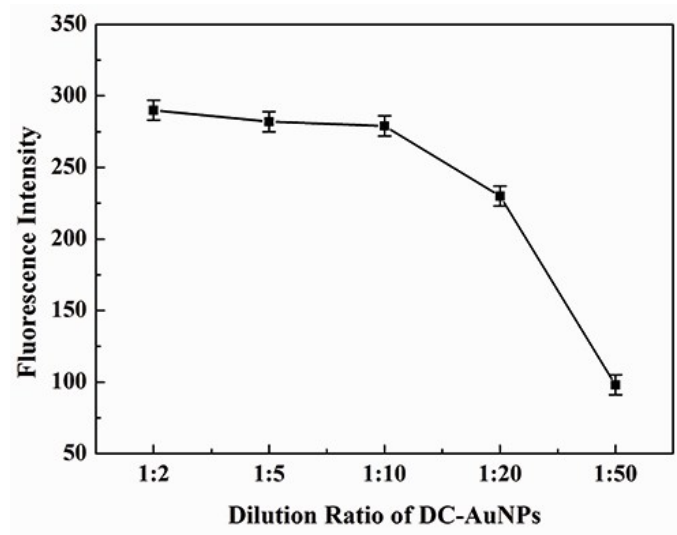


Fig. S5. The effect of the dilution ratio of DC-AuNPs.

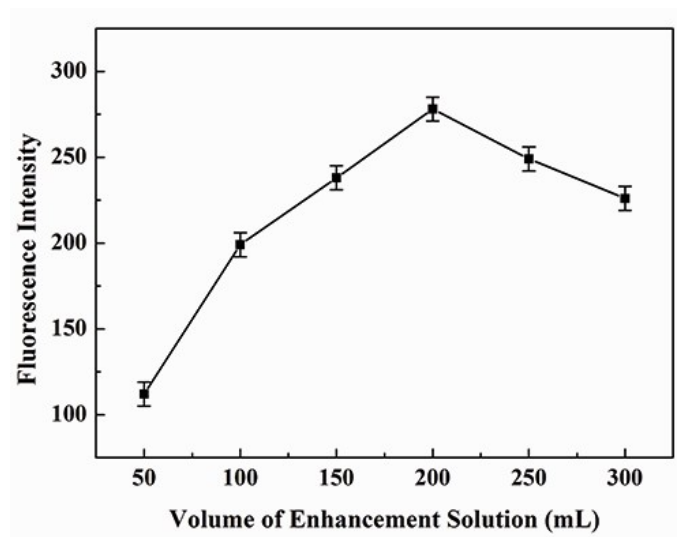


Fig. S6. The effect the amount of enhancement solution

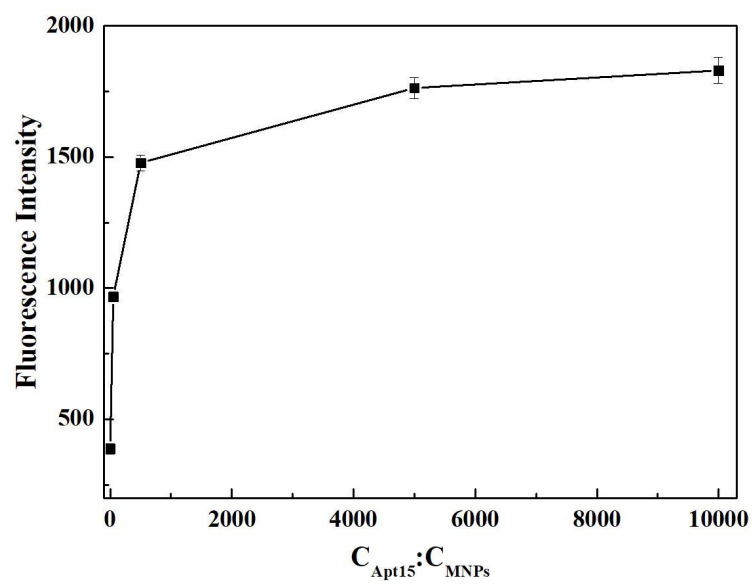


Fig. S7. The effect the ratio of  $C_{Apt15}$  to  $C_{MNPs}$