## **Supporting information**

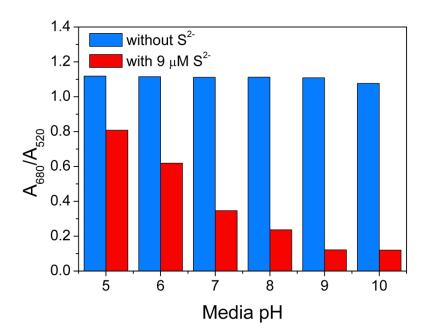
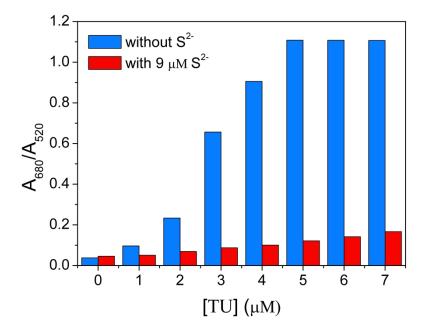


Fig. S1 Effect of media pH on the absorbance ratio  $(A_{680}/A_{520})$  of the sensing system. The concentrations of TU were all 5  $\mu$ M.



**Fig. S2** Effect of the concentration of TU on the absorbance ratio  $(A_{680}/A_{520})$  of sensing system.

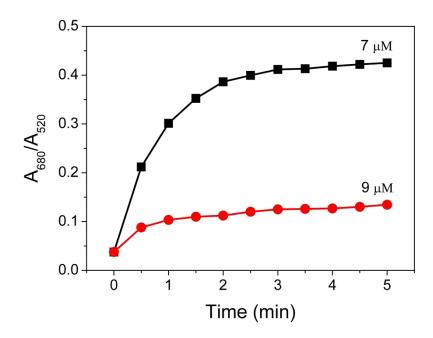


Fig. S3 Effect of incubation time on the absorbance ratio  $(A_{680}/A_{520})$  of the sensing system. The concentration of  $S^{2-}$  was 7 and 9  $\mu M$ .