

Supplementary Information 1

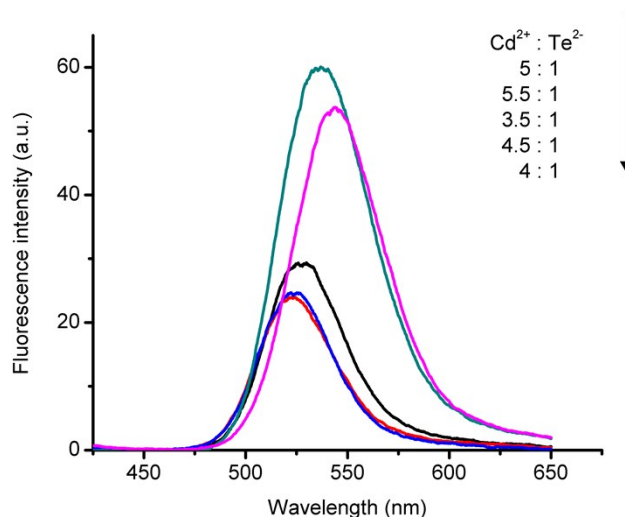


Fig. 1.1 Effect of ratios of $[\text{Cd}^{2+}] / [\text{Te}^{2-}]$ on the fluorescence intensity of CdTe: Zn QDs

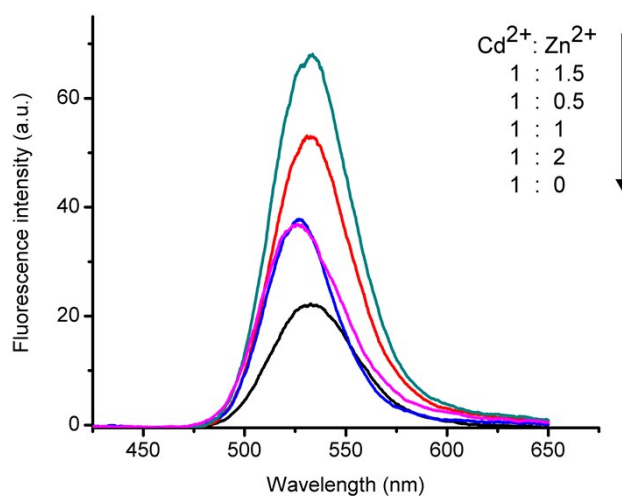


Fig. 1.2 Effect of ratios of $[\text{Cd}^{2+}] / [\text{Zn}^{2+}]$ on the fluorescence intensity of CdTe: Zn QDs

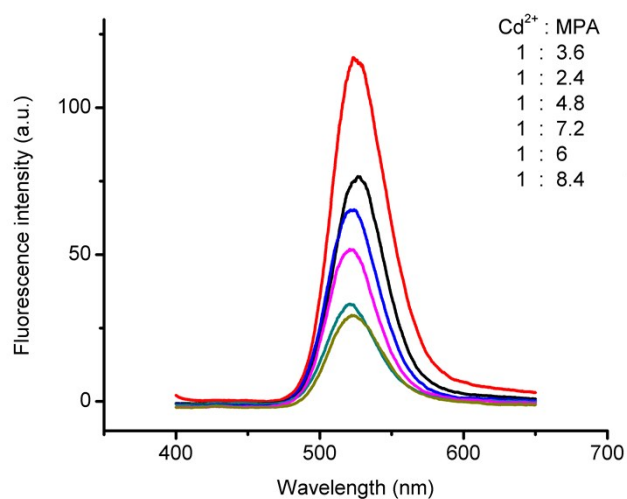


Fig. 1.3 Effect of ratios of $[\text{MPA}] / [\text{Cd}^{2+}]$ on the fluorescence intensity of CdTe: Zn QDs

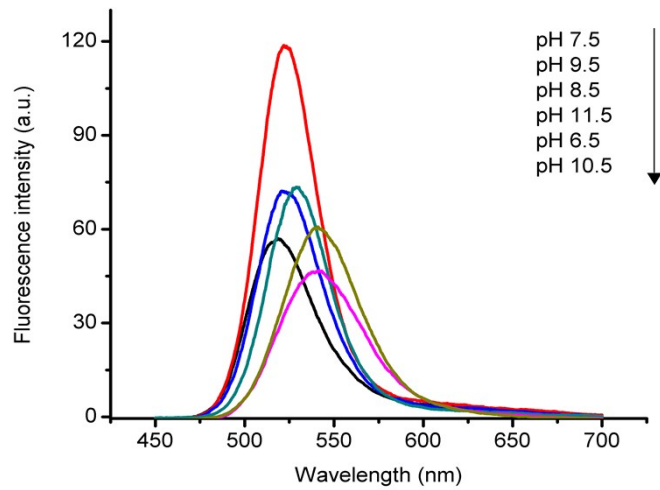


Fig. 1.4 Effect of pH on the fluorescence intensity of CdTe: Zn QDs

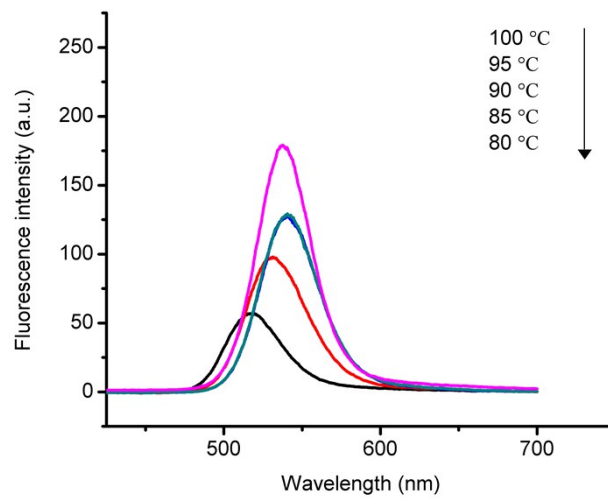


Fig. 1.5 Effect of reaction temperature on the fluorescence intensity of CdTe: Zn QDs

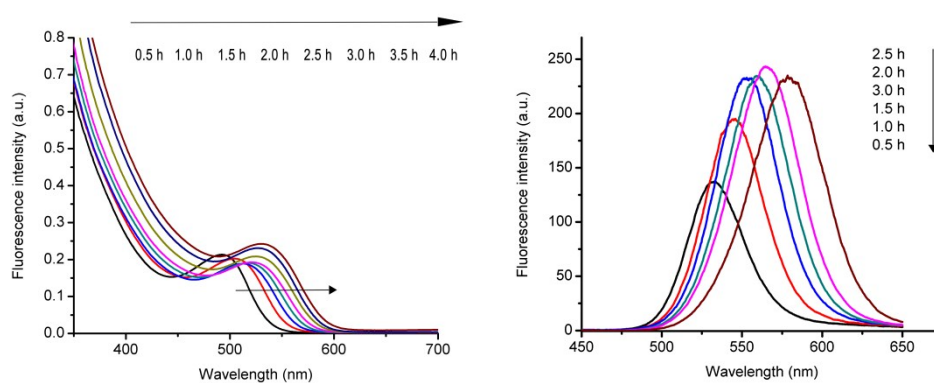


Fig. 1.6 Absorption spectra (left) and fluorescence emission spectra (right) of CdTe: Zn QDs under different reflux reaction time

Supplementary Information 2

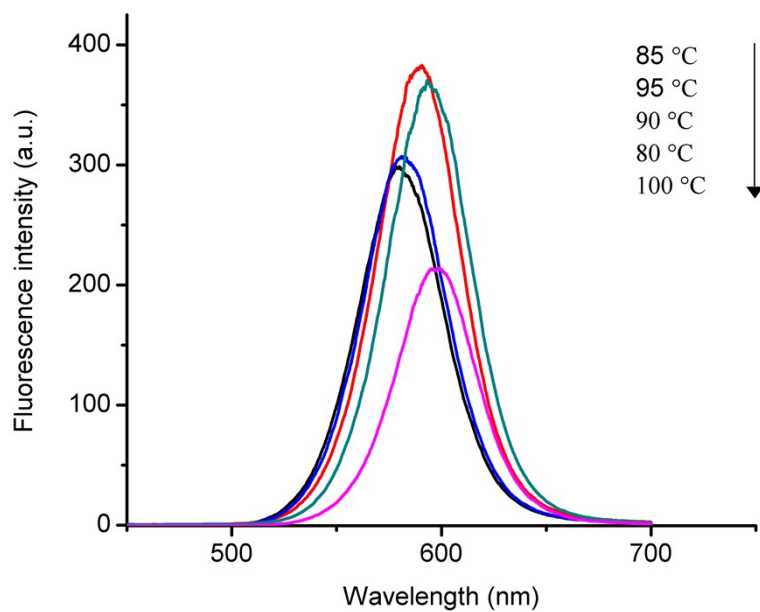


Fig. 2.1 Effect of reflux reaction temperature on the fluorescence intensity of CdTe: Zn/ ZnS QDs

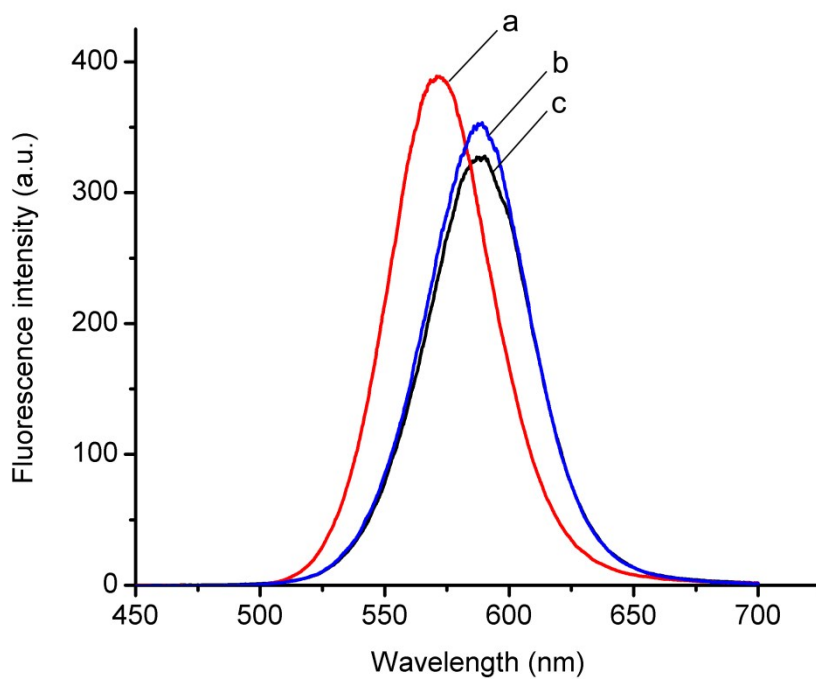


Fig. 2.2 Effect of addition styles of zinc precursor and sulfur precursor on the fluorescence intensity of CdTe: Zn/ZnS QDs

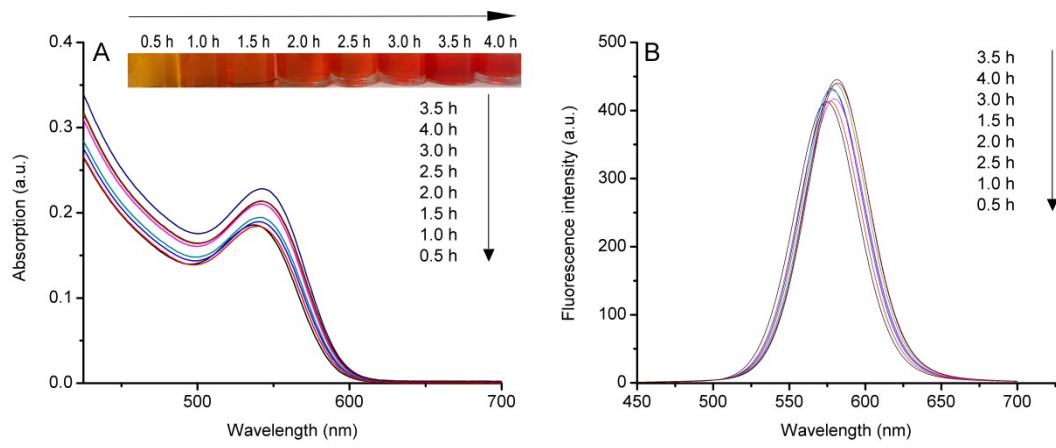


Fig. 2.3 Effect of reflux reaction time on the absorption spectra (A) and fluorescence emission spectra (B) of CdTe: Zn/ZnS QDs

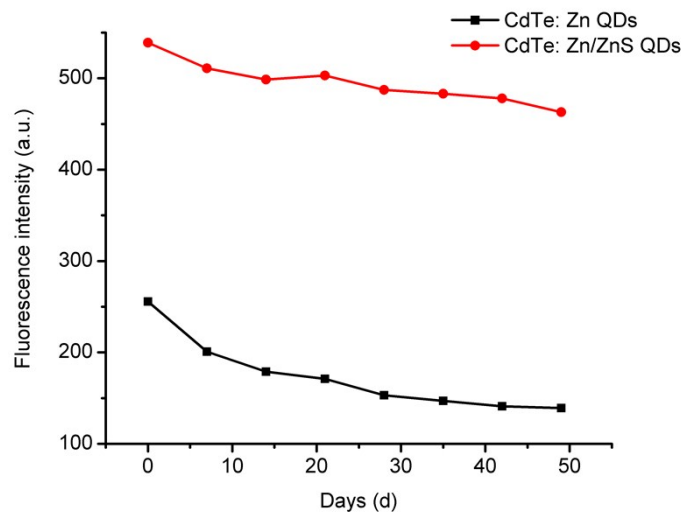


Fig. 2.4 Comparisons of stability between CdTe: Zn/ZnS QDs and CdTe: Zn QDs

Supplementary Information 3

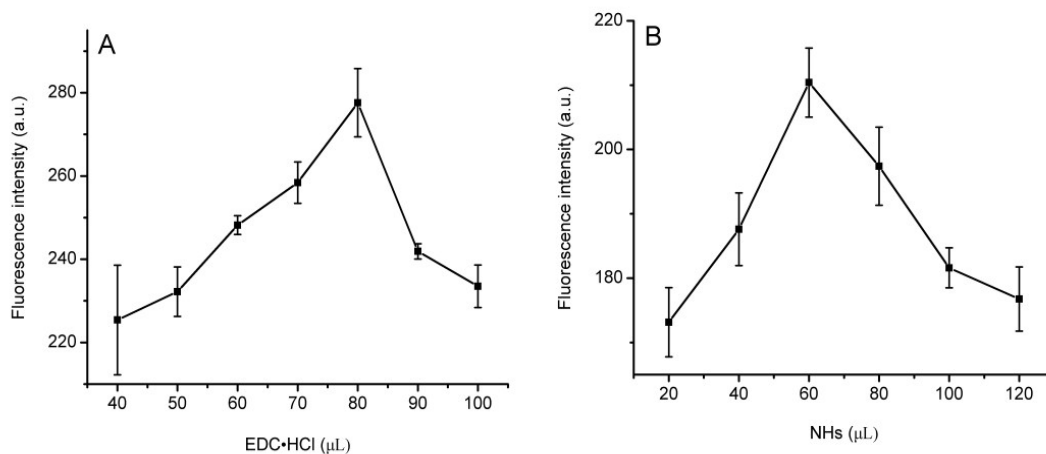


Fig. 3.1 Impacts of amount of EDC·HCl (A) and NHs (B) on the fluorescence intensity of CdTe: Zn/ZnS QDs-antibody conjugation

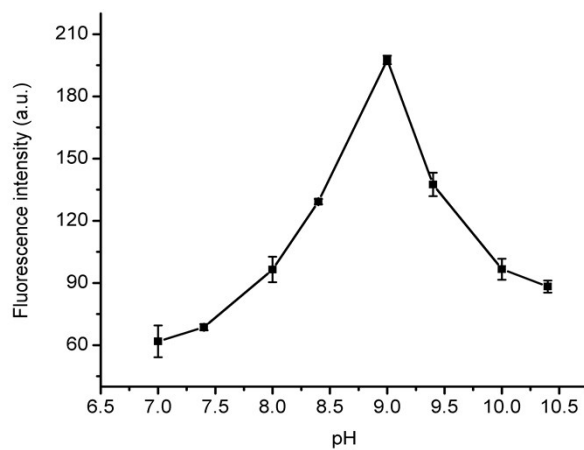


Fig. 3.2 Impacts of pH value on the fluorescence intensity of CdTe: Zn/ZnS QDs-antibody

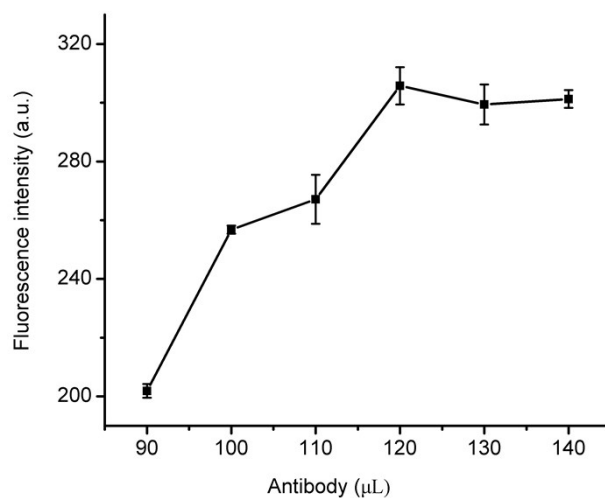


Fig. 3.3 Effect of the amount of antibody on the fluorescence intensity of CdTe: Zn/ZnS QDs-antibody conjugations

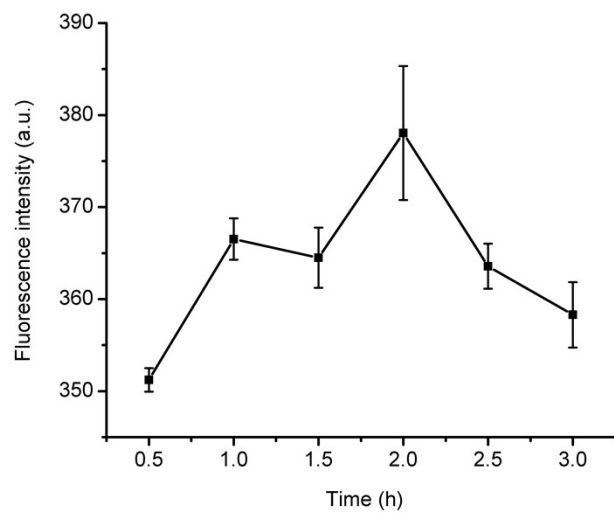


Fig. 3.4 Impact of react time on the fluorescence intensity of CdTe: Zn/ZnS QDs-antibody conjugations

Supplementary Information 4

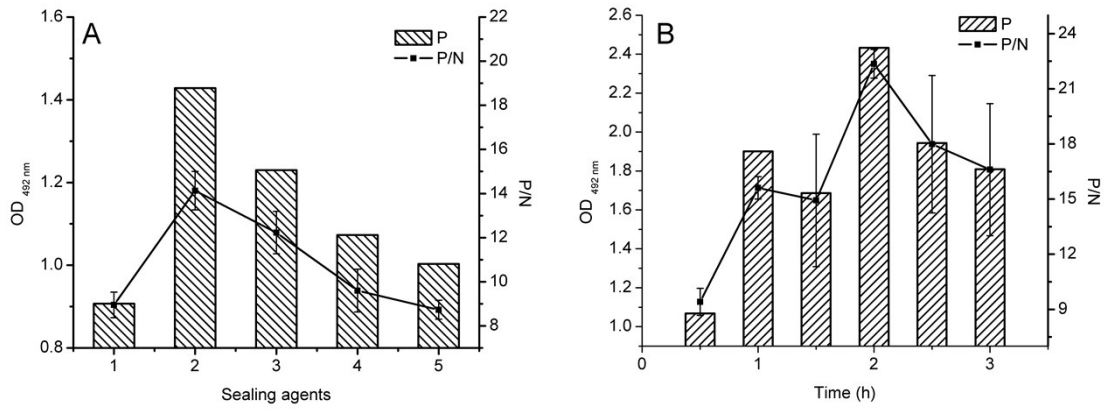


Fig. 4.1 Sealing agents (A) and Sealing time (B)

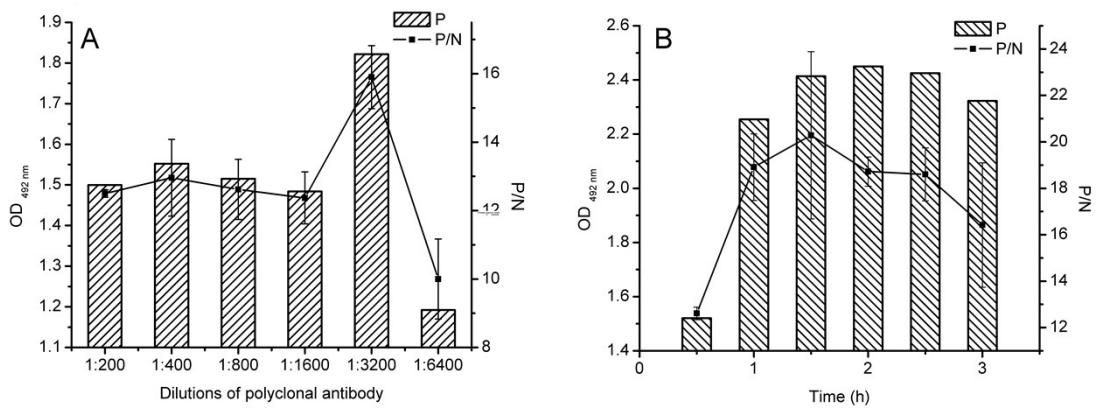


Fig. 4.2 Concentrations of protein of serum (A) and reaction time (B)

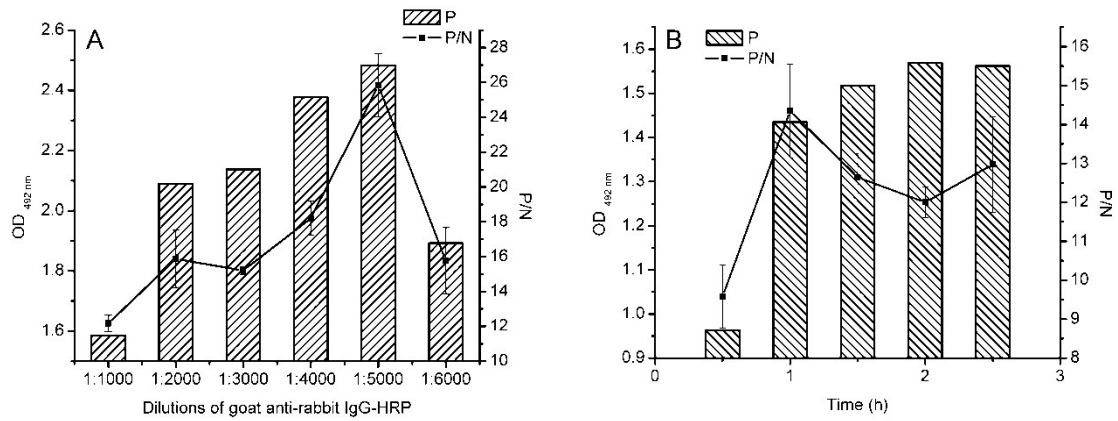


Fig. 4.3 The addition of goat anti-rabbit IgG-CdTe: Zn/ZnS QDs (A) and reaction time (B)

Supplementary information 5

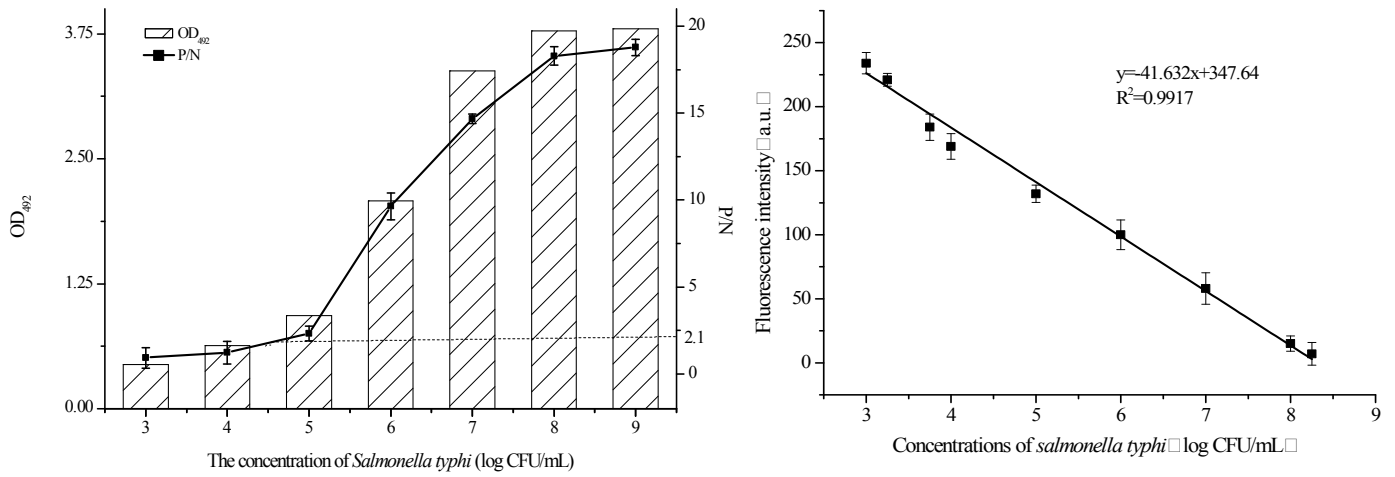


Fig. 5.1 Detection limits of ELISA (left) and FLISA (right) detected *Salmonella typhi*, respectively

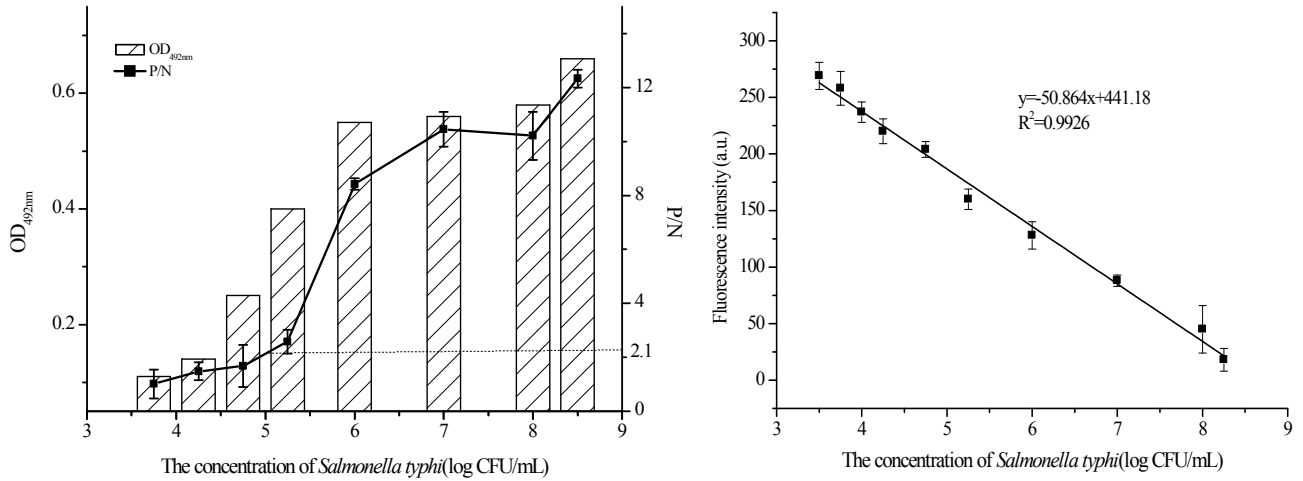


Fig. 5.2 ELISA (left) and FLISA (right) detected *Salmonella typhi* in artificial contamination test

Supplementary information 6

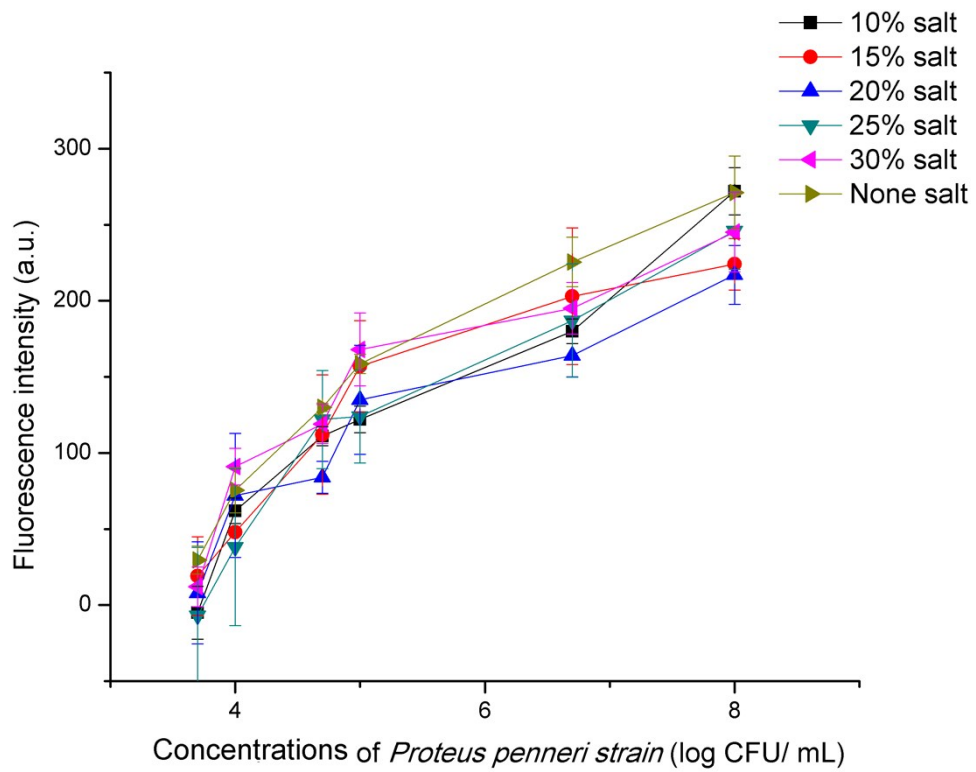


Fig. 6.1 Effect of salt (NaCl) on the detection of *Proteus penneri* strain of FLISA

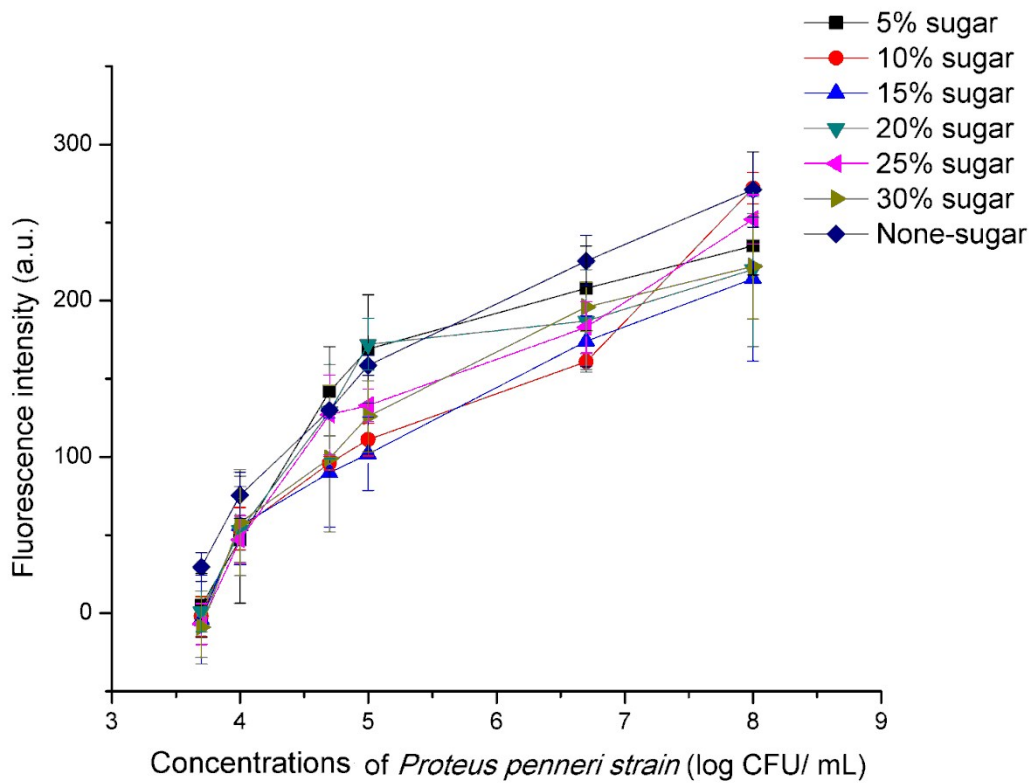


Fig. 6.2 Effect of sugar (glucose) on the detection of *Proteus penneri* strain of FLISA

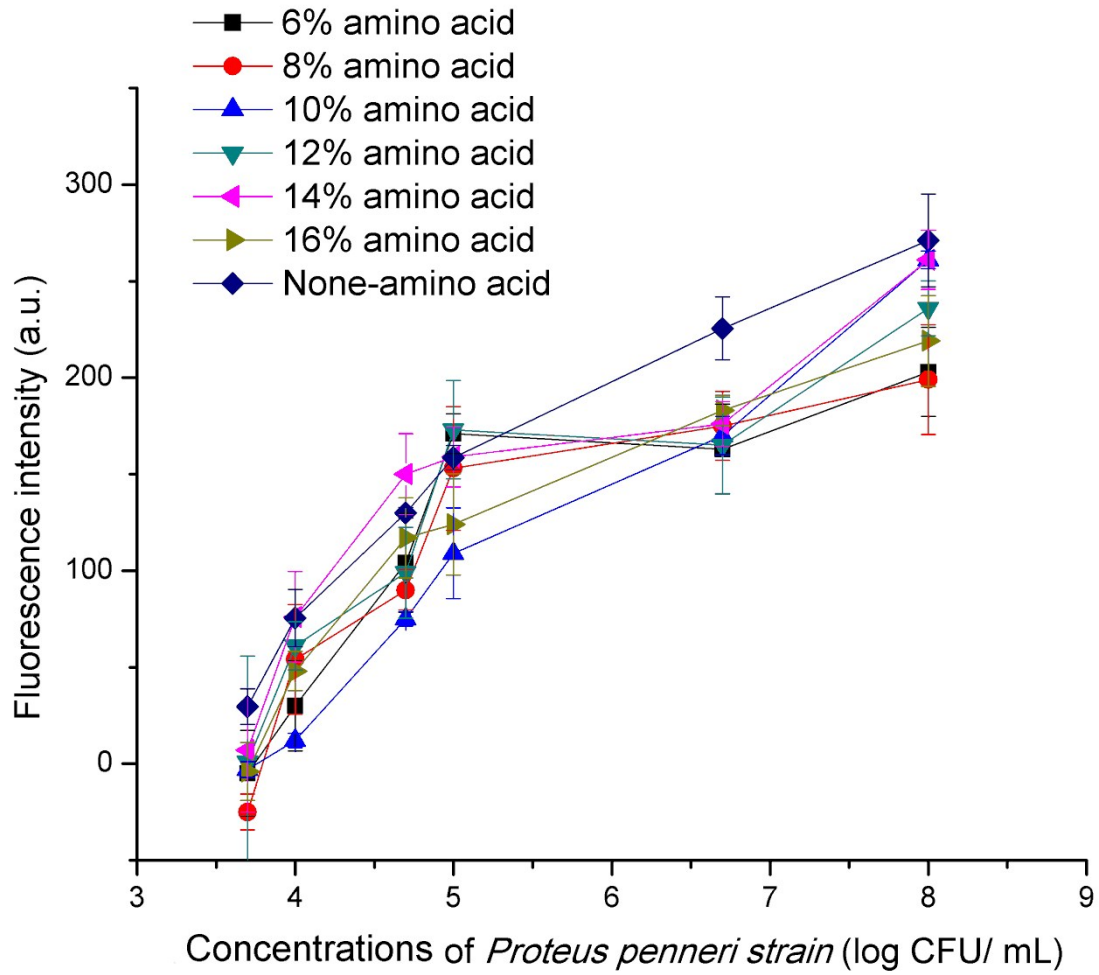


Fig. 6.3 Effect of amino acid (L-Met) on the detection of *Proteus penneri* strain of FLISA

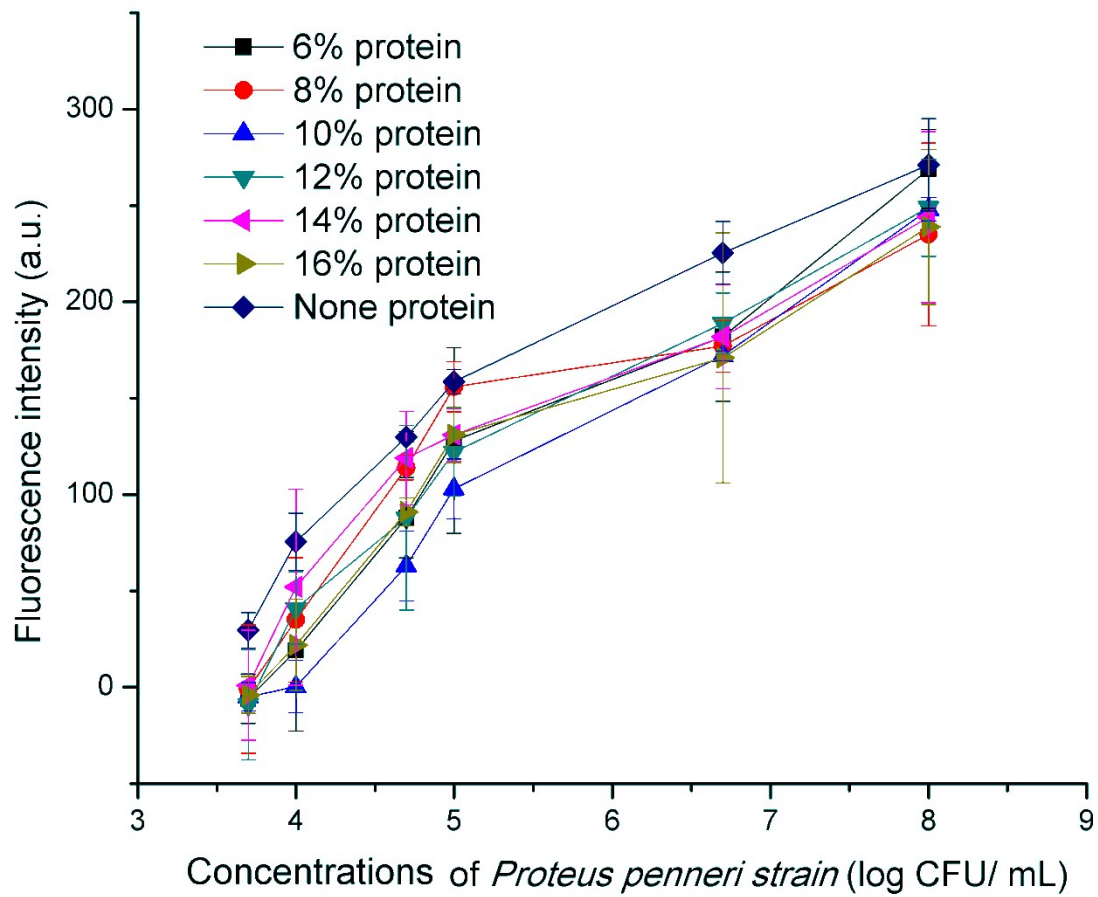


Fig.6.4 Effect of protein (whey protein) on the detection of *Proteus penneri* strain of FLISA