

Supplementary Materials

Procalcitonin Detection Using Immunomagnetic Beads-Mediated Surface-Enhanced Raman Spectroscopy

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Figure S1. Magnetic adsorption diagram of magnetic nanoparticles in an aqueous solution.

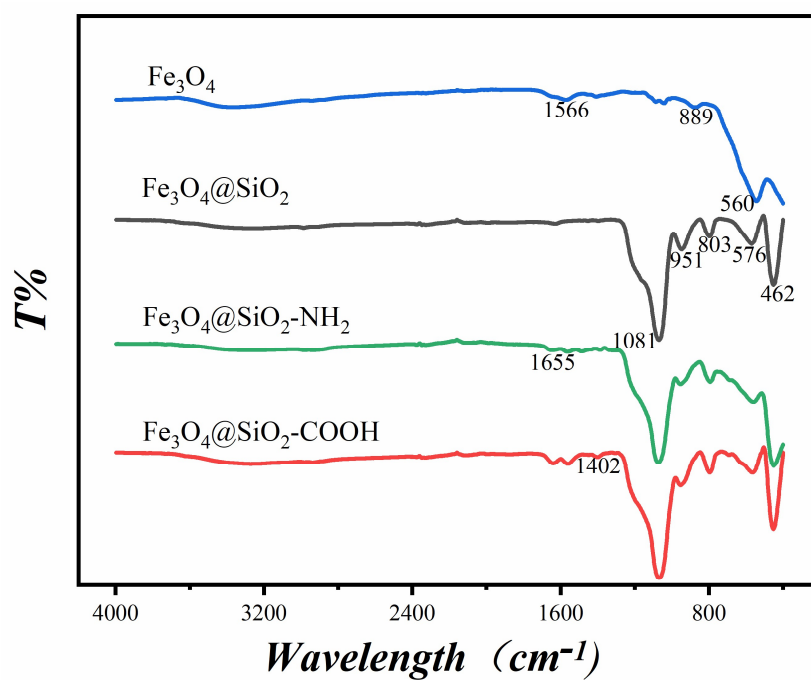


Figure S2. Infrared spectra of Fe_3O_4 , $\text{Fe}_3\text{O}_4@\text{SiO}_2$, $\text{Fe}_3\text{O}_4@\text{SiO}_2\text{-NH}_2$, and $\text{Fe}_3\text{O}_4@\text{SiO}_2\text{-COOH}$.

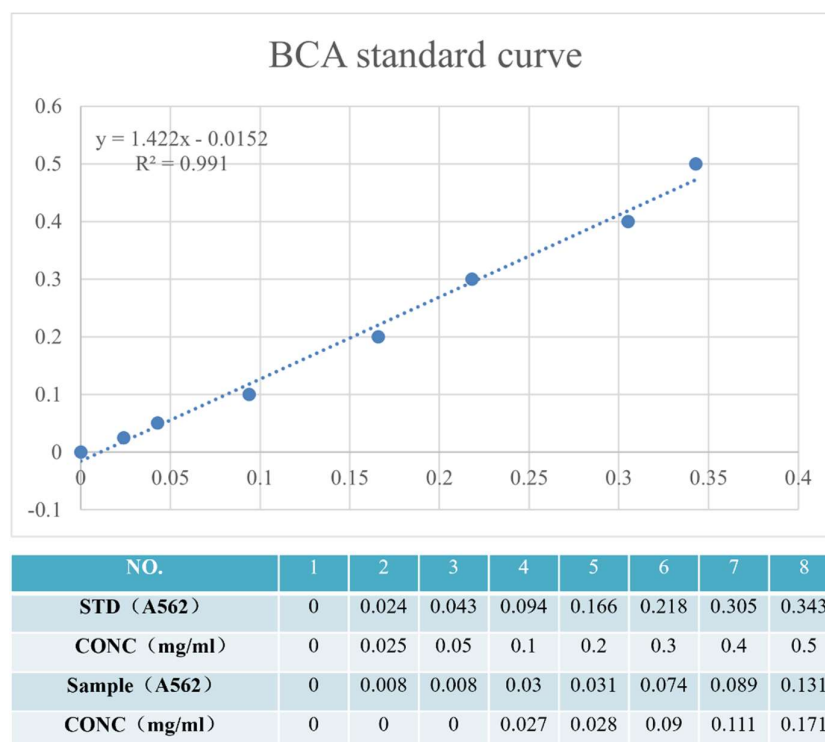


Figure S3. (a) BCA method to determine the amount of magnetic nanoparticle-conjugated antibodies.

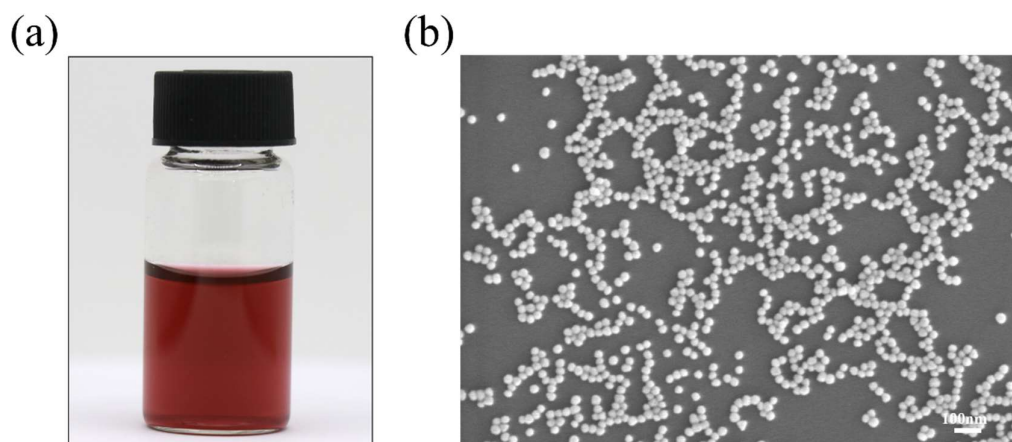


Figure S4. (a) Photograph of gold nanoparticles; (b) scanning electron microscope image of gold nanoparticles.

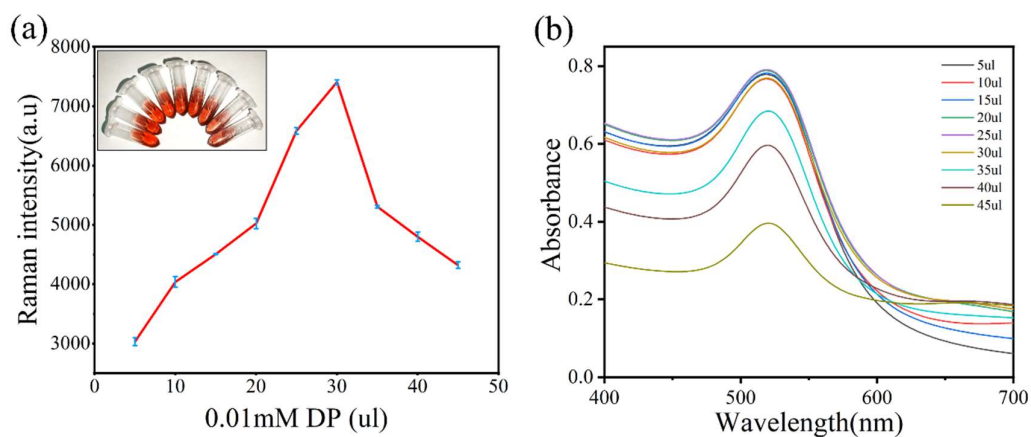


Figure S5. (a) The volume of bipyridine addition in relation to Raman strength; (b) the volume of DP added corresponds to the UV absorption spectrum.

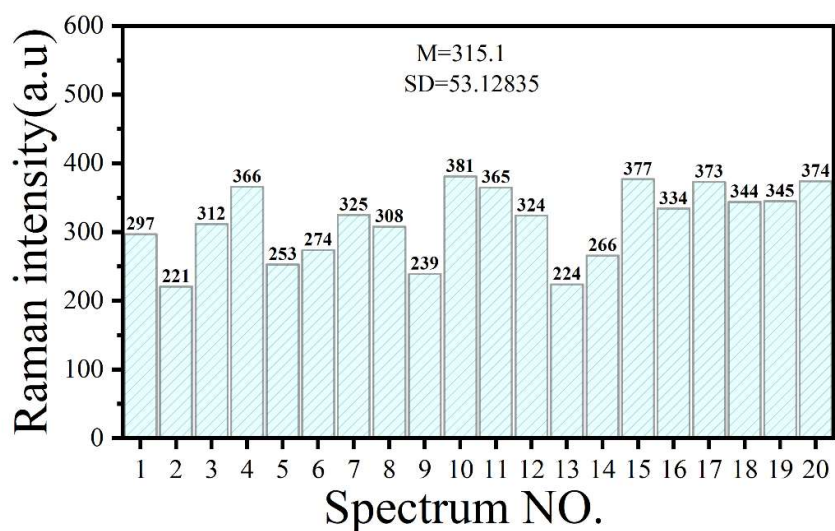


Figure S6. Raman signal value for 20 blank detections at 1612cm^{-1} .