

Based on Unmodified Aptamer-Gold Nanoparticles Colorimetric Detection of Dexamethasone in Food

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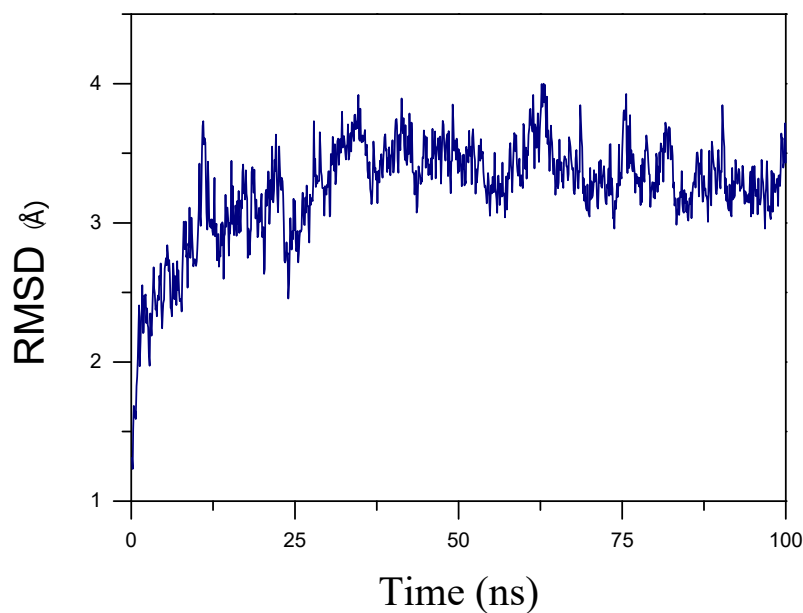


Figure S1. The RMSD plot during molecular dynamics simulations of aptamer with DEX.

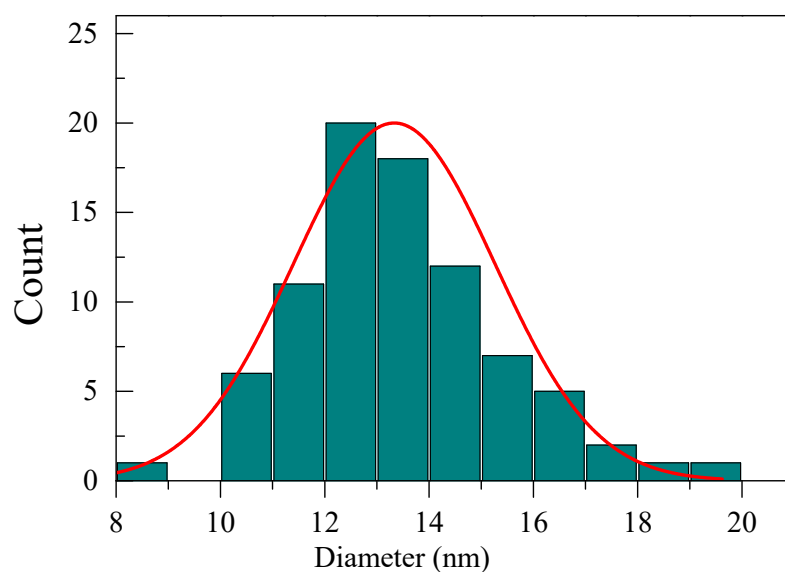


Figure S2. Size distribution of 100 Au NPs with an average diameter of 13nm.

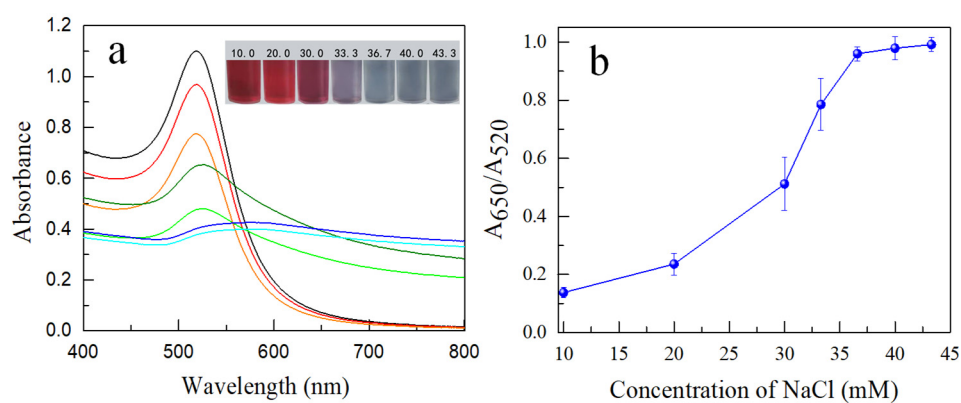


Figure S3. Effect of NaCl concentration on spectra (a) and absorbance ratio (b) of the AuNPs in the sensing system. The AuNPs volume was 300 μ L.

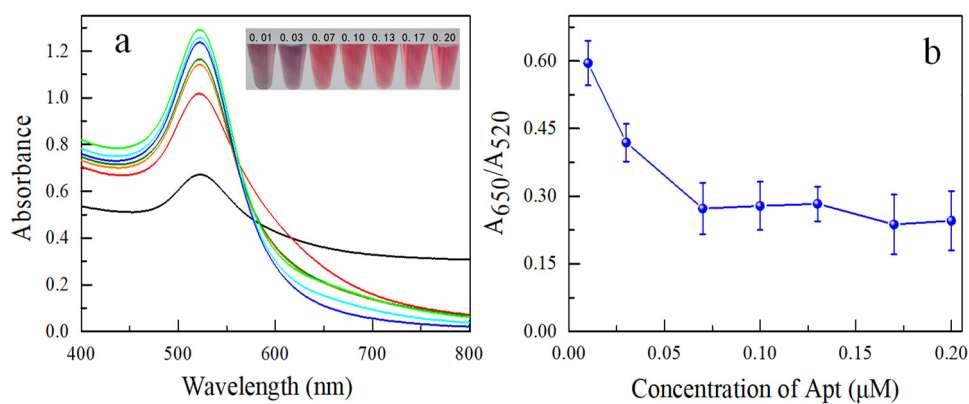


Figure S4. In the absence of DEX, the effect of aptamer concentration on spectra (a) and absorbance ratio (b). The AuNPs volume was 300 μ L and the NaCl concentration was 36.7 mM.

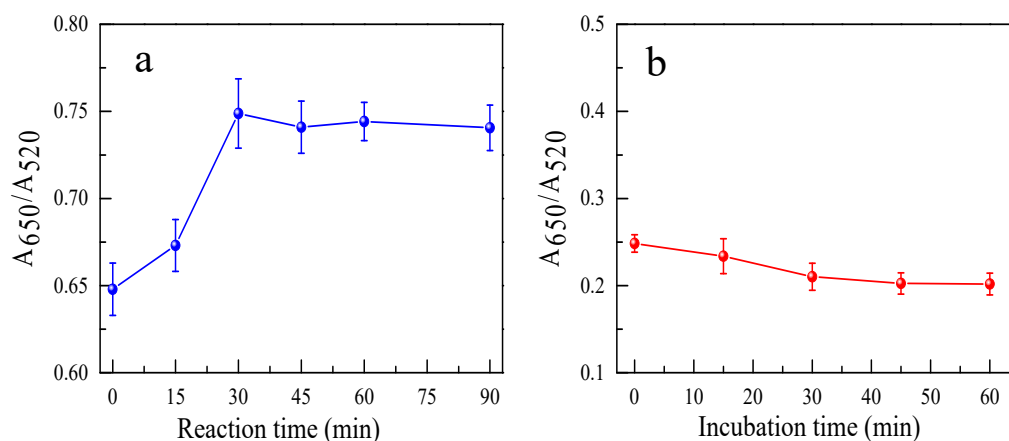


Figure S5. Changes in absorbance ratio as a function of reaction time (a). The AuNPs volume was 300 L, the NaCl concentration was 36.7 mM, and the aptamer concentration was 0.07 μ M. When the fixed reaction time is 30 min, the absorbance ratio changes with the incubation time (b). The volume of 36.7 mM NaCl, 0.07 μ M aptamer, and DEX at concentrations of 350 nM.

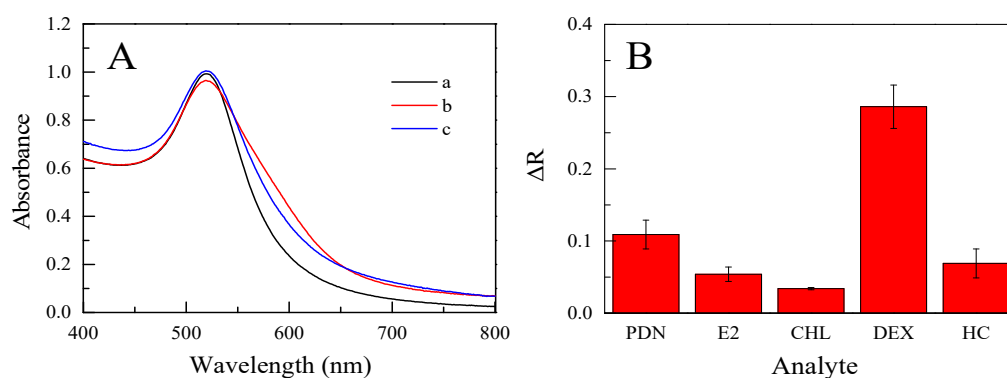


Figure S6. (A): Absorption spectra of the effect of the extract of real sample on the Au NPs. (a) 300 μ L Au NPs + 200 μ L H₂O + 200 μ L aptamer+200 μ L NaCl; (b) 300 μ L Au NPs + 200 μ L extract solution of glucosamine + 200 μ L aptamer+200 μ L NaCl; (c) 300 μ L Au NPs + 200 μ L extract solution of milk + 200 μ L aptamer+200 μ L NaCl. **(B):** The cross reactivity of the DEX aptasensor against 30 μ g ml⁻¹ of DEX, HC, PDN, E2 and CHL.