

## Electronic Supplementary Information

### Preparation of aptamer based organic-inorganic hybrid monolithic column with gold nanoparticles as intermediary for enrichment of proteins

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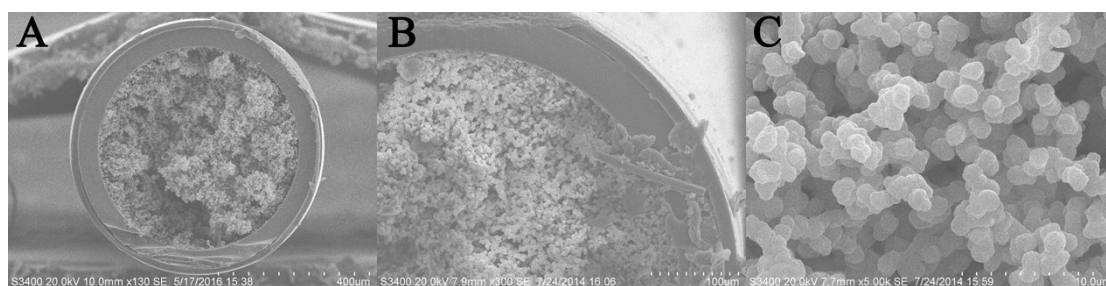


Fig. S-1. SEM images of structure of hybrid monolithic column on the scanning electron microscope ( $\times 130$ ) (A), ( $\times 300$ ) (B) and ( $\times 5000$ ) (C).

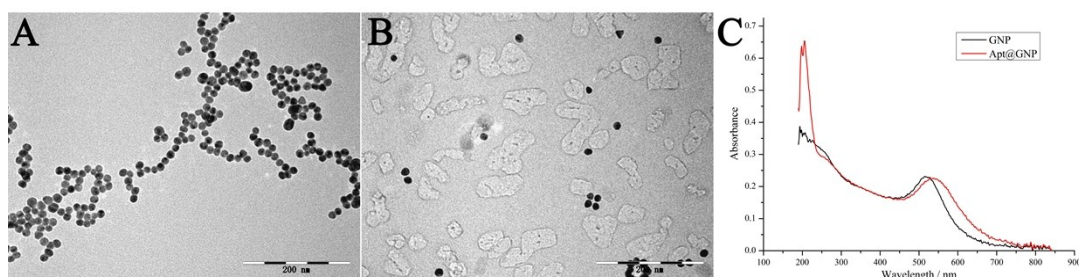


Fig. S-2. TEM images of gold nanoparticles (A) and aptamer modified gold nanoparticles (B); UV-Vis absorbance of gold nanoparticles and aptamer modified gold nanoparticles (C).

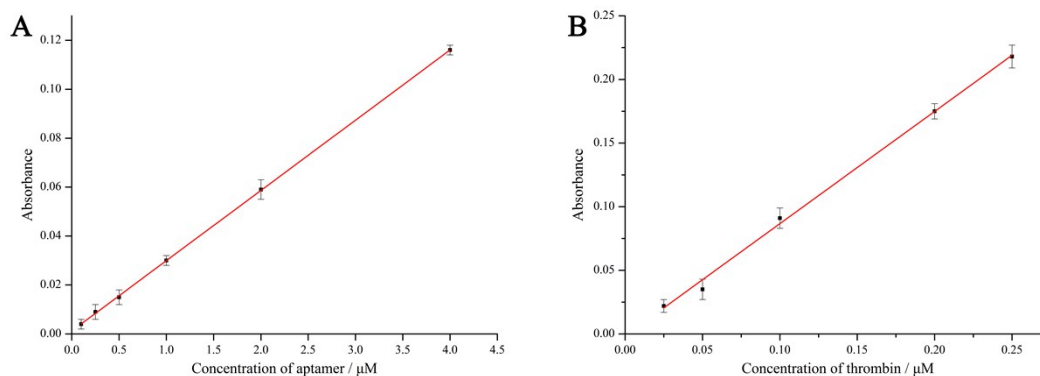


Fig. S-3. The UV-Vis absorbance at 260 nm of aptamer standard solution of different concentrations (A). The UV-Vis absorbance at 405 nm of thrombin standard solution of different concentrations via the enzymatic chromogenic assay (B).

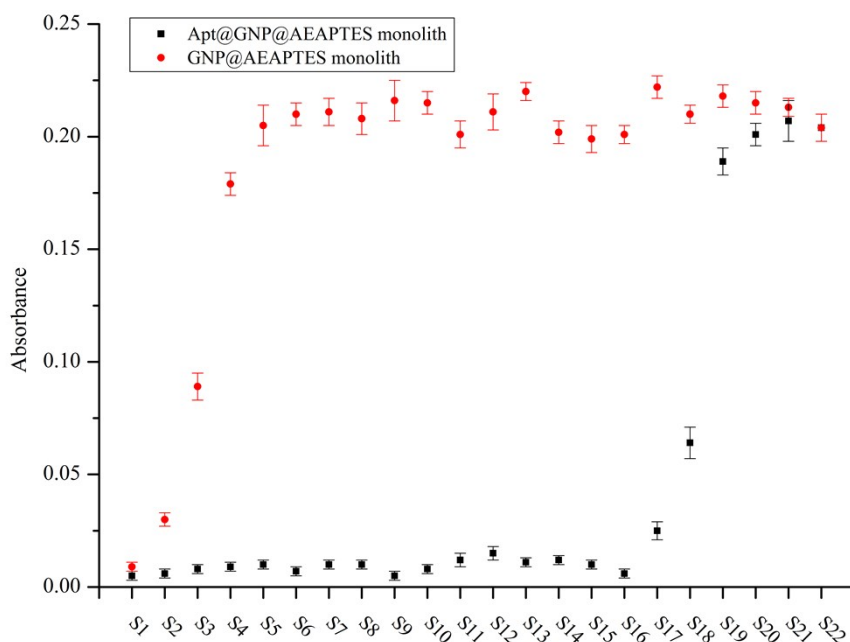


Fig. S-4. The UV-Vis absorbance at 405 nm of all the sample solutions from the effluents (50 μL each) of aptamer@GNP@AEAPTES-silica hybrid monolith and GNP@AEAPTES-silica hybrid monolith via the enzymatic chromogenic assay. Flow rate: 5 μL/min; effective column length: 2 cm.