Suppoting information

Colorimetric Detection of HVA by Self-assembly of Au Nanorods with DNA Double Helix Side-by-side, End-to-end Structures

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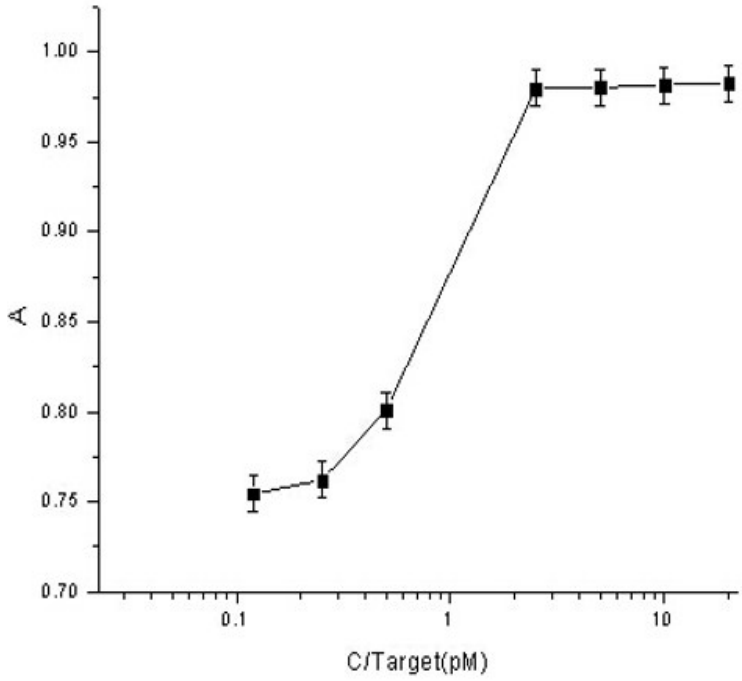

Figure S1. Liner relationship between absorbance with the change of concentration of Target DNA (C_1 and C_2 was 33 pM, Helper was 10 pM end-to-end structure), T was 0.12 pM; 0.25 pM; 0.5 pM; 2.5 pM; 5.0 pM; 10 pM; 20 pM; respectively). The error bars indicate the standard deviation of the seven successive measurements of a sample for each assay.

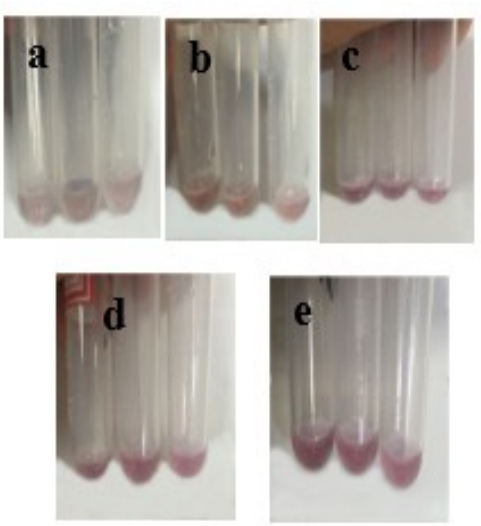

Figure S2. The colorimetric response to different concentration of HVA in the presence of C_1 and C_2 was 33 pM, Helper was 10 pM (side-by-side structure), T was a) 0.5 pM; b)1.25 pM; c) 5 pM; d)10 pM; e)35 pM respectively.

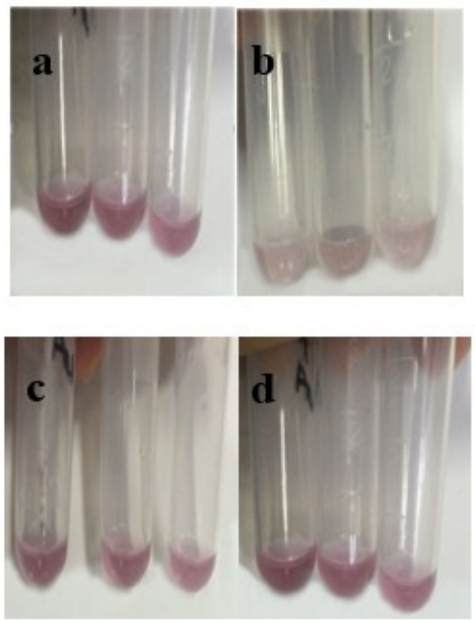

Figure S3. The color change of the contrast experiment. From left to right was a)second deionized water; b) HVA and c) other DNA 1; d) other DNA 2.

Table S1. The performance comparison with other sensors

Detection method	magnetic florescence[33]	Raman spectroscopy[34]	antibodies based enzyme immunoassays (EIAs) and radio immuno assays (RIAs)[35]	SPR based colorimetric method[36]	Our method
Detection limit	0.1pM	1pM	1pM	10pM	0.05pM