

Supplementary Information

Highly Flexible and Stable Aptamer-Caged Nanoparticles for Control of Thrombin Activity

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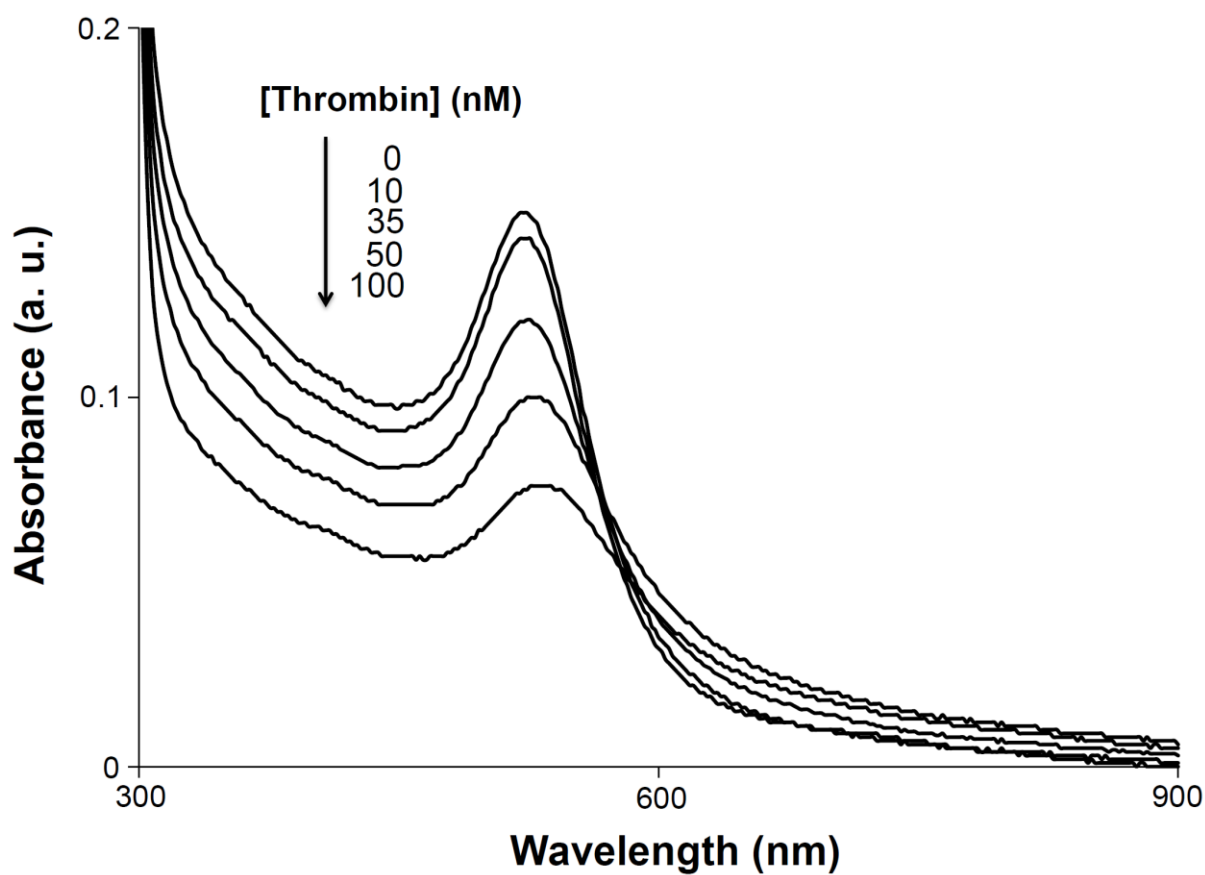


Fig. S1 The UV-Vis absorption spectrum of TBA₁₅/TBA₂₉-P₈T₁₅-Au NPs (1.0 nM) in the presence of thrombin (0–100 nM) with the physiological buffer containing 100 μM BSA. Other conditions were the same as those described in Figure 1.

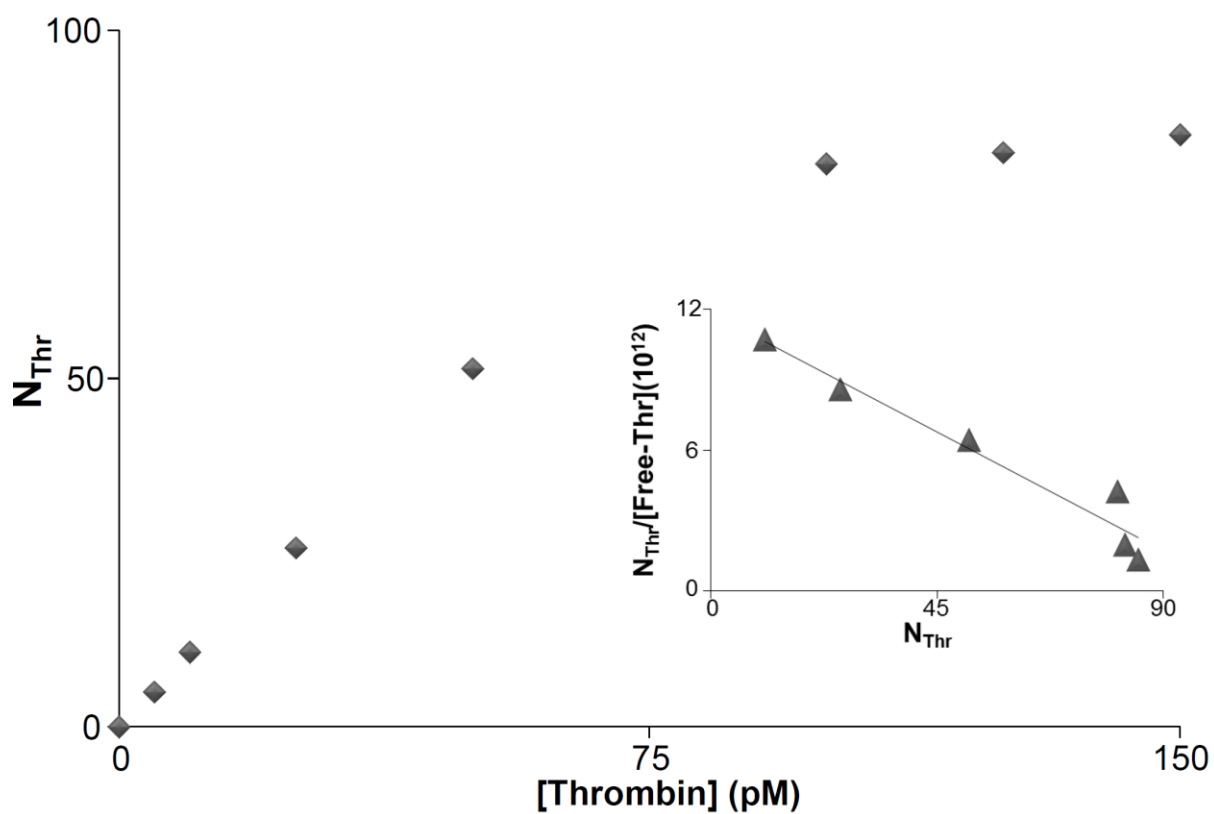


Fig. S2 Dissociation constant K_d for thrombin–TBA₁₅/TBA₂₉-P₈T₁₅-Au NPs complexes, determined from a plot of $N_{Thr}/[Free-Thr]$ versus N_{Thr} .

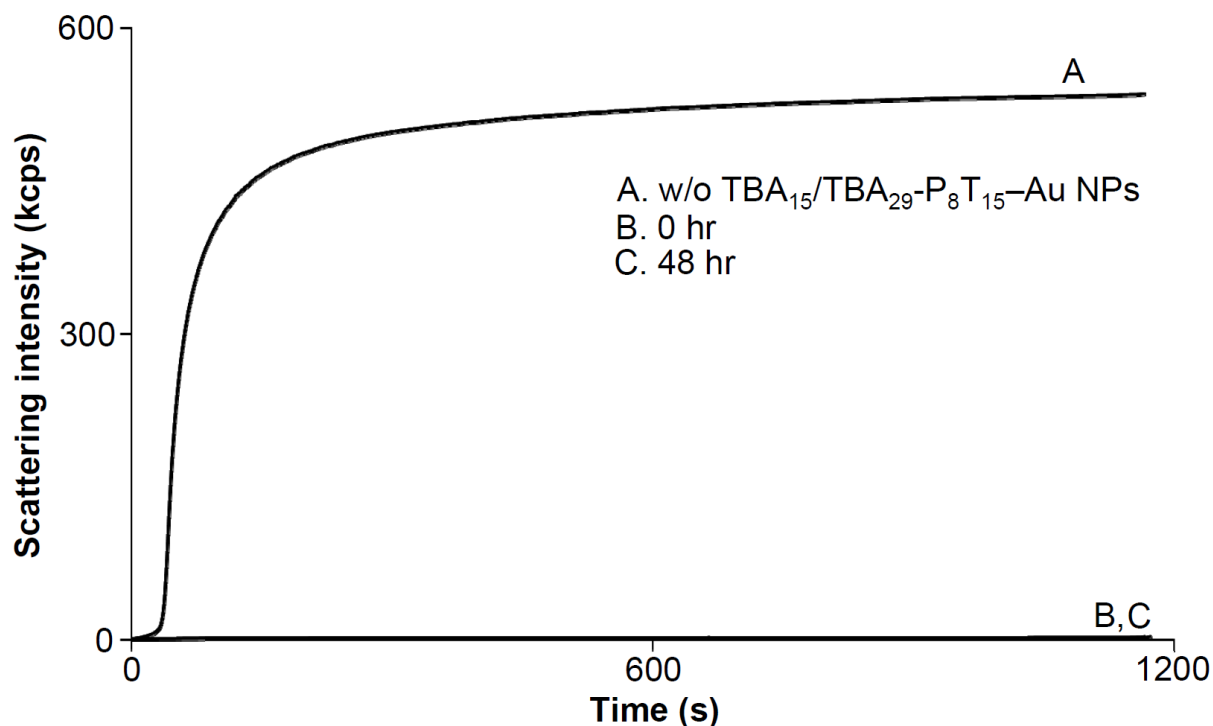


Fig. S3 Scattering intensity as a function of time, validating the use of $\text{TBA}_{15}/\text{TBA}_{29}\text{-P}_8\text{T}_{15}\text{-Au}$ NPs as a stable anticoagulant agent in a representative human-plasma sample. $\text{TBA}_{15}/\text{TBA}_{29}\text{-h}_8\text{T}_{15}\text{-Au}$ NPs (1 nM, 990 μL) were incubated in two-fold-diluted human-plasma samples for 0 and 48 h, followed by the addition of thrombin (500 nM, 10 μL). Other conditions were the same as those described in Figure 1.