

Supplementary information for manuscript:

**An assay for disease-associated enzyme activity with
glycosaminoglycan-assisted synthesized gold nanoparticles**

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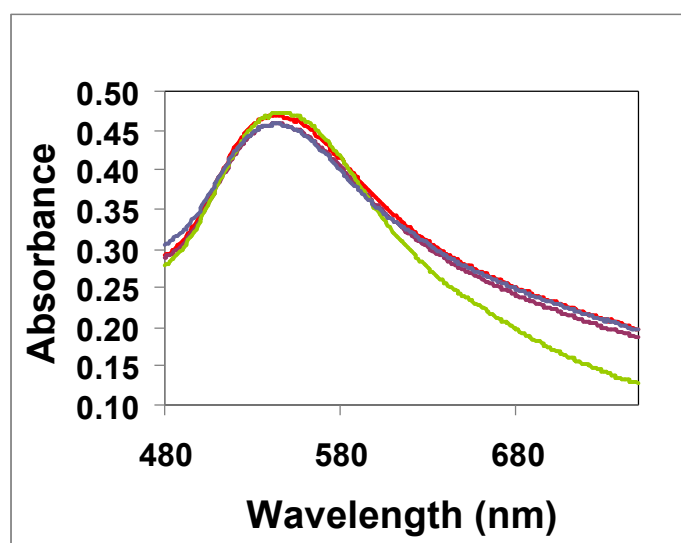


Figure S1: Effects of different control samples on the photophysical properties of the heparan sulphate gold nanoparticles. For each sample, 1 ml of serum (purple), 1 ml of plasma (red) or 1 ml of 10% w/v BSA (blue) or 1 ml of PBS buffer pH 7.4 as reference (green) were added to a solution containing 1.5 ml of 51.2 $\mu\text{g/ml}$ heparan sulfate–GNP in water and 0.4 ml of PBS buffer pH 7.4. Spectra for heparan sulfate–GNP in buffer alone are shown in blue.

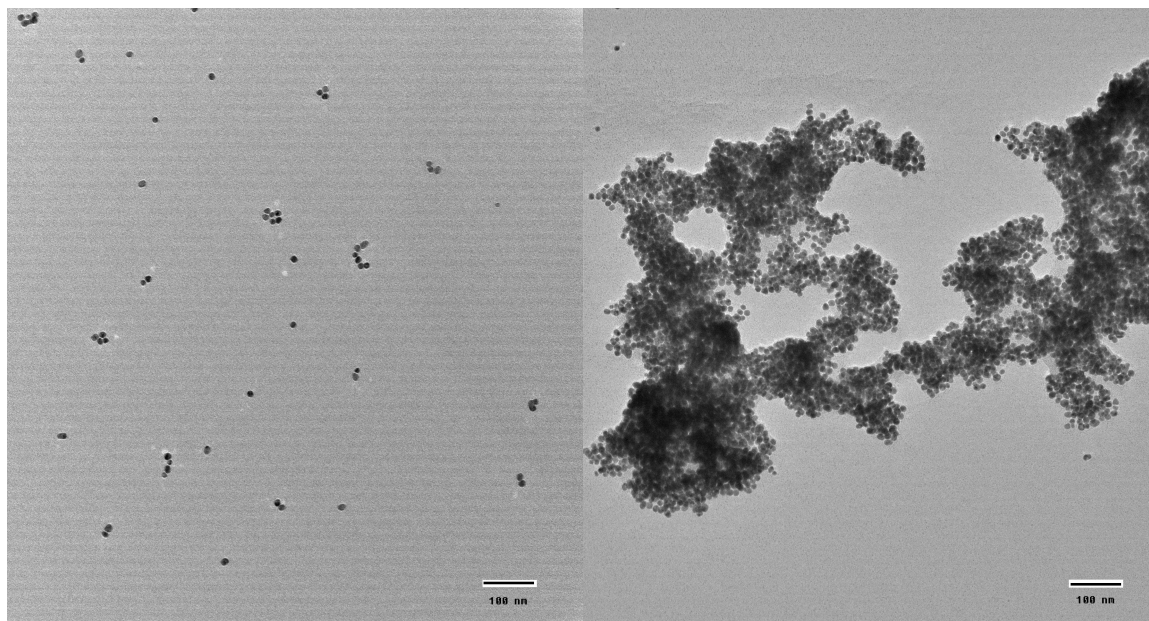


Figure S2: TEM of haparan sulfate-GNPs (25.6 $\mu\text{g/ml}$) before (left) and after (right) treatment with heparinase III enzyme. Bar scale = 100 nm.