Supplementary information

Synthesis, characterization, and application of a biocompatible gene delivery nanocarrier constructed from gold nanostars and chitosancyclodextrin-poly(ethylene imine) graft polymer

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Fig. S1. TEM images of AuNSs with different magnifications (A-C).



Fig. S2. Size distribution of AuNS measured by DLS device.



Fig. S3. ¹H NMR spectra of bPEI (A) and AuNS@CCP (B).



Fig. S4. TEM images of AuNS@CCP with different magnifications (A-C).



Fig. S5. Size distribution of AuNS@CCP measured by DLS device.



Fig. S6. Bioluminescence image (A) and the quantitative graph showing the outcome of pcDNA-FLuc-ZsGreen plasmid DNA transfected in HEK293T cells at different N/P ratios using CS, CS-CD, bPEI, and AuNS@CCP (B).



Fig. S7. Investigation of cytotoxicity of pure AuNS and AuNS@CCP (without plasmid DNA) on (A) CT-26 and (B) HEK293T cells (Error bars are expressed as Standard Error Mean)