

The Supporting Information

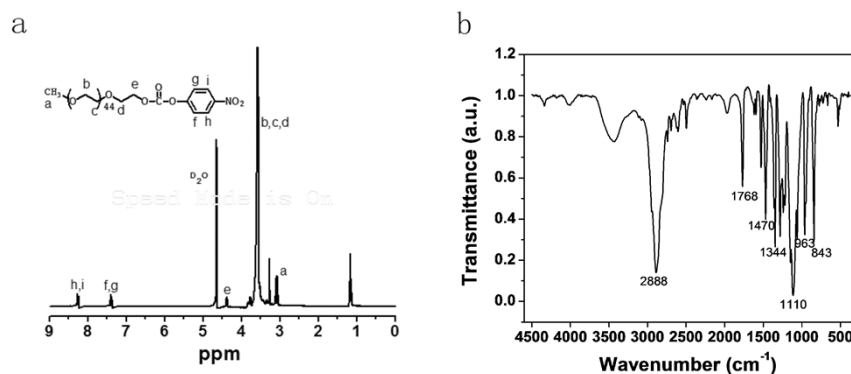


Fig. S1 ¹H NMR spectra of PEG-NO₂ in D₂O (a) and FT-IR spectra of PEG-NO₂.

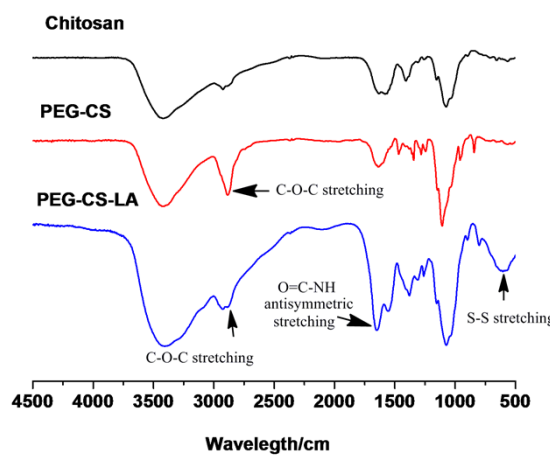


Fig. S2 FT-IR spectra of chitosan (CS), PEG-CS and PEG-CS-LA copolymers.

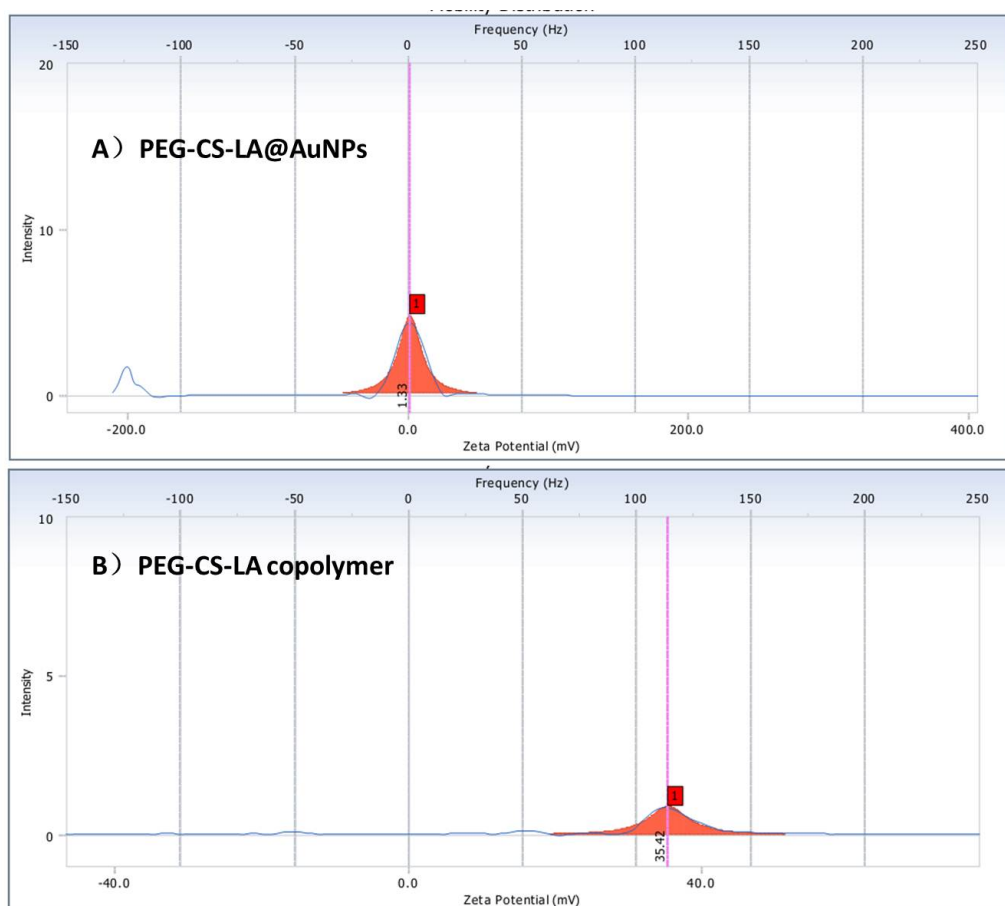


Fig. S3 Zeta potential of PEG-CS-LA@AuNPs (A) and PEG-CS-LA copolymer (B) in water.

Table S1. Characteristics of PEG-CS, PEG-CS-LA and CS-LA copolymers

Copolymer	SD of PEG ^a	SD of LA ^a
PEG-CS	3%	-
PEG-CS-LA	3%	18%
CS-LA	-	14.8%

^a The substitution degree of amino groups.

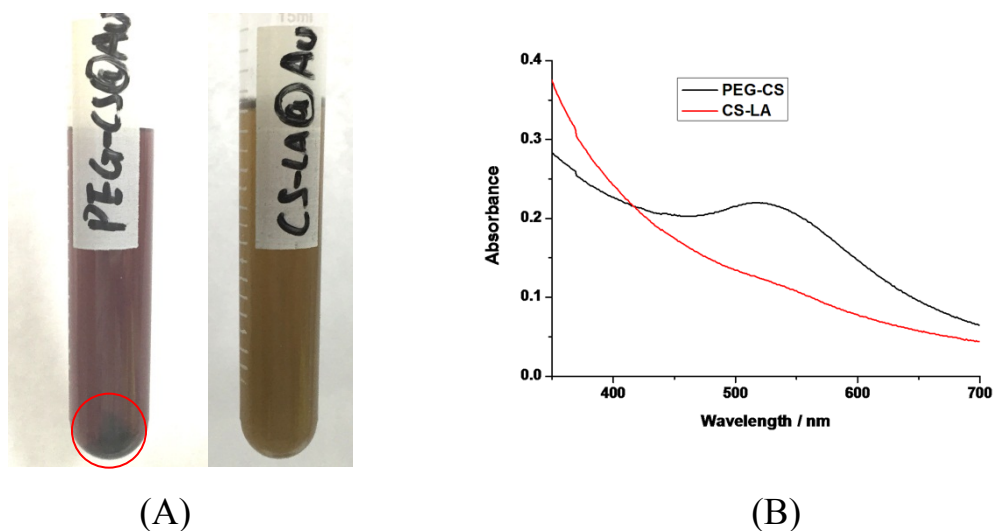


Fig. S4 (A) Digital images of AuNPs modified by PEG-CS (left, dark red color with precipitate) and CS-LA (right, gray brown color); (B) UV-Vis spectra of PEG-CS and CS-LA modified AuNPs in water.

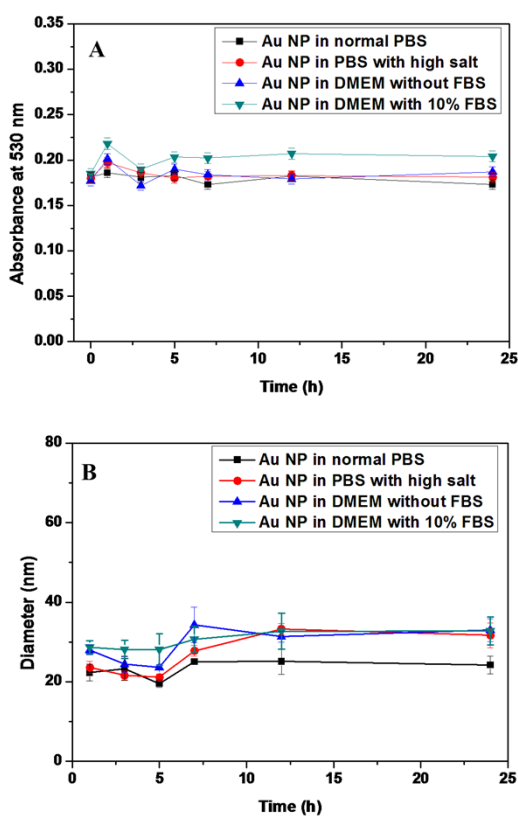


Fig. S5 The changes of the UV absorbance of PEG-CS-LA@AuNPs at 530 nm (A) and the size of PEG-CS-LA@AuNPs during 24 hours in various medium.