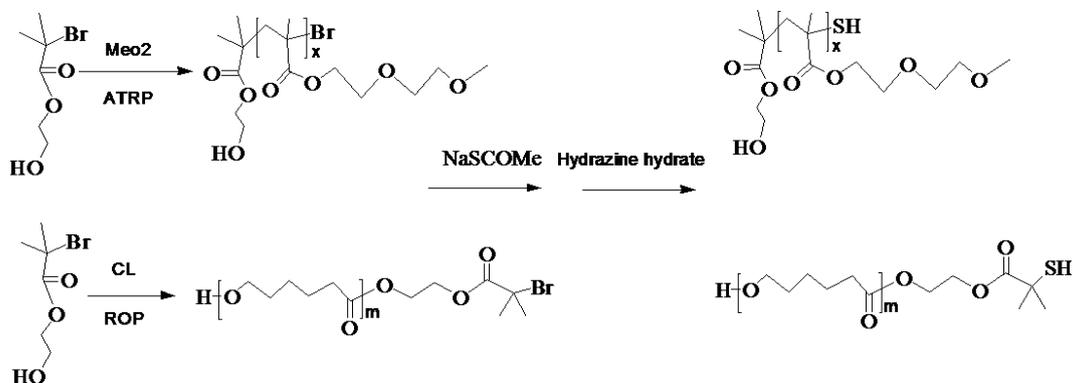


Supporting information



Scheme S1. The reaction routes to obtain PMEO₂MA-SH and PCL-SH.

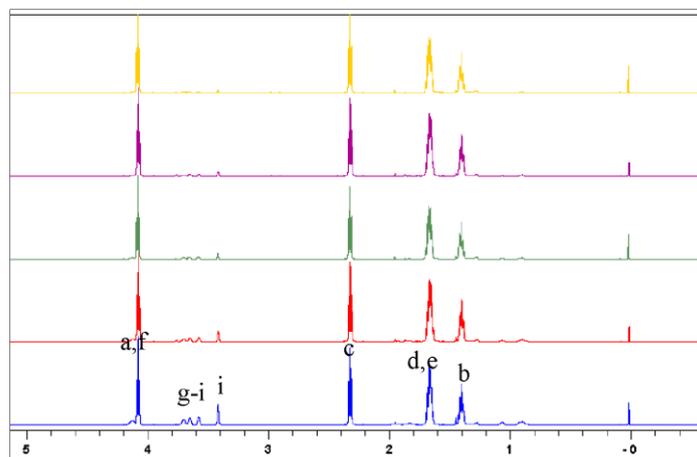


Figure S1. ¹H NMR spectra of AuNPs with different PCL/PMEO₂MA ratio.

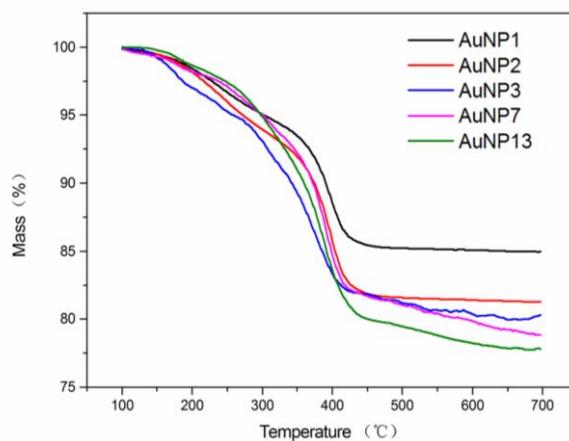


Figure S2. TGA results of AuNPs with different PCL/PMEO₂MA ratio



Figure S3. The digit image of the AuNP13 solution after self-assembly, because the PCL/PMEO₂MA ratio was too high, hydrophilic parts of polymer can not stabilized the assembly in water.

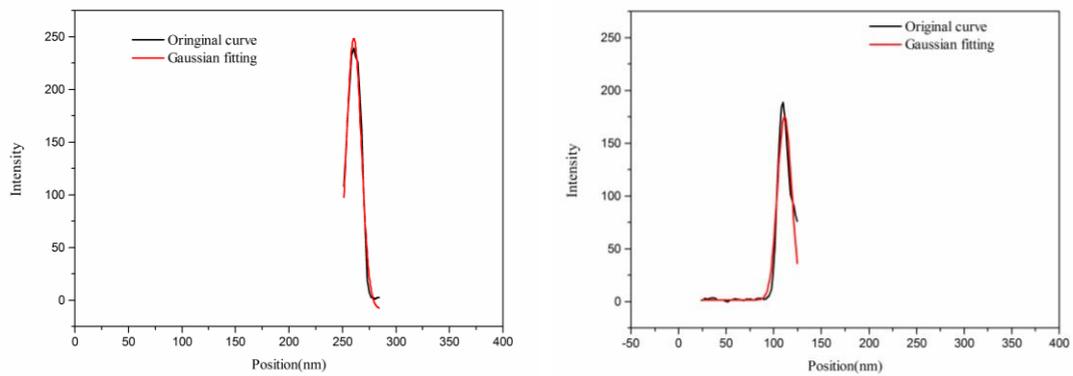


Figure S4. The Guassian fitting of the Au intensity line scan curves of GA2.

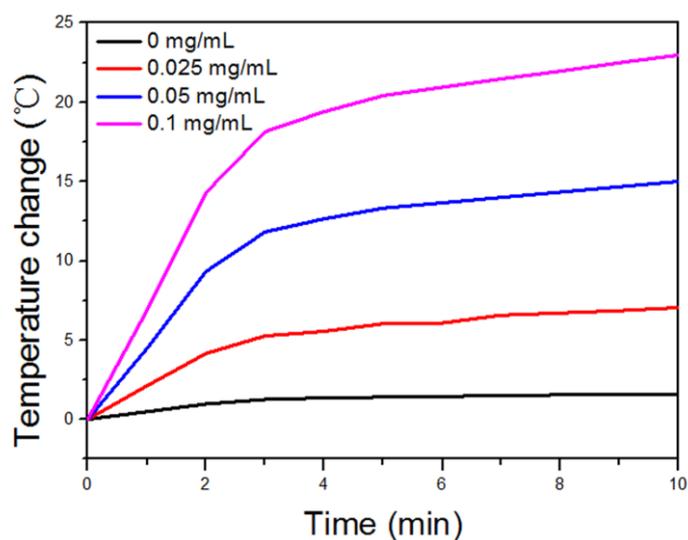


Figure S5: The temperature elevation curves of aqueous solution of GA7 with different concentration (0, 0.025, 0.050, 0.1 mg/mL) as a function of irradiation time by 808 nm laser.

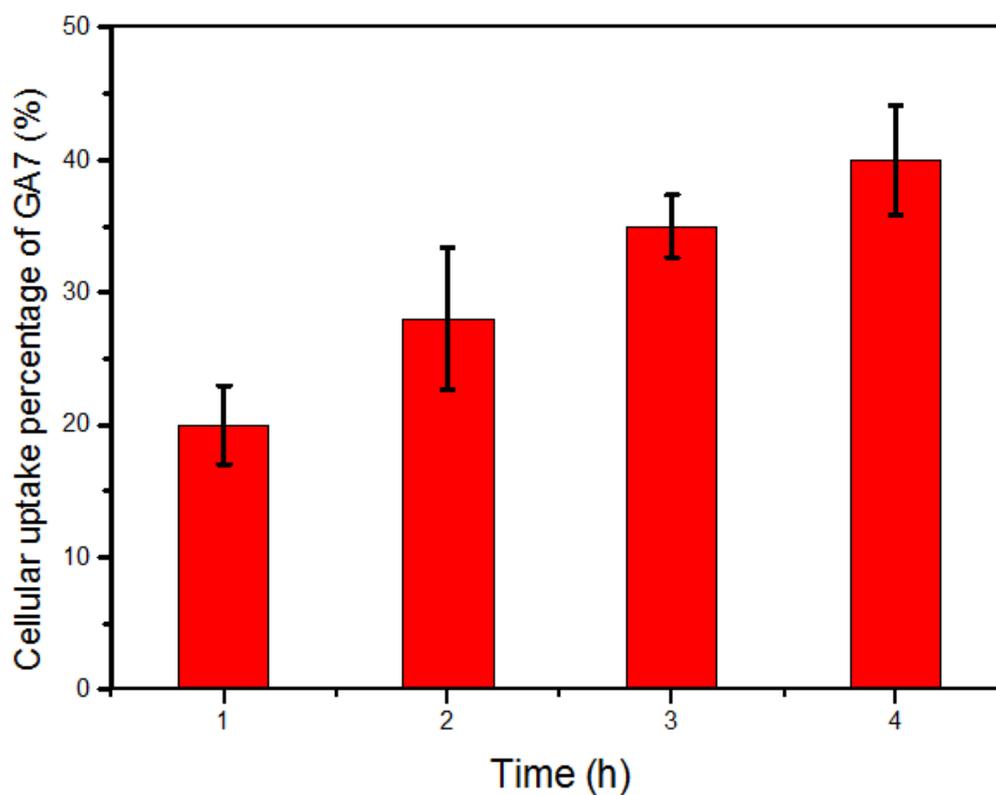


Figure S6: Cellular uptake percentage of GA7 after incubated with MCF-7 cells for 1 h 2 h, 3 h and 4 h.

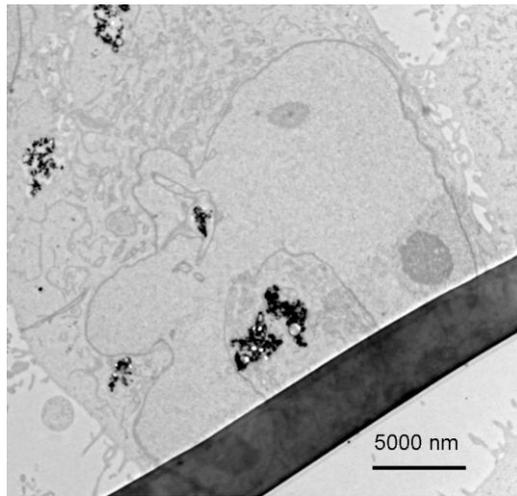


Figure S7. The ultrathin section TEM image of GA7 ingested by MCF-7 cell under low magnification.