

Electronic Supplementary Information

Facile formation of dendrimer-stabilized gold nanoparticles modified with diatrizoic acid for enhanced computed tomography imaging applications

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Table S1. Zeta potential values of [(Au⁰)₅₀-G5.NH₂-DTA] DENPs and [(Au⁰)₅₀-G5.NHAc-DTA] DSNPs.

Sample	Zeta Potential (mV)
[(Au ⁰) ₅₀ -G5.NH ₂ -DTA] DENPs	14.2±0.6
[(Au ⁰) ₅₀ -G5.NHAc-DTA] DSNPs	6.7±0.2

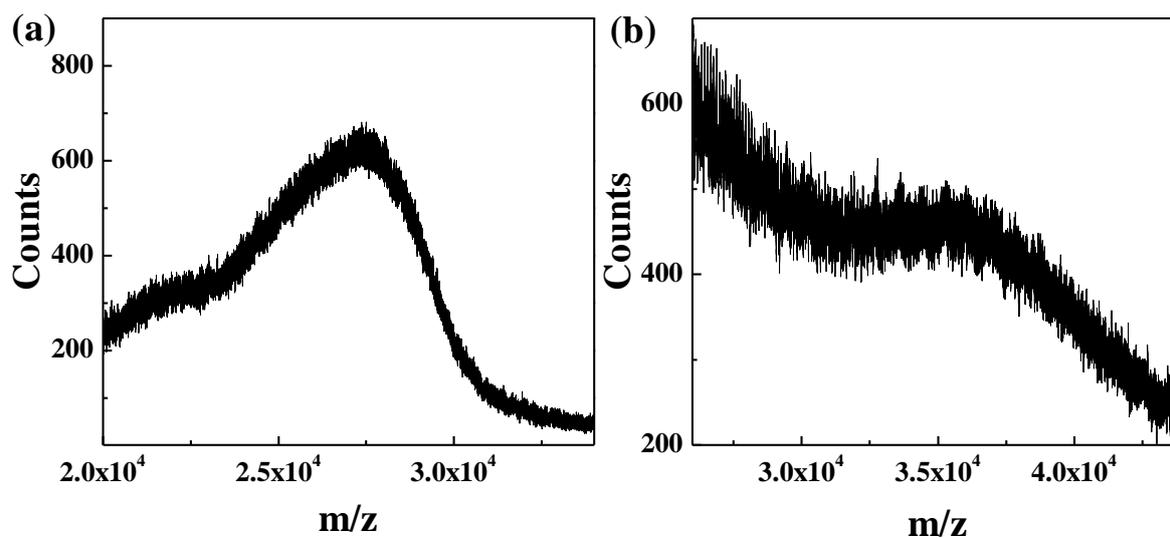


Figure S1. MALDI-TOF mass spectra of G5.NH₂ (a) and G5.NH₂-DTA (b) dendrimers.

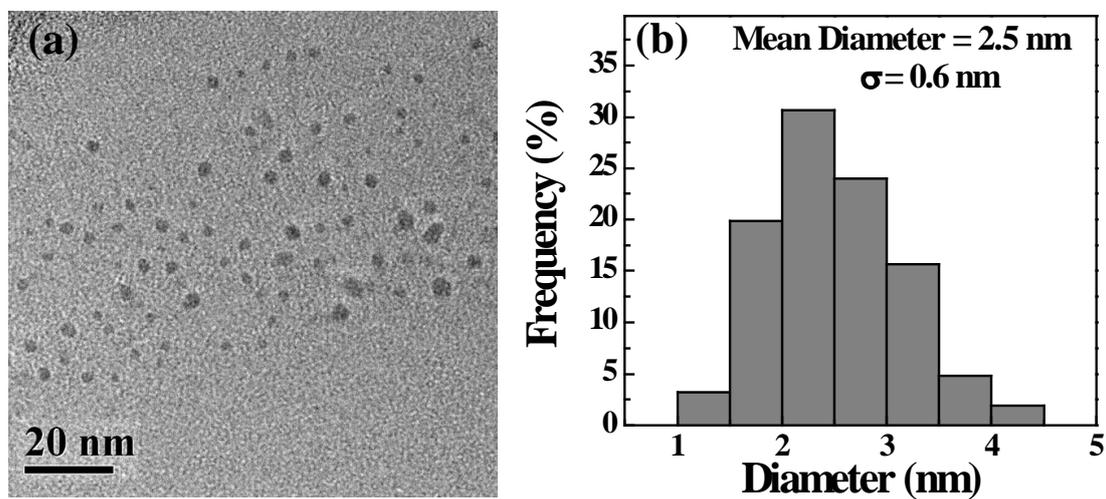


Figure S2. TEM image (a) and size distribution histogram (b) of $[(Au^0)_{50}\text{-G5.NH}_2\text{-DTA}]$ DENPs.

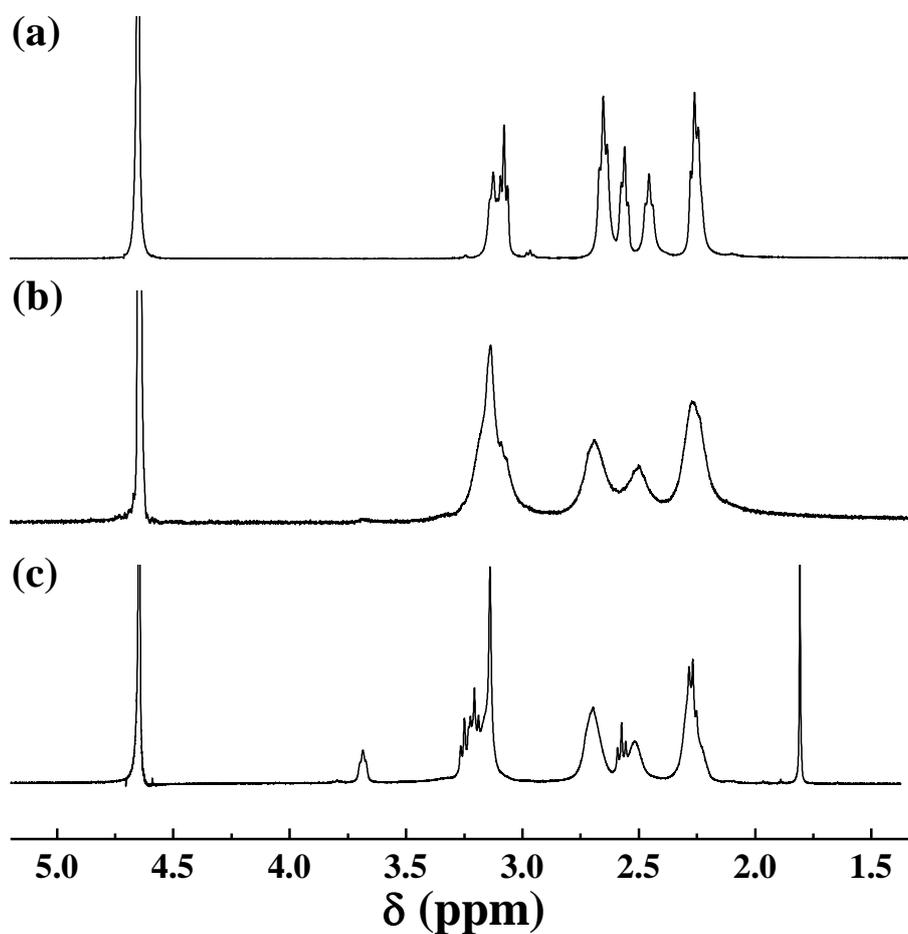


Figure S3. ^1H NMR spectra of G5.NH₂ (a), G5.NH₂-DTA (b), and $[(Au^0)_{50}\text{-G5.NHAc-DTA}]$ DSNPs (c), respectively.

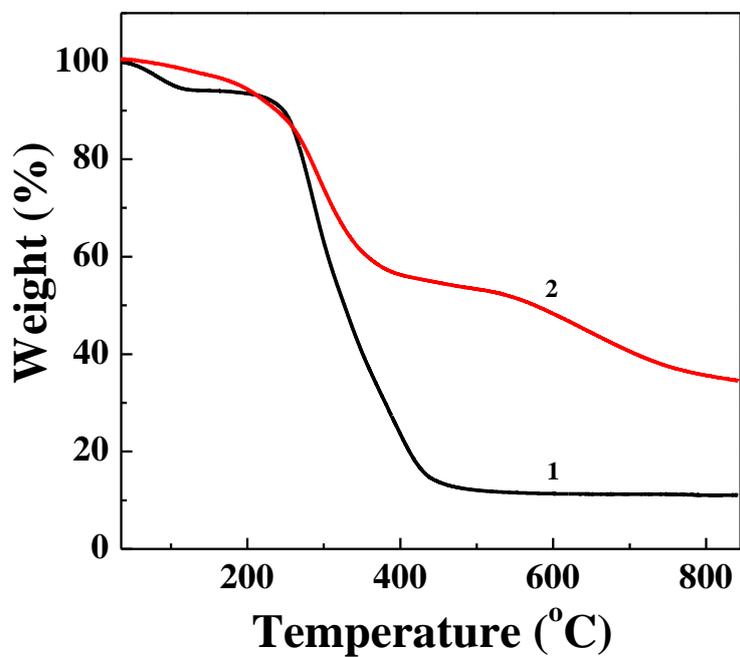


Figure S4. TGA curves of G5.NHAc-DTA dendrimers (1) and [(Au⁰)₅₀-G5.NHAc-DTA] DSNPs (2).

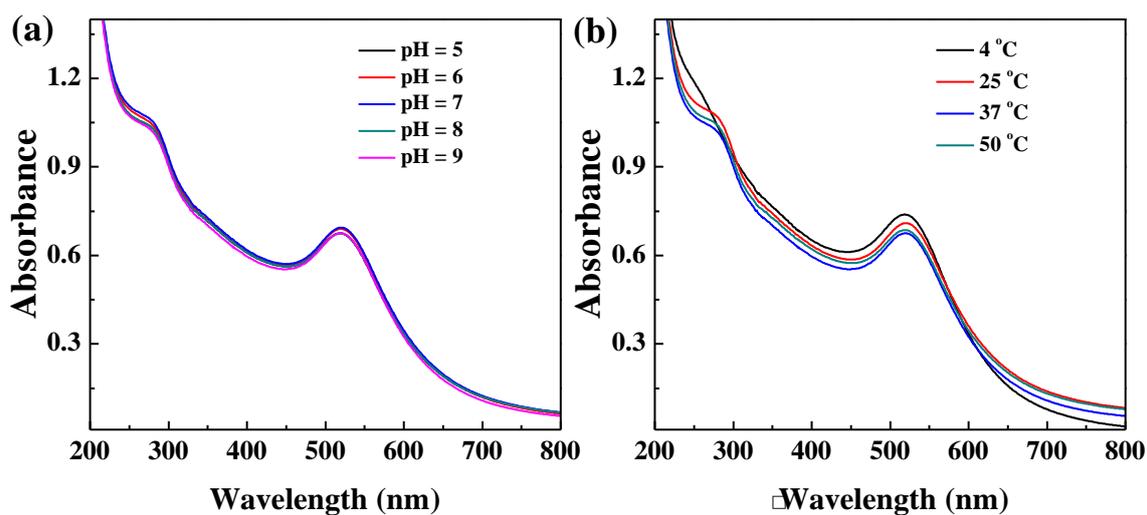


Figure S5. UV-vis spectra of [(Au⁰)₅₀-G5.NHAc-DTA] DSNPs at different pH conditions in phosphate buffer (0.1 M) at 25 °C (a) and at different temperatures in water solution (pH = 7.0) (b).

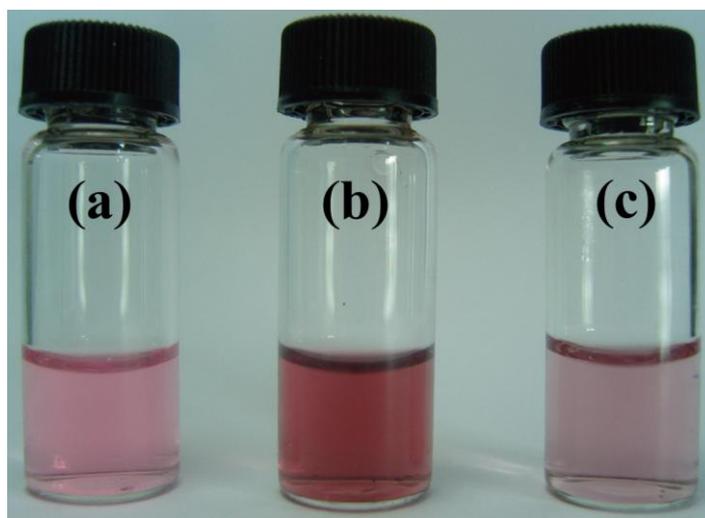


Figure S6. Photos of (a) cell culture medium, (b) $[(\text{Au}^0)_{50}\text{-G5.NHAc-DTA}]$ DSNPs dispersed in cell culture medium, and (c) $[(\text{Au}^0)_{50}\text{-G5.NHAc-DTA}]$ DSNPs dispersed in PBS solution.

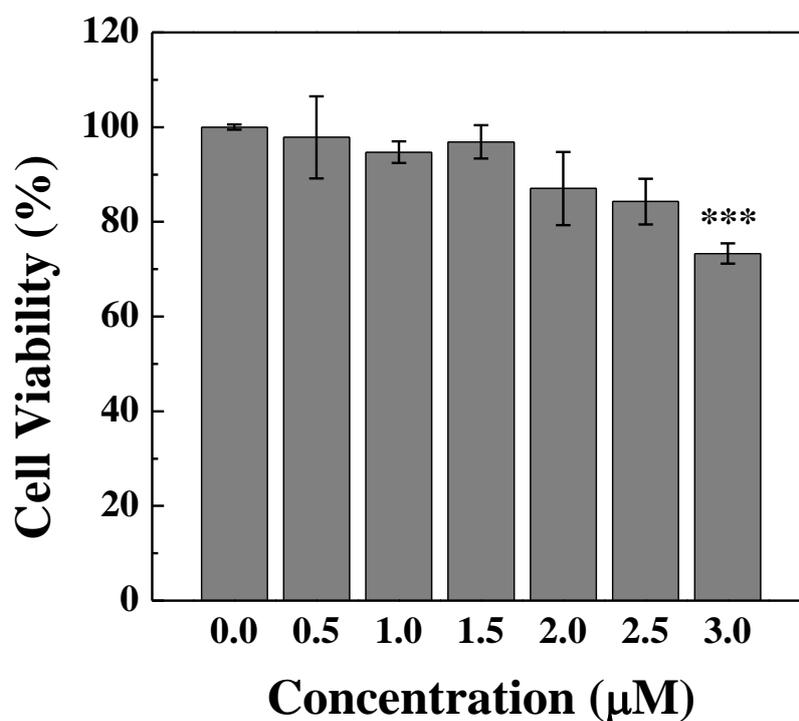


Figure S7. MTT assay of the viability of KB cells treated with $[(\text{Au}^0)_{50}\text{-G5.NHAc-DTA}]$ DSNPs at different concentrations for 12 h ($n=4$).