

Bifunctional folic-conjugated aspartic-modified Fe_3O_4 nanocarriers for efficient targeted anticancer drug delivery

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Supplementary Information

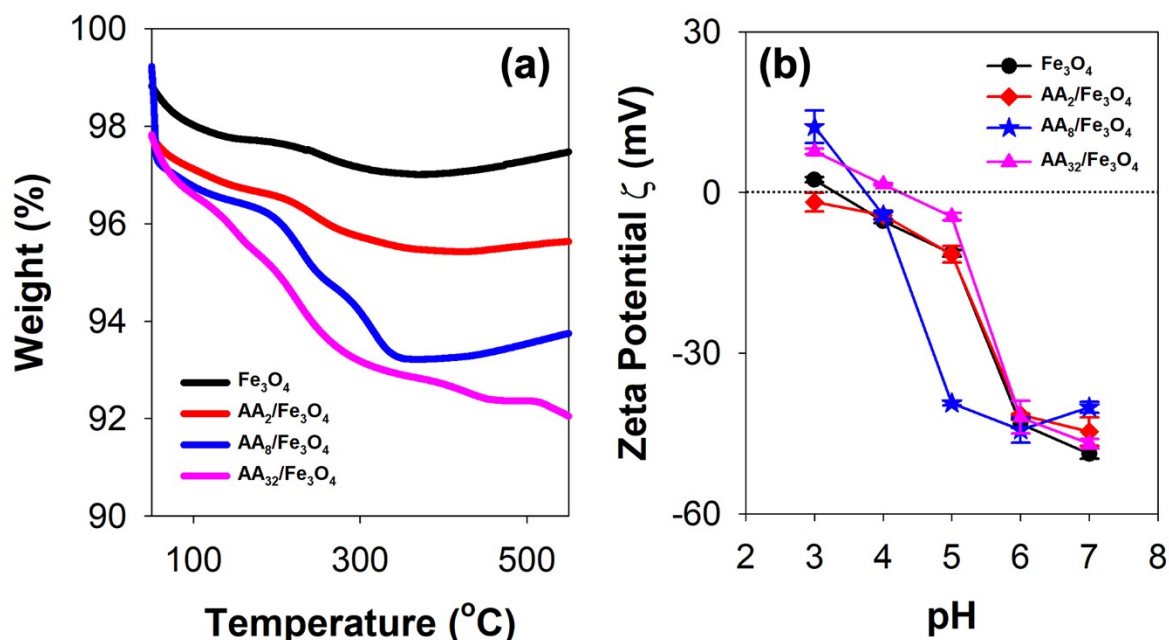


Figure S1. (a) TGA curves, and (b) zeta potential (ζ) values at various pH for the unmodified Fe_3O_4 and the corresponding $\text{Fe}_3\text{O}_4/\text{AA}_2$, $\text{Fe}_3\text{O}_4/\text{AA}_8$, and $\text{Fe}_3\text{O}_4/\text{AA}_{32}$ nanoparticles, respectively.

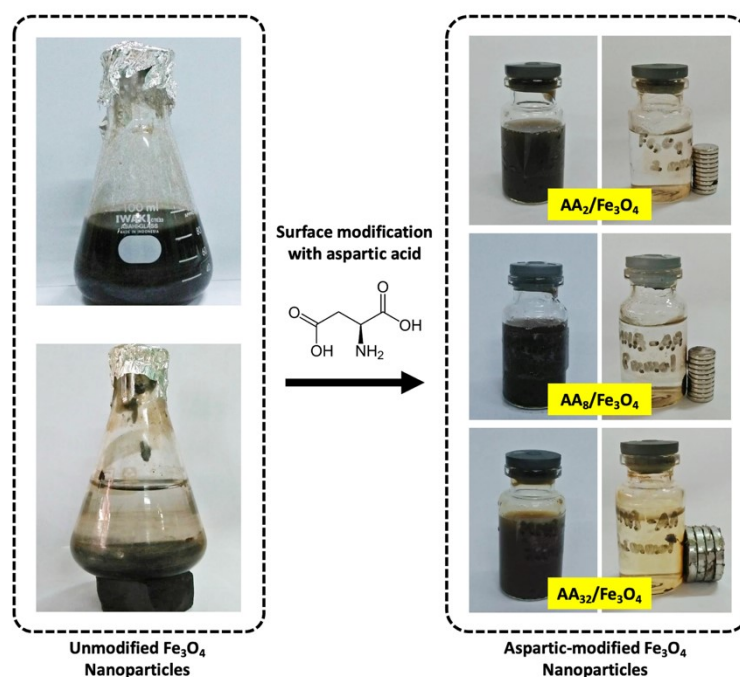


Figure S2. Photograph of unmodified and aspartic-modified Fe_3O_4 without and with the influence of external permanent magnet.

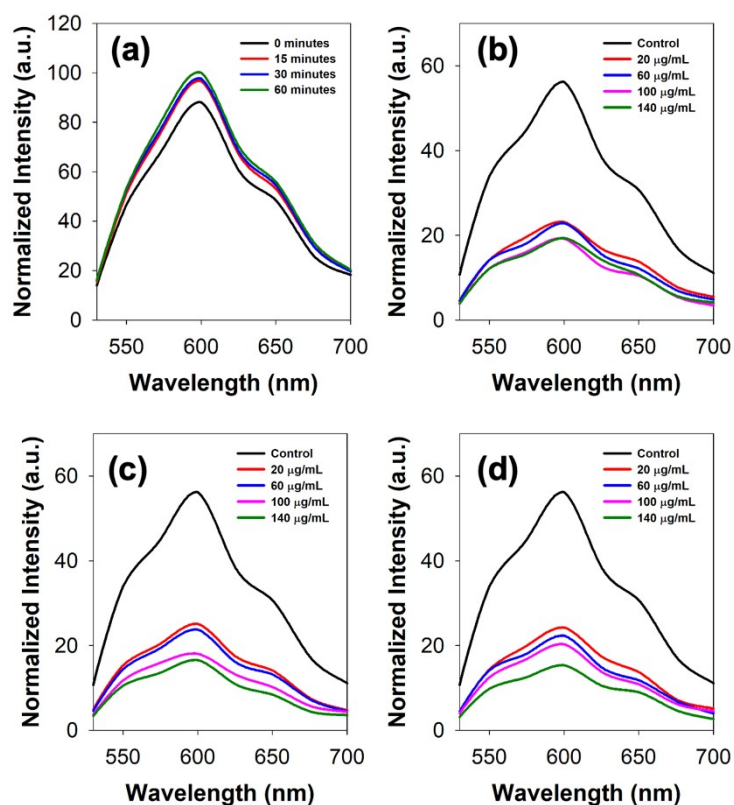


Figure S3. Normalized fluorescence spectra of (a) pure DOX at different time intervals, and (b-d) DOX after loading at various concentrations of FA/AA₂/Fe₃O₄, FA/AA₈/Fe₃O₄, and FA/AA₃₂/Fe₃O₄ nanoparticles, respectively.

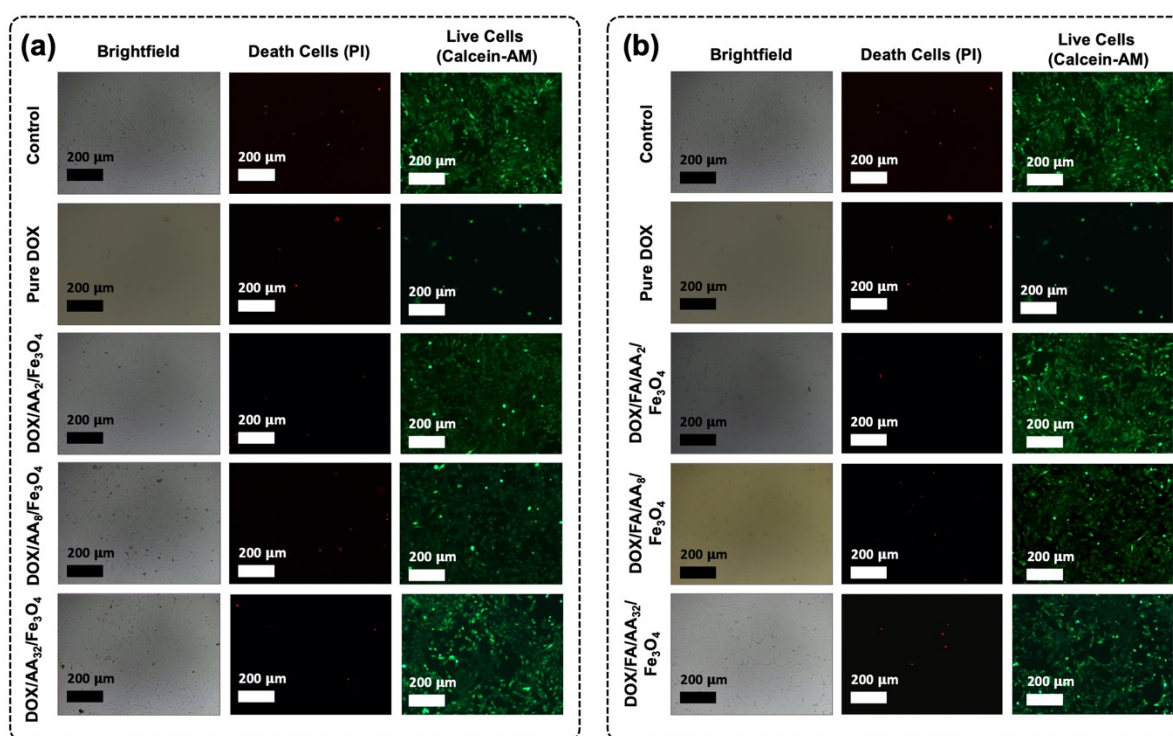


Figure S4. Fluorescence microscopy images of NIH-3T3 normal murine fibroblasts before and after incubation of (a) pure DOX and DOX/AA/Fe₃O₄, and (b) pure DOX and DOX/FA/AA/Fe₃O₄ at their IC₅₀ concentration.

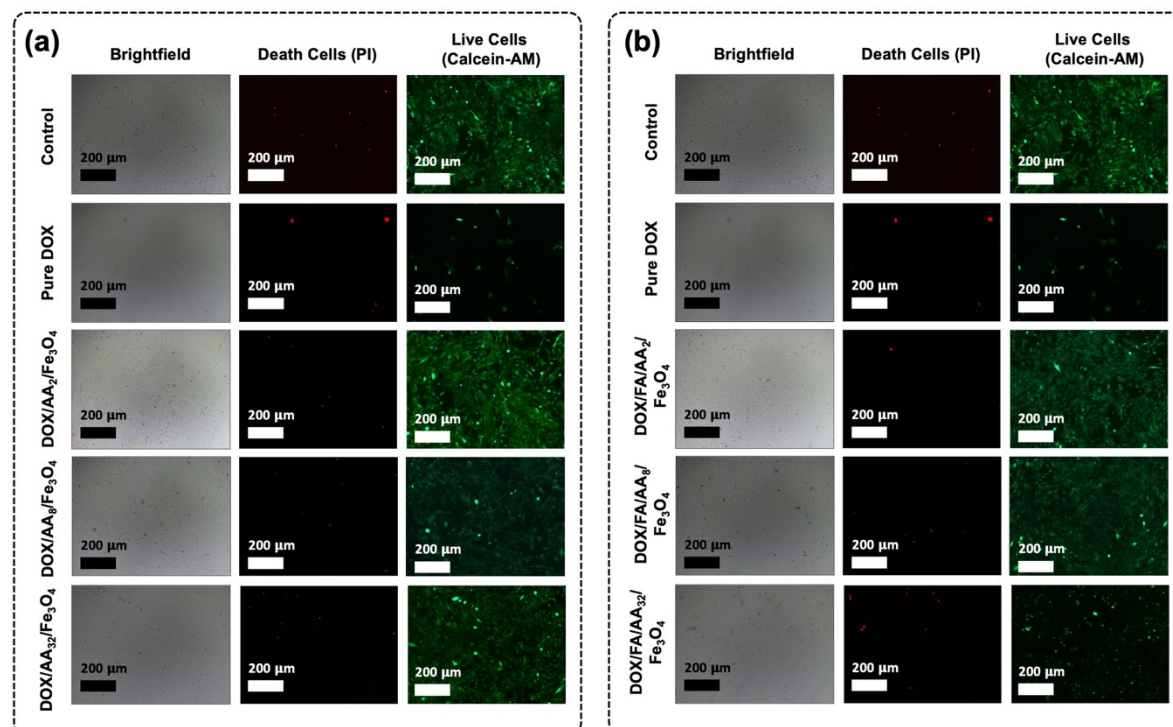


Figure S5. Fluorescence microscopy images of NIH-3T3 normal murine fibroblasts before and after incubation of (a) pure DOX and DOX/AA/Fe₃O₄, and (b) pure DOX and DOX/FA/AA/Fe₃O₄ at concentration of 20 μg/mL.