

Supporting Information

Plug-and-Play Multifunctional Mesoporous Silica Nanoparticles as Potential Platforms for Cancer Therapy

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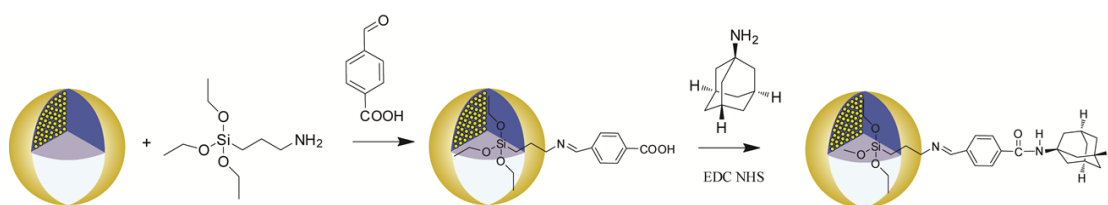


Fig S1 Fabrication of multifunctional mesoporous silica nanoparticles

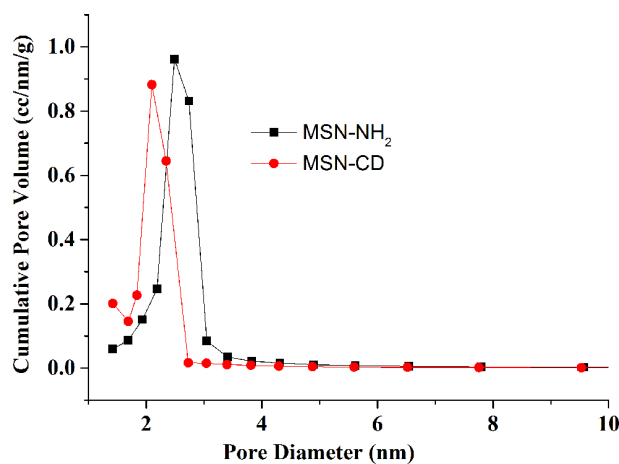


Fig S2 BJH pore size distribution of the corresponding samples

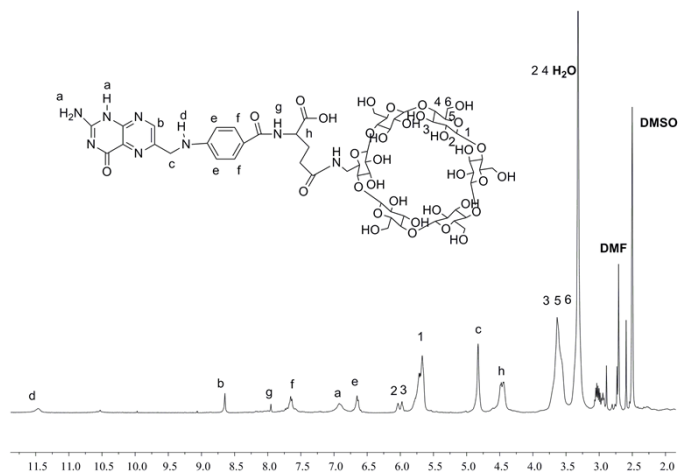


Fig S3 ^1H NMR spectrum of FA-CD

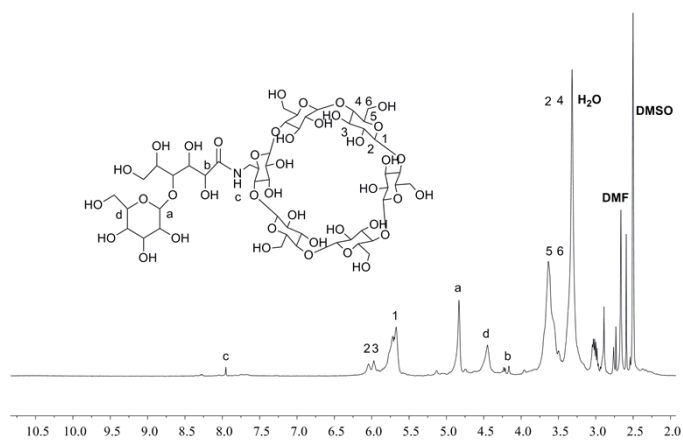


Fig S4 ^1H NMR spectrum of LA-CD

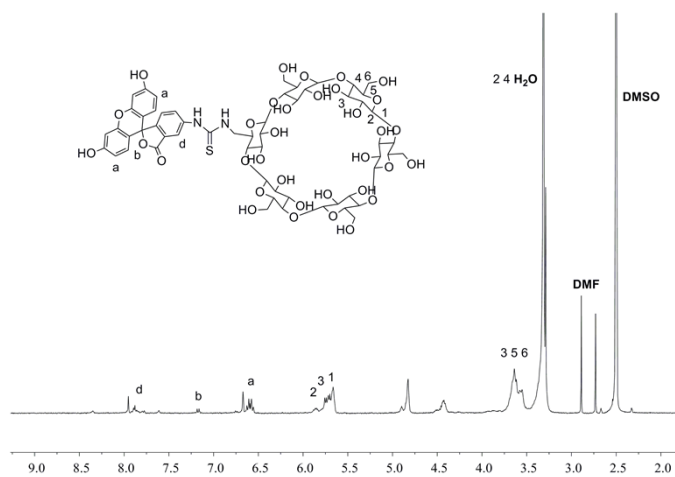


Fig S5 ^1H NMR spectrum of FITC-CD

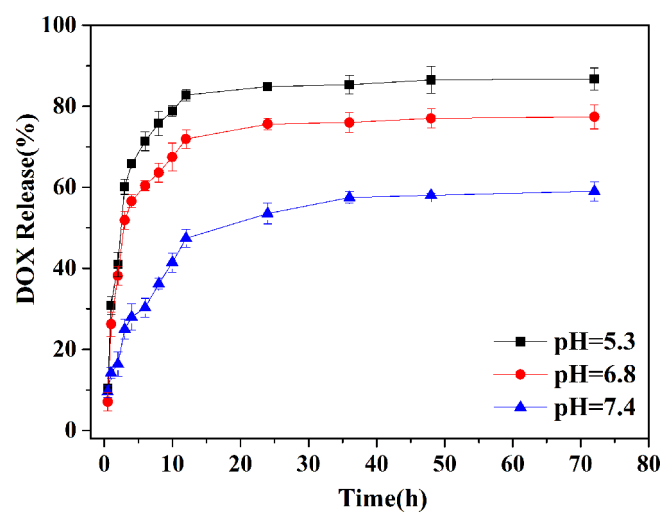


Fig S6 *In vitro* DOX release behaviors of DOX-loaded MSNs (MSN@DOX) in PBS at pH 5.3, 6.8 and 7.4 at 37 °C

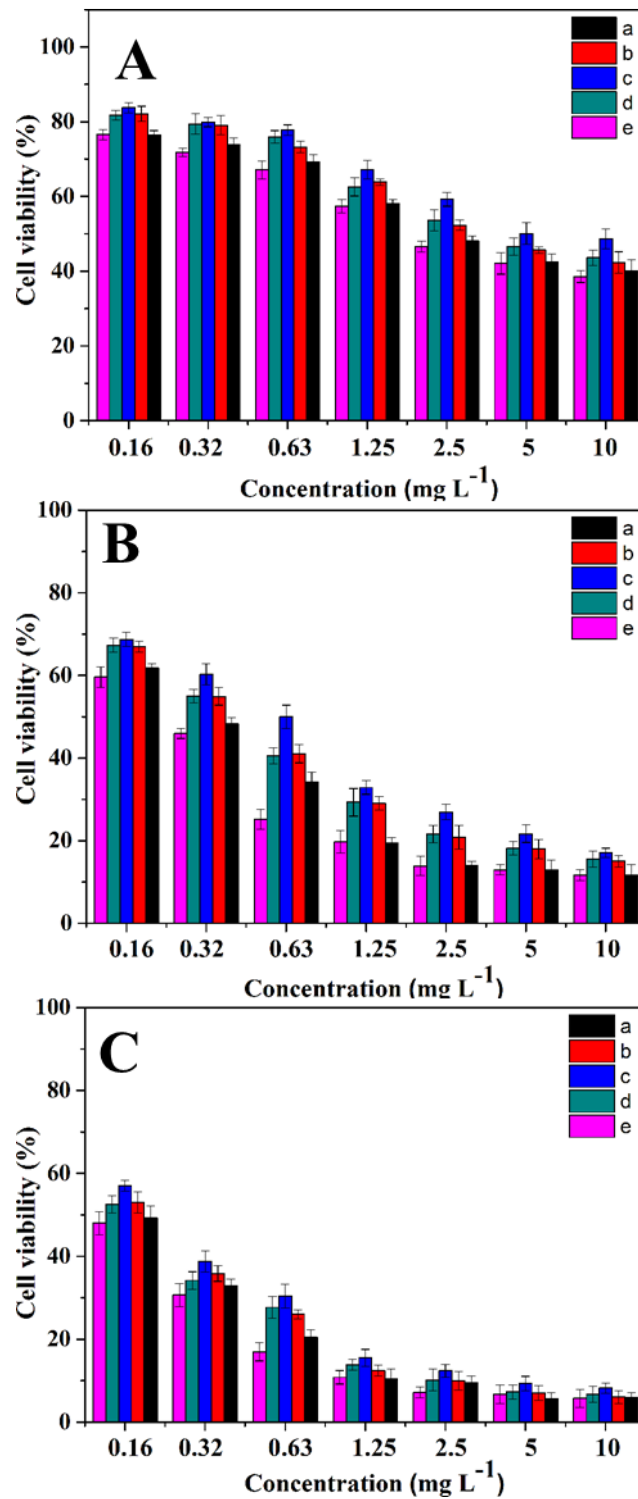


Fig S7 Cytotoxicities of DOX-loaded MMSN-LA (a), DOX-loaded MMSN-FA (b), DOX-loaded MMSN-LA + free LA (c), DOX-loaded MMSN (d) and DOX (e) toward HepG2 cells after incubation for 24 h (A), 48 h (B), and 72 h (C).

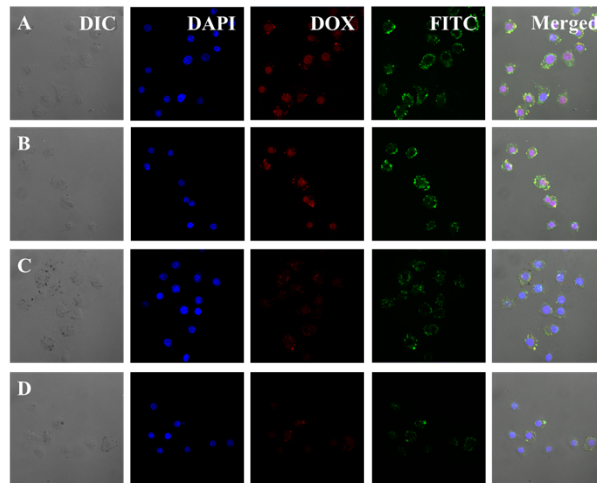


Fig S8 Representative CLSM images of HepG2 cells incubated with DOX-loaded MMSN-FA (A), DOX-loaded MMSN-LA (B), DOX-loaded MMSN (C) and DOX-loaded MMSN-FA + free FA (D) for 3 h. For each panel, the images from left to right show differential interference contrast (DIC) image, cell nuclei stained by DAPI (blue), DOX fluorescence in cells (red), FITC fluorescence (green) and overlays of the four images.

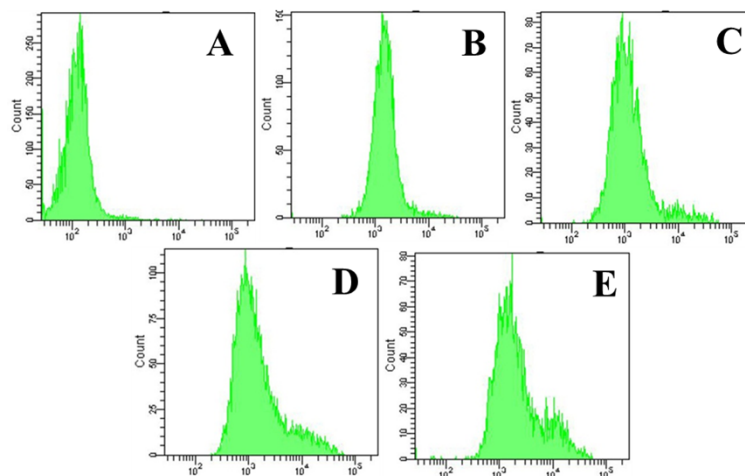


Fig. S9 Flow cytometric profiles of HepG2 cells blank (A) and incubated with DOX-loaded MMSN-LA + free LA (B), DOX-loaded MMSN (C), DOX-loaded MMSN-FA (D) and DOX-loaded MMSN-LA (E) for 3 h.

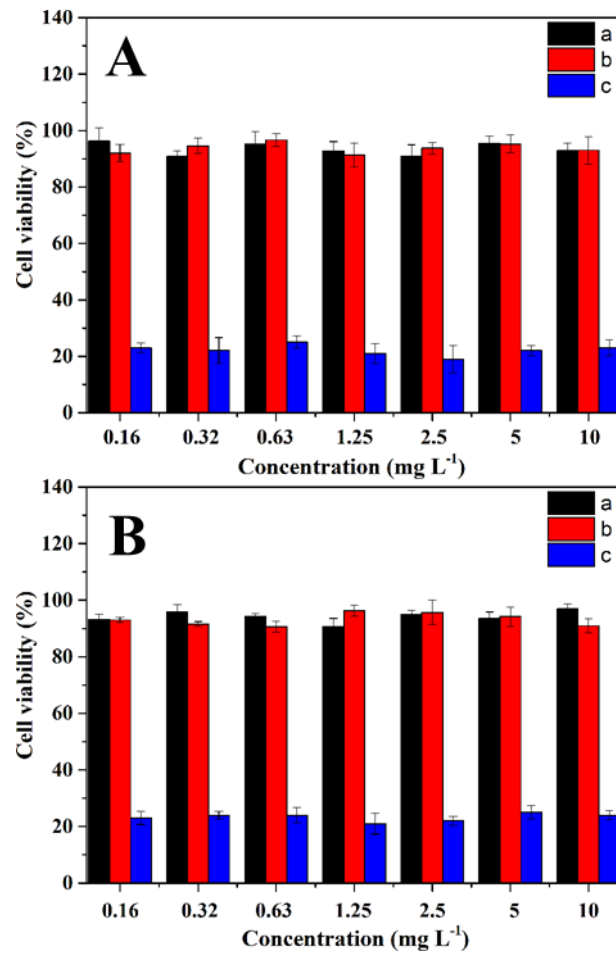


Fig S10 Cytotoxicities of MSN-AD (a), MSN-CD (b), and PEI (c) toward HeLa (A) and HepG2 (B) cells after incubation for 48 h.