Electronic Supporting Information

Enhanced highly toxic reactive oxygen species levels by iron oxide core-shell mesoporous silica nanocarrier-mediated Fenton reactions for cancer therapy

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Fig. S1 The TEM image of MSN-TPP-PEG-FA

Fig. S2 (A) The FTIR spectra of different MSN materials; (B) The UV-vis spectra of MSN-NH$_2$, MSN-TPP and MSN-TPP/PEG-FA.
Fig. S3 Actual pictures of color changes induced by ferric ions released from Fe₃O₄@MSN-TPP/PEG-FA. (a) Without H₂O₂, (b) low concentration of H₂O₂ and (c) high concentration of H₂O₂.

Fig. S4 Standard calibration curves of DOX (A) and AT (B) in aqueous solution.

Fig. S5 Release curves of DOX and AT from Fe₃O₄@MSN-TPP/PEG-FA in PBS solutions at different pH = 8.0 (A) and pH = 6.8 (B).
Fig. S6 (A) Mitochondrial targeting ability of the Fe$_3$O$_4$@MSN-TPP/PEG-FA to MCF-7 cells at different incubation time intervals (4 h, 8 h, 12 h). (B) Binding efficacy of non-FA-conjugated and FA-conjugated Fe$_3$O$_4$@MSN to MCF-7 cells at 6 h of incubation.