

SUPPORTING INFORMATION

Folate targeting and bovine serum albumin gated mesoporous silica nanoparticles as a redox-responsive carrier for epirubicin release

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Table.S1 DLS and LC data of MSN and MSN-FA

polymer	Drug loading Content (%)	Drug loading efficiency (%)
MSN	N/A	N/A
MSN-FA	15.0	60.0

Table.S2 Main structural characteristics of MSN and MSN-FA

	MSN	MSN-FA	EPI/MSN-FA
S_{BET} ($m^2 \cdot g^{-1}$)	1103.02	400.68	107.86
V_p ($cm^3 \cdot g^{-1}$)	1.22	0.59	0.22
D_p (nm)	2.70	2.60	2.40

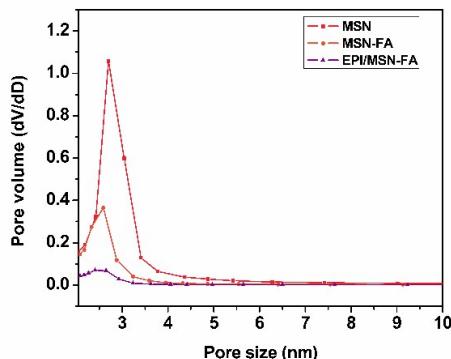


Fig. S1 pore size distribution of MSN, MSN-FA and EPI/MSN-FA

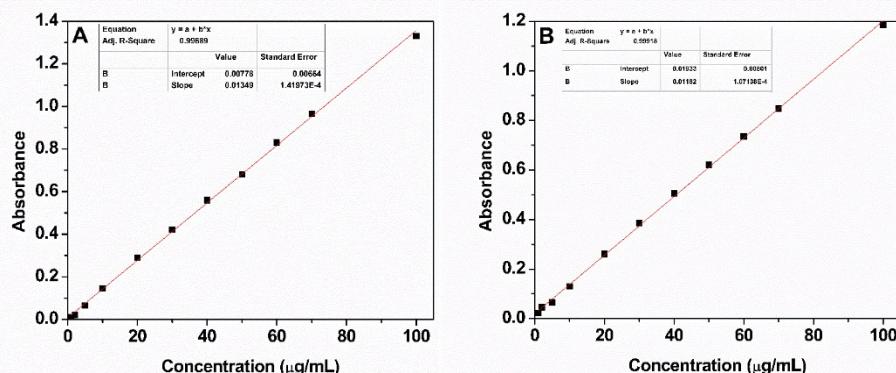


Fig. S2 EPI's standard curves of different pH. (A) pH 7.4, $Y = 0.01349x + 0.00778$, $R^2 = 0.999$ and (B) pH=5.3,

$$Y=0.011x+0.019, R^2=0.999.$$

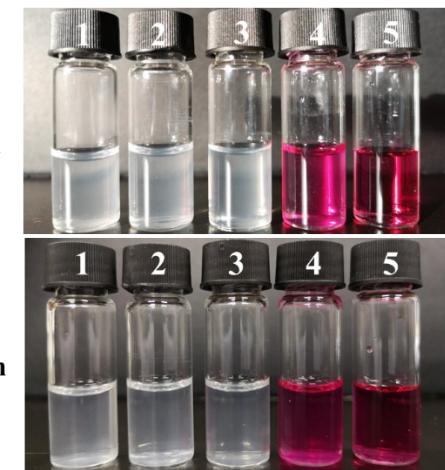


Fig. S3 Images of MSN-FA dispersed in different media (From 1 to 4: distilled water, PBS, SBF, DMEM) with 1 mg/mL MSN-FA, 5: pure DMEM without MSN-FA for 0 and 12 hours.

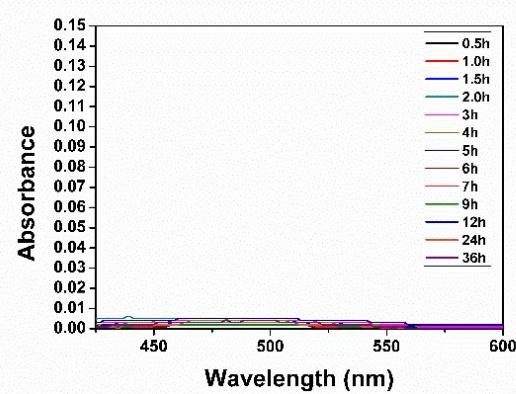


Fig. S4 The UV absorbance about drug release at different time periods from EPI/sSiO₂-FA.

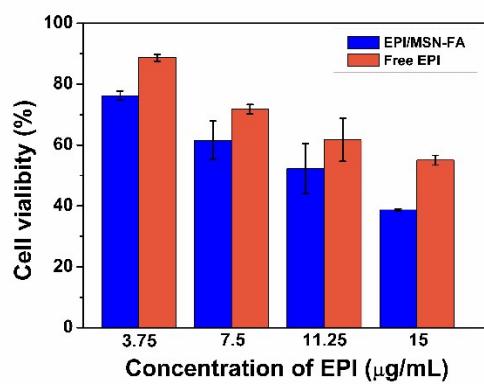


Fig. S5 Viability of HepG2 cells cultured with EPI/MSN-FA in comparison with that of free EPI at the same EPI dose for 24h.