

Electronic Supplementary Information

Folate-integrated magnetic polymer micelle for MRI and dual targeted drug delivery

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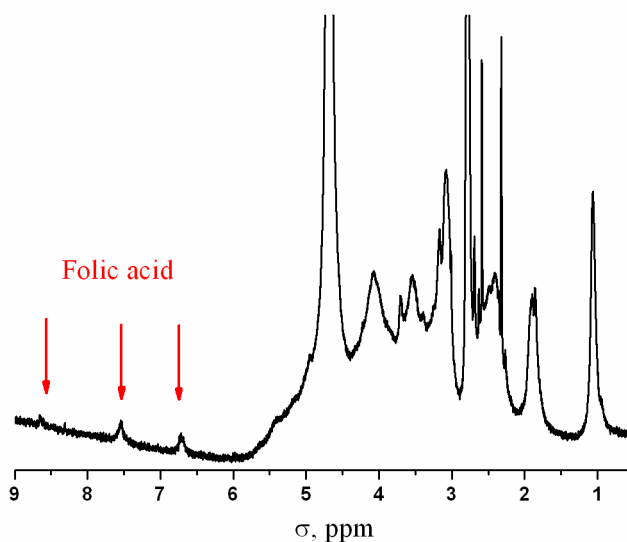


Fig. S1 ¹H-NMR spectrum of heparin-folic acid conjugate in D₂O.

The folic acid grafted on heparin could be identified by the peaks (marked by red arrows) as reported in previous literatures ^{1,2}

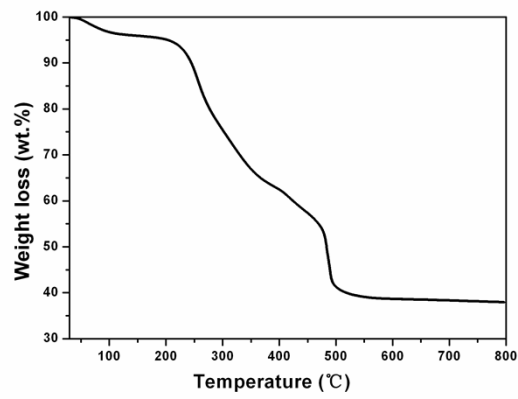


Fig. S2 TGA measure of HF-SPION from 25°C to 800°C at a heating rate of 10°C/min in air atmosphere.

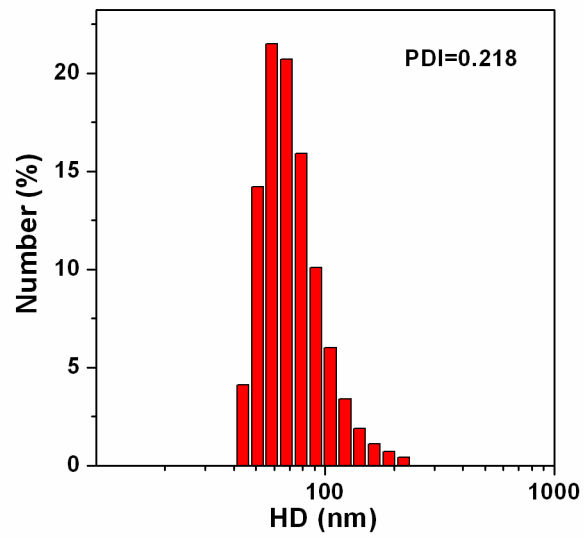


Fig. S3 Size distribution of HF-SPION-DOX measured by dynamic light scattering (DLS).

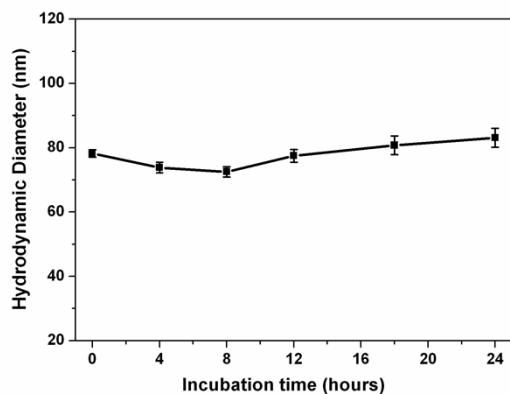


Fig. S4 Hydrodynamic diameters of HF-SPION-DOX in mouse blood serum during 24 h incubation at 37°C.

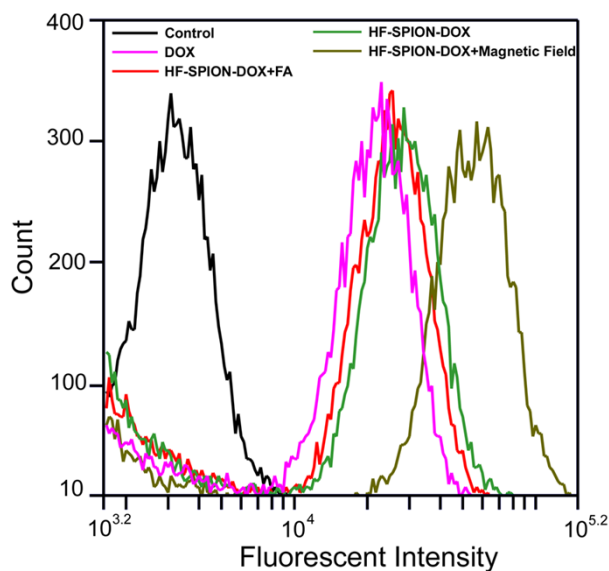


Fig. S5 Flow cytometric analysis of controlled MCF-7 cells and MCF-7 cells treated with free DOX, HF-SPION-DOX with FA, HF-SPION-DOX and HF-SPION-DOX under an external magnetic field at DOX concentration of 5 $\mu\text{g/mL}$ for 0.5h (left to right).

References

- (1) X. Wang, J. Li, Y. Q. Wang, K. J. Cho, G. Kim, A. Gjyzezi, L. K. P. Giannakakou, H. J. C. Shin, M. Tighiouart, S. M. Nie, Z. Chen and D. M. Shin, *ACS Nano*, 2009, **3**, 3165-3174.
- (2) C. X. Yue, P. Liu, M. B. Zheng, P. F. Zhao, Y. Q. Wang, Y. F. Ma, L. T. Cai, *Biomaterials*, 2013, **34**, 6853-6861.