## A hollow porous magnetic nanocarrier for efficient nearinfrared light- and pH- controlled drug release

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## **Supplementary Information**

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Sample Name	RT(min)	$M_n$	$M_{\rm w}$	$M_z$	PDI
DDACMM-PEG	21.412	101700	271100	559900	2.665
DDACMM-PEG-FA	21.485	104600	278000	573500	2.657

**Table S2** Drug loading concent and drug loading efficiency

Theoretical drug loading concent (wt%)	Drug loading content (wt%)	Drug loading efficiency (%)
5.00	3.97	79.40
10.00	7.23	72.30
50.00	32.93	65.86



Figure S1 XRD powder pattern of HPFe<sub>3</sub>O<sub>4.</sub>



Figure S2 <sup>1</sup>H NMR spectrum of DDACMM-PEG-FA.



Figure S3 <sup>1</sup>H NMR spectrum of DDACMM-PEG before and after light irradiation.



Figure S4 N<sub>2</sub> adsorption-desorption isotherm of HPFe<sub>3</sub>O<sub>4</sub>.



Figure S5 DLS of polymer-coated HPFe $_3O_4$  before and after 10 min irradiation using femtosecond pulse NIR laser.



**Figure S6** T2-wight MRI of KB cells incubated with HPFe<sub>3</sub>O<sub>4</sub>-DDACMM-PEG (without FA targeting groups) (a) and HPFe<sub>3</sub>O<sub>4</sub>@DDACMM-PEG-FA (with FA targeting groups) (b) for 1h (Figure (a) as control)