Supplementary Information for

pH-responsive nanoparticle based on Ibuprofen prodrug as drug carrier for inhibition of primary tumor growth and metastasis

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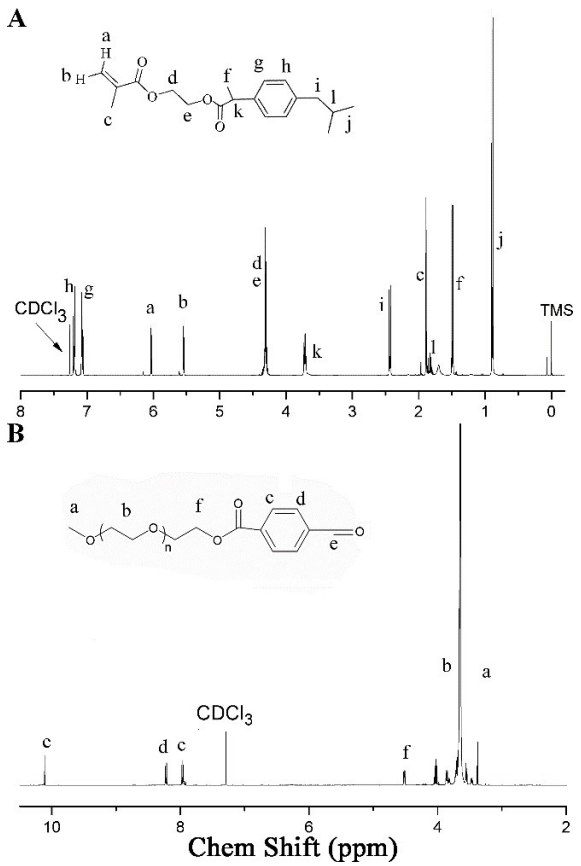

Figure S1 ^{1}H-NMR spectra of HEI (A) and PEG-CBA (B) in $CDCl_3$.

Table S1 Characterization data of the polymers

	M*n*(GPC)[a]	PDI
MPEG-PHEI$_5$	3714	1.15
MPEG-PHEI$_{10}$	6229	1.24

[a] measured by GPC (THF, PS standards).

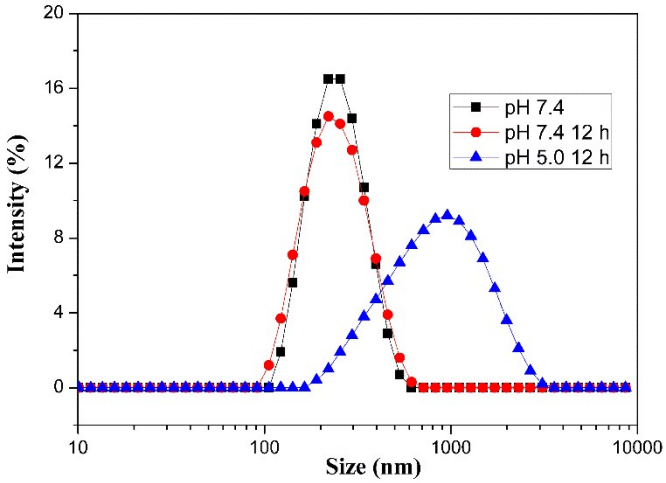

Figure S2 Size distribution of blank nanoparticles in physiological and acidic conditions (37 °C, pH 7.4 and 5.0).

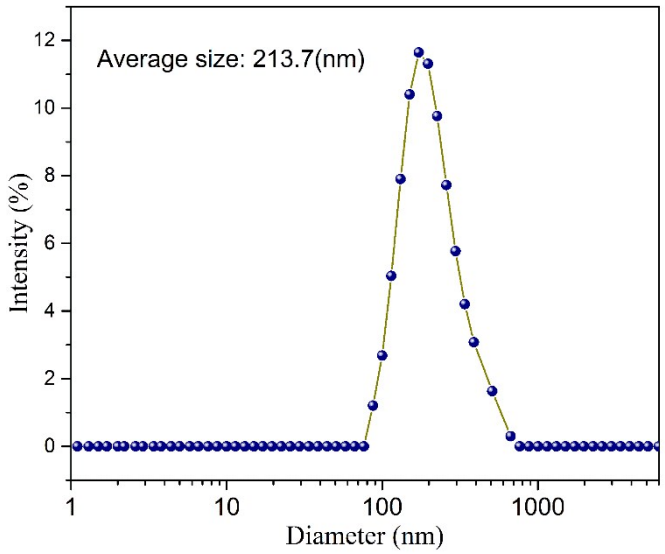

Figure S3 Size distribution of DOX/NPs.

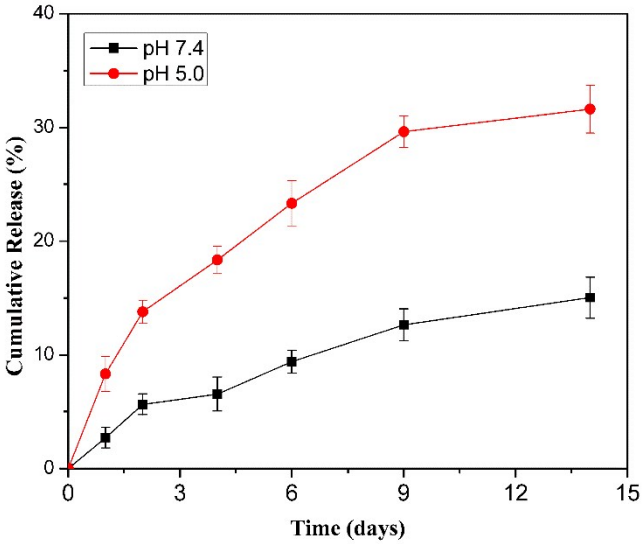

Figure S4 Ibuprofen release profiles of MPEG-PHEI in physiological and acidic conditions (37 °C, pH 7.4 and 5.0).

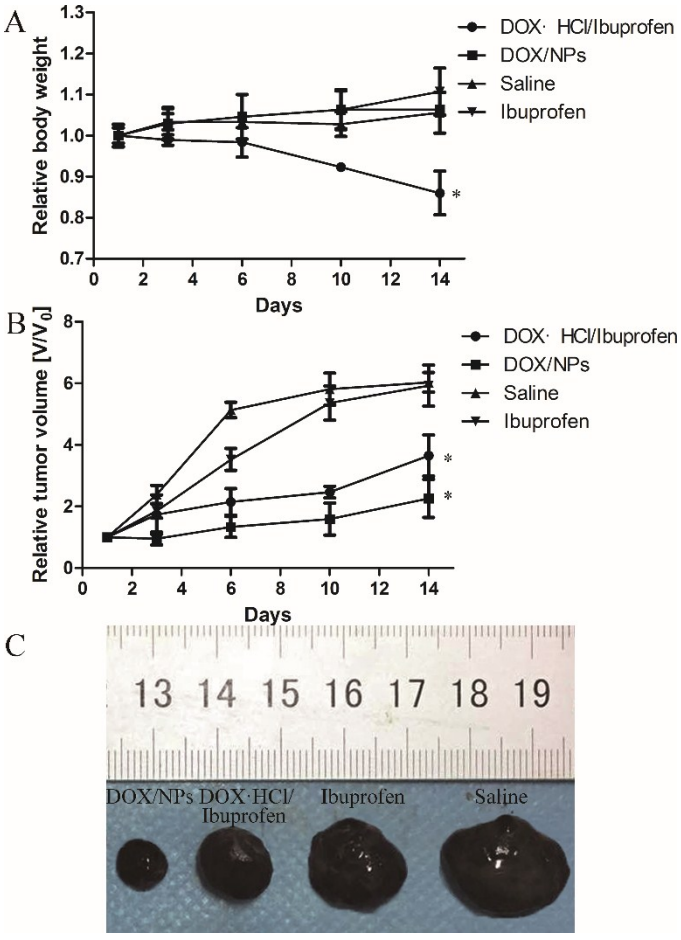

Figure S5 *In vivo* antitumor effcacy of DOX/NPs compared to ibuprofen, as well as the combination of DOX and ibuprofen. (A) Body weights of mice, (B) tumor growth curves, (C) tumor morphologies after the mice were sacrificed. Error bars indicate SD (n = 6). *P < 0.01, treated group versus saline group. The scale bar is 500 μm.