Electronic Supplementary Information

Enhanced endocytosis of acid-sensitive doxorubicin derivatives with intelligent nanogel for improved security and efficacy

Jianxun Ding‡[a], Fenghua Shi‡[ab], Di Li[a], Li Chen*[b], Xiuli Zhuang*[a], Xuesi Chen[a]

[a]Key Laboratory of Polymer Ecomaterials, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun 130022, P. R. China. Fax: +86 431 85262367; Tel: +86 431 85262367; E-mail: zhuangxl@ciac.jl.cn

[b]Department of Chemistry, Northeast Normal University, Changchun 130024, P. R. China. Fax: +86 431 85099667; Tel: +86 431 85099667; E-mail: chenl686@nenu.edu.cn

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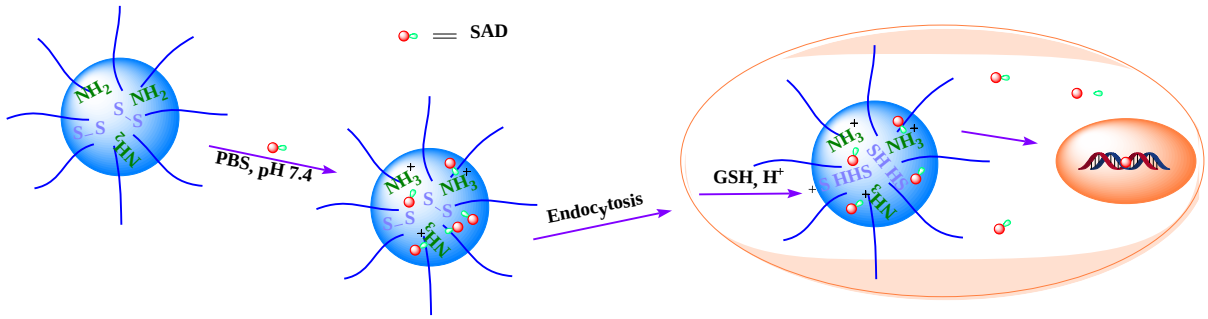
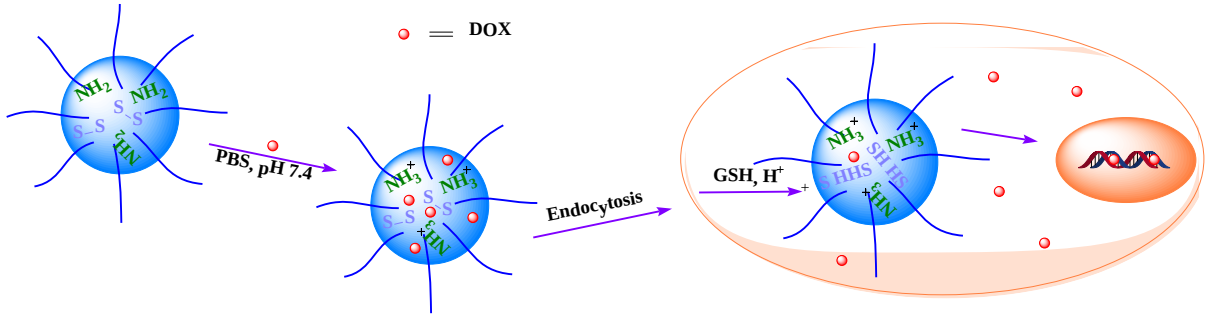
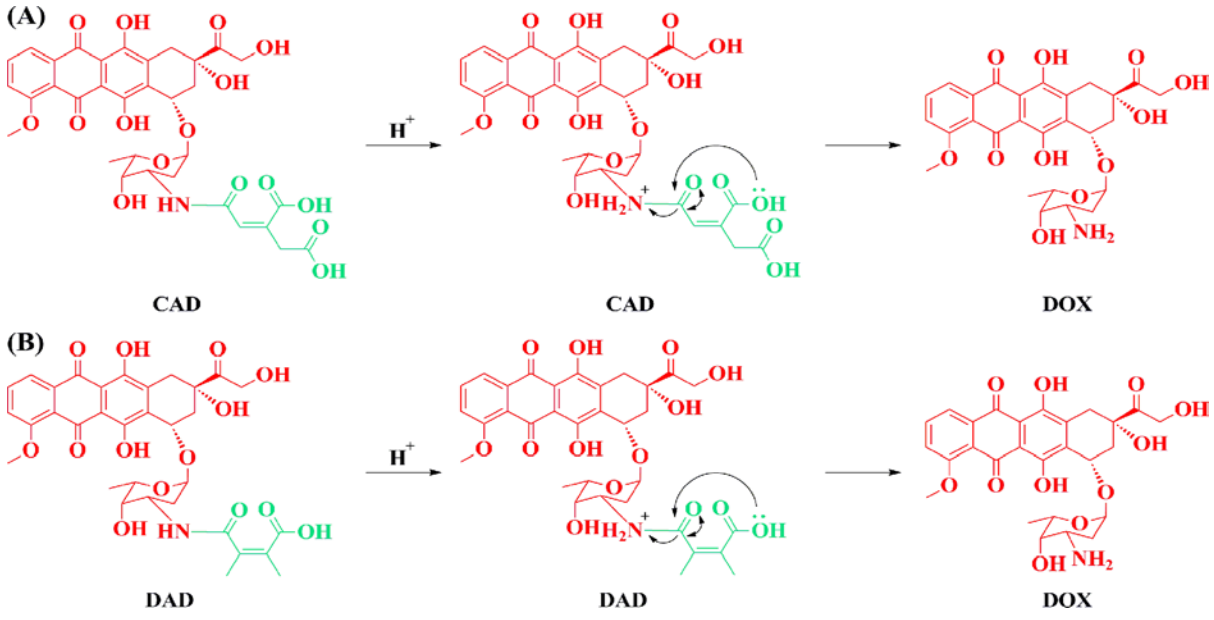
‡These authors contributed equally to this work.



Scheme S1 Schematic illustration of SAD loading and intracellular release.



Scheme S2 Schematic illustration of DOX loading and intracellular release.



Scheme S3 Schematic illustration of acid-triggered hydrolysis of CAD (A) and DAD (B).

Table S1 IC_{50} values of SAD, CAD, DAD and DOX after incubation toward HeLa and HepG2 cells for 24, 48 and 72 h.

Cell	Drug	24 h (μM)	48 h (μM)	72 h (μM)
HeLa	SAD	—	—	—
	CAD	—	11.59	8.12
	DAD	—	8.13	2.11
	DOX	2.71	1.48	1.05
HepG2	SAD	—	—	—
	CAD	—	12.29	6.19
	DAD	—	7.22	2.34
	DOX	9.55	1.84	1.25

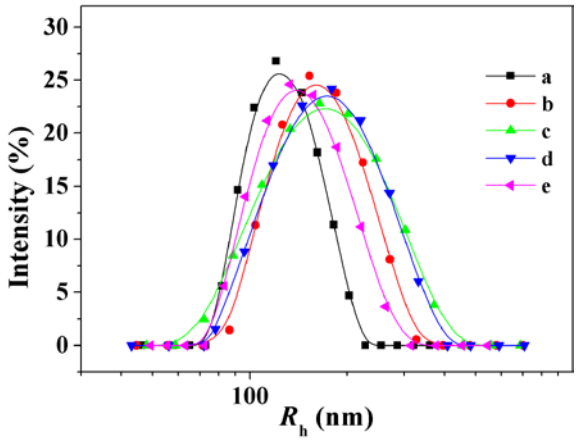


Fig. S1 The hydrodynamic radii (R_h) of nanogel (a), SAD (b), DAD (c), DAD (d) and DOX-loaded nanogels (e) in PBS at pH 7.4.