

Supporting Information  
*of*  
Enzyme-Induced and Tumor Targeted Drug Delivery System Based  
on Multifunctional Mesoporous Silica Nanoparticles

*Yin-Jia Cheng, Guo-Feng Luo, Jing-Yi Zhu, Xiao-Ding Xu, Xuan Zeng, Dong-Bing Cheng, You-Mei Li,  
Yan Wu, Xian-Zheng Zhang, Ren-Xi Zhuo, and Feng He\**

Key Laboratory of Biomedical Polymers of Ministry of Education, Department of Chemistry, Wuhan  
University, Wuhan 430072, China

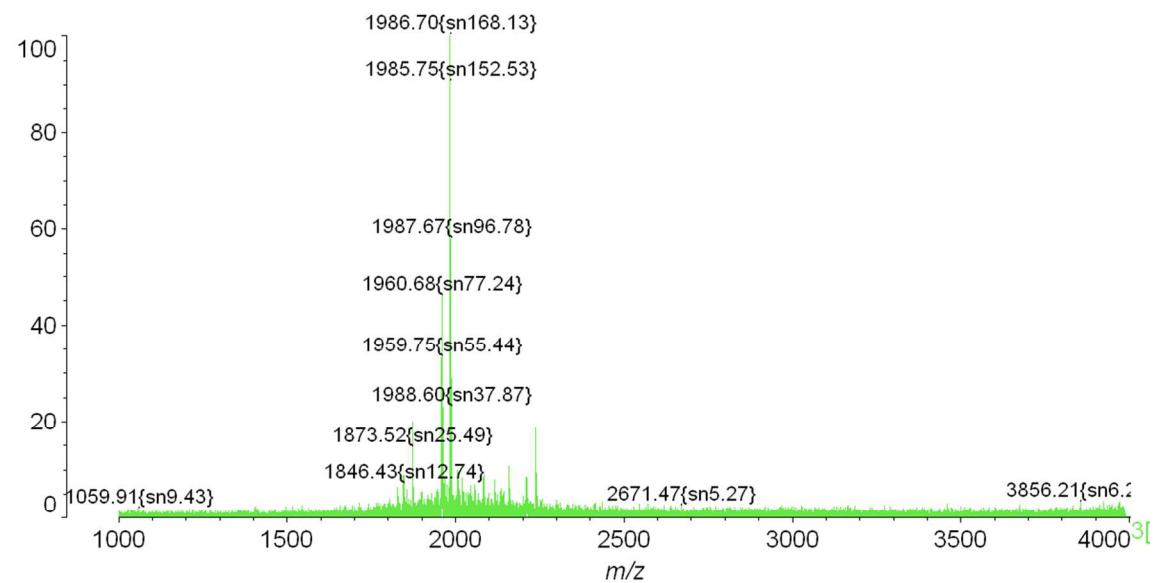
\*To whom correspondence should be addressed.

\*E-mail: hefeng@whu.edu.cn. Tel.: +86 27 6875 4061; fax: +86 27 6875 4509.

**Table S1.** BET and BJH parameters of different nanoparticles.

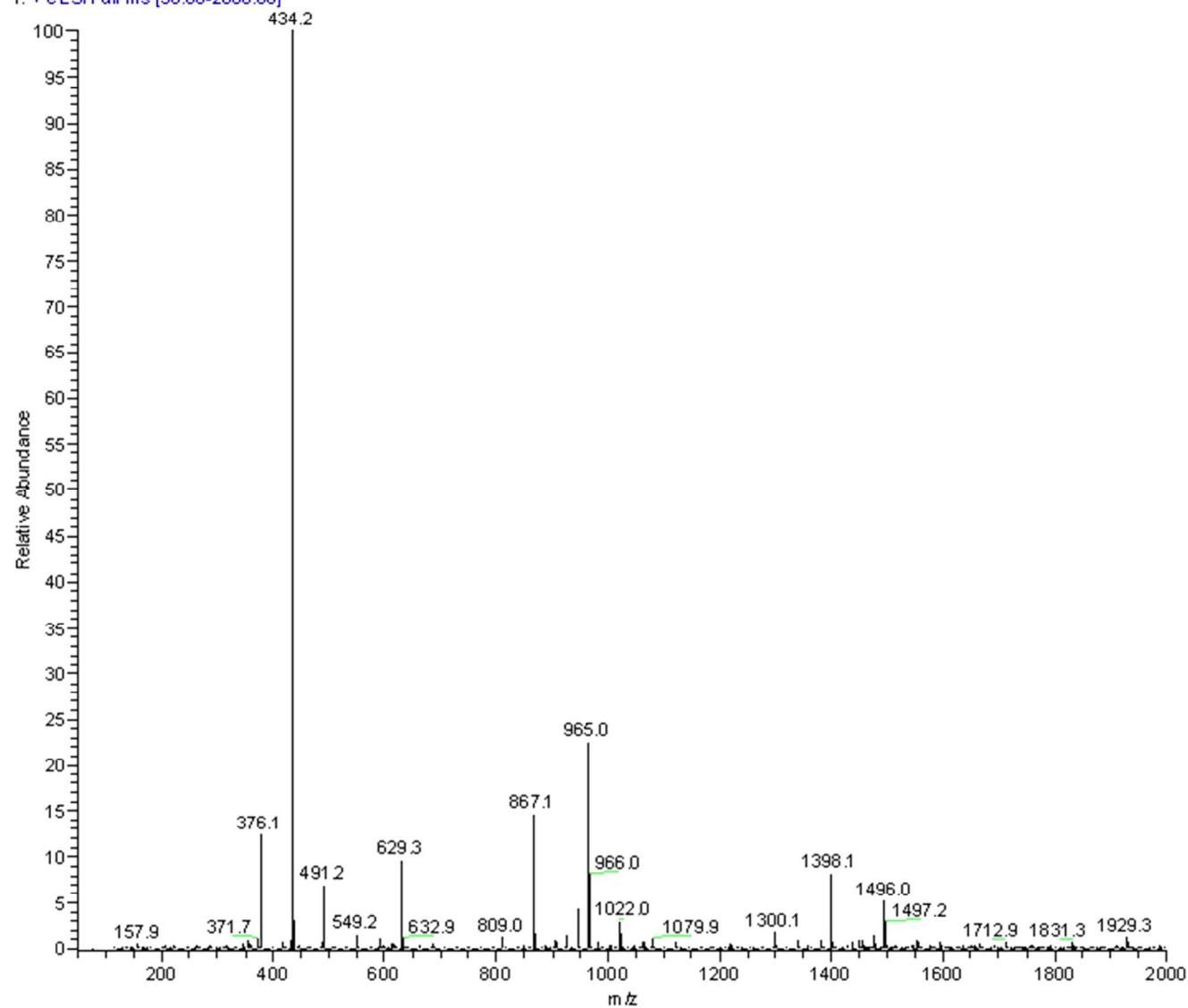
Sample	BET surface area	BET pore volume	BJH pore diameter
	$S_{BET}(\text{m}^2/\text{g})$	$V_p(\text{cm}^3/\text{g})$	$V_{BJH}(\text{\AA})$
MSN	1136.74	1.10	38.63
MSN-NH <sub>2</sub>	810.30	0.71	34.89
MSN-alkyne	604.91	0.47	29.25
DOX@MSN-GFLGR <sub>7</sub> RGDS/α-CD	88.54	/	/

%Int. 252 mV[sum= 17914 mV] Profiles 430-500 Unsmoothed -Baseline 60

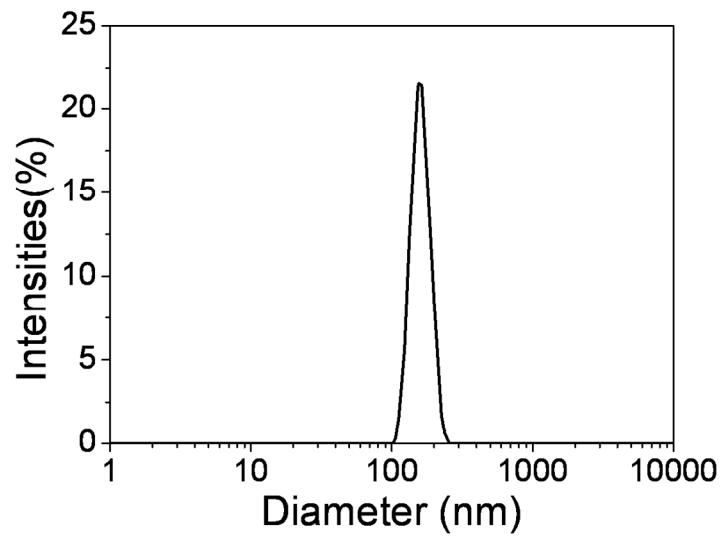


**Figure S1.** MALDI-TOF spectrum of azido-GFLGR<sub>7</sub>RGDS

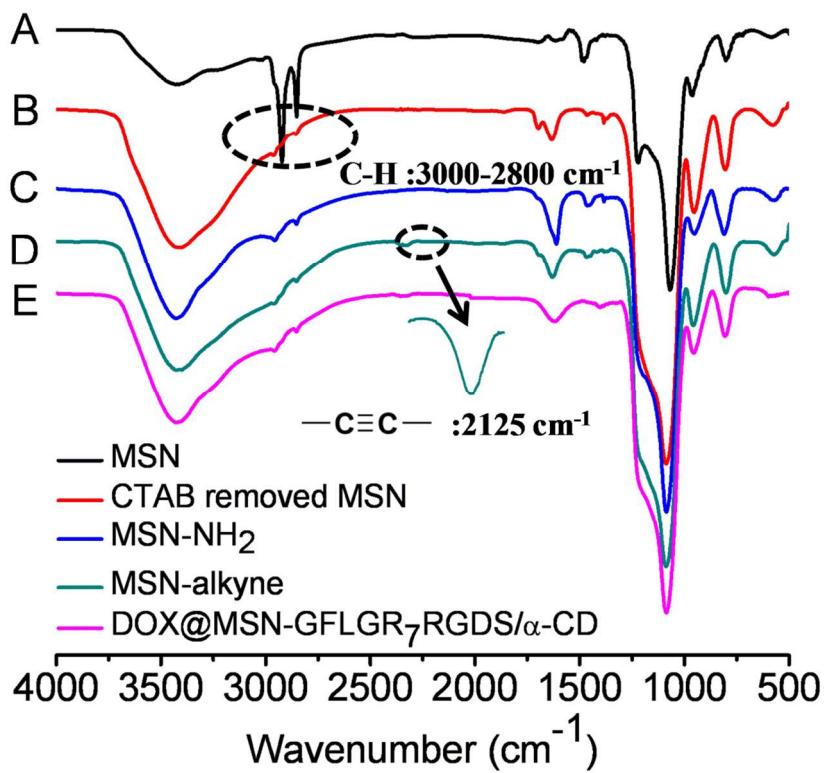
ESI-2014-0625-ch-4 #26-28 RT: 0.76-0.82 AV: 3 NL: 3.97E8  
T: + cESI Full ms [50.00-2000.00]



**Figure S2.** ESI-MS of RGDS



**Figure S3.** Size distribution of blank MSNs in PBS (pH 7.4, 10 mM) at 37 °C.



**Figure S4.** FT-IR spectra of MSN (A), CTAB removed MSN (B), MSN-NH<sub>2</sub> (C), MSN-alkyne (D), DOX@MSN-GFLGR<sub>7</sub>RGDS/α-CD (E).