Supporting Information

## Dopamine responsive nano-container for treatment of pheochromocytoma cells based on mesoporous silica nanoparticles capped with DNA-templated silver nanoparticles

Xue Yang,<sup>†</sup> Dinggeng He,<sup>†</sup> Xiaoxiao He,\* Kemin Wang,\* Zhen Zou, Xiaoxiao Yang, Xing He, Jun Xiong, Siqi Li and Liling Li



Fig. S1 Powder X-ray pattern (a) and nitrogen sorption isotherms (b) of assynthesized MSN-N<sub>3</sub>. Inset: pore size distribution plots of MSN-N<sub>3</sub>.



Fig. S2 TEM-associated EDX spectra of MSN-N<sub>3</sub> a), MSN@AgNPs b), and MSN@AgNPs after DA treatment c).



**Fig. S3** Release profiles of  $Ru(bipy)_3^{2+}$  from  $Ru(bipy)_3^{2+}$ -loaded MSN@AgNPs under different DA conditions.



Fig. S4 The CLSM images of PC-12 cells and HeLa cells incubated with DOX@MSN@AgNPs (60  $\mu$ g mL<sup>-1</sup>) for 3 h.



Fig. S5 The cytotoxicity of DOX@MSN@AgNPs for PC-12 cells and HeLa cells after treated with 48 h, respectively.



**Fig. S6** The viability of PC-12 cells and HeLa cells after treated with different concentration of DA for 48 h, respectively.



Fig. S7 The UV-vis absorption spectrum of left DNA in the supernatant.