Supporting information

Triple functions nanocomposites of porous silica-$CoFe_2O_4$-MWCNTs as carrier for pH-sensitive anti-cancer drugs controlled delivery

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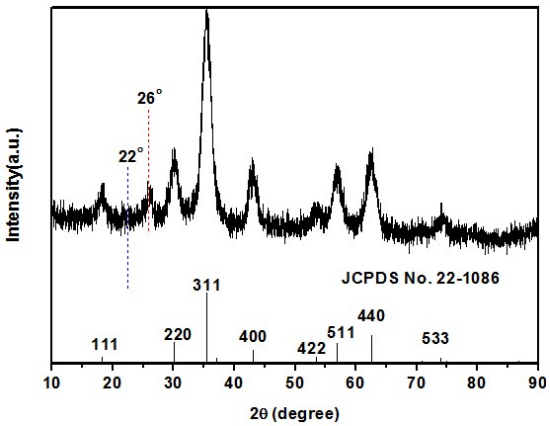

Fig. S1. XRD patterns of the MWCNTs@$CoFe_2O_4$@mSiO_2 NPs.

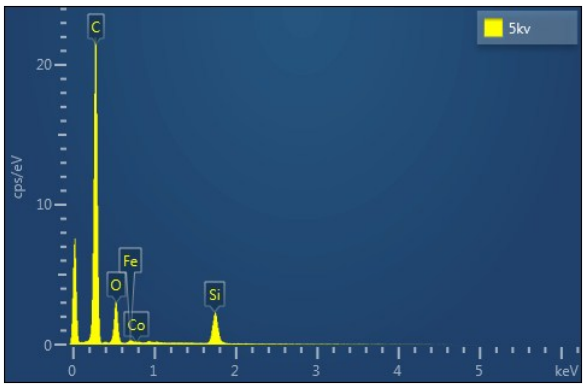

Fig. S2. Energy-dispersive X-ray spectrum of the MWCNTs@$CoFe_2O_4$@$mSiO_2$ NPs.

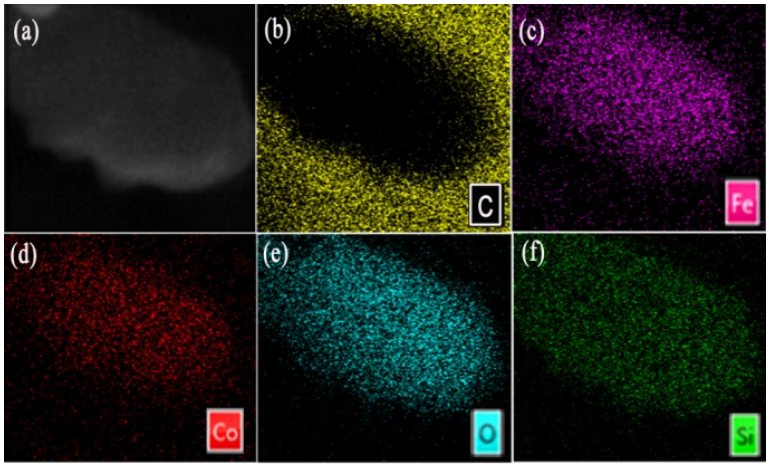

Fig. S3. EDX elemental mappings of the MWCNTs@$CoFe_2O_4$@$mSiO_2$ NPs (a-f).

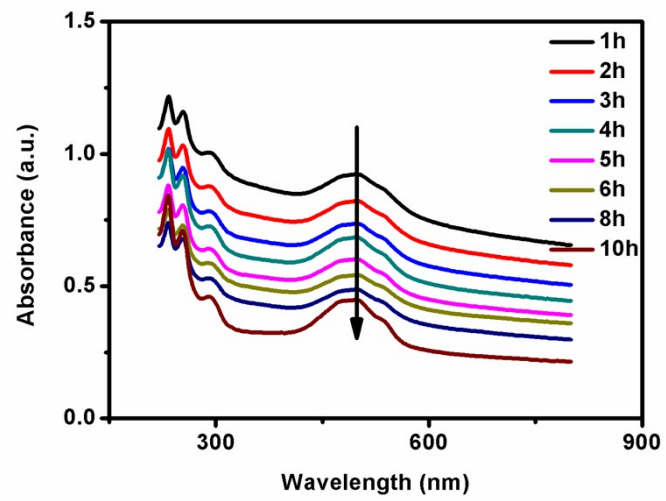

Fig. S4. The drug loading process of the MWCNTs@$CoFe_2O_4$@$mSiO_2$ NPs.

Table S1. Comparison of the efficiency for pH controlled drug release.

nanocarrier	pH	Efficiency (%)	Time (h)	ref
MWCNTs@$CoFe_2O_4$	7.4	3.8	72	36
MWCNTs@$CoFe_2O_4$	6.3	4.8	72	36
MWCNTs@$CoFe_2O_4$	5.2	30	72	36
MWCNTs@$CoFe_2O_4$@$mSiO_2$	7.4	17.8	48	this work
MWCNTs@$CoFe_2O_4$@$mSiO_2$	6.0	27.3	48	this work
MWCNTs@$CoFe_2O_4$@$mSiO_2$	2.0	59.6	48	this work