

Supporting Information

**Mesoporous Titanium Dioxide Nanocarrier with Magnetic-Targeting
and High Loading Efficiency for Dual-Modal Imaging and
Photodynamic Therapy**

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Table S1. The structure parameters of delivery systems.

Sample	S _{BET} (m ² /g)	V(cm ³ /g)
Fe ₃ O ₄ @TiO ₂ @mTiO ₂	1211	3.35
Fe ₃ O ₄ @TiO ₂ @mTiO ₂ /siRNA	779	0.86
Fe ₃ O ₄ @TiO ₂ @mTiO ₂ -DOX/siRNA	351	0.32

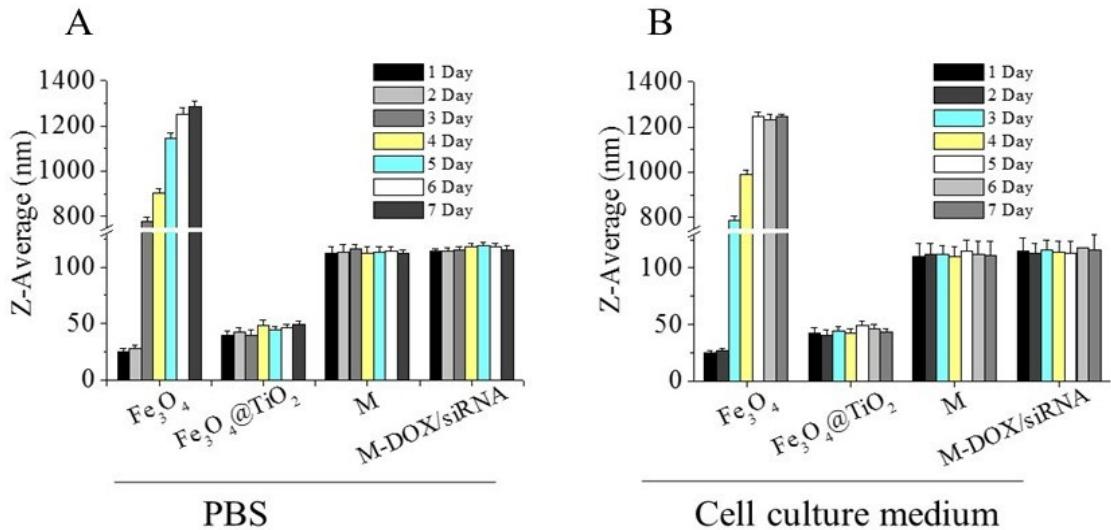


Figure S1. The stability of Fe_3O_4 , $\text{Fe}_3\text{O}_4@\text{TiO}_2$, $\text{Fe}_3\text{O}_4@\text{TiO}_2@m\text{TiO}_2$ and $\text{Fe}_3\text{O}_4@m\text{TiO}_2$ -DOX/siRNA in PBS ($\text{pH} = 7.4$) and cell culture medium (F) (M= $\text{Fe}_3\text{O}_4@\text{TiO}_2@m\text{TiO}_2$).

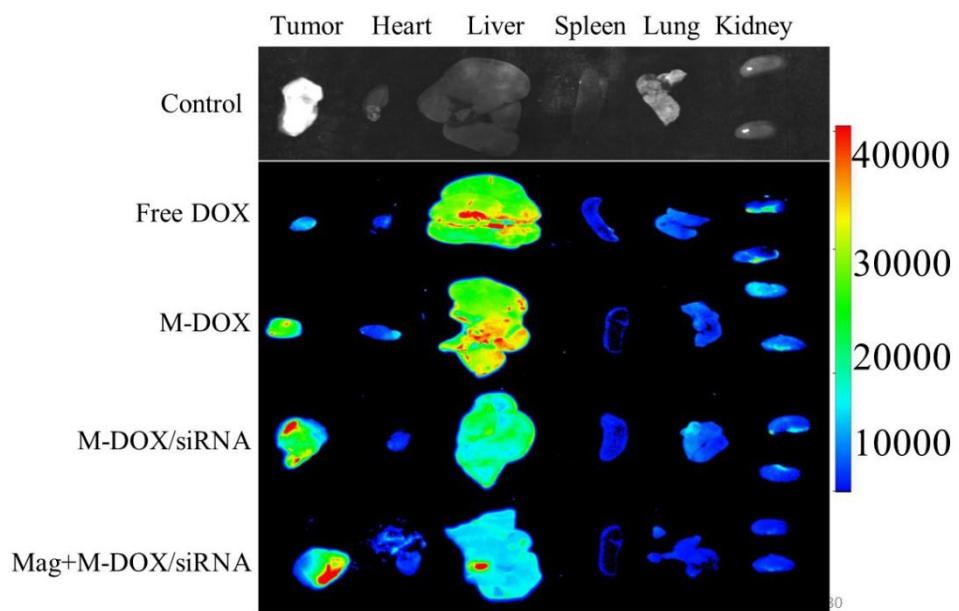


Figure S2. Ex vivo fluorescence images of tissues including heart, liver, spleen, lung, kidney and tumor collected at 4 h post-injection of different delivery systems (M= $\text{Fe}_3\text{O}_4@\text{TiO}_2@m\text{TiO}_2$).

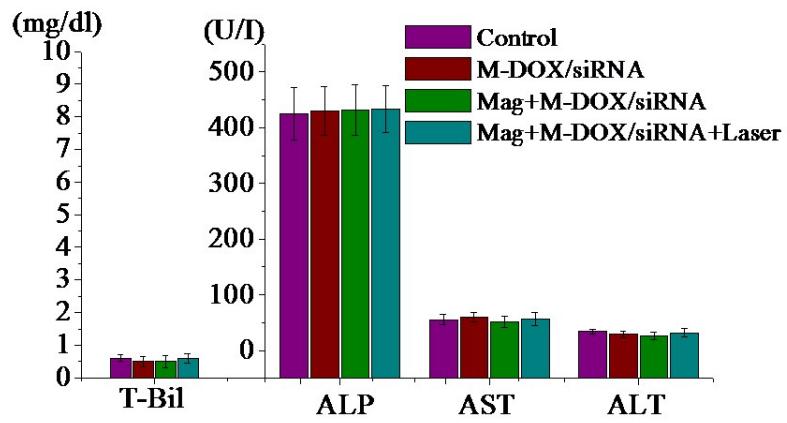


Figure S3. Blood biochemical analysis of injection of $\text{Fe}_3\text{O}_4@\text{TiO}_2@\text{mTiO}_2$ - DOX/siRNA nanoparticles whether with magnetic attraction in comparison with PBS injection (T-Bil : total bilirubin, ALP : alkaline phosphatase, AST: aspartate transaminase, ALT: alanine transaminase, n = 3) (M= $\text{Fe}_3\text{O}_4@\text{TiO}_2@\text{mTiO}_2$).

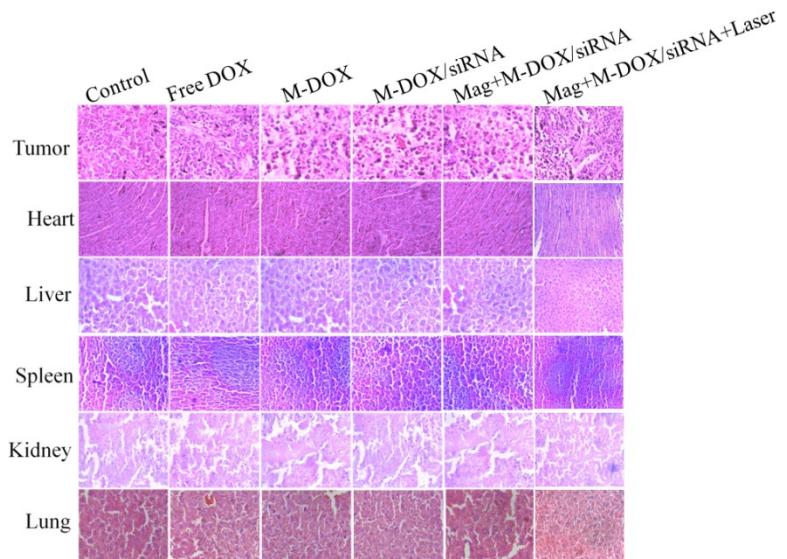


Figure S4. H&E stained images of tumor with collected from different delivery systems injected mice and control treated mice with PBS. Scale bar = 50 μm (M= $\text{Fe}_3\text{O}_4@\text{TiO}_2@\text{mTiO}_2$).