

Supporting Information

A ZnO-gated porphyrinic metal-organic framework-based drug delivery system for targeted bimodal cancer therapy

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List of Contents

1.	Characterization of porous structure of porMOF	S3
2.	pH-dependent release of DOX from the carriers without or with ZnO encapsulation	S4
3.	DOX fluorescence measurements in selected cells	S5
4.	Confocal fluorescence microscopy images of HeLa and NIH3T3 cells.....	S6

1. Characterization of porous structure of porMOF

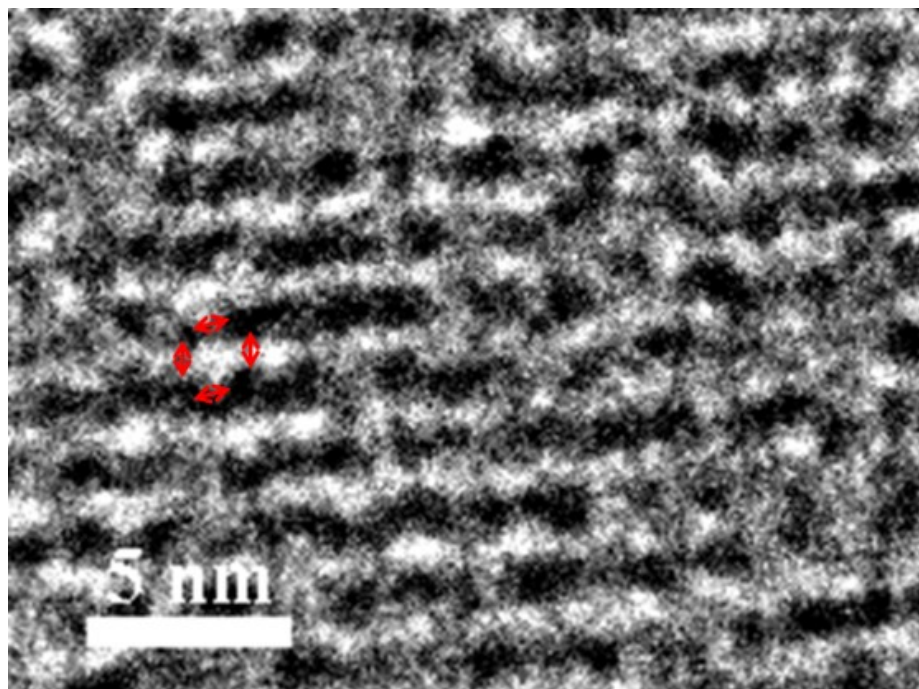


Figure S1. HR-TEM of porMOF

2. pH-dependent release of DOX from the carriers without or with ZnO encapsulation.

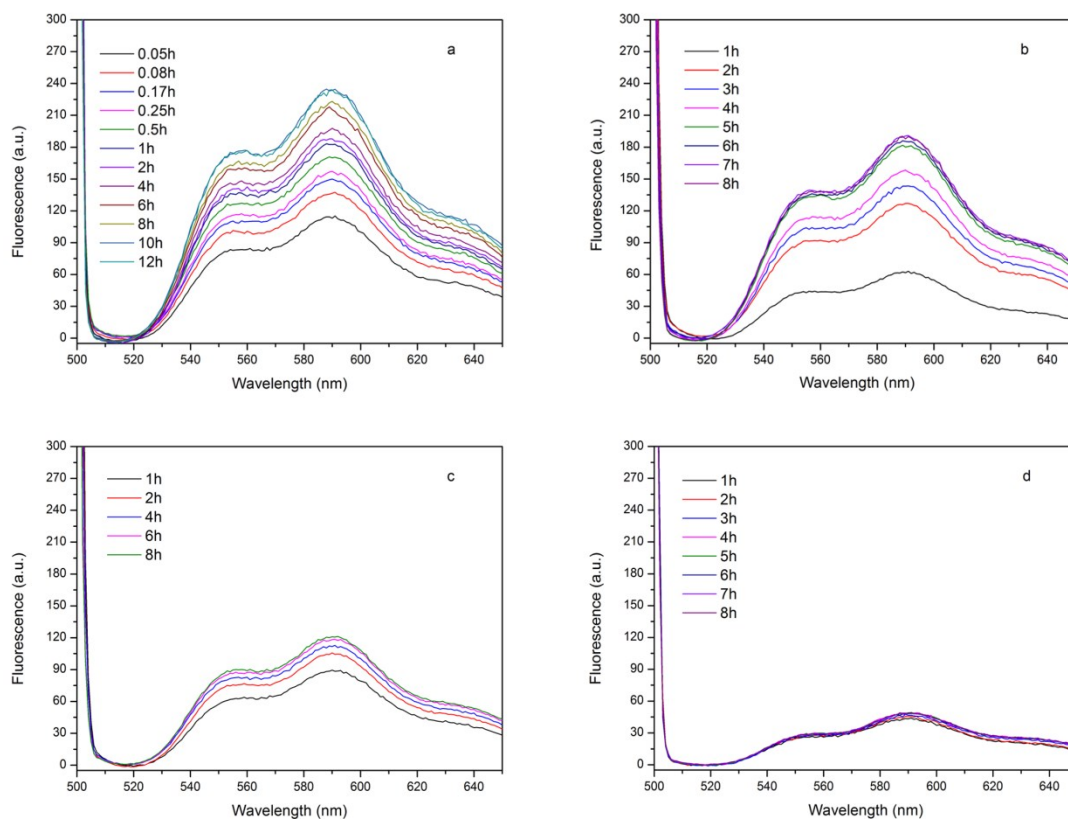
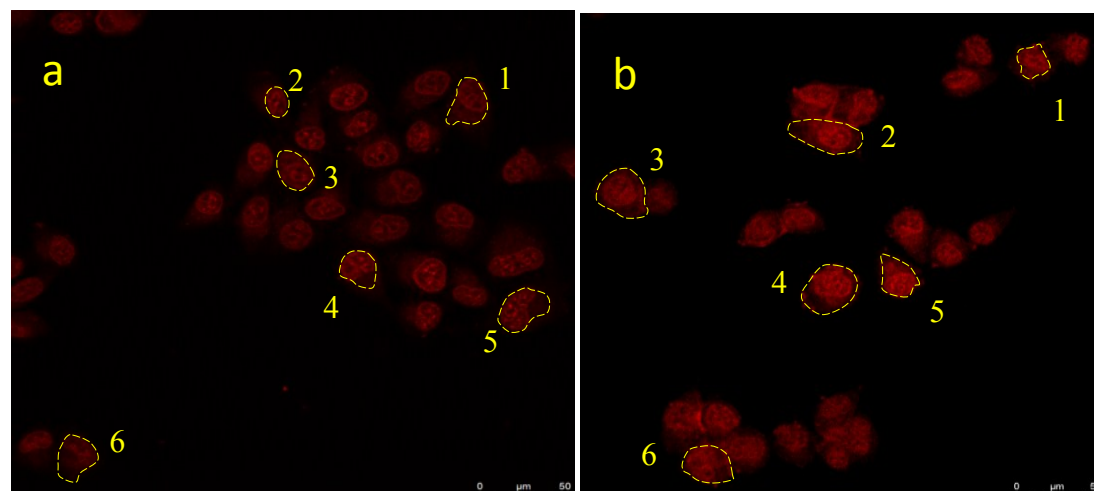


Figure S2. Time-dependent fluorescence spectra of DOX released from DOX@porMOF or ZnO-gated DOX@porMOF system under different pH conditions. (a) DOX@porMOF at pH 5.0; (b) ZnO-gated DOX@porMOF at pH 5.0; (c) DOX@porMOF at pH 7.4; (d) ZnO-gated DOX@porMOF at pH 7.4. $\lambda_{\text{ex}} = 488 \text{ nm}$.

3. DOX fluorescence measurements in selected cells



c Cell	Fluorescence intensity (a.u.)	
	Figure a	Figure b
1	14.93	24.86
2	15.26	26.29
3	15.20	21.25
4	15.53	26.52
5	13.10	26.46
6	15.49	23.72
Mean±SD	14.92±0.84	24.85±1.90

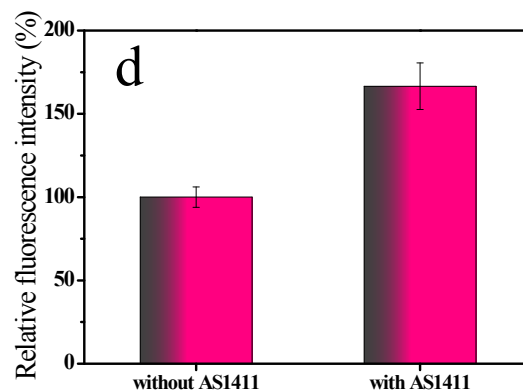


Figure S3. DOX fluorescence measurements in selected cells. (a, b) Cell selection from the images of HeLa cells treated with 80 $\mu\text{g}/\text{mL}$ (a) ZnO-gated DOX@porMOF or (b) ZnO-gated DOX@porMOF-AS1411 for 4 h. (c) Fluorescence intensities measured from the selected cells. (d) Histogram of the relative average fluorescence intensity.

4. Confocal fluorescence microscopy images of HeLa and NIH3T3 cells

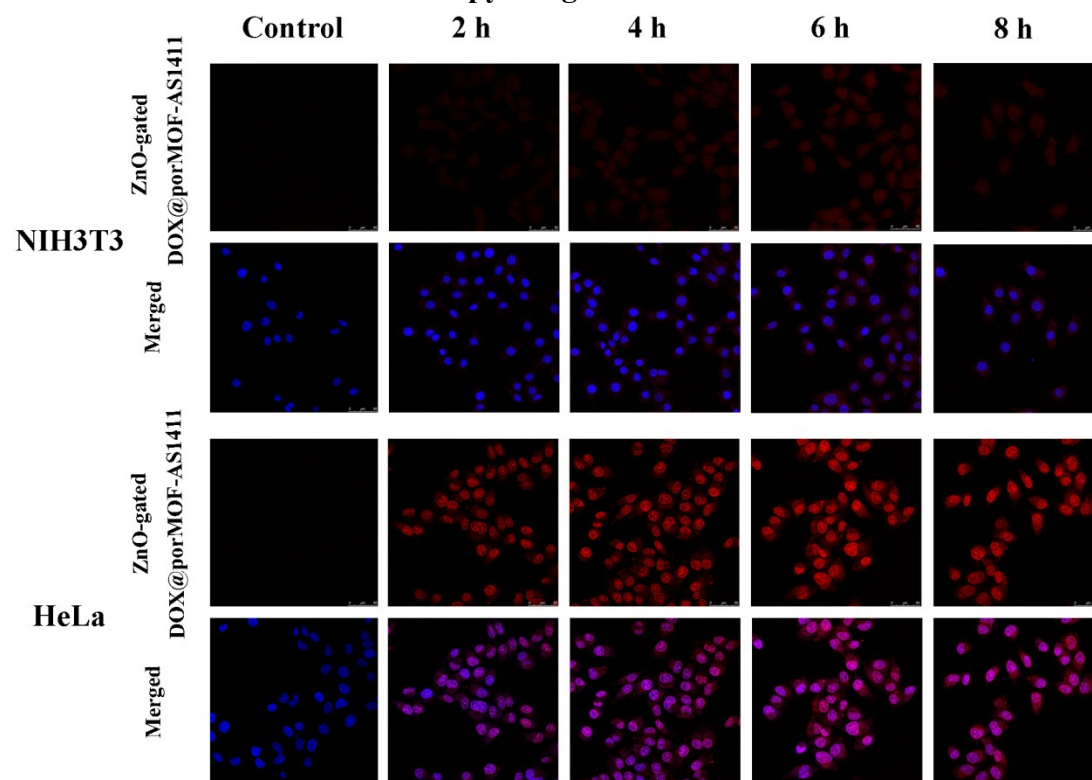


Figure S4. Confocal fluorescence microscopy images of HeLa and NIH3T3 cells after incubating with ZnO-gated DOX@porMOF-AS1411 for different time.