

## SUPPORTING INFORMATION

### **A novel microwave stimulus remote controlled anticancer drug release system based on $\text{Fe}_3\text{O}_4@\text{ZnO}@m\text{Gd}_2\text{O}_3:\text{Eu}$ - $\text{P}(\text{NIPAm-co-MAA})$ multifunctional nanocarrier**

Hongjin Qiu, Bin Cui\*, Weiwei Zhao, Ping Chen, Hongxia Peng, Yaoyu Wang

Key Laboratory of Synthetic and Natural Functional Molecule Chemistry (Ministry of Education), Shaanxi Key Laboratory of Physico-Inorganic Chemistry, School of Chemistry & Materials Science, Northwest University, Xi'an 710069, PR China

\* Corresponding author: Prof. Bin Cui

E-mail: [cuibin@nwu.edu.cn](mailto:cuibin@nwu.edu.cn),

Tel.: +86

029

8153-5030

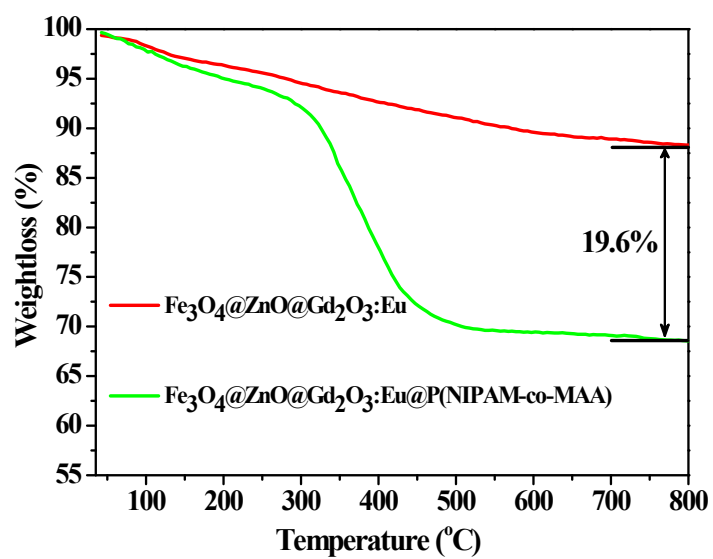


Figure S1. TGA curves of  $\text{Fe}_3\text{O}_4@\text{ZnO}@\text{Gd}_2\text{O}_3:\text{Eu}$  and  $\text{Fe}_3\text{O}_4@\text{ZnO}@\text{Gd}_2\text{O}_3:\text{Eu}@\text{P}(\text{NIPAM-co-MAA})$  nanocomposites, respectively.

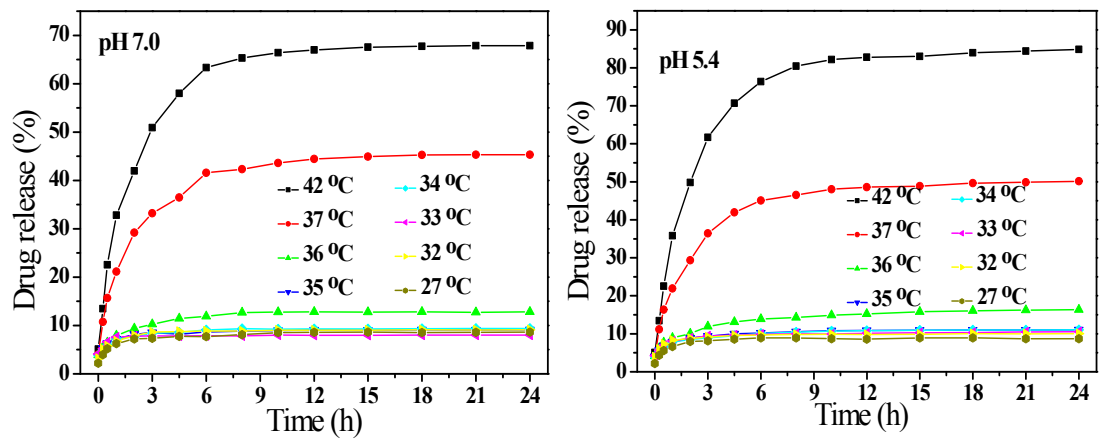


Figure S2. Cumulative release rates of VP16 from  $\text{Fe}_3\text{O}_4@\text{ZnO}@\text{Gd}_2\text{O}_3:\text{Eu}@\text{P}(\text{NIPAM-co-MAA})\text{-VP16}$  in response to temperature changes in sodium chloride solution: (a) at pH 7, (b) at pH 5.4.