## **Supporting Information**

## Heteropoly Blue Doped Polymer Nanoparticles: an Efficient Nanoplatform for Targeted Photoacoustic Imaging and Near-infrared Photothermal Therapy *in Vivo*

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**Figure S1.** (a) The size distribution of P4VP-b-PEO and HPB/P4VP-b-PEO NPs, respectively. (b) FT-IR spectra of HPB, P4VP-b-PEO NPs, and HPB/P4VP-b-PEO NPs, respectively



**Figure S2.** (a) The absorption spectra of HPB/P4VP-b-PEO NPs solution in different pH solution. (b) The absorption value solution at 808 nm of HPB/P4VP-b-PEO NPs in different pH solution. (c) The absorption spectra of HPB/P4VP-b-PEO NPs solution (pH = 5.3) at different time. (d) The absorption value of HPB/P4VP-b-PEO NPs solution (pH = 5.3) at 808 nm.



**Figure S3**. The temperature variation of HPB/P4VP-b-PEO NPs solution with 808 nm laser on/off (1 W/cm<sup>2</sup>). And insert: Plot of cooling time versus negative natural logarithm of the temperature driving force obtained from the cooling stage.



Figure S4. Photographs of mice for all groups during the therapy process.



Figure S5. Relative tumor volume changes of mice for all groups.