## **Supporting Information**

## **Anti-EGFR Peptide Conjugated Triangular Gold Nanoplates for**

## Computed Tomography/Photoacoustic Imaging Guided

## Photothermal Therapy of Non-Small Cell Lung Cancer

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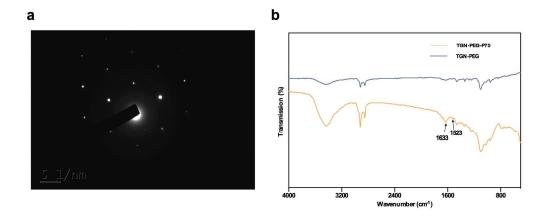
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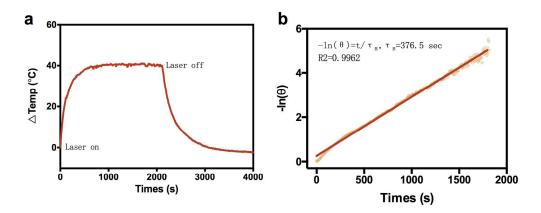
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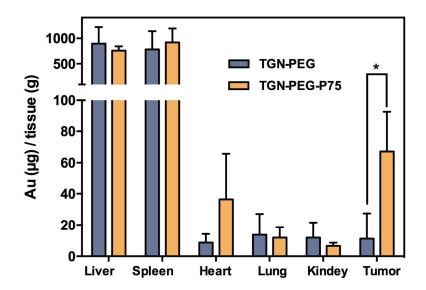
**Figure S1.** (a) The selected area electron diffraction pattern of the top of a single TGN-PEG-P75. (b) FTIR spectra of the TGN-PEG and TGN-PEG-P75.



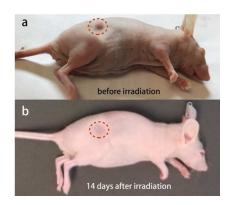
**Figure S2.** (a) Heating and cooling curves of 45 μg·mL<sup>-1</sup> TGN-PEG-P75. The laser lasted for 35 min, and then the laser was turned off. (b) The linear regression between cooling period and the negative natural logarithm of driving force temperature.

**Table S1.** Photothermal conversion efficacy of different types of nanomaterials-based photothermal agents.

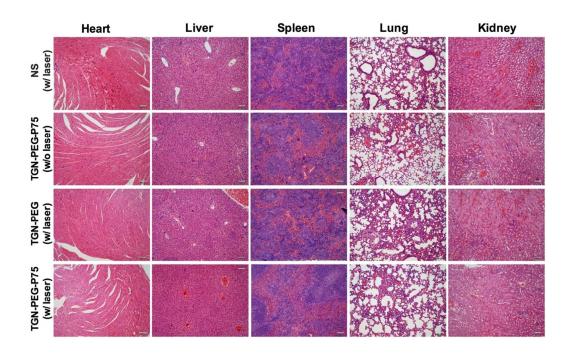
Nanomaterials	Photothermal conversion efficacy	Wavelength	Reference
gold nanoprisms	70%	660nm	RSC ADV. 2015, 5, 81682-81688
gold nanocages	63%	808 nm	Angew. Chem. Int. Ed. 2013, 52, 13958-64
dopamine-melanin colloidal nanospheres	40%	808 nm	Adv. Mater. 2013, 25, 1353-1359
black phosphorus quantum dots	28%	808 nm	Angew. Chem. Int. Ed. 2015, 54, 11526-11530
graphene oxide	25%	532 nm	Chem. Commun. 2014, 50, 14345-14348
Cu <sub>2-x</sub> Se nanoparticles	22%	800 nm	Nano Lett. 2011, 11, 2560-2566
gold rod	21%	800 nm	Nano Lett. 2011, 11, 2560-2566
gold nanoshells	13%	800 nm	Nano Lett. 2011, 11, 2560



**Figure S3.** The biodistribution of TGN-PEG and TGN-PEG-P75 in HCC827 tumor-bearing mice (three mice per group).



**Figure S4.** Digital photos of mice (TGN-PEG-P75 + laser group) before (a) and 14 days after irradiation (b). The tumor was indicated by the red circles.



**Figure S5.** H&E images of major organs of HCC827 tumor-bearing mice after 14 days of different treatments. Scale bar:  $100 \mu m$ .