Supporting Information

Temperature-Sensitive Gold Nanoparticle-Coated Pluronic-PLL Nanoparticles for Drug Delivery and Chemo-Photothermal Therapy

Ying Sun^{1,†}, Qi Wang^{1,†}, Jianhua Chen¹, Lei Liu¹, Li Ding¹, Ming Shen¹, Jin Li*³, Baoshan Han*² and Yourong Duan*¹

¹ State Key Laboratory of Oncogenes and Related Genes, Shanghai Cancer Institute,

Renji Hospital, School of Medicine, Shanghai Jiao Tong University, Shanghai

200032, People's Republic of China

² Department of General Surgery, School of Medicine, Xinhua Hospital, Shanghai

Jiao Tong University, Shanghai 200092, People's Republic of China

³ Department of Ophthalmology, Renji Hospital, School of Medicine, Shanghai Jiao

Tong University, Shanghai 200127, People's Republic of China

† These authors contributed equally to this work.

* Corresponding author. Tel.: +86 21 64437139; fax: +86 21 64437139. E-mail:
yrduan@shsci.org (Y. Duan). Tel.: +86 21 25078999; fax: +86 21 25078999. E-mail:
hanbaosan@126.com (B. Han). Tel.: +86 21 63672937; fax: +86 21 63730455.

E-mail: lijinmpa@163.com (J. Li).



Figure S1. TEM image of Pluronic-PLL@Au NPs after laser irradiation for 2 min.



Figure S2. EDS result of Pluronic-PLL@Au NPs.



Figure S3. Size distribution of Pluronic-PLL@Au nanoparticles. (A) without laser irradiation, (B) after laser irradiation (808 nm, 1 W/cm², 2 min). The measurement was carried out at 20 °C.



Figure S4. Particle size of Pluronic-PLL@Au nanoparticles incubated with PBS or 5% BSA for different time.



Figure S5. The wavelength of the SPR peak of Pluronic-PLL@Au nanoparticles (prepared for 0.5 h) as a function of solution temperature.



Figure S6. Cell viability of mouse fibroblasts L-929 cells against Pluronic-PLL@Au nanoparticles after being cultured for 24 h and 48 h with different concentrations.



Figure S7. Images of H&E-stained organs from the MDA-MB-231 tumor bearing mice with different treatment (scale bar = $100 \ \mu m$).