Photothermal-triggered Nitric oxide Nanogenerator Combined with siRNA Precise Therapy Osteoarthritis by Suppressing Macrophage Inflammation

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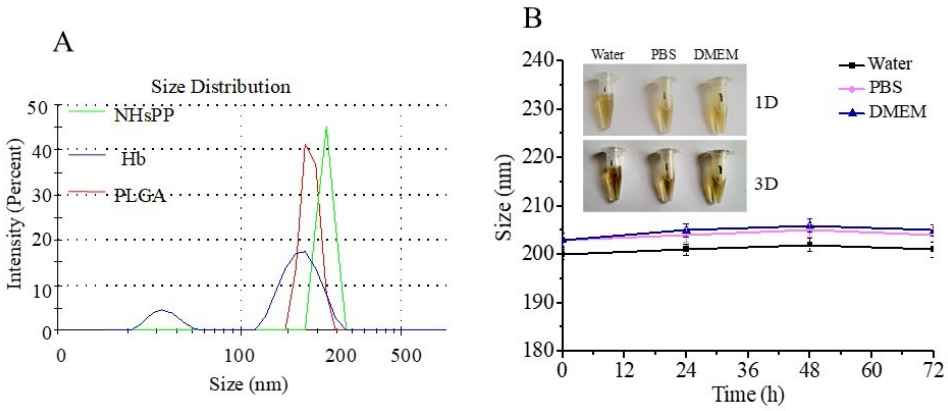

Figure S1. (A) Nanoparticles diameter distribution detected by dynamic light scattering (DLS). (B) The size stability of NHsPP nanoparticles in incubation with water, PBS and DMEM for 72 h respectively.

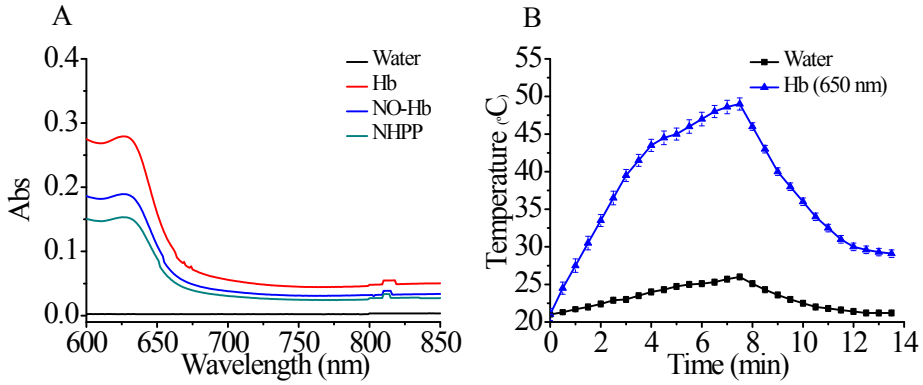

Figure S2. (A) Part UV-vis spectra in of water, Hb solution NO-Hb and NHPP solution. (B) The monitored temperature change curves of Hb nanoparticles as irradiated by the NIR laser for 600 s, followed by natural cooling with the laser light turned off, and determination of the time constant for heat transfer from the system using linear regression of the cooling profiles. Temperature variation curves of 650 nm.

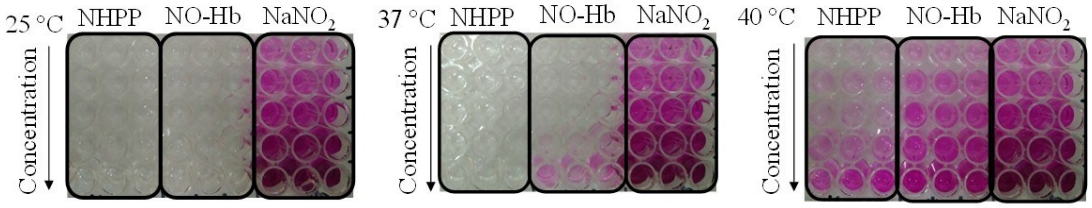

Figure S3. Detecting the NO release of NO-Hb, NHPP nanoparticles at different temperature.

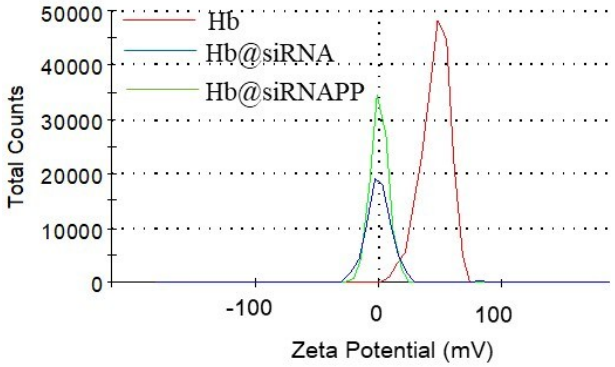

Figure S4.Zeta potential of nanoparticles in process synthesis nanoparticles.

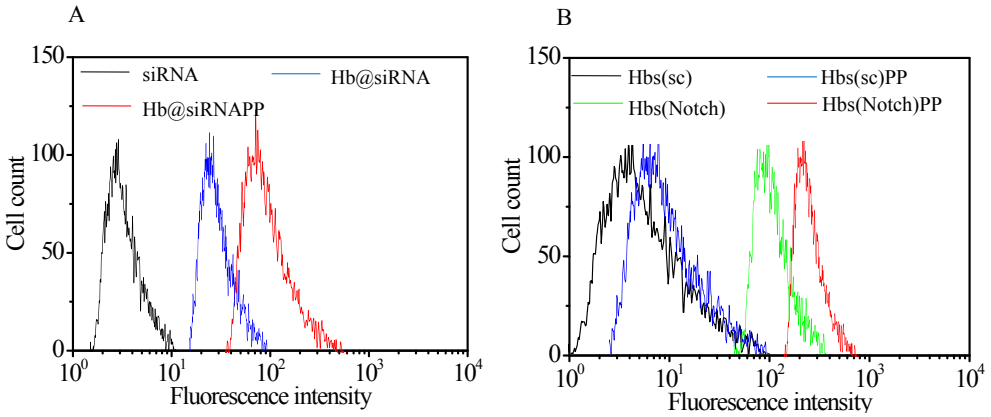

Figure S5. (A).The cellular uptake of FAM-labeled Notch-siRNA, Hb@siRNA and Hb@siRNAPP in RAW 264.7 cells detected by flow cytometry. (B).The cellular uptake of FAM-labeled Hbs (sc), Hbs (Notch), Hbs (sc) PP, Hbs (Notch) PP in RAW 264.7 cells detected by flow cytometry.

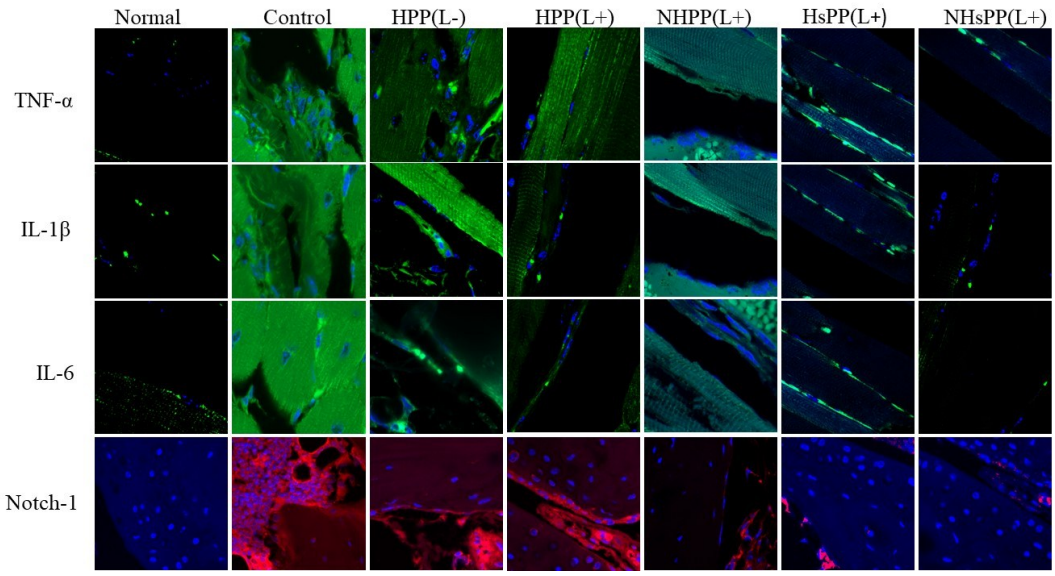

Figure S6. The joints were stained for immunofluorescence, Images were acquired at 400* magnification.