

# Clinically-Applicable Perfluorocarbon-Loaded Nanoparticles For *In vivo* Photoacoustic, <sup>19</sup>F Magnetic Resonance And Fluorescent Imaging

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**Supplementary Information**

Video S 1. Ultrasound-guided injection of nanoparticles into a thigh muscle.

Video S 2. 3D unmixed scan of thigh muscle after the in vivo injection of PLGA-PFCE-ICG nanoparticles. Signal coming from nanoparticles is seen in green.

Video S 3. 3D unmixed photoacoustic image of popliteal lymph node (green) 4 hours after injection of nanoparticles into the foot pad.

Video S 4. 3D unmixed scan of a thigh muscle after in vivo injection of  $0.1 \times 10^6$  nanoparticle-loaded cells. Signal coming from nanoparticle-loaded cells is seen in green.

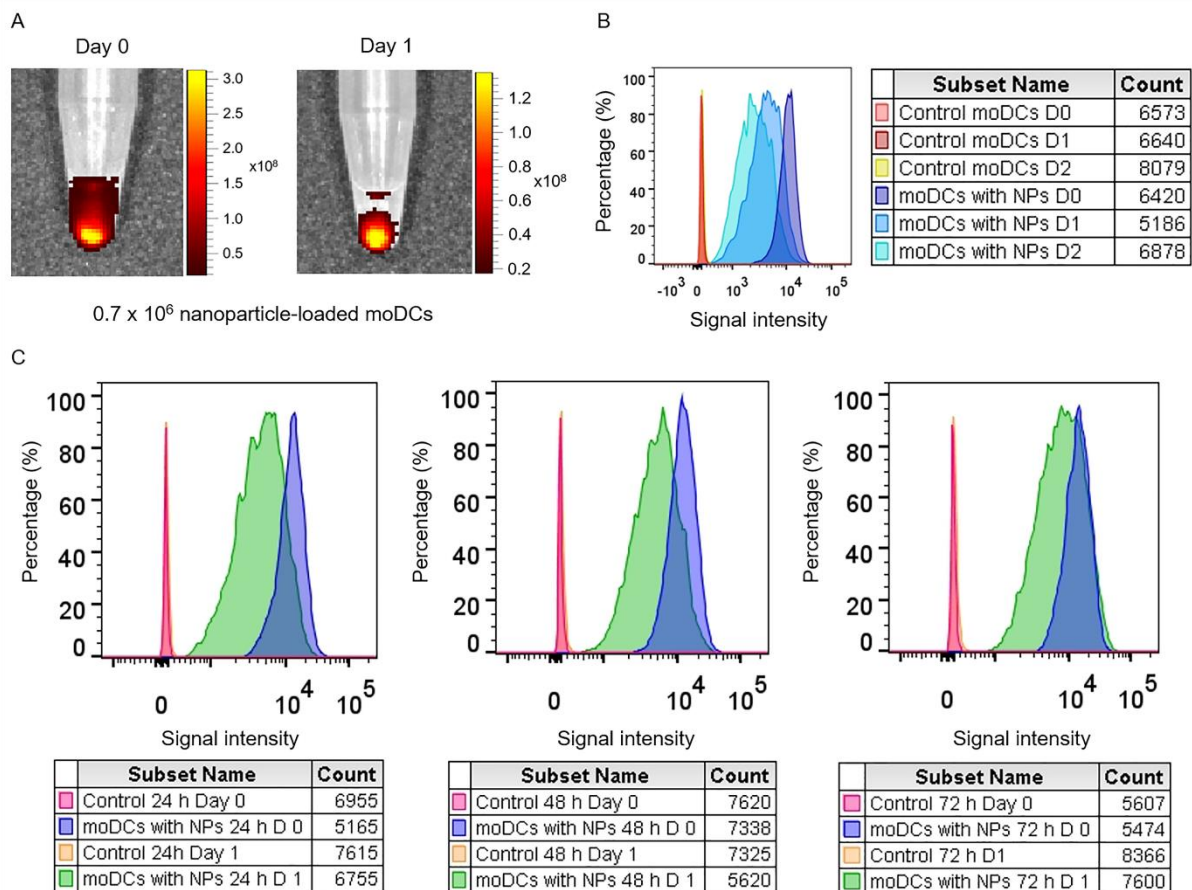


Figure S 1. Retention of PLGA-PFCE-ICG nanoparticle signal within DCs. (A) Fluorescence image of nanoparticle-loaded DCs after 24 h incubation with the label (D0) and DCs after further 24 h incubation after the remove of the label (D1). The fluorescence signal from the cell is clearly visible on both time points. (B) FACS results of cells incubated for 24 h with the label and for further two time points after the removal of the label. After 48 h (D2) the signal intensity slightly dropped, however it was above the baseline. (C) FACS results of DCs incubated with the label for 24, 48 and 72 h. After remove of the label part of the cells were further incubated for 24 h for each condition. Small drop of the signal was observed on D 1 in all samples.

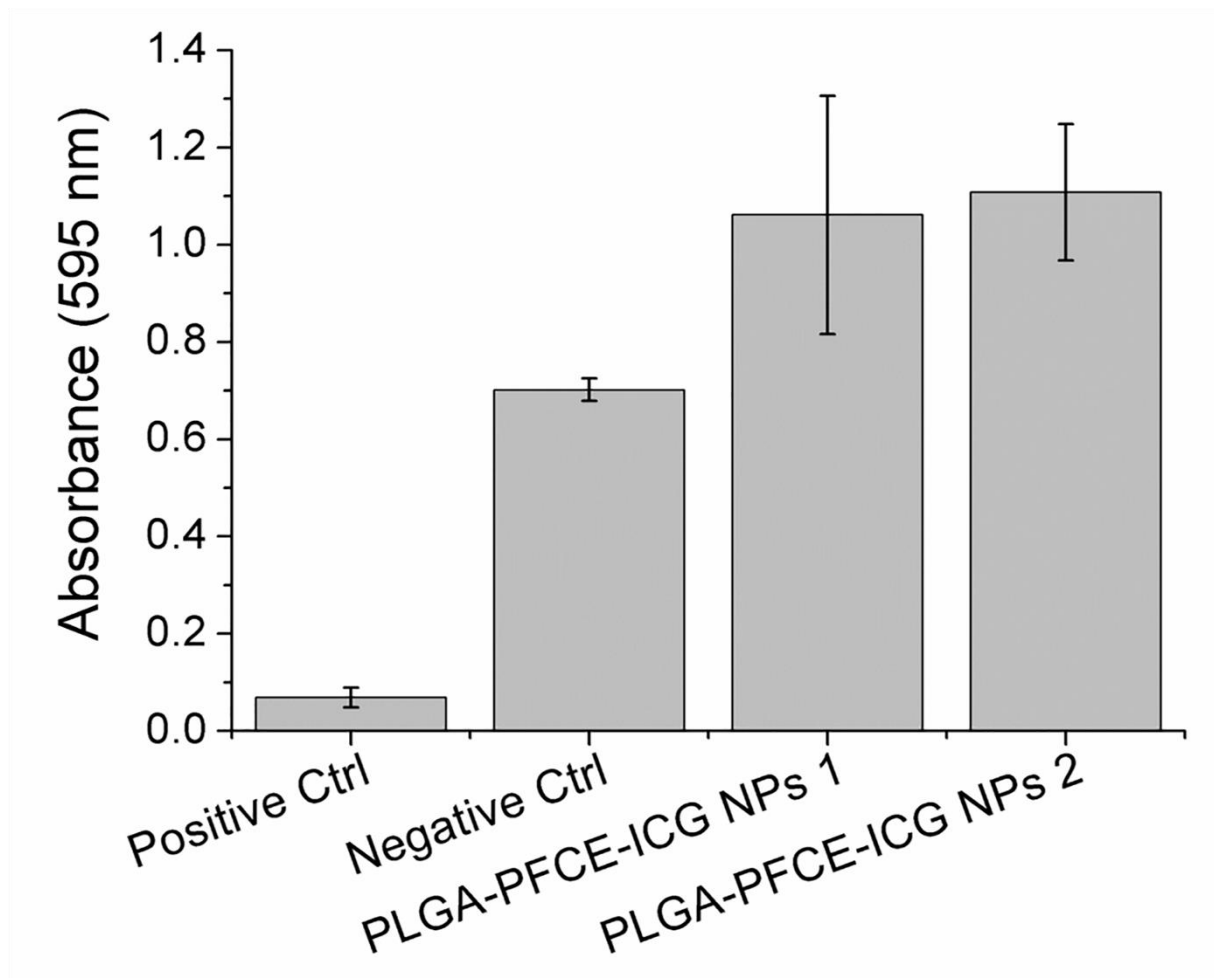


Figure S 2. Viability assay (MTT) on DCs with or without the nanoparticle loading. PLGA-PFCE-ICG nanoparticles showed no cell toxicity after 72 hours of incubation. (n=3)