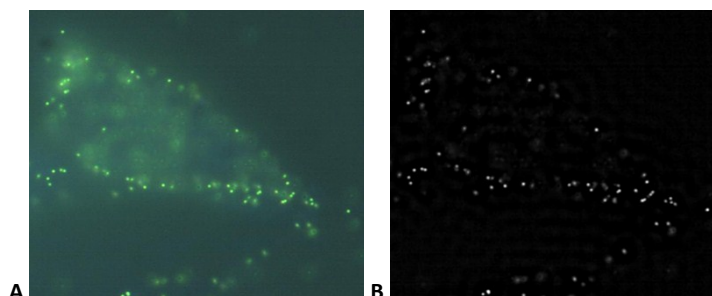


Electronic Supplementary Information

Single point single-cell nanoparticle mediated pulsed laser optoporation.

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Video S1. A) Experimental 50nm step z-scan images of cell-NPs complex using RLM. B) Image after deconvolution

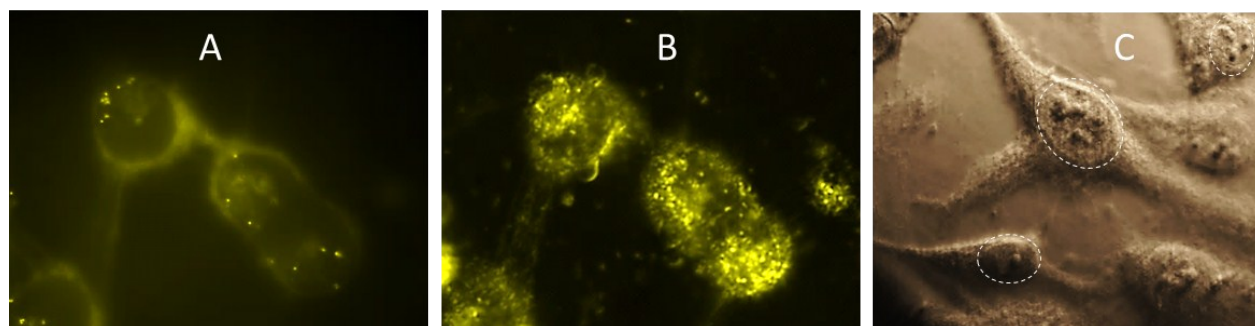
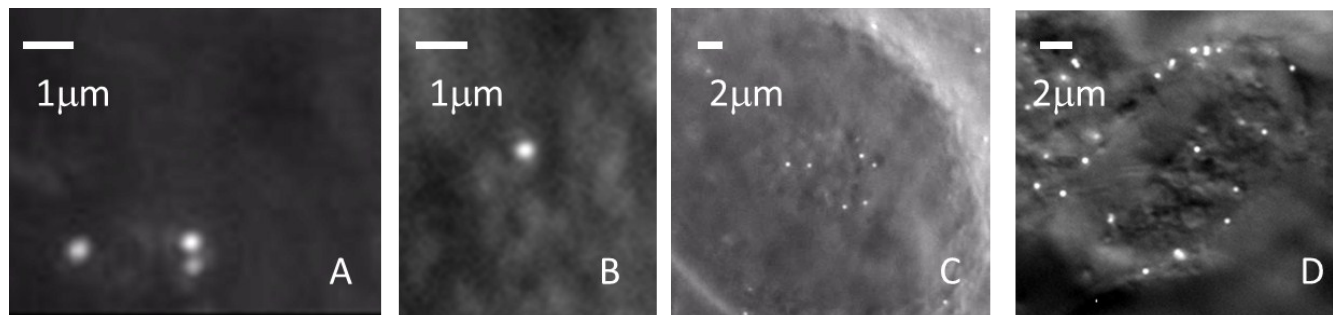


Fig.S1. Comparison of RLM (A) and dark-field microscopy (B) of cell-NPs complex. (C) Nucleus position estimation (red circle) by using oblique illumination microscopy.



Video S2. NP-mediated laser perforation dependence on the laser power. Low energy 200 mJ/cm²: (A) NPs are displaced aside. (B) NPs are “sinking” producing local perforation. (C) Optoporation at energies 300 mJ/cm² – 1.5 J/cm². (D) Cell destruction by high energy > 1.5 mJ/cm² laser.