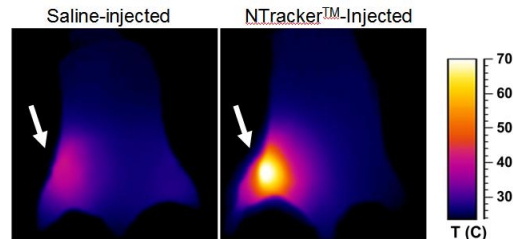


Ntracker™

Nanopartz™ has developed a revolutionary new *in vivo* product - Ntracker™ nanorods specifically for use in biological, preclinical, and *in vivo* applications. Ntracker™ nanorods are coated in a dense layer of polymers that shield the gold surface and give the particles ultra long-circulation times *in vivo*. As opposed to other commercially available nanoparticles with short circulation times, such as quantum dots, Ntracker™ nanorods can be not only be used for imaging, but also for photothermal applications. They have been rigorously tested *in vivo* to yield superior circulation times a variety of mammalian species promoting great permeation into solid tumor cancers. Ntracker™ nanorods are available with transverse plasmon resonance peaks in the visible and near-infrared.



Infrared thermographic image showing In-vivo heating from Ntracker™ nanorods permeated in a cancer tumor. Laser excitation is a 2 W/cm² 808 nm diode laser ex vivo.

Features

- ❖ Long circulation times.
- ❖ Low cytotoxicity. Gold is FDA approved for rheumatoid arthritis. (Cytotoxicity is based on CTAB capping agent concentration and not on the gold itself).
- ❖ Great photothermal conversion efficiency in the near IR.
- ❖ Strong two photon fluorescence.

Benefits

- ❖ Monodisperse shapes and sizes in production volumes satisfies high volume applications.
- ❖ Tunable scattering/absorptions in the NIR create good for multilabel imaging and therapy.
- ❖ NIR absorptions are advantageous for in-vivo applications at the peak transmission window of skin and tissue.
- ❖ High photothermal conversion is advantageous for killing tumors and viruses in-vivo.

Applications

Life Sciences

In-Vivo
 Imaging
 Photoacoustic Imaging
 Optical Coherence Tomography
 Two photon fluorescence
 SERS
 Therapeutics
 Photothermal
 Cancer
 Viral

Product Number

	Ntracker Part #
700 nm	30-PM-700
750 nm	30-PM-750
780 nm	30-PM-780
808 nm	30-PM-808
850 nm	30-PM-850