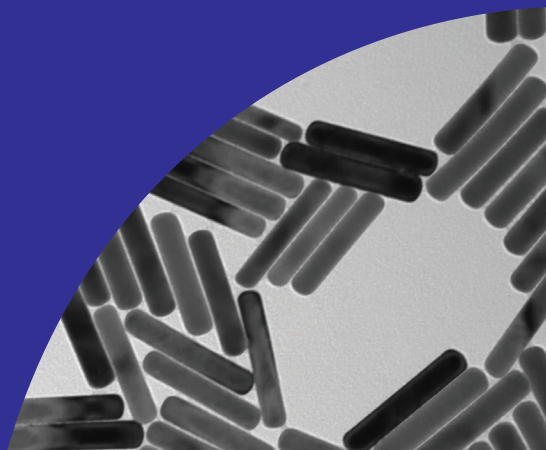


# Gold Nanorods: Pioneering Therapeutic and Diagnostic Advancements



Gold nanorods exhibit localized surface plasmon resonance (SPR), enabling unique optical properties and an unparalleled versatility to drive transformative breakthroughs in diagnostics and therapeutics.

nanoComposix gold nanorods have narrow size distributions, high shape purity, and tunable absorption peaks throughout visible and short-wave near-infrared (SWNIR) regions. Ammonium-based surfactants are replaced with citrate using our proprietary purification methods, ensuring stable surface chemistry for functionalization with diverse molecules such as silica, DNA, and antibodies.

## Why Choose Our Gold Nanorods?

**Tunable Optical Properties:** The aspect ratio of our gold nanorods can be adjusted to precisely control their longitudinal surface plasmon resonance, making them adaptable for various optical applications.

**Custom Resonance Peaks:** Our synthetic process allows for precise control of nanorod peak resonances between 600–1100 nm. Custom peak resonance wavelength materials can be developed to meet your specific requirements.

**CTAB-Free Nanorods:** Our high purity gold nanorods are free from the toxic surfactant CTAB, eliminating a key safety concern.

**Versatile Surface Options:** We offer bare (citrate), PEG, and carboxyl surfaces to facilitate further customization or bioconjugation.

**Custom Surfaces:** Additional custom surfaces such as PVP, lipoic acid, and BPEI are available upon request to meet specific application needs and preferences.



## Applications

- Drug Delivery
- Photothermal Therapy
- Photoacoustic imaging
- Biosensing

## Ordering Information

Gold Nanorod Surface Type	Peak Wavelength	Optical Density	Available Volumes
Bare (Citrate)	660 nm	1 OD	25 mL, 100 mL, 500 mL, 1 L
		50 OD	500 $\mu$ L, 1 mL, 5 mL, 15 mL
	800 nm	1 OD	25 mL, 100 mL, 500 mL, 1 L
		50 OD	500 $\mu$ L, 1 mL, 5 mL, 15 mL
	980 nm	1 OD	25 mL, 100 mL, 500 mL, 1 L
		50 OD	500 $\mu$ L, 1 mL, 5 mL, 15 mL
PEG Functionalized	600 nm	50 OD	500 $\mu$ L, 1 mL, 5 mL, 15 mL
	800 nm	50 OD	500 $\mu$ L, 1 mL, 5 mL, 15 mL
PEG-Carboxyl Functionalized	600 nm	50 OD	500 $\mu$ L, 1 mL, 5 mL, 15 mL
	800 nm	50 OD	500 $\mu$ L, 1 mL, 5 mL, 15 mL

To request a quote or more information visit us at:

[nanocomposix.com/gold-nanorods](http://nanocomposix.com/gold-nanorods)