

NITgold Clusters—NH₂ 1.5nm

#5100981

STORE AT 4°C away from light. DO NOT FREEZE

Description

Gold clusters terminated by amine groups are highly stable in aqueous media exhibiting intrinsic near-infrared (NIR) fluorescence associated to their small size. They can be employed for different applications such as fluorescence imaging techniques, immunocytochemical approaches, immunoprobes for correlative microscopy, immunogold labelling.

Technical Specifications

Particle Surface: Amine groups Average Diameter (UHRTEM): (1.5 ± 0.2) nm

Solvent: Milli-Q Water Nº cluster/mL: ~ 1.5x10¹⁵ clusters/mL

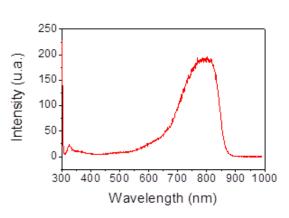
Molar Gold Concentration: ~0.26 mM Fluorescence emission: ~800 nm

Optical absorption and fluorescence emission spectra

UV/visible absorbance spectrum

0.8 0.6 0.2 0.0 200 400 600 800 1000 Wavelength (nm)

Fluorescence emission spectrum



Measurement conditions of the UV/visible absorbance spectrum: UV/Visible Thermo Scientific™ Multiskan™ Spectrophotometer; ~2.7×10¹⁴ clusters/mL in water.

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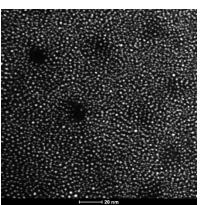


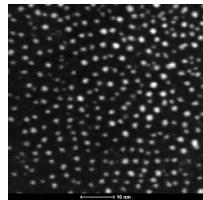
Measurement conditions of the Fluorescence emission spectrum: Cary Eclipse Fluorescence Spectrophotometer; $\lambda_{\text{excitation}}$: 300 nm; PMT: maximum; excitation and emission slits 10 nm; ~1.5×10¹⁵ clusters/mL in water.

Stability of gold clusters:

NITgold Clusters–NH₂ are stable preserving their fluorescence in aqueous solutions at pH below 6.0, at which terminal amine groups remain protonated.

UHRTEM images





Suggested Application(s)

- Immunogold

- Microscopy probe
- Immunocytochemistry

Ordering Information

Product Name	Nº clusters/mL	Quantity (nmol)	Quantity (mL)	Catalogue No.
NITgold amine clusters 1.5 nm	1.5E+15	2.5nmol	1mL	51009815S
NITgold amine clusters 1.5 nm	1.5E+15	12.5nmol	5mL	51009815W
NITgold amine clusters 1.5 nm	1.5E+15	62.5nmol	25mL	51009817V

Product disclaimer

This nitparticles* product is to be used for research purposes only. Unless stated in the documentation of on an individual product label, catalog or other information provided to the buyer, IT IS FORBIDDEN TO USE IT for different purposes, including but not limited to them: in vitro diagnostic, use in food, pharmaceutical purposes, medical purposes, or use in cosmetic products, neither for use in humans nor animals, nor for any commercial purposes. Please refer to www.nitparticles.com for the Material Safety Data Sheet of the product.

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