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PRODUCT DATASHEET

NITgold Clusters–NH_2 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

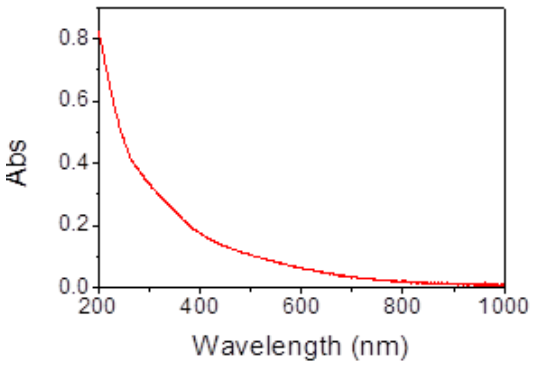
Nº cluster/mL : ~ 1.5×10^{15} clusters/mL

Molar Gold Concentration: ~0.26 mM

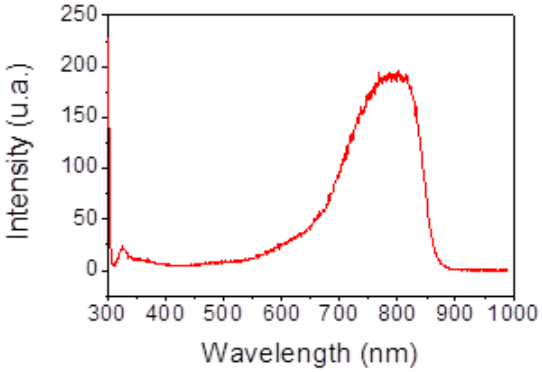
Fluorescence emission: ~800 nm

Optical absorption and fluorescence emission spectra

UV/visible absorbance spectrum



Fluorescence emission spectrum



Measurement conditions of the UV/visible absorbance spectrum: UV/Visible Thermo Scientific™ Multiskan™ Spectrophotometer; ~2.7×10^{14} clusters/mL in water.

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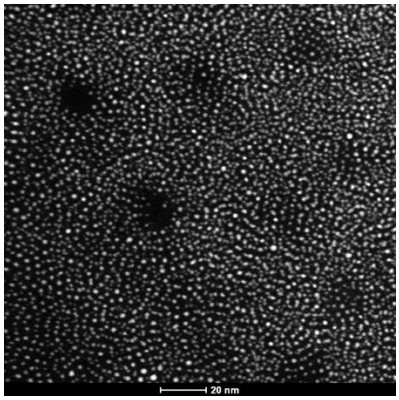
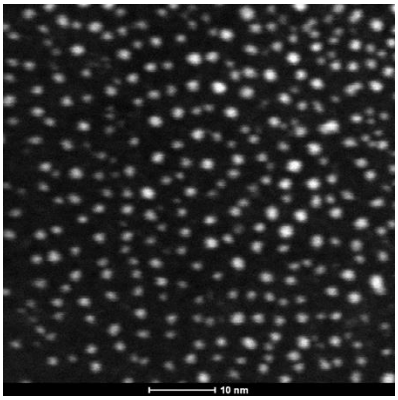
Measurement conditions of the Fluorescence emission spectrum: Cary Eclipse Fluorescence Spectrophotometer; $\lambda_{excitation}$: 300 nm; PMT: maximum; excitation and emission slits 10 nm; ~1.5×10^{15} clusters/mL in water.

Stability of gold clusters:

NITgold Clusters–NH_2 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
- Immunocytochemistry
- Microscopy probe

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

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