

Gold Nanoparticles

AQM Sodium citrate-stabilized gold nanoparticles

CAS # 7440-57-5

Description

AQM's gold nanoparticles feature uniform colloidal materials stabilized with sodium citrate. These nanoparticles are suitable for conjugation with thiolated ligands, such as proteins, oligonucleotides, and aptamers, or for adsorption of cationic molecules. Additionally, their enhanced stability makes them ideal for various physical and optical applications.



Features

- **Uniform Particle Size**

These nanoparticles exhibit a highly uniform size distribution, which enhances consistency in experimental and application outcomes.

- **Enhanced Stability**

Stabilization by sodium citrate improves the colloidal stability of the gold nanoparticles.

- **Surface Reactivity**

Allows easy adsorption of cationic molecules; direct conjugation with thiolated ligands like thiol-terminated polyethylene glycol (PEG), proteins, oligonucleotides, and aptamers.

- **Optical Properties**

Their strong optical absorption and scattering properties make them valuable in optical and imaging applications, such as colorimetric detection of environmental pollutants, diagnostics, and photothermal therapies.

- **Versatility in Applications**

Ideal for biomedical, materials science, catalysis, and electronics applications due to their stability, functionalizable surface, and excellent optical properties.

Product Specifications

Particle sizes available	Size (TEM average size)	SPR wavelength
	20 nm	521 nm
	30 nm	530 nm
	70 nm	546 nm
	100 nm	580 nm
Solvent	Sodium citrate	
Concentration	1 OD	

Use and Handling Recommendations

Store at 2~8 °C, do not freeze or dry.

[Contact us](#) for purchasing/customization options. AQM can tailor surface chemistry to provide gold nanoparticles suitable for specific applications.

Characterization Data

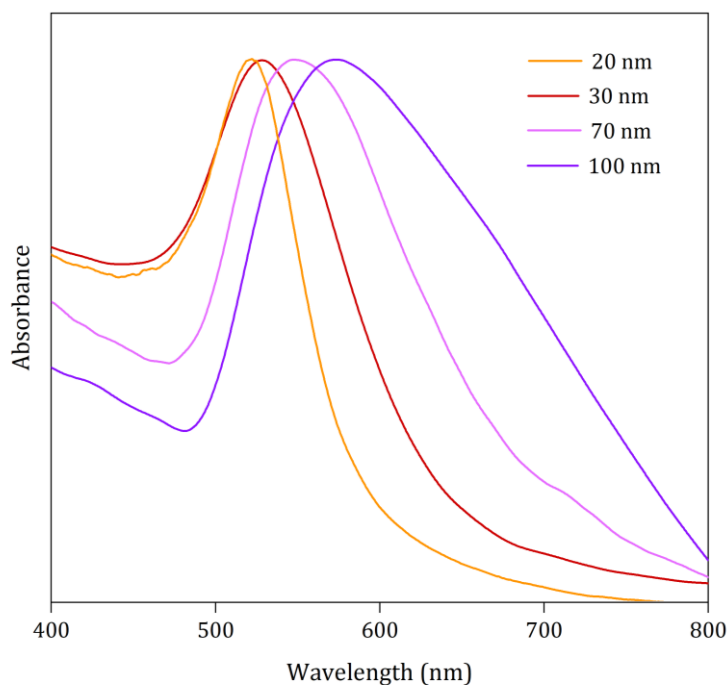


Figure 1. UV-Vis spectra of gold nanoparticles with different sizes.

Packaging and Shipping

Product size: 1 mL, 5 mL, and 20 mL solution in glass vials (bulk can be supplied upon request).
Shipping conditions: Ambient temperature.