

Solid and Functionalized Gold Nanoparticles

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79-0235 Gold nanoparticles powder, 6nm, organic solvent-dispersible [7440-57-5]

5mg 25mg

Organic soluble solid

Surface ligand: dodecanethiol

Hydrodynamic size: ~8-10nm larger than their inorganic core size measured by TEM

79-0238 Gold nanoparticles with amine surface functional group, 6nm, in water [7440-57-5]

5mg 25mg

Water-soluble gold nanoparticles with amphiphilic polymer and PEG coating.

Reactive group: amine

Zeta potential: from -10mV to 0mV

Total thickness of organic ~6nm The organic layers consist of a monolayer of dodecanethiol, a monolayer of amphipilic

layers: polymer and a monolayer of PEG

Hydrodynamic size: ~12-14 nm larger than their inorganic core size as measured by TEM

Stability: Very stable in buffer solutions in the pH range of 4-10 and can survive the autoclaving (121°C

for 30 mins.) The long term stability is not as good as that of 79-0240.

Conjugating: 79-0238 can be conjugated to carbonyl or thiol-containing molecules.

Check expiration date before conjugating.

79-0240 Gold nanoparticles with carboxylic acid surface functional group, 6nm, in water

10mg 50mg

Water-soluble gold nanoparticles with amphiphilic polymer.

Reactive group: carboxylic acid

[7440-57-5]

Zeta potential: from -30mV to -50mV

Total thickness of organic ~4 nm The organic layers consist of a monolayer of dodecanethiol and a monolayer of amphih-

layers: pilic polymer

Hydrodynamic size: ~ 8-10 nm larger than their inorganic core size as measured by TEM

Stability: Very stable in buffer solutions in the pH range of 4-10 and can survive the autoclaving (121°C

for 30 min.)

Conjugating: 79-0240 can be conjugated to protein, peptide, and other amine-containing molecules

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