

Spherotech

Let the Possibilities Flow

SPHERO™ Gold Nanoparticles

High Efficiency for Maximum Sensitivity

Gold Nanoparticles

- 15-20nm
- Available at 1nM and 5nM concentration
- Suitable for protein & oligonucleotide adsorption and surface modification

Biotin Coated Gold Nanoparticles

- Covalently bound to the surface coating of gold nanoparticle
- Used in conjugation with streptavidin-labeled reagents such as antibodies or protein for lateral flow

Streptavidin Coated Gold Nanoparticles

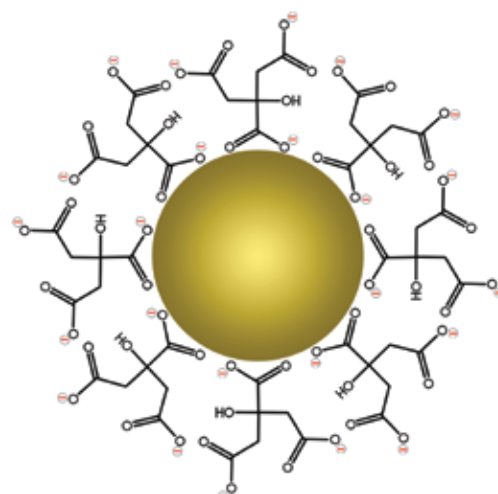
- Covalently bound to the surface coating of gold nanoparticle
- Used in conjugation with biotinylated reagents such as antibodies or protein for lateral flow immunoassays

T25 DNA Coated Gold Nanoparticles

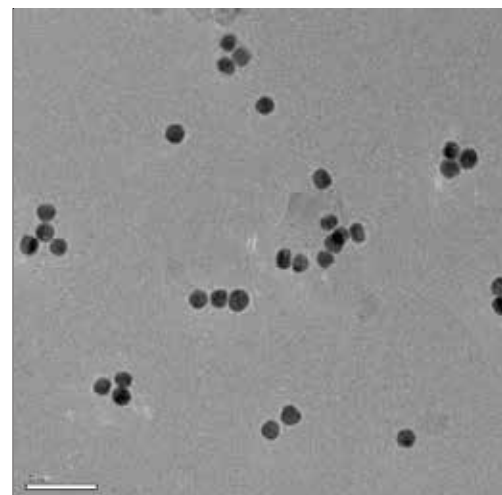
- Used for the detection and identification of oligonucleotides
- Allow for simple, rapid and reliable binding of Biotinylated PCR hybridized with a poly(dA)-tailed oligo

Custom Gold Nanoparticles

- Aptamer, Antibody, scFV, PEG & DNA coated gold nanoparticles upon request



Citrate-capped Gold Nanoparticle



TEM of Monodispersed 20 nm Streptavidin Coated Gold Nanoparticles

To learn more about Spherotech Gold Nanoparticles visit us online

www.spherotech.com

27845 Irma Lee Circle, Unit 101

Lake Forest, IL 60045-5100

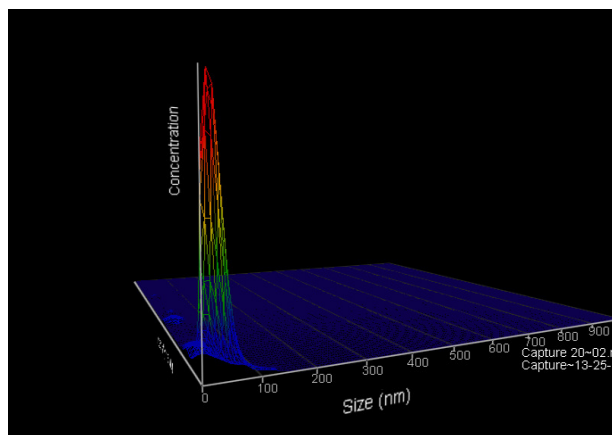
(847) 680-8922 fax (847) 680-8927



SPHERO™ Gold Nanoparticles

- Suitable for clinical and point-of-care applications
- Excellent for gold particle aggregation due to high monodispersity, consistency and purity
- Reactive groups on uniform nanoparticles provide consistent and repeatable coating and binding.
- Scale-up capability: Liter size batches available upon request.
- Technical Assay Development, Optimization & Conjugation services available.

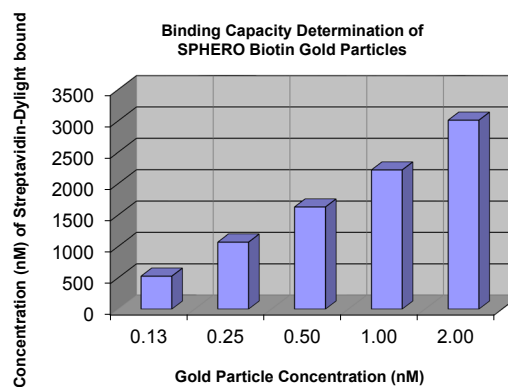
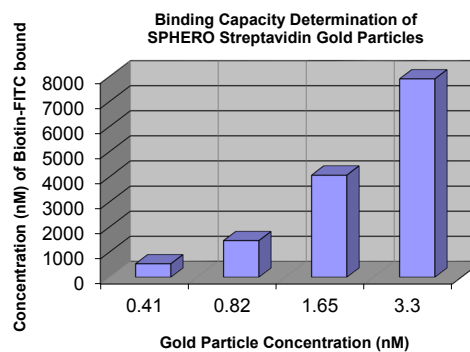
Uses of SPHERO™ Gold Nanoparticles include:	
Diagnostics	Used to detect biomarkers in the diagnosis of cancer, heart disease, and infectious diseases. Commonly used in lateral flow immunoassays
Probes	Produce an array of colors under dark-field microscopy. The scattered colors are currently used for biological imaging applications. Also used as probes for transmission electron microscopy.
Sensors	Used in a variety of sensors such as colorimetric and surface enhanced Raman spectroscopy for the detection of proteins, pollutants, and other molecules label-free
Therapeutic Agent Delivery	Can be coated with hundreds of molecules including therapeutics, targeting agents, and anti-fouling polymers.



Characterization of Size and Concentration of 20nm Gold Nanoparticles using a Malvern NanoSight LM10

Particle Type and Surface	Size, nm	nM	Catalog No.	Unit
Citrate Gold	15-20 nm	1.0	AuP-002-20	20 mL
Citrate Gold	15-20 nm	5.0	AuP5-002-20	20 mL
Biotin Gold	15-20 nm	3.0	TAuP-002-1	1 mL
Biotin Gold	15-20 nm	3.0	TAuP-002-5	5 mL
Streptavidin Gold	15-20 nm	3.0	SVAuP-002-1	1 mL
Streptavidin Gold	15-20 nm	3.0	SVAuP-002-5	5 mL
T25 Gold	15-20 nm	1.0	OdT(25)AuP-002-1	1 mL
T25 Gold	15-20 nm	1.0	OdT(25)AuP3-002-5	5 mL

Characterization of SPHERO Streptavidin and Biotin Gold Particles with a Molecular Devices SpectraMax Gemini EM



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Visit us on the web at <http://www.spherotech.com>