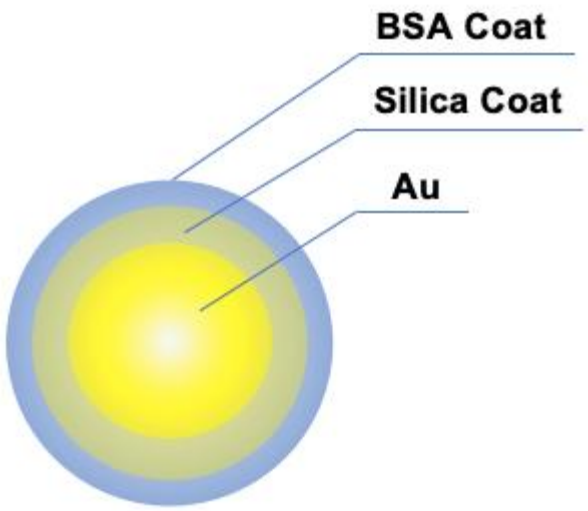
Silica Coated Gold Particles-BSA
PRODUCT DATA SHEET

Silica Coated Gold Particles-BSA

Description

Silica Coated Gold Particles is a composite nanomaterial composed of Gold Particles coated with a silica shell. This composite nanomaterial exhibits the surface enhanced Raman scattering effect of Gold Particles and excellent biocompatibility of silica. The presence of silica shell enhances the stability of Gold Particles while reducing their toxicity to cells. Silica shell has good chemical modification effect. By modifying the surface of silica layer with BSA, Silica Coated Gold Particles-BSA can be obtained. BSA is a highly biocompatible protein that can enhance the stability and biocompatibility of Silica Coated Gold Particles in biological systems. Silica Coated Gold Particles modified with BSA can be better applied in drug carriers, biological immune detection, protein labeling, dark field optical imaging, biosensors, surface enhanced Raman substrates, and other fields.



Abvigen Inc can provide high-quality Silica Coated Gold Particles-BSA with a variety of particle sizes. The thickness of the silica shell layer can be selected, the particle size is uniform, and the stability is good. It can meet the personalized material needs of various customers in research and development, testing, production, and consumption.

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For custom sizes, formulations or bulk quantities please contact our customer service department.

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Characteristics

OD: 50

Size: 1 ml or others

Diameter: 1.8 nm - 1500 nm

Surface: BSA

Shape: Spherical

Composition: Silica Coated Gold Particles

Silica Thickness: 3 nm/ 5 nm/ 10 nm/ 20 nm/ 30 nm

Buffer: DI Water

Monodispersity: > 99.9%

Store: Storage at 4 °C

For 50 OD of Silica Coated Gold Particles-BSA

Cat No	Diameter (nm)	Peak SPR Wavelength (nm)	NPS/ml	Molarity (pM)	Moles	Molar Ext. (M-1cm-1)
ASCGN-1.8	1.8	—	4.25E+16	7.10E+07	7.09E-08	7.05E+05
ASCGN-2.2	2.2	—	2.33E+16	3.90E+07	3.88E-08	1.29E+06
ASCGN-3	3	—	9.19E+15	1.50E+07	1.53E-08	3.26E+06
ASCGN-4	4	—	3.88E+15	6.50E+06	6.46E-09	7.74E+06
ASCGN-5	5	512	1.99E+15	3.30E+06	3.31E-09	1.51E+07
ASCGN-10	10	516	2.48E+14	4.10E+05	4.14E-10	1.21E+08
ASCGN-15	15	518	7.35E+13	1.20E+05	1.23E-10	4.08E+08
ASCGN-20	20	520	3.10E+13	5.20E+04	5.17E-11	9.67E+08
ASCGN-25	25	521	1.59E+13	2.60E+04	2.65E-11	1.89E+09
ASCGN-30	30	523	9.19E+12	1.50E+04	1.53E-11	3.26E+09
ASCGN-35	35	526	5.79E+12	9.60E+03	9.65E-12	5.18E+09
ASCGN-40	40	527	3.88E+12	6.50E+03	6.46E-12	7.74E+09
ASCGN-45	45	529	2.72E+12	4.50E+03	4.54E-12	1.10E+10
ASCGN-50	50	531	1.99E+12	3.30E+03	3.31E-12	1.51E+10

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ASCGN-55	55	533	1.49E+12	2.50E+03	2.49E-12	2.01E+10
ASCGN-60	60	536	1.15E+12	1.90E+03	1.91E-12	2.61E+10
ASCGN-65	65	539	9.04E+11	1.50E+03	1.51E-12	3.32E+10
ASCGN-70	70	542	7.23E+11	1.20E+03	1.21E-12	4.15E+10
ASCGN-75	75	545	5.88E+11	9.80E+02	9.80E-13	5.10E+10
ASCGN-80	80	549	4.85E+11	8.10E+02	8.08E-13	6.19E+10
ASCGN-85	85	553	4.04E+11	6.70E+02	6.73E-13	7.42E+10
ASCGN-90	90	558	3.40E+11	5.70E+02	5.67E-13	8.81E+10
ASCGN-95	95	563	2.89E+11	4.80E+02	4.82E-13	1.04E+11
ASCGN-100	100	569	2.48E+11	4.10E+02	4.14E-13	1.21E+11
ASCGN-150	150	612	7.35E+10	1.20E+02	1.23E-13	4.08E+11
ASCGN-200	200	—	3.10E+10	5.20E+01	5.17E-14	9.67E+11
ASCGN-500	500	—	1.99E+09	3.30E+00	3.31E-15	1.51E+13
ASCGN-1000	1000	—	2.48E+08	4.10E-01	4.14E-16	1.21E+14
ASCGN-1500	1500	—	7.35E+07	1.20E-01	1.23E-16	4.08E+14

Advantage

Good chemical stability

Strong photothermal conversion ability

Uniform particle size

Good biocompatibility

Surface modifiable

Applications

Spectral signal enhancement

Biosensor materials

Molecular imaging

Drug delivery

Chemical catalysis

Storage

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This product should be stored at 4°C. **DO NOT FREEZE**.

Ordering Information

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