PRODUCT DATA SHEET

Silica Particles-NH2

Description

Silica Particles are spherical in shape and can be made to have a broad range of sizes and their surface chemistry easily modified to target a variety of applications. For the covalent binding of proteins, antibodies or other target molecules various conjugation methods can be applied e.g. the SPDP or maleimide functionalization for conjugation of thiolated molecules.

Abvigen offers a comprehensive list of basic, coated, functional and conjugated silica particles with uniform size and shapes. Our silica particles in the size range of 50 nm to 200 µm are monodisperse and nonporous particles with a density of 1.8 g/cm³.

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

website: www.abvigen.com Phone: +1 929-202-3014 Email: info@abvigenus.com

Characteristics

Diameter: 50 nm -200 um

Size: 10 ml; 20 ml; 50 ml; 100 ml; 500 ml

Concentration: 25 mg/ml; 50 mg/ml

Composition: Silica Particles

Density: 1.8 g/ccm

Shape: Spherical

Functional Group: NH2

Buffer: DI Water

Form: Suspension

Colour: white

Highlights

Not Displaceable: strongly bound to the particle surface

Negatively Charged

Highly uniform size and shapes

Wide size ranges from 50 nm-200 µm

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Dispersive in a wide range of solvents with a high degree of stability

Various surface properties: coated, functionalized and conjugated

Designed for the covalent binding of proteins, antibodies or other molecules

Allows engineering of controlled aggregates

Applications

Photothermal applications

Color applications

Controlled aggregation

Protein adsorption and separation

Nucleic acid detection and purification

Drug and gene delivery

Imaging contrast agents construction

Biodiagnostic and nanomedicine applications

Storage

This product should be stored at room temperature. **DO NOT FREEZE**. If stored unopened and as specified, Abvigen Plain Silica Particles are stable for 12 months.

NPS of Silica Particles

Diameter	Conc.(mg/ml)	Particles/mg	Particles/ml	Diameter	Conc.(mg/ml)	Particles/mg	Particles/ml
10 nm	25	1.06E+15	2.65E+16	3 um	50	3.93E+07	1.96E+09
20 nm	25	1.33E+14	3.32E+15	4.0 um	50	1.66E+07	8.29E+08
30 nm	25	3.93E+13	9.82E+14	5 um	50	8.49E+06	4.24E+08
50 nm	25	8.49E+12	2.12E+14	6.0 um	50	4.91E+06	2.46E+08
70 nm	25	3.09E+12	7.73E+13	7.0 um	50	3.09E+06	1.55E+08
100 nm	50	1.06E+12	5.31E+13	8.0 um	50	2.07E+06	1.04E+08
150 nm	50	3.14E+11	1.57E+13	9.0 um	50	1.46E+06	7.28E+07
200 nm	50	1.33E+11	6.63E+12	10 um	50	1.06E+06	5.31E+07
300 nm	50	3.93E+10	1.96E+12	15 um	50	3.14E+05	1.57E+07
350 nm	50	2.47E+10	1.24E+12	20 um	50	1.33E+05	6.63E+06

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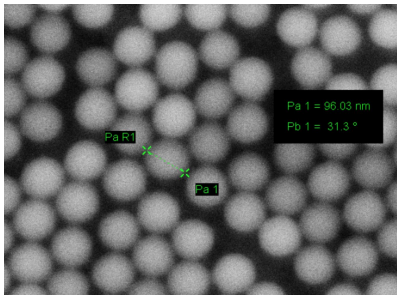
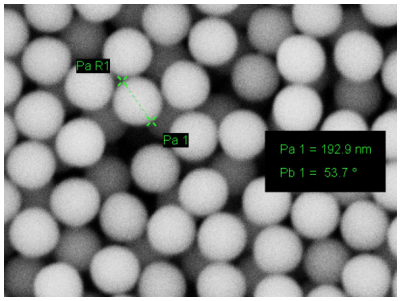
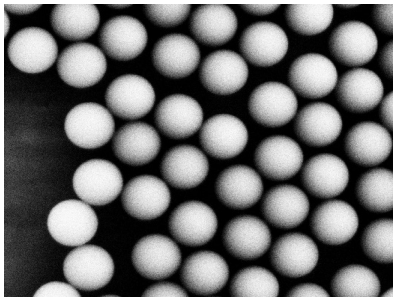
400 nm	50	1.66E+10	8.29E+11	30um	50	3.93E+04	1.96E+06
500 nm	50	8.49E+09	4.24E+11	40 um	50	1.66E+04	8.29E+05
600 nm	50	4.91E+09	2.46E+11	50 um	50	8.49E+03	4.24E+05
700 nm	50	3.09E+09	1.55E+11	60 um	50	4.91E+03	2.46E+05
800 nm	50	2.07E+09	1.04E+11	70 um	50	3.09E+03	1.55E+05
900 nm	50	1.46E+09	7.28E+10	80 um	50	2.07E+03	1.04E+05
1 um	50	1.06E+09	5.31E+10	900 um	50	1.46E+03	7.28E+04
1.5 um	50	3.14E+08	1.57E+10	100 um	50	1.06E+03	5.31E+04
2.0 um	50	1.33E+08	6.63E+09	200 um	50	1.33E+02	6.63E+03



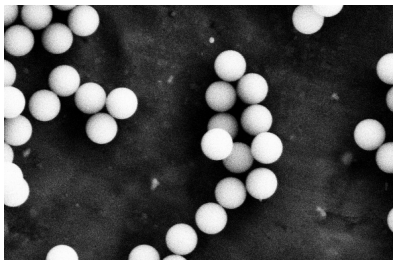
100 nm



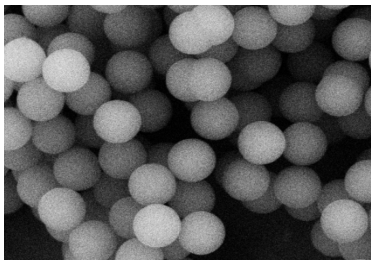
200 nm



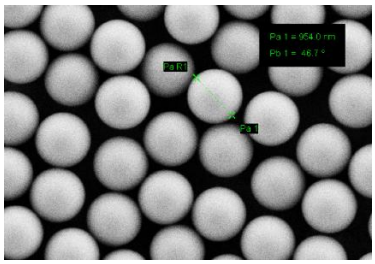
400 nm



700 nm



900 nm



1 um

Ordering Information

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