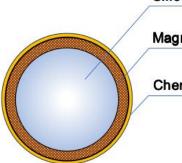


Silica Magnetic Particles

Description

Silica Magnetic Particles are a special type of nanomaterial composed of an internal silicon dioxide core, a middle magnetic material layer, and a chemically modified outermost layer. This structure endows microsphere materials with complete superparamagnetism, uniform particle size distribution, and good monodispersity. Complete superparamagnetism enables the material to respond quickly to external magnetic fields, without exhibiting magnetism in the absence of an external magnetic field, effectively avoiding long-term magnetic accumulation in living organisms. Chemical modification on the surface of Silica Magnetic Particles enables the binding of different chemical functional groups and specific antibodies, proteins, and nucleic acids. This material can be applied in multiple fields such as nucleic acid purification, targeted drug transportation, environmental monitoring, clinical diagnosis, and medical imaging.



Silicon dioxide

Magnetic modification layer

Chemical modification layer

Abvigen Inc can provide high-quality Silica Magnetic Particles with uniform particle size and good chemical stability, which can meet various personalized material needs such as customer research and development, testing, and production consumption.

For custom sizes, formulations or bulk quantities please contact our customer service department. Website: <u>www.abvigen.com</u> Phone: +1 929-202-3014 Email: <u>info@abvigenus.com</u>



Diameter: 0.2 um - 6 um Size: 10 ml or others Concentration: 25 mg/ml Composition: Silica Magnetic Particles Shape: Spherical Surface: N/A Buffer: PBS Store: Storage at 4 °C

Storage

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

For 10 mg/ml of Silica Magnetic Particles

Diameter	Conc. mg/ml	Particles/mg	Particles/ml	Diameter	Conc. mg/ml	Particles/mg	Particles/ml
0.2 um	25	9.55E+10	2.39E+12	1.5 um	25	2.26E+08	5.66E+09
0.35 um	25	1.78E+10	4.45E+11	6 um	25	3.54E+06	8.84E+07
1 um	25	7.64E+08	1.91E+10				

Highlights

- Superparamagnetism
- Uniform particle size distribution
- Good monodispersity
- Good chemical stability
- Surface modifiable



Applications

- **Environmental Monitoring**
- Targeted drug delivery
- Immunoassay determination
- Immobilized enzyme
- Biomolecular detection
- Chemical synthesis
- Catalyst carriers
- Biosensors
- Protein separation and purification

Ordering Information

Website: <u>www.abvigen.com</u> Phone: +1 929-202-3014 Email: <u>info@abvigenus.com</u>