



## Dextran coated $\text{Fe}_3\text{O}_4$ nanoparticles, 100 nm-COOH

### PRODUCT DATA SHEET

## Dextran Coated $\text{Fe}_3\text{O}_4$ Nanoparticles, 100 nm-COOH

### Description

$\text{Fe}_3\text{O}_4$  nanoparticles have excellent magnetic properties, including high saturation magnetization and coercivity, which makes it have a wide range of applications in the fields of magnetism, biomedicine, magnetic recording and magnetic fluids. In addition, the surface energy of nano  $\text{Fe}_3\text{O}_4$  is higher, so that it has a high reactivity, can react quickly with other molecules, and improve the reaction efficiency. Dextran modified magnetic beads have the characteristics of superparamagnetism, fast magnetic response, good monodispersion and strong resistance to non-specific adsorption. The surface of magnetic beads is rich in carboxyl groups, which can be covalently coupled with proteins, antibodies, peptides, oligonucleotides, etc. Magnetic beads have excellent suspension stability in different buffer solutions, which can effectively ensure the uniformity of reaction and detection consistency, and can be used in immunodetection, affinity purification, cell sorting and other fields. Abvigen offers high quality 100 nm dextran modified magnetic beads. The product has high repeatability between batches, which can meet the needs of various customers for personalized materials such as research and development, testing and production.

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

**Website:** [www.abvigen.com](http://www.abvigen.com) **Phone:** +1 929-202-3014 **Email:** [info@abvigenus.com](mailto:info@abvigenus.com)

### Characteristics

Type: Dextran Coated  $\text{Fe}_3\text{O}_4$  Nanoparticles, 100 nm-COOH

Particle size: 100±20 nm

Surface group: -COOH

Surface potential: < -30 mV

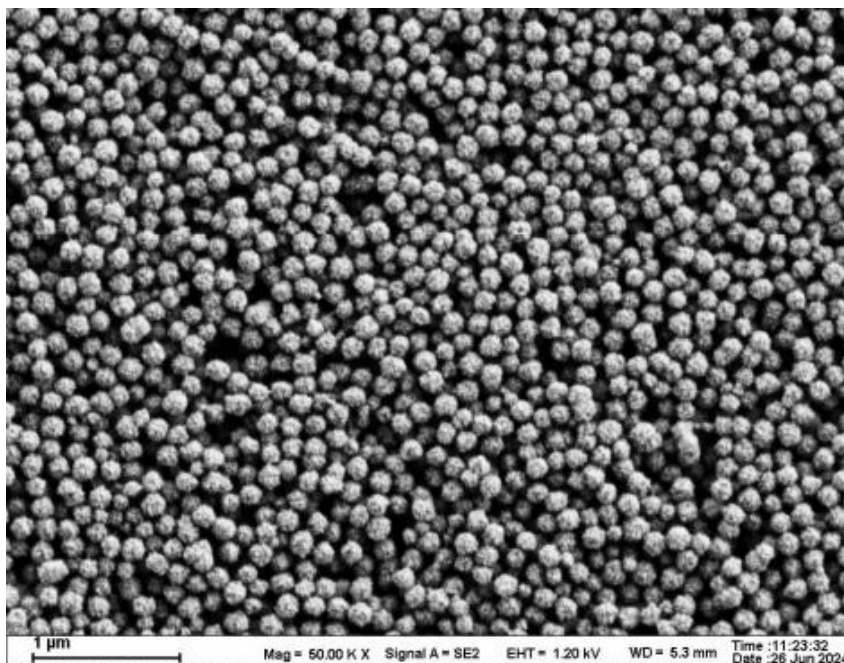
Dispersing solvent: Ultrapure water

Concentration: 10 mg/mL

Size: 1/5/10 mL

Storage condition: Store sealed at 2-8°C.

## SEM of Dextran Coated $\text{Fe}_3\text{O}_4$ Nanoparticles, 100 nm-COOH



### Advantages

- Superparamagnetism
- Fast magnetic response
- Good monodispersion
- Strong resistance to non-specific adsorption
- Excellent suspension stability

### Applications

- Immunodetection
- Affinity purification
- Cell sorting

### Storage

Store sealed at 2-8°C.



### Notes

1. The magnetic bead should be fully mixed before use to prevent the concentration of the magnetic bead from changing and to avoid long-term ultrasonic damage to the surface of the magnetic bead;
2. Magnetic beads should be magnetically separated and cleaned 2-3 times with pure water or buffer solution before use;
3. The use and preservation of magnetic beads should avoid freezing and thawing.

### Ordering Information

Website: [www.abvigen.com](http://www.abvigen.com)

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