



## Red Fluorescent Magnetic Starch Particles PRODUCT DATA SHEET

### Red Fluorescent Magnetic Starch Particles

#### Description

Red Fluorescent Magnetic Starch Particles are multifunctional nanomaterials that combine magnetic and fluorescent properties, exhibiting excellent biocompatibility and widely used in various fields such as biomedical, molecular detection, and environmental monitoring. Its core is composed of 75-80% (w/w) magnetite, and its shell is cross-linked hydroxyethyl starch, which endows it with excellent biodegradability and environmental stability. These particles not only emit bright red fluorescence at specific wavelengths, suitable for deep tissue imaging, but also have good magnetism, allowing for precise manipulation under external magnetic fields. They are widely used for cell labeling, targeted drug delivery, and magnetic resonance imaging (MRI). In addition, the surface of Red Fluorescent Magnetic Starch Particles can be modified with amino groups or streptavidin, allowing them to covalently bind with molecules such as antibodies, proteins, or biotin, thereby enhancing their applications in molecular detection and biosensing. Its unique magnetic and fluorescent properties make it have broad application potential in fields such as environmental pollutant monitoring and materials science.

Abvigen Inc can provide high quality Red Fluorescent Magnetic Starch Particles with various particle sizes. The product has uniform particle size and good magnetic stability. It can meet the personalized material needs of various customers for research and development, testing, production, and consumption.

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

Concentration: 10 mg/ml

Size: 10 ml

Surface: Plain/ Amino / Streptavidin

Diameter: 100 nm

Polydispersity index: < 0.250

Composition: Cross-linked starch iron oxide composite particles

Shape: Cluster-typed

Excitation: 552 nm

Emission: 580 nm

Buffer: Suspension in PBS

Expiration date: 6 months

Store: Storage at 2 - 8 °C

### Storage

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

### For 10 mg/ml of Red Fluorescent Magnetic Starch Particles

Diameter	Conc. mg/ml	Particles/mg	Particles/ml
100 nm	10	5.97E+11	5.97E+12

### Advantage

Uniform particle size

Stable fluorescence intensity

Good magnetism

Good biocompatibility

**Applications**

Biological fluorescence imaging

Biosensors

Drug delivery

Targeted therapy

**Ordering Information**

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

Phone: +1 929-202-3014

Email: [info@abvigenus.com](mailto:info@abvigenus.com)