



## **Far Red Nanoflower Structure Fluorescent Magnetic Nanoparticles**

### **PRODUCT DATA SHEET**

#### **Far Red Nanoflower Structure Fluorescent Magnetic Nanoparticles**

##### **Description**

Far Red Nanoflower Structure Fluorescent Magnetic Nanoparticles are a multifunctional nanomaterial that combines magnetic response and fluorescence tracing. This material is composed of a cross-linked pectin matrix and magnetic hematite nanoclusters, forming a unique "nanoflower" morphology. Far Red Nanoflower Structure Fluorescent Magnetic Nanoparticles are excited at a wavelength of 732 nm and emit at 758 nm. This material exhibits specific interactions with alternating magnetic fields in terms of magnetic properties, and cannot be separated by conventional permanent magnets. However, it can achieve precise manipulation in high gradient magnetic fields and is an ideal tracer for magnetic particle imaging (MPI). Commonly used in biomedical fields such as precise drug delivery, dynamic tracking of living cells, and targeted diagnosis and treatment of tumors.

Abvigen Inc can provide high quality Far Red Nanoflower Structure Fluorescent Magnetic Nanoparticles 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: 5 mg/ml

Size: 5 ml

Surface: Plain

Diameter: 50 nm / 70 nm

Polydispersity index: < 0.200

Composition: Cross-linked starch iron oxide composite particles

Shape: Cluster-typed

Density: 2.5 g/ccm

Excitation: 732 nm



Emission: 758 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 5 mg/ml of Far Red Nanoflower Structure Fluorescent Magnetic Nanoparticles

Diameter	Conc. mg/ml	Particles/mg	Particles/ml
50 nm	5	6.1E+12	3.1E+13
70 nm	5	2.2E+12	1.1E+13

### Advantage

Uniform particle size

Stable fluorescence intensity

Good magnetic stability

Good biocompatibility

High sensitivity

High specific surface area

Superparamagnetism

### Applications

Cell labeling and tracking

Molecular probe

Biological imaging

Drug delivery

### Ordering Information

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