



## **NIR- II AIE PS Fluorescent Particles**

### **PRODUCT DATA SHEET**

## **NIR- II AIE PS Fluorescent Particles**

### **Description**

Fluorescent particles are prepared by incorporating selected fluorophores into monodisperse polystyrene particles through swelling process or copolymerizing styrene with various organic fluorescent dyes, which produce fluorophores labeled polystyrene particles with satisfactory properties. This series of fluorescent microspheres are obtained by encapsulating aggregation-induced emission (AIE) molecules in polystyrene. AIE molecules are embedded inside the microspheres, and owing to the characteristics of aggregation-induced emission, there is no fluorescence quenching effect during aggregation, which can significantly improve the fluorescence efficiency of AIE molecules. Meanwhile, after being encapsulated in polystyrene, AIE molecules are isolated from the influences of external environment, greatly improving their fluorescence stability and achieving durable as well as stable fluorescence effects. Functional groups or biological macromolecules (carboxyl, amino, hydroxyl, streptavidin, etc.) can be quantitatively modified on the surface of microsphere as linking groups for immunoanalysis, making AIE fluorescent polystyrene microspheres have a wide range of applications, including lateral chromatography, cell imaging, microfluidics and fluorescence enzyme-related immunosorbent assay. Fluorescent particles with single or multiple fluorophores are available in various sizes, emission spectra and combinations. Many are suitable for uses in flow cytometry, fluorescence microscopy, phagocytosis studies, and cell labeling.

Abvigen Inc. offers a wide range of AIE PS Fluorescent Particles, including NIR- II AIE PS Fluorescent Particles. The product size is adjustable in the range of 50 nm - 2  $\mu$ m, and can be further flexibly adjusted according to customer requirements and use conditions to achieve customized supply.

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

1378 US-206 Ste 6-126, Skillman, NJ USA

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

Tel: 1-816-388- 0112 Fax: 1- 888-616-0161

Reserved

Email:

© Abvigen Inc All Rights



Particle size range: 50 nm - 2 um

Surface: Carboxyl; Amino

Shape: Spherical

Additive: Trace surfactants

Composition: Polystyrene Particles

Excitation: 855 nm

Emission: 988 nm

Form: Suspension

Store: Storage at 2 - 8 °C

Quality guarantee period: 24 months

Disperse medium: Pure water (containing 0.05wt% Proclin 300)

### Storage

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

### Highlights

Customized supply

Large scale supply

Excellent application effect

Aggregation induced luminescence characteristics

Good monodispersity

Excellent fluorescence performance

High density of surface functional groups

### For 10 mg/ml of NIR- II AIE PS Fluorescent Particles

Diameter	Conc. mg/ml	Particles/mg	Particles/ml	Diameter	Conc. mg/ml	Particles/mg	Particles/ml
50 nm	10	1.44E+13	1.44E+14	400 nm	10	2.82E+10	2.82E+11
100 nm	10	1.80E+12	1.80E+13	500 nm	10	1.44E+10	1.44E+11
200 nm	10	2.25E+11	2.25E+12	1 um	10	1.80E+09	1.80E+10
300 nm	10	6.67E+10	6.67E+11	2 um	10	2.25E+08	2.25E+09

1378 US-206 Ste 6-126, Skillman, NJ USA

info@abvigenus.com

Tel: 1-816-388- 0112 Fax: 1- 888-616-0161

Reserved

Email:

© Abvigen Inc All Rights



### Ordering Information

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

Phone: +1 929-202-3014

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

1378 US-206 Ste 6-126, Skillman, NJ USA

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

Tel: 1-816-388-0112 Fax: 1-888-616-0161

Reserved

Email:

© Abvigen Inc All Rights