**Orange Cross-linked PS Fluorescent Particles-NH2**
**PRODUCT DATA SHEET**

# Orange Cross-linked PS Fluorescent Particles-NH2

**Description**

Cross-linked PS Fluorescent Particles are particles with excellent stability and multifunctionality, widely used in biomedical, chemical analysis, and surface coating fields. Cross-linked PS Fluorescent Particles have strong chemical stability, thermal stability, and mechanical strength, and can maintain good functionality in complex experimental environments. Organic fluorescent dyes were added into the monodisperse polystyrene Particles through copolymerization, so that the materials had stable and good fluorescence characteristics. The surface of the material can be further modified to enable it to bind with other biomolecules such as antibodies, DNA, RNA. Widely used in fields such as immune detection, flow cytometry, molecular labeling, and biomolecular analysis. Due to its good dispersion and stability, fluorescent Particles also play an important role in environmental monitoring, sensors and medical diagnosis.The introduction of amino functional groups endows Cross-linked PS Fluorescent Particles with good hydrophilicity and high reactivity. Amino functional groups can also undergo specific chemical reactions with other molecules, enhancing their potential applications in various fields.

Abvigen Inc can provide high-quality Orange Cross-linked PS Fluorescent Particles-NH2 in various particle sizes. The product has uniform particle size and stable fluorescence performance. 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 Phone: +1 929-202-3014 Email: info@abvigenus.com**


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**Characteristics**

Concentration: 10 mg/ml

Size: 10 ml; 20 ml

Surface: Amino

Shape: Spherical

Density: 1.03 g/ccm

Composition: Orange Cross-linked PS Fluorescent Particles

Excitation: 540 nm

Emission: 580 nm

Buffer: DI Water

Form: Suspension

Store: Storage at 2 - 8 °C

**Storage**

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

**Note**

1-20 um default cross-linking% is 1%, >20 um default cross-linking% is 5%.

If you require any other cross-linking%, please contact us: info@abvigenus.com

**For 10 mg/ml of Orange Fluorescent Cross-linked Polystyrene Particles-NH2**

| Diameter | Conc. mg/ml | Particles/mg | Particles/ml | Diameter | Conc. mg/ml | Particles/mg | Particles/ml |
|---|---|---|---|---|---|---|---|
| 0.3 um | 10 | 6.87E+10 | 6.87E+11 | 16 um | 10 | 4.53E+05 | 4.53E+06 |
| 0.4 um | 10 | 2.90E+10 | 2.90E+11 | 17 um | 10 | 3.77E+05 | 3.77E+06 |
| 0.5 um | 10 | 1.48E+10 | 1.48E+11 | 18 um | 10 | 3.18E+05 | 3.18E+06 |
| 0.6 um | 10 | 8.58E+09 | 8.58E+10 | 19 um | 10 | 2.70E+05 | 2.70E+06 |
| 0.7 um | 10 | 5.41E+09 | 5.41E+10 | 20 um | 10 | 2.32E+05 | 2.32E+06 |
| 0.8 um | 10 | 3.62E+09 | 3.62E+10 | 21 um | 10 | 2.00E+05 | 2.00E+06 |
| 0.9 um | 10 | 2.54E+09 | 2.54E+10 | 22 um | 10 | 1.74E+05 | 1.74E+06 |
| 1 um | 10 | 1.85E+09 | 1.85E+10 | 23 um | 10 | 1.52E+05 | 1.52E+06 |
| 2 um | 10 | 2.32E+08 | 2.32E+09 | 24 um | 10 | 1.34E+05 | 1.34E+06 |
| 3 um | 10 | 6.87E+07 | 6.87E+08 | 25 um | 10 | 1.19E+05 | 1.19E+06 |

1378 US-206 Ste 6-126, Skillman, NJ USA
Email: info@abvigenus.com
Tel: 1-816-388- 0112 Fax: 1- 888-616-0161
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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4 um | 10 | 2.90E+07 | 2.90E+08 | 26 um | 10 | 1.05E+05 | 1.05E+06 |
| 5 um | 10 | 1.48E+07 | 1.48E+08 | 27 um | 10 | 9.42E+04 | 9.42E+05 |
| 6 um | 10 | 8.58E+06 | 8.58E+07 | 28 um | 10 | 8.45E+04 | 8.45E+05 |
| 7 um | 10 | 5.41E+06 | 5.41E+07 | 29 um | 10 | 7.60E+04 | 7.60E+05 |
| 8 um | 10 | 3.62E+06 | 3.62E+07 | 30 um | 10 | 6.87E+04 | 6.87E+05 |

**Polystyrene Particles Centrifugation Parameters**

| Particle Size | Centrifugal Acceleration | Time | Resuspension of Pellet |
|---|---|---|---|
| 50 nm | 45,000 x g | 30 min | 30 min sonication / vortex |
| 100 nm | 45,000 x g | 30 min | 30 min sonication / vortex |
| 200 nm | 45,000 x g | 30 min | 30 min sonication / vortex |
| 500 nm | 45,000 x g | 20 min | 10 min sonication / vortex |
| 800 nm | 10,000 x g | 20 min | 10 min sonication / vortex |
| 1 um | 3,500 x g | 15 min | 10 min sonication / vortex |
| 2-4 um | 1,600 x g | 15 min | vortex |
| 5-8 um | 1,200 x g | 10 min | vortex |
| >8 um | 25 x g | 10 min | vortex |

**Advantage**

Monodisperse particles

High uniformity of particle size

High fluorescence intensity

Good chemical stability

Strong resistance to photobleaching

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**Applications**

Flow cytometry

Fluorescence microscope

Devouring research

Cell markers

**Ordering Information**

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Phone: +1 929-202-3014

Email: info@abvigenus.com

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Email: info@abvigenus.com
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