



Orange PS Fluorescent Particles-COOH PRODUCT DATA SHEET

Orange PS Fluorescent Particles-COOH

Description

PS Fluorescent Particles-COOH is a kind of functionalized Particles material obtained by introducing carboxyl group into polystyrene molecular chain. PS Fluorescent Particles-COOH exhibits excellent fluorescence and functionalization properties. The introduction of carboxyl groups enhances the polarity of PS Fluorescent Particles, improves their interfacial compatibility with other materials, and enhances their mechanical properties, resulting in better durability in polymer blends. The presence of carboxyl groups also enhanced the thermal stability of Particles, enabling them to maintain good performance at high temperatures. Carboxyl modification makes the surface of PS Fluorescent Particles more hydrophilic and reactive, enabling them to covalently bind with biomolecules such as proteins, antibodies, or drug molecules through chemical reactions, making them widely used in fields such as biomarkers, targeted drug delivery, cell detection, and biosensing. The unique functional characteristics of this material make it an important high-performance material for scientific research and industrial applications.

Abvigen Inc can provide high-quality Orange PS Fluorescent Particles-COOH 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



Characteristics

Concentration: 10 mg/ml

Size: 10 ml; 20 ml

Surface: Carboxyl

Shape: Spherical

Density: 1.03 g/ccm

Composition: Orange 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.**

For 10 mg/ml of Orange PS Fluorescent Particles-COOH

Diameter	Conc. mg/ml	Particles/mg	Particles/ml	Diameter	Conc. mg/ml	Particles/mg	Particles/ml
0.05 um	10	1.48E+13	1.48E+14	18 um	10	3.18E+05	3.18E+06
0.1 um	10	1.85E+12	1.85E+13	19 um	10	2.70E+05	2.70E+06
0.2 um	10	2.32E+11	2.32E+12	20 um	10	2.32E+05	2.32E+06
0.3 um	10	6.87E+10	6.87E+11	21 um	10	2.00E+05	2.00E+06
0.4 um	10	2.90E+10	2.90E+11	22 um	10	1.74E+05	1.74E+06
0.5 um	10	1.48E+10	1.48E+11	23 um	10	1.52E+05	1.52E+06
0.6 um	10	8.58E+09	8.58E+10	24 um	10	1.34E+05	1.34E+06
0.7 um	10	5.41E+09	5.41E+10	25 um	10	1.19E+05	1.19E+06
0.8 um	10	3.62E+09	3.62E+10	30 um	10	6.87E+04	6.87E+05
0.9 um	10	2.54E+09	2.54E+10	40 um	10	2.90E+04	2.90E+05
1 um	10	1.85E+09	1.85E+10	50 um	10	1.48E+04	1.48E+05
2 um	10	2.32E+08	2.32E+09	60 um	10	8.58E+03	8.58E+04
3 um	10	6.87E+07	6.87E+08	70 um	10	5.41E+03	5.41E+04



4 um	10	2.90E+07	2.90E+08	80 um	10	3.62E+03	3.62E+04
5 um	10	1.48E+07	1.48E+08	90 um	10	2.54E+03	2.54E+04
6 um	10	8.58E+06	8.58E+07	110 um	10	1.39E+03	1.39E+04
7 um	10	5.41E+06	5.41E+07	120 um	10	1.07E+03	1.07E+04
8 um	10	3.62E+06	3.62E+07	150 um	10	5.49E+02	5.49E+03
9 um	10	2.54E+06	2.54E+07	180 um	10	3.18E+02	3.18E+03
10 um	10	1.85E+06	1.85E+07	250 um	10	1.19E+02	1.19E+03
11 um	10	1.39E+06	1.39E+07	500 um	10	1.48E+01	1.48E+02
12 um	10	1.07E+06	1.07E+07	900 um	10	2.54E+00	2.54E+01
13 um	10	8.44E+05	8.44E+06	1100 um	10	1.39E+00	1.39E+01
14 um	10	6.76E+05	6.76E+06	1400 um	10	6.76E-01	6.76E+00
15 um	10	5.49E+05	5.49E+06	1700 um	10	3.77E-01	3.77E+00
16 um	10	4.53E+05	4.53E+06	3000 um	10	6.87E-02	6.87E-01
17 um	10	3.77E+05	3.77E+06				

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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Ordering Information

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