

## Orange PS Fluorescent Particles-NH2

### DESCRIPTION

橙色氨基聚苯乙烯荧光微球（Orange PS Fluorescent Particles-NH2）是由苯乙烯单体经自由基聚合反应合成，表面由橙色荧光染料和氨基基团修饰获得的一种聚合物微球，是一种普遍应用于生物医学、化学分析和环境监测的荧光标记材料。该材料具有优良的化学稳定性和生物亲和性，在特定波长下能够发出明亮的橙色荧光。氨基修饰提升了聚苯乙烯荧光微球生物相容性，有效降低聚苯乙烯荧光微球在生物体系中的免疫原性。此外，氨基基团能够与蛋白质、DNA、抗体等多种生物分子进行高效结合，实现微球表面的功能化，使微球能够用于生物传感器、细胞标记和分子识别等应用，还可以作为后续化学反应的起始点进行多种化学修饰。在细胞标记、免疫分析、传感器开发、药物载体、生物医学和电子化工等领域发挥着重要作用。

百欧泰生物可以提供多种粒径大小的高质量橙色氨基聚苯乙烯荧光微球（20 nm - 3000 um ），橙色氨基聚苯乙烯荧光微球产品粒径均一、表面吸附性能良好、荧光强度稳定，可以满足各类客户研发，试验及生产消费等不同个性化材料需求。

### Product Information

类型	Orange PS Fluorescent Particles
直径	20 nm - 3000 um
规格	10 ml
表面修饰	Amino
激发波长	Orange-1: 525-543 nm Orange-2: 380 nm

发射波长	Orange-1: 580 nm Orange-2: 610 nm
浓度	10 mg/ml
缓冲溶液	DI Water, 20 ppm SDS
保存温度	Stored at 2 - 8°C. Do not freeze

**NPS of Orange PS Fluorescent Particles-NH<sub>2</sub>, 10 mg/ml**

Diameter (um)	Particle Volume (nm <sup>3</sup> )	Volume (ml)	Wt. Conc.(mg/ml)	Particle Mass (g)	NPS/mg	NPS/ml	Conc. (nmol/ml)
0.02	4.19E+03	10	10	4.31E-18	2.32E+14	2.32E+15	3.85E+00
0.03	1.41E+04	10	10	1.46E-17	6.87E+13	6.87E+14	1.14E+00
0.05	6.54E+04	10	10	6.74E-17	1.48E+13	1.48E+14	2.46E-01
0.1	5.24E+05	10	10	5.39E-16	1.85E+12	1.85E+13	3.08E-02
0.2	4.19E+06	10	10	4.31E-15	2.32E+11	2.32E+12	3.85E-03
0.3	1.41E+07	10	10	1.46E-14	6.87E+10	6.87E+11	1.14E-03
0.4	3.35E+07	10	10	3.45E-14	2.90E+10	2.90E+11	4.81E-04
0.5	6.54E+07	10	10	6.74E-14	1.48E+10	1.48E+11	2.46E-04
0.6	1.13E+08	10	10	1.16E-13	8.58E+09	8.58E+10	1.43E-04
0.7	1.80E+08	10	10	1.85E-13	5.41E+09	5.41E+10	8.98E-05
0.8	2.68E+08	10	10	2.76E-13	3.62E+09	3.62E+10	6.01E-05
0.9	3.82E+08	10	10	3.93E-13	2.54E+09	2.54E+10	4.22E-05
1	5.24E+08	10	10	5.39E-13	1.85E+09	1.85E+10	3.08E-05
2	4.19E+09	10	10	4.31E-12	2.32E+08	2.32E+09	3.85E-06
3	1.41E+10	10	10	1.46E-11	6.87E+07	6.87E+08	1.14E-06
4	3.35E+10	10	10	3.45E-11	2.90E+07	2.90E+08	4.81E-07
5	6.54E+10	10	10	6.74E-11	1.48E+07	1.48E+08	2.46E-07
6	1.13E+11	10	10	1.16E-10	8.58E+06	8.58E+07	1.43E-07
7	1.80E+11	10	10	1.85E-10	5.41E+06	5.41E+07	8.98E-08
8	2.68E+11	10	10	2.76E-10	3.62E+06	3.62E+07	6.01E-08
9	3.82E+11	10	10	3.93E-10	2.54E+06	2.54E+07	4.22E-08
10	5.24E+11	10	10	5.39E-10	1.85E+06	1.85E+07	3.08E-08
11	6.97E+11	10	10	7.18E-10	1.39E+06	1.39E+07	2.31E-08
12	9.05E+11	10	10	9.32E-10	1.07E+06	1.07E+07	1.78E-08
13	1.15E+12	10	10	1.18E-09	8.44E+05	8.44E+06	1.40E-08
14	1.44E+12	10	10	1.48E-09	6.76E+05	6.76E+06	1.12E-08
15	1.77E+12	10	10	1.82E-09	5.49E+05	5.49E+06	9.12E-09

16	2.14E+12	10	10	2.21E-09	4.53E+05	4.53E+06	7.52E-09
17	2.57E+12	10	10	2.65E-09	3.77E+05	3.77E+06	6.27E-09
18	3.05E+12	10	10	3.15E-09	3.18E+05	3.18E+06	5.28E-09
19	3.59E+12	10	10	3.70E-09	2.70E+05	2.70E+06	4.49E-09
20	4.19E+12	10	10	4.31E-09	2.32E+05	2.32E+06	3.85E-09
21	4.85E+12	10	10	4.99E-09	2.00E+05	2.00E+06	3.32E-09
22	5.58E+12	10	10	5.74E-09	1.74E+05	1.74E+06	2.89E-09
23	6.37E+12	10	10	6.56E-09	1.52E+05	1.52E+06	2.53E-09
24	7.24E+12	10	10	7.46E-09	1.34E+05	1.34E+06	2.23E-09
25	8.18E+12	10	10	8.43E-09	1.19E+05	1.19E+06	1.97E-09
26	9.20E+12	10	10	9.48E-09	1.05E+05	1.05E+06	1.75E-09
27	1.03E+13	10	10	1.06E-08	9.42E+04	9.42E+05	1.56E-09
28	1.15E+13	10	10	1.18E-08	8.45E+04	8.45E+05	1.40E-09
30	1.41E+13	10	10	1.46E-08	6.87E+04	6.87E+05	1.14E-09
40	3.35E+13	10	10	3.45E-08	2.90E+04	2.90E+05	4.81E-10
50	6.54E+13	10	10	6.74E-08	1.48E+04	1.48E+05	2.46E-10
60	1.13E+14	10	10	1.16E-07	8.58E+03	8.58E+04	1.43E-10
70	1.80E+14	10	10	1.85E-07	5.41E+03	5.41E+04	8.98E-11
80	2.68E+14	10	10	2.76E-07	3.62E+03	3.62E+04	6.01E-11
90	3.82E+14	10	10	3.93E-07	2.54E+03	2.54E+04	4.22E-11
100	5.24E+14	10	10	5.39E-07	1.85E+03	1.85E+04	3.08E-11
110	6.97E+14	10	10	7.18E-07	1.39E+03	1.39E+04	2.31E-11
120	9.05E+14	10	10	9.32E-07	1.07E+03	1.07E+04	1.78E-11
150	1.77E+15	10	10	1.82E-06	5.49E+02	5.49E+03	9.12E-12
180	3.05E+15	10	10	3.15E-06	3.18E+02	3.18E+03	5.28E-12
220	5.58E+15	10	10	5.74E-06	1.74E+02	1.74E+03	2.89E-12
250	8.18E+15	10	10	8.43E-06	1.19E+02	1.19E+03	1.97E-12
500	6.54E+16	10	10	6.74E-05	1.48E+01	1.48E+02	2.46E-13
850	3.22E+17	10	10	3.31E-04	3.02E+00	3.02E+01	5.01E-14
900	3.82E+17	10	10	3.93E-04	2.54E+00	2.54E+01	4.22E-14
1100	6.97E+17	10	10	7.18E-04	1.39E+00	1.39E+01	2.31E-14
1400	1.44E+18	10	10	1.48E-03	6.76E-01	6.76E+00	1.12E-14
1700	2.57E+18	10	10	2.65E-03	3.77E-01	3.77E+00	6.27E-15
3000	1.41E+19	10	10	1.46E-02	6.87E-02	6.87E-01	1.14E-15

## Advantage

粒径大小均一  
荧光强度稳定  
化学稳定性好  
表面活性良好  
良好生物相容性

## Applications

荧光显微测定  
侧向层析技术  
药物载体  
生物传感器  
生物成像  
细胞追踪  
分子检测  
免疫层析  
食品安全检测  
酶联免疫吸附实验

## Storage

Stored product away from direct sunlight at 4° C.

Do NOT freeze.

When stored as specified the product is stable for at least six months.

## Notes

Please use PS Particles after fully stirring and ultrasonic dispersion.

Store at room temperature/4 degree and avoid light, avoid drying into blocks and avoid

freezing and thawing.

PS Fluorescent Particles are soluble in organic solvents such as acetone/ chloroform/ tetrahydrofuran, so they should not be mixed with the above reagents.

Adding high concentration of ethanol to the solution will cause the leakage of fluorescent substances and decrease the fluorescence intensity of the particle.

The working temperature should not exceed 100° C to prevent the PS Fluorescent Particles from melting, deforming or sticking together.

## Contact Us

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