

# CdSe/ZnS Quantum Dot Particles-COOH PRODUCT DATA SHEET

# **CdSe/ZnS Quantum Dot Particles-COOH**

#### Description

Quantum dots (QDs) are nanoscale low-dimensional semiconductor materials, generally composed of semiconductor materials such as group II-VI elements or Group III-V elements, and can also be composed of two or more kinds of semiconductor materials to form a core/shell structure, and the particle size is generally between 2  $^{\sim}$  20 nm. By applying a certain electric field or light pressure to the nano-semiconductor materials, they will emit a specific frequency of light, and the frequency of the light emitted will change with the size of the semiconductor. Quantum dot fluorescent microspheres are super fluorescent microspheres filled with multiple quantum dots. The surface of microspheres can be modified with carboxyl group (-COOH), amino group (-NH<sub>2</sub>), p-methylbenzene sulfonyl group (-Ts), streptavidin (-SA) and other functional groups to meet various labeling requirements.

Abvigen offers high quality CdSe/ZnS quantum dot fluorescent particles-COOH. The product has high repeatability between batches, which can meet the needs of various customers for personalized materials such as research and development, testing and production.

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**

Type: CdSe/ZnS Quantum Dot Particles-COOH

Material: CdSe/ZnS polymer

Surface: COOH

Particle size: 35 nm, 85 nm, 125 nm

**PDI:** < 0.15 (measured by dynamic light reflection)

Dispersion medium: Deionized water

Emission wavelength: 615 ± 10 nm

Solid content: 2.5‰

Colour: Orange

Size: 5 ml

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**Storage condition:** Store at 4 ~ 25°C. Do not freeze.

## **Advantages**

The structure is stable and the luminous material is difficult to overflow.

The process is stable and the difference between batches is small.

High signal value.

Low non-specific adsorption and high signal-to-noise ratio.

Particle size and functional group type can be customized.

#### **Applications**

Fluorescence imaging

Biosensors

Fluorescence chromatography

Real-time tissue imaging

Single molecule detection

Drug delivery

Bar code label

Immunochromatography

Indicator

#### **Storage**

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## **Ordering Information**

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