



## Streptavidin Quantum Dots PRODUCT DATA SHEET

### Streptavidin Quantum Dots

#### Description

Biocompatible quantum dots (QD) offer high photostability and high fluorescence with great long-term colloidal stability over a broad pH range. They are also accessible to simple and efficient bioconjugation techniques, such as EDC coupling and SMCC conjugation. The surface of the QDs is engineered to reduce non-specific binding for a variety of applications, such as sensing, cellular imaging, and Förster Resonance Energy Transfer (FRET).

Streptavidin Quantum Dots are a group of streptavidin conjugated, water soluble core/shell quantum dots. Biotinylated proteins, antibodies, nucleic acids or other ligands with biotin can be easily coupled to the QDs. Since QDs are nanosized particles, monobiotin labeled molecules are preferred in to keep the colloidal stability of the QDs after binding. Otherwise, Streptavidin Quantum Dots tends to aggregate. With excellent colloidal stability and unique surface coating, the streptavidin QDs exhibit high binding capacity and low non-specific binding.

#### Product List

Cat No	Product Name	Concentration	Size
AQD-SA-425	Streptavidin Quantum Dots, 425 nm	1 $\mu$ M	1 nmol
AQD-SA-525	Streptavidin Quantum Dots, 525 nm	1 $\mu$ M	1 nmol
AQD-SA-540	Streptavidin Quantum Dots, 540 nm	1 $\mu$ M	1 nmol
AQD-SA-560	Streptavidin Quantum Dots, 560 nm	1 $\mu$ M	1 nmol
AQD-SA-580	Streptavidin Quantum Dots, 580 nm	1 $\mu$ M	1 nmol
AQD-SA-600	Streptavidin Quantum Dots, 600 nm	1 $\mu$ M	1 nmol
AQD-SA-620	Streptavidin Quantum Dots, 620 nm	1 $\mu$ M	1 nmol



### **Characteristics**

Reaction group: streptavidin

Emission range: 425 nm ~ 620 nm

Full Width at Half Maximum: < 35 nm

Zeta potential: from -25 mV to -40mV

Concentration: 1  $\mu$ M

Storage buffer: 10 mM PBS buffer (pH 7.4), 0.01% BSA and 0.02% NaN<sub>3</sub>

Storage temperature: 2-8°C

### **Advantages**

Narrow emission peak

Wide choice of emission colors

Low non-specific binding

High colloidal stability

Lyophilizable

### **Applications**

Immunoassay

Multiplexing

Tissue Imaging

### **Storage**

Store at 2-8°C. **DO NOT FREEZE.**

### **Ordering Information**

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

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