





Quantum Dots

Refs. QDCORE550 **QDCORESHELL595** QDCORESHELL610 QDCORE570 QDCORE585 QDCORESHELL620

Quantum Dots are nanocrystals of inorganic semiconductors that have all three dimensions restricted to the 2 to 8 nm length scale. Core CdSe and core/shell CdSe/ZnS are produced via chemical synthesis at high temperature in organic solvent (chloroform) are offered by DropSens.



CdSe Core structure, Emmision maximum 556, 570 and 585 nm Diameter 2.52; 3.02; 3.18 nm



CdSe Core/ZnS Shell structure Emmission Maximum 595, 610 and 620 nm Diameter 3.22; 3.92; 4.21 nm

These nanoparticles are stable and soluble in organic solvents with high fluorescence and electrochemical properties.

Quantum Dots with different emision ranges are available, since the emission wavelengths are controlable by the size and composition of the core. Photoactivation is recommended for fluorescence applications.

The main features of DropSens' Quantum Dots are:

QDCORE-550: $\lambda_{em} = 550$ nm; concentration= $21 \pm 2\mu$ M; diameter Ø= 2.52 ± 0.03 nm

QDCORE-570: $\lambda_{em} = 570$ nm; concentration= $23 \pm 2\mu$ M; diameter Ø= 3.02 ± 0.01 nm

QDCORE-585: $\lambda_{em} = 585$ nm; concentration= $24 \pm 2\mu$ M; diameter Ø= 3.18 ± 0.05 nm

QDCORESHELL-595: λ_{em} = 595 nm; concentration= 24 ± 2 μ M; diameter Ø= 3.21 ± 0.05 nm

QDCORESHELL-610: $\lambda_{em} = 610 \text{ nm}$; concentration= $19 \pm 3\mu\text{M}$; diameter Ø= $3.92 \pm 0.03 \text{ nm}$

QDCORESHELL-620: λ_{em} = 620 nm; concentration= 20 ± 2 μ M; diameter Ø= 4.21 ± 0.02 nm

This product is available in 10 mL order quantities. It is recommended to be stored at 2-8°C and protected from light.

Related products



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DRP-GPHOX



DRP-NINW



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