

Product Specification

Product: Sapphire[™] Nanocrystal Quantum Dots NC620

Authorized for research use only

Contents

The vial(s) contain CdS_xSe_{1-x}/ZnS core/shell quantum dots coated with aluminum oxide and oleic acid as ligand. The physical properties of quantum dots are as follows: the emission wavelength, λ_{max} , is 620±5 nm; full width at half maximum (FWHM) of the emission spectra is 30 +/-5 nm; size (in diameter) is 8-10 nm; and the quantum yield is 85-95%. The quantum dots are normally shipped in toluene. Quantum dots are also available in other solvents by request.

Instructions

The quantum dots should be stored in the dark at 4 °C. The shelf life is approximately one year under these conditions. Quantum dots may be isolated by using a polar solvent/nonpolar solvent precipitation method. Normally, methanol is used as the polar solvent. Quantum dots will begin to precipitate at 30-40% methanol in toluene.

