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Product Specification

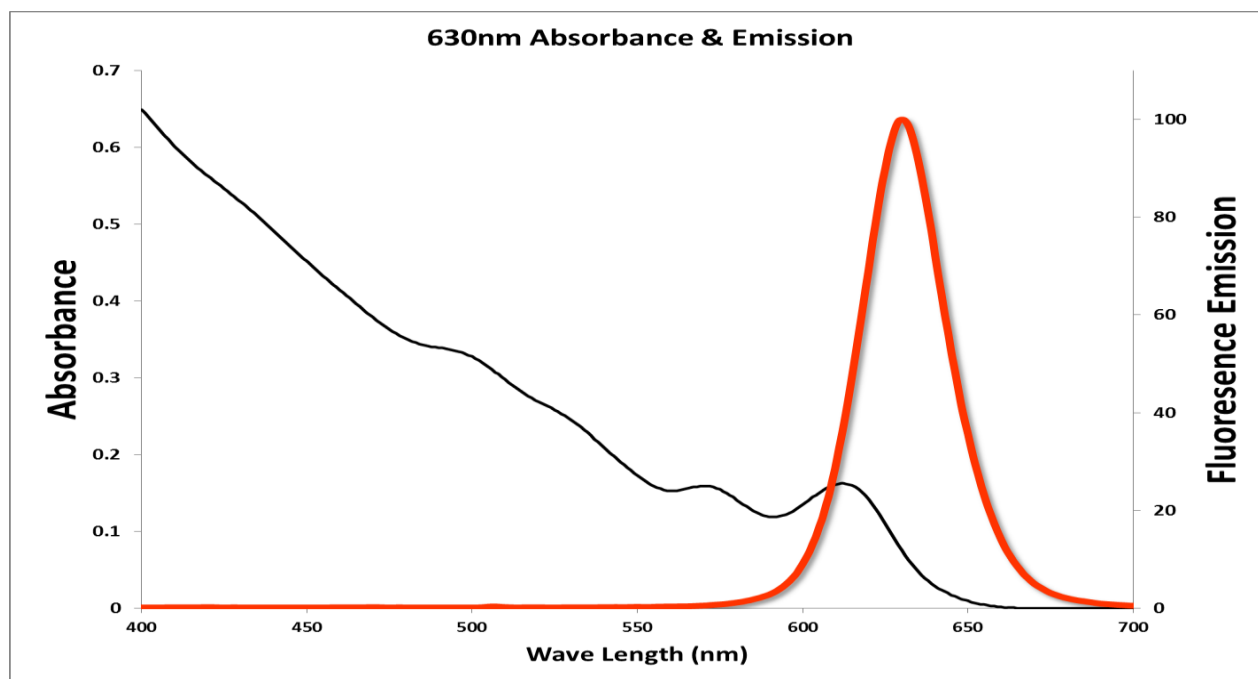
Product: SpectraRed™ Fluorescent Nanocrystals

Contents

The vial(s) contain CdS_xSe_{1-x}/ZnS core/shell nanocrystals coated with oleic acid as ligand. The physical properties of nanocrystals are as follows: the emission wavelength, λ_{max} , is 630±5 nm; full width at half maximum (FWHM) of the emission spectra is 30 +/-5 nm; size (in diameter) is 6-7 nm; and the quantum yield is 45-55%. The nanocrystals are shipped in either toluene or water solvent, according to customer orders. Nanocrystals are also available in other solvents by request.

Instructions

The nanocrystals should be stored in the dark at 4 °C. The shelf life is approximately one year under these conditions. Nanocrystals may be isolated by using a polar solvent/nonpolar solvent precipitation method. Normally, methanol is used as the polar solvent. Nanocrystals will begin to precipitate at 30-40% methanol in toluene. Water-soluble nanocrystals have undergone surface modification to impart water solubility. During use the nanocrystals should not be subjected to ionic concentrations higher than 180 mM or a pH lower than 5.5 or greater than 9.0.



Rev 2016 03 07

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