

## Product Specification

### Product: TriLite™ Nanocrystals NC575C

Authorized for research use only

#### Contents

The vial(s) contain CdS<sub>x</sub>Se<sub>1-x</sub>/ZnS core/shell nanocrystals coated with COOH functional ligands. The physical properties of the nanocrystals are as follows: the emission wavelength,  $\lambda_{\text{max}}$ , is 575±5 nm; full width at half maximum (FWHM) of the emission spectra is 30-40 nm; size (in diameter) is 5.5-6.5 nm. The nanocrystals are shipped in deionized water with 0.01% Sodium Azides.

#### 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 diluted into any appropriate saline or buffered saline solution. Do not exceed 160 mM ionic strength in saline. The nanocrystals are stable in a pH range of 6.0 – 9.0. Nanocrystals may aggregate outside of this pH range or at salt concentrations above 160 mM. If this occurs, bring the pH to within the usable range using a small amount of either 1N HCl or 1N NaOH, and redisperse nanocrystals by sonication (approximately 10 seconds, three times, vortexing between sonications). If necessary, nanocrystals may be isolated by centrifugal filtration by using a centrifugal filter tube (from Millipore Corporation, Cat. No. UFC801008) at 4000 G for 10-20 minutes.

#### Emission spectra

