

## Product Specification

### Product: TriLite™ Nanocrystals NC575N

Authorized for research use only

#### Contents

The vial(s) contain  $\text{CdS}_x\text{Se}_{1-x}/\text{ZnS}$  core/shell nanocrystals coated with  $\text{NH}_2$  functional ligands. The physical properties of the nanocrystals are as follows: the emission wavelength,  $\lambda_{\text{max}}$ , is  $575 \pm 5$  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 5.0 – 7.0. Nanocrystals will aggregate in basic pH conditions. If this occurs, bring the pH to 7.0 or below using a small amount of 1N HCl, 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

