

## PRODUCT DATA SHEET

### Trilite™ Fluorescent Nanocrystals 665nm - Carboxy

#### Catalog Numbers:

- FN-665-C-1MG (1 mg, 2 nmol)**
- FN-665-C-5MG (5 mg, 10 nmol)**
- FN-665-C-25MG (25 mg, 50 nmol)**

#### Description

The vial(s) contains  $Cd_xSe_{1-x}/ZnS$  core/shell fluorescent nanocrystals coated with  $-COOH$  functional ligands. These functionalized nanocrystals offer the possibility to efficiently conjugate antibodies and other ligands for development of functional assays.

- Unlike traditional quantum dots, emission wavelength is tunable by composition rather than size.
- Proprietary surface passivation and ligand technology isolates the core from oxygen and harmful ions that can degrade quantum dot performance over time.
- Photostable (no bleaching)
- Narrow and sharp emission peaks
- All colors equally bright
- Comparable quantum efficiencies (50%) throughout the visible spectrum
- Semiconductor Grade

#### Characteristics

**Diameter:** 5.5-6.5nm

**Amount:** 1, 5, 25mg

**Emission ( $\lambda$  max):** 665±5nm

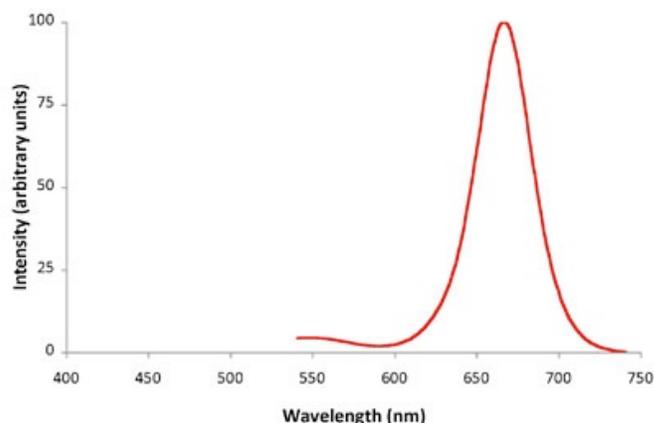
**Full width at half maximum (FWHM):** 30-40nm

**Supplied in deionized water**

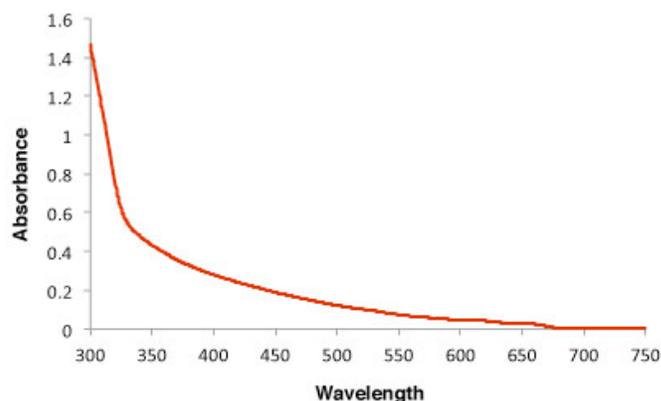
#### Storage

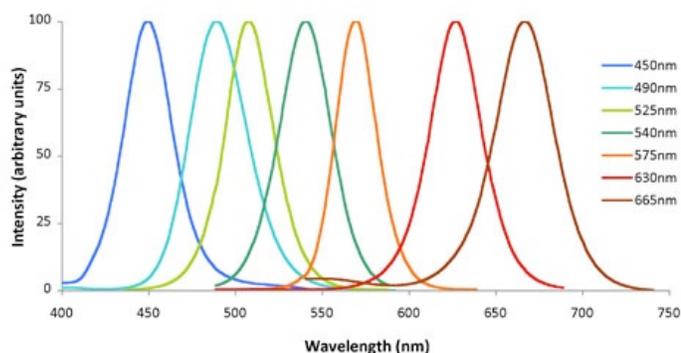
This product should be stored at 4°C in the dark. If stored as specified, Cytodiagnosics Trilite™ Fluorescent Nanocrystals have a shelf life of approximately one year.

#### Emission Spectra



#### Excitation Spectra





## Ordering Information

For ordering call 866-344-3954 or visit us online at [www.cytodiagnos<sup>t</sup>ics.com](http://www.cytodiagnos<sup>t</sup>ics.com)

## Instructions

The fluorescent nanocrystals can be diluted in any buffered saline solution with an ionic strength of 160mM or less and are stable in a pH range of 6.0-9.0.

Outside of the specified ionic strength and pH range the quantum dots may aggregate.

If this occur, bring the pH to within working range using either 1N HCl or 1N NaOH and redisperse by sonication (approximately 10 seconds, three times with vortexing in between sonication).

Isolation of fluorescent nanocrystals is best performed using a centrifugal filter device (Millipore, Cat. # UFC801008) at 4000 x g for 10-20 minutes.

## Product Safety and Handling

This product is for R&D use only, not for drug, household, or other uses. Please review the material safety datasheet (MSDS) available online for proper safety and handling procedures