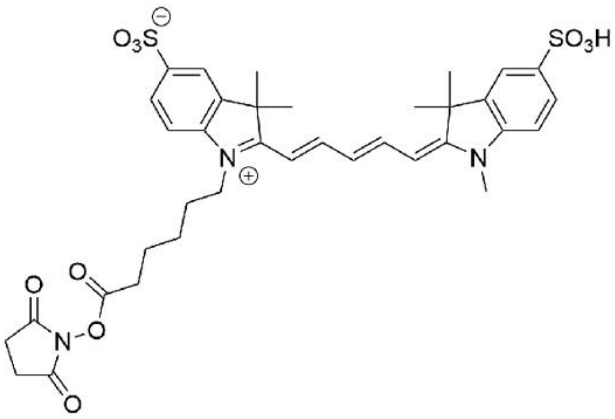
www.vectorlabs.com
Email: customerservice@vectorlabs.com
Telephone: (650) 697-3600

# CY5 NHS ESTER

**SKU:** FP-1321



## Description


Cy5 dye (also sold under Sulfo-Cyanine5 name) is one of the most popular far-red fluorescent dyes. It is often a reagent of choice for protein and peptide labeling. Cy5 dye is a water-soluble, bright, far-red-fluorescent dye with excitation ideally suited for the 633 nm or 647 nm laser lines. Cy5 conjugates of antibodies, peptides, and proteins are pH insensitive from pH 4 to pH 10. A significant advantage to using long wavelength dyes such as Cy5 or AF 647 dye over other fluorophores is the low autofluorescence of biological specimens in this region of the spectrum. The NHS ester (or succinimidyl ester) is the most popular amine reactive group for labeling with the primary amines of proteins (Lys), amine-modified oligonucleotides, and other amine-containing molecules. We do not recommend using Cy5 NHS ester for labeling proteins at high

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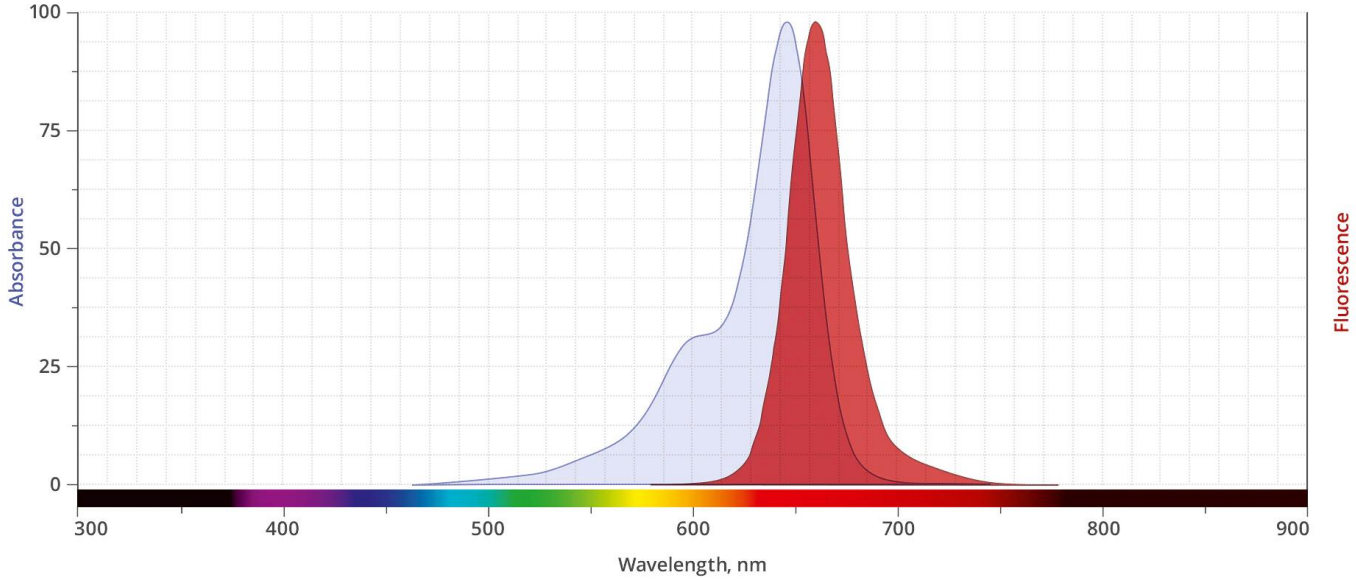
molar ration due significant self-quenching. Cy5 conjugates are recommended for detection of moderate-to-high abundance targets. For detection of low-abundance biological targets we recommend using AZDye 647 (Alexa Fluor® 647 analog), or IR 650 dye (IRDye® 650 analog), which can be attached to proteins at high molar ratios without significant self-quenching, enabling brighter conjugates and more sensitive detection.




Abs/Em Spectra

## Specifications

| | |
|---|---|
| **Unit Size** | 1 mg, 5 mg, 25 mg, 100 mg |
| **Reactivity** | Primary amine |
| **Abs/Em Maxima** | 648/671 nm |
| **Extinction coefficient** | 250,000 cm-1M-1 |
| **Solubility** | Water, DMSO, DMF |
| **Spectrally similar dyes** | Alexa Fluor® 647, DyLight® 649, |
| **Molecular weight** | 739.86 |
| **Storage Conditions** | -20°C. |
| **Shipping Conditions** | Ambient temperature |