

Product Name: Cyanine 7, SE

Catalog No.: 5437

Batch No.: 1

CAS Number: 477908-53-5

IUPAC Name: 2-[7-[1-[6-[(2,5-Dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2*H*-indol-2-ylidene]-1,3,5-heptatrien-1-yl]-1-ethyl-3,3-dimethyl-5-sulfo-3*H*-indolium, inner salt

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₃₉H₄₅N₃O₁₀S₂

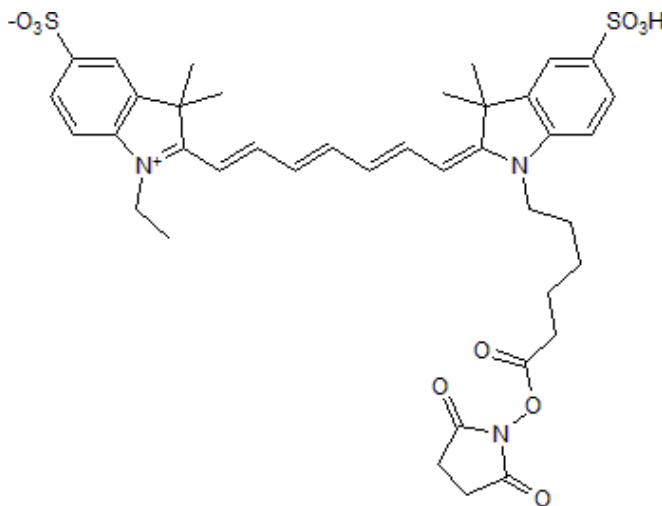
Batch Molecular Weight: 779.92

Physical Appearance: Blue solid

Solubility: DMSO to 100 mM
DMF to 100 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 95.3% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

Near-infrared fluorescent dye for labeling of amines. Emission maximum ~764 nm.

Physical and Chemical Properties:

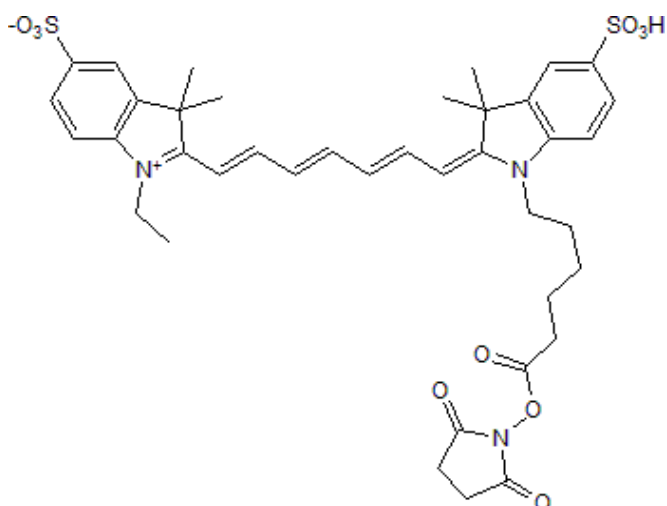
Batch Molecular Formula: C₃₉H₄₅N₃O₁₀S₂

Batch Molecular Weight: 779.92

Physical Appearance: Blue solid

Minimum Purity: >95%

Batch Molecular Structure:



Storage: Store at -20°C. This product is packaged under an inert atmosphere.

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:

DMSO to 100 mM

DMF to 100 mM

This compound is unstable in the presence of water. We recommend using anhydrous solvents. We recommend using an excess of reagent (greater than 2 molar eq.) in reactions.

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Chen et al (2012) Synthesis and biological evaluation of low molecular weight fluorescent imaging agents for the prostate-specific membrane antigen. *Bioconjug.Chem.* **23** 2377. PMID: 23157641.

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