

**Product Name:** Cyanine 5, SE

**Catalog No.:** 5436

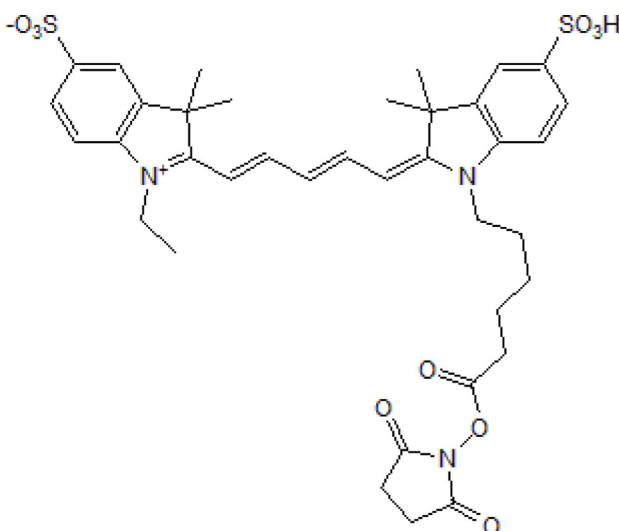
**Batch No.:** 6

CAS Number: 146368-14-1

IUPAC Name: 2-[5-[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-pentadien-1-yl]-1-ethyl-3,3-dimethyl-5-sulfo-3*H*-indolium, inner salt

## 1. PHYSICAL AND CHEMICAL PROPERTIES

<b>Batch Molecular Formula:</b>	C <sub>37</sub> H <sub>43</sub> N <sub>3</sub> O <sub>10</sub> S <sub>2</sub>
<b>Batch Molecular Weight:</b>	753.88
<b>Physical Appearance:</b>	Dark purple solid
<b>Solubility:</b>	DMSO to 100 mM DMF to 100 mM
<b>Storage:</b>	Store at -20°C
<b>Batch Molecular Structure:</b>	



## 2. ANALYTICAL DATA

<b>HPLC:</b>	Shows 94.7% purity
<b><sup>1</sup>H NMR:</b>	Consistent with structure
<b>Mass Spectrum:</b>	Consistent with structure
<b>UV Spectrum:</b>	Consistent with structure
<b>λ<sub>max</sub>:</b>	645 nm (PBS buffer pH 7.4)
<b>λ<sub>ex</sub>:</b>	647 nm (PBS buffer pH 7.4)
<b>λ<sub>em</sub>:</b>	663 nm (PBS buffer pH 7.4)

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

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**Description:**

Cyanine 5, SE is a red fluorescent dye for the labeling of amines. Excitation maximum ~649 nm; emission maximum ~666 nm. For more information on how Cyanine 5, SE may be used, see our protocol: Conjugation Protocol for Amine Reactive Dyes.

**Physical and Chemical Properties:**

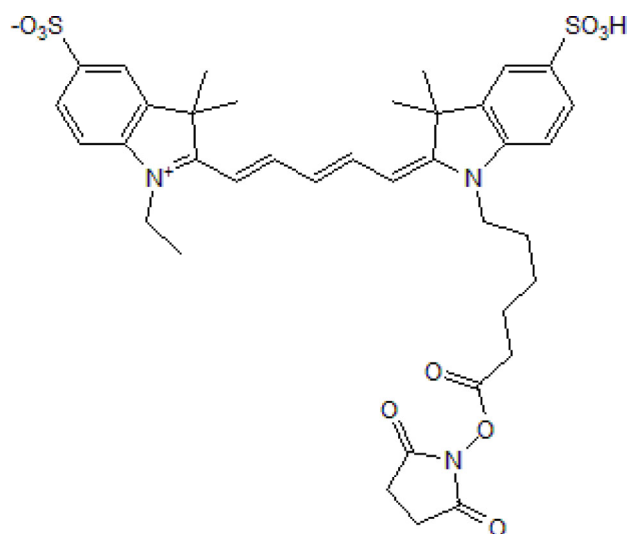
Batch Molecular Formula: C<sub>37</sub>H<sub>43</sub>N<sub>3</sub>O<sub>10</sub>S<sub>2</sub>

Batch Molecular Weight: 753.88

Physical Appearance: Dark purple 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:**

Shin *et al* (2014) Live-cell imaging of Pol II promoter activity to monitor gene expression with RNA IMAGEtag reporters. *Nucleic Acids Res.* **42** e90. PMID: 24753407.

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