

Product Name: sCy5DL-amide

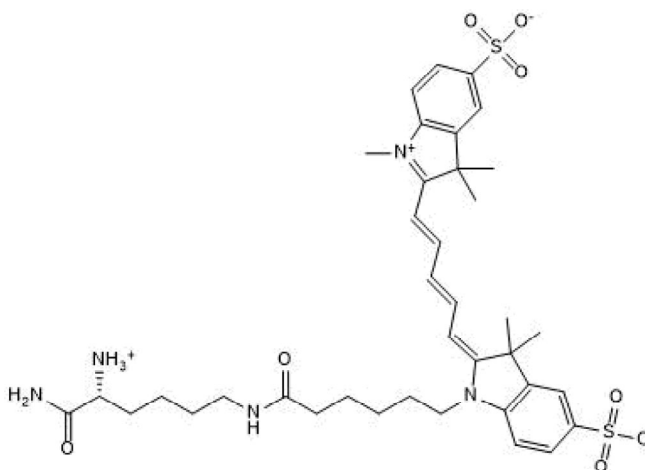
Catalog No.: 7835

Batch No.: 1

IUPAC Name: 2-(((1*E*,3*E*)-5-((*E*)-1-(6-(((*R*)-6-Amino-5-ammonio-6-oxohexyl)amino)-6-oxohexyl)-3,3-dimethyl-5-sulfonatoindolin-2-ylidene)penta-1,3-dien-1-yl)-1,3,3-trimethyl-3*H*-indol-1-ium-5-sulfonate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	C ₃₈ H ₅₁ N ₅ O ₈ S ₂
Batch Molecular Weight:	769.97
Physical Appearance:	Purple solid
Solubility:	DMSO to 10 mM
Storage:	Store at -20°C
Batch Molecular Structure:	



2. ANALYTICAL DATA

HPLC:	Shows 97.0% purity at 647 nm
¹H NMR:	Consistent with structure
Mass Spectrum:	Consistent with structure
UV Spectrum:	Consistent with structure
λ_{max}:	645 nm (RPM-00056 (0.01M PBS pH 7.4))
λ_{ex}:	646 nm (RPM-00056 (0.01M PBS pH 7.4))
λ_{em}:	666 nm (RPM-00056 (0.01M PBS pH 7.4))

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

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Description:

sCy5DL-amide is a fluorescent D-amino acid. It is suitable for labeling peptidoglycans of a wide variety of bacteria, including gram-positive, gram-negative, and mycobacteria. Incorporates particularly well into Gram-positive *B.subtilis*. sCy5DL-amide labeled bacteria can be imaged by single molecule localization microscopy (SMLM; also referred to as PALM or STORM). Excitation/emission maxima = 646/666 nm.

Physical and Chemical Properties:

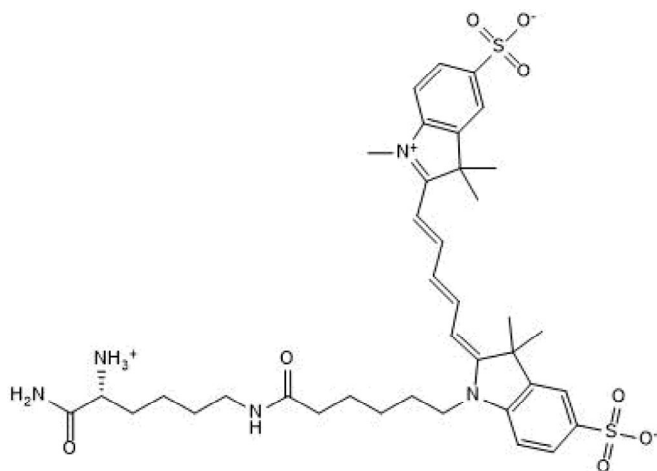
Batch Molecular Formula: C₃₈H₅₁N₅O₈S₂

Batch Molecular Weight: 769.97

Physical Appearance: Purple solid

Minimum Purity: ≥95%

Batch Molecular Structure:



Storage: Store at -20°C

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 10 mM

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. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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:

Zhang *et al* (2022) Fluorescent D-amino acids for super-resolution microscopy of the bacterial cell wall. *ACS Chem.Biol.* **117** 2418. PMID: 35994360.

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