

Product Name: 5-TAMRA NHS

Catalog No.: 7665

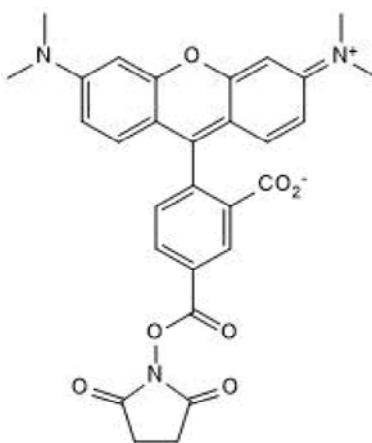
Batch No.: 1

CAS Number: 150810-68-7

IUPAC Name: 2-[3-(Dimethylamino)-6-dimethylazaniumylidenexanthen-9-yl]-5-(2,5-dioxopyrrolidin-1-yl)oxycarbonylbenzoate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₉H₂₅N₃O₇
Batch Molecular Weight: 527.52
Physical Appearance: Purple solid
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 94.0% purity
UV Spectrum: Consistent with structure
λ_{max}: 546 nm (Methanol)
λ_{em}: 580 nm (Methanol)

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

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Description:

5-TAMRA NHS is an orange-fluorescent dye that is commonly used for labeling proteins, peptides and oligonucleotides containing primary amines. Excitation maximum = 546 nm; emission maximum = 580 nm Please see the protocol for further information on protein/antibody labeling and conjugation. It is recommended to prepare stock solutions in DMSO.

Physical and Chemical Properties:

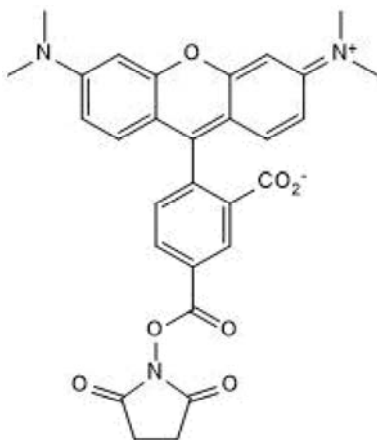
Batch Molecular Formula: C₂₉H₂₅N₃O₇

Batch Molecular Weight: 527.52

Physical Appearance: Purple solid

Minimum Purity: ≥90%

Batch Molecular Structure:



References:

Hirata *et al* (2014) Structural evaluation of tandem hairpin pyrrole-imidazole polyamides recognizing human telomeres. *J. Am. Chem. Soc.* **136** 11546. PMID: 25036716.

Kvach *et al* (2009) Practical synthesis of isomerically pure 5- and 6-carboxytetramethylrhodamines, useful dyes for DNA probes. *Bioconjug. Chem.* **20** 1673. PMID: 19606815.

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.

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.

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