

Product Name: Janelia Fluor[®] 549, NHS ester

Catalog No.: 6147

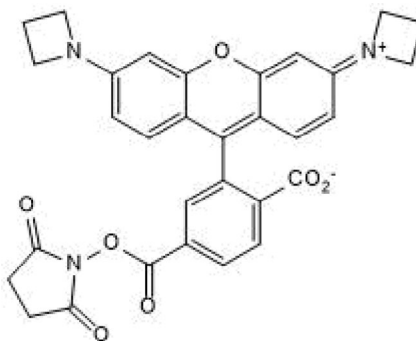
Batch No.: 8

CAS Number: 1811539-32-8

IUPAC Name: 3,6-Di-1-azetidinyl-9-[2-carboxy-5-[[[(2,5-dioxo-1-pyrrolidinyl)oxy]carbonyl]phenyl]xanthylum, inner salt

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	C ₃₁ H ₂₅ N ₃ O ₇
Batch Molecular Weight:	551.56
Physical Appearance:	Purple solid
Solubility:	DMSO to 100 mM DMF to 100 mM
Storage:	Store at -20°C
Batch Molecular Structure:	



2. ANALYTICAL DATA

¹H NMR:	Consistent with structure
Mass Spectrum:	Consistent with structure
UV Spectrum:	Consistent with structure
λ_{max}:	555 nm (0.01M PBS pH 7.4)
λ_{ex}:	555 nm (0.01M PBS pH7.4)
λ_{em}:	576 nm (0.01M PBS pH7.4)

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

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Description:

Key Information: Janelia Fluor® 549, NHS ester is a yellow fluorescent dye; supplied with an NHS ester reactive group for the labeling of primary amines. Suitable for live cell imaging. **Application:** Suitable for flow cytometry, confocal microscopy, super resolution microscopy (SRM) including dSTORM and STED. Janelia Fluor® 549, NHS ester is cell permeable. **Properties and Photophysical Data:** NHS ester can be converted to relevant substrate for use in self-labeling tag systems, e.g. HaloTag® and SNAP-tag®. Excitation and emission maxima (λ) are 549 nm and 571 nm, respectively; quantum yield = 0.88; extinction coefficient ... Please see product specific page on www.tocris.com for full description.

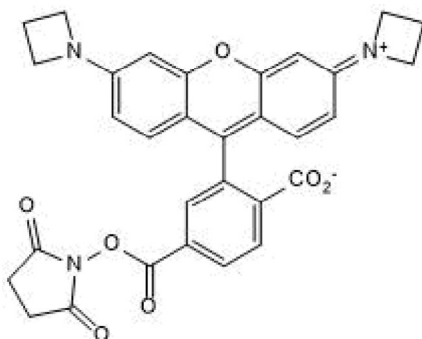
Physical and Chemical Properties:

Batch Molecular Formula: C₃₁H₂₅N₃O₇

Batch Molecular Weight: 551.56

Physical Appearance: Purple solid

Batch Molecular Structure:



References:

Zheng et al (2019) Rational design of fluorogenic and spontaneously blinking labels for super-resolution imaging. *ACS Cent.Sci.* **5** 1602. PMID: 31572787.

Legant et al (2016) High-density three-dimensional localization microscopy across large volumes. *Nat.Methods* **13** 359. PMID: 26950745.

Deng et al (2015) CASFISH: CRISPR/Cas9-mediated in situ labeling of genomic loci in fixed cells. *Proc.Natl.Acad.Sci.USA.* **112** 11870. PMID: 26324940.

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

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.

Licensing Information:

Sold under license from the Howard Hughes Medical Institute, Janelia Research Campus

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