

**Product Name:** Janelia Fluor® 549, SE

**Catalog No.:** 6147

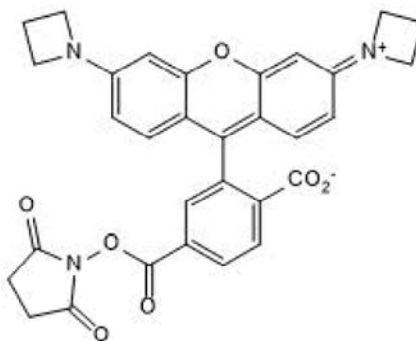
**Batch No.:** 5

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<sub>31</sub>H<sub>25</sub>N<sub>3</sub>O<sub>7</sub>  
**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**

**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**UV Spectrum:** Consistent with structure  
**λ<sub>max</sub>:** 555 nm (PBS pH7.4)  
**λ<sub>ex</sub>:** 553 nm (PBS pH7.4)  
**λ<sub>em</sub>:** 576 nm (PBS pH7.4)

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

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**Description:**

Yellow fluorescent dye; supplied as an NHS ester for coupling to primary amine groups. NHS ester can be converted to relevant substrate for use in self-labeling tag systems, e.g. HaloTag<sup>®</sup> and SNAP-tag<sup>®</sup>. Suitable for confocal fluorescent imaging and super resolution microscopy (SRM) techniques, such as dSTORM (live and fixed cells) and STED. Also suitable for flow cytometry. Cell permeable. Excitation maximum = 549 nm; emission maximum = 571 nm; Quantum yield = 0.88; Extinction coefficient = 101,000 M<sup>-1</sup>cm<sup>-1</sup>; A280 correction factor is 0.169. We also offer Janelia Fluor<sup>®</sup> conjugated antibodies and custom conjugation services with... Please see product datasheet on www.tocris.com for full description.

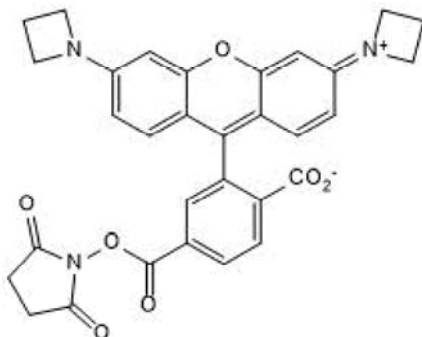
**Physical and Chemical Properties:**

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**References:**

**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.

**Grimm et al** (2015) A general method to improve fluorophores for live-cell and single-molecule microscopy. *Nat.Methods* **12** 244. PMID: 25599551.

**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. 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.

**Licensing Information:**

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

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