



# **Certificate of Analysis**

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Product Name: Janelia Fluor® 525, NHS ester Catalog No.: 6296 Batch No.: 4

CAS Number: 2975167-21-4

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

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:**  $C_{31}H_{21}F_4N_3O_7$ 

**Batch Molecular Weight:** 623.51 **Physical Appearance:** Pink solid

Solubility: DMSO to 50 mM Storage: Store at -20°C

**Batch Molecular Structure:** 

## 2. ANALYTICAL DATA

 $^1$ H NMR:Consistent with structureMass Spectrum:Consistent with structureUV Spectrum:Consistent with structure $\lambda_{max}$ :530 nm (PBS buffer pH7.4) $\lambda_{ex}$ :531 nm (PBS buffer pH7.4) $\lambda_{em}$ :555 nm (PBS buffer pH7.4)

## **Product Information**

Print Date: Feb 5<sup>th</sup> 2025

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## **Description:**

Key information: Janelia Fluor® 525, NHS ester is a yellow fluorescent dye; supplied with an NHS ester reactive for the labeling of primary amines. Suitable for live cell imaging. Application: Suitable for confocal microscopy and super resolution microscopy (SRM) techniques, including dSTORM (in both live and fixed cells). Janelia Fluor® 525, 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®. Can be multiplexed for two color imaging with Janelia Fluor® 635, NHS ester (Cat. No. 6419). Excitati... Please see product specific page on www.tocris.com for full description.

## **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>31</sub>H<sub>21</sub>F<sub>4</sub>N<sub>3</sub>O<sub>7</sub>

Batch Molecular Weight: 623.51 Physical Appearance: Pink solid

#### **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.

Catalog No.: 6296

## Solubility & Usage Info:

DMSO to 50 mM

This product is supplied in lyophilized form. It may appear as a solid, gel or film and be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

## 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

#### References:

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

Grimm et al (2017) A general method to fine-tune fluorophores for live-cell and in vivo imaging. Nat. Methods 14 987. PMID: 28869757.

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