



Certificate of Analysis

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Product Name: Janelia Fluor® 525, Maleimide Catalog No.: 8025 Batch No.: 1

IUPAC Name: 2-(3-(3,3-Difluoroazetidin-1-ium-1-ylidene)-6-(3,3-difluoroazetidin-1-yl)-3*H*-xanthen-9-yl)-4-((2-(2,5-dioxo-2,5-

dihydro-1*H*-pyrrol-1-yl)ethyl)carbamoyl)benzoate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Weight: 648.57 **Physical Appearance:** Pink solid

Solubility: DMSO to 10 mM Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 97.2% purity at 533 nm

1H NMR:Consistent with structureMass Spectrum:Consistent with structureUV Spectrum:Consistent with structure

 λ_{max} : 530 nm (RPM-00056 (0.01M PBS)) λ_{ex} : 530 nm (RPM-00056 (0.01M PBS)) λ_{em} : 554 nm (RPM-00056 (0.01M PBS))

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

Product Information

Print Date: Feb 6th 2025

Batch No.: 1

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2-(3-(3,3-Difluoroazetidin-1-ium-1-ylidene)-6-(3,3-difluoroazetidin-1-yl)-3*H*-xanthen-9-yl)-4-((2-(2,5-dioxo-2,5-

IUPAC Name: 2-(3-(3,3-Difluoroazetidin-1-ium-1-ylidene)-6-(3,3-dihydro-1*H*-pyrrol-1-yl)ethyl)carbamoyl)benzoate

Description:

Key information: Janelia Fluor® 525, Maleimide is a yellow fluorescent dye, supplied with a maleimide reactive group for conjugation (thiol reactivity). Suitable for live cell imaging. Application: Suitable for flow cytometry, confocal microscopy, super resolution microscopy (SRM) including dSTORM (in both live and fixed cells) and STED. Cell permeable. Properties and Photophysical Data: Excitation and emission maxima (λ) are 531 nm and 553 nm, respectively. Please see the product protocol for further information and a guide to protein/antibody labeling. Janelia Fluor is a registered trademark of Howard Hughes Medical Institute.... Please see product specific page on www.tocris.com for full description.

Physical and Chemical Properties:

Batch Molecular Weight: 648.57 Physical Appearance: Pink 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.

Catalog No.: 8025

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.

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

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