



Certificate of Analysis

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Product Name: Janelia Fluor® 669, Maleimide Catalog No.: 8097 Batch No.: 1

 $IUPAC\ Name: 2-(3-(Azetidin-1-ium-1-ylidene)-7-(azetidin-1-yl)-5, 5-dimethyl-3, 5-dihydrodibenzo[b,e]silin-10-yl)-4-((2-((2-(2,5-dioxo-1-yl)-1-ylidene)-$

2,5-dihydro-1*H*-pyrrol-1-yl)ethyl)amino)-2-oxoethyl)thio)-3,5,6-trifluorobenzoate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₃₆H₃₃F₃N₄O₅SSi

Batch Molecular Weight: 718.82

Physical Appearance: Pale green solid

Solubility: DMSO to 10 mM

Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 95.0% purity at 667 nm

 1 H NMR:Consistent with structureMass Spectrum:Consistent with structureUV Spectrum:Consistent with structure λ_{max} :670 nm (EtOH + 0.1% TFA) λ_{ex} :673 nm (EtOH + 0.1% TFA) λ_{em} :688 nm (EtOH + 0.1% TFA)

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

Product Information

Print Date: Dec 1st 2025

Batch No.: 1

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Product Name: Janelia Fluor® 669, Maleimide

 $2-(3-(Azetidin-1-ium-1-ylidene)-7-(azetidin-1-yl)-5, 5-dimethyl-3, 5-dihydrodibenzo \cite{be}, e]silin-10-yl)-4-((2-((2-(2,5-dioxo-1-ylidene)$

2,5-dihydro-1*H*-pyrrol-1-yl)ethyl)amino)-2-oxoethyl)thio)-3,5,6-trifluorobenzoate

Description:

IUPAC Name:

Key information: Janelia Fluor® 669, Maleimide is a red fluorogenic 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. Can be multiplexed for two color imaging with Janelia Fluor® 549 SE (Cat. No. 6147). Cell permeable. Properties and Photophysical Data: Excitation and emission maxima (λ) are 669 nm and 689 nm, respectively. Please see the product protocol for further information and a guide to prot... Please see product specific page on www.tocris.com for full description.

Physical and Chemical Properties:

Batch Molecular Formula: C₃₆H₃₃F₃N₄O₅SSi

Batch Molecular Weight: 718.82 Physical Appearance: Pale green 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.: 8097

Solubility & Usage Info:

DMSO to 10 mM

CAUTION - This product is chemically unstable in the presence of Trifluoroacetic acid (TFA).

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:

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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