

# Certificate of Analysis

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**Product Name:** Janelia Fluor® 635, Tetrazine

**Catalog No.:** 8134

**Batch No.:** 1

**IUPAC Name:** 4-((4-(1,2,4,5-Tetrazin-3-yl)benzyl)carbamoyl)-2-(3-(3-fluoroazetidin-1-ium-1-ylidene)-7-(3-fluoroazetidin-1-yl)-5,5-dimethyl-3,5-dihydrodibenzo[b,e]silin-10-yl)benzoate

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>38</sub>H<sub>33</sub>F<sub>2</sub>N<sub>7</sub>O<sub>3</sub>Si

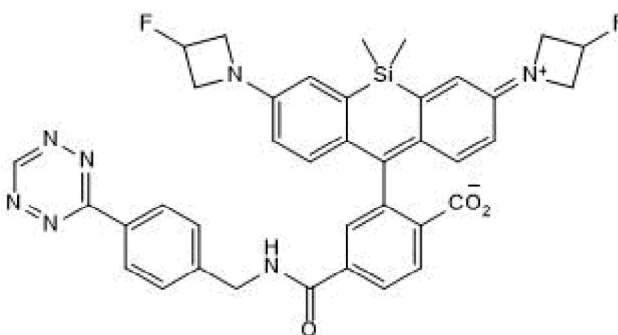
**Batch Molecular Weight:** 701.81

**Physical Appearance:** Pink solid

**Solubility:** DMSO to 10 mM

**Storage:** Store at -20°C

**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 92.5% purity at 268 nm

**<sup>1</sup>H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**UV Spectrum:** Consistent with structure

**λ<sub>max</sub>:** 643 nm (EtOH + 0.1% TFA)

**λ<sub>ex</sub>:** 645 nm (EtOH + 0.1% TFA)

**λ<sub>em</sub>:** 663 nm (EtOH + 0.1% TFA)

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

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**Description:**

**Key Information:** Janelia Fluor® 635, Tetrazine is a red fluorogenic fluorescent dye; supplied with a tetrazine reactive handle for copper-free click chemistry. Suitable for live-cell imaging. **Application:** Suitable for flow cytometry, confocal microscopy, super resolution microscopy (SRM) techniques including dSTORM (in both live and fixed cells). Janelia Fluor® 635, Tetrazine is cell permeable. **Properties and Photophysical Data:** Excitation and emission maxima (λ) are 645 nm and 663 nm, respectively. Janelia Fluor® is a registered trademark of Howard Hughes Medical Institute.

**Physical and Chemical Properties:**

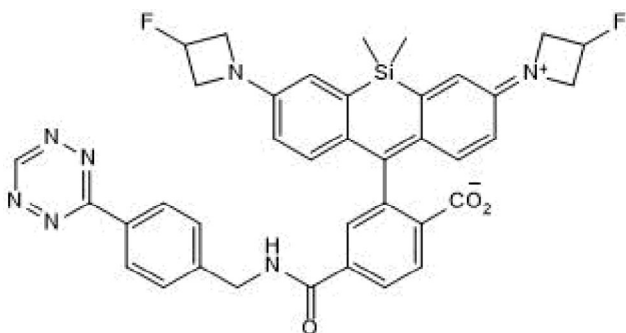
**Batch Molecular Formula:** C<sub>38</sub>H<sub>33</sub>F<sub>2</sub>N<sub>7</sub>O<sub>3</sub>Si

**Batch Molecular Weight:** 701.81

**Physical Appearance:** Pink solid

**Minimum Purity:** ≥90%

**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.

**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:**

**Peng and Hang (2016)** Site-specific bioorthogonal labeling for fluorescence imaging of intracellular proteins in living cells. *J.Am.Chem.Soc.* **138** 14423. PMID: 27768298.

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