

# Certificate of Analysis

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**Product Name:** dTAG Janelia Fluor® 525

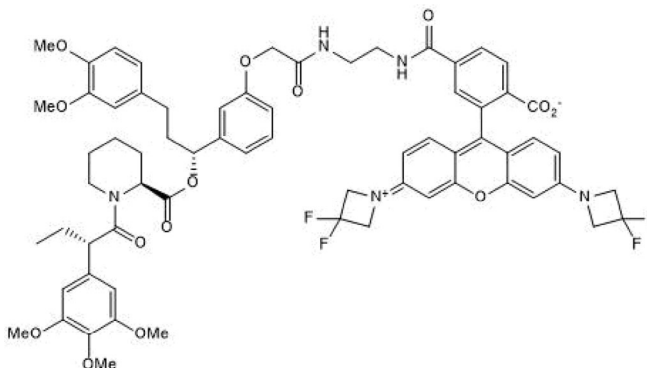
**Catalog No.:** 8102

**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-(3-((*R*)-3-(3,4-dimethoxyphenyl)-1-(((*S*)-1-((*S*)-2-(3,4,5-trimethoxyphenyl)butanoyl)piperidine-2-carbonyl)oxy)propyl)phenoxy)acetamido)ethyl)carbamoyl)benzoate

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>67</sub>H<sub>69</sub>F<sub>4</sub>N<sub>5</sub>O<sub>14</sub>  
**Batch Molecular Weight:** 1244.3  
**Physical Appearance:** Pink solid  
**Solubility:** DMSO to 10 mM  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 97.3% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

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

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**Description:**

**Key Information:** dTAG Janelia Fluor® 525 is a fluorogenic srTAG probe for live cell imaging of FKBP12<sup>F36V/L</sup> fusion proteins. **Application:** Suitable for confocal microscopy and Super Resolution Microscopy (SRM) including STED. dTAG Janelia Fluor® 525 is cell permeable. **Properties and Photophysical Data:** In FRAP (fluorescence recovery after photobleaching) experiment, the highest maximum recovery ratio (73%) was shown when U2OS cells expressing FKBP<sup>F36L</sup> were incubated with 10 µM dTAG Janelia Fluor® 525; excitation and emission maxima (λ) are 530 nm and 560 nm, respectively; quantum yield = 0.47; extinction coefficient = 8... Please see product specific page on [www.tocris.com](http://www.tocris.com) for full description.

**Physical and Chemical Properties:**

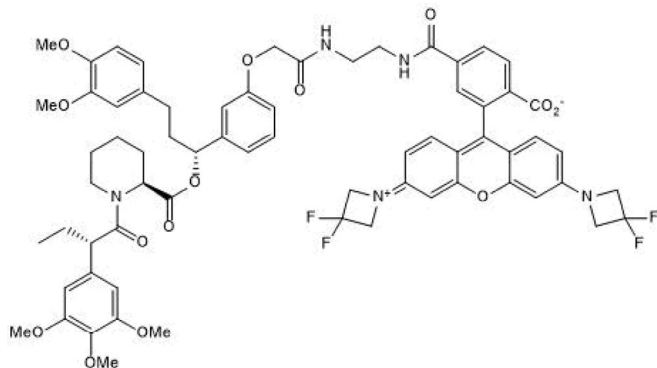
Batch Molecular Formula: C<sub>67</sub>H<sub>69</sub>F<sub>4</sub>N<sub>5</sub>O<sub>14</sub>

Batch Molecular Weight: 1244.3

Physical Appearance: Pink solid

**Minimum Purity:** ≥95%

**Batch Molecular Structure:**



**References:**

Du *et al* (2023) Self-renewable tag for photostable fluorescence imaging of proteins. *J.Am.Chem.Soc.* **145** 18968. PMID: 37596976.

**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

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.

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