

**Product Name:** Pepstatin A Janelia Fluor® 526

**Catalog No.:** 7314

**Batch No.:** 1

**CAS Number:** 2410614-07-0

**IUPAC Name:** 2-(3-(3,3-Difluoroazetidini-1-ium-1-ylidene)-6-(3,3-difluoroazetidini-1-yl)-2,7-difluoro-3H-xanthen-9-yl)-4-(((6S,9S,12S,13S,17S,20S,21S)-13,21-dihydroxy-12,20-diisobutyl-6,9-diisopropyl-2,17-dimethyl-4,7,10,15,18,23-hexaaxo-5,8,11,16,19,24-hexaazatriacontan-30-yl)carbamoyl)benzoate trifluoroacetate

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>67</sub>H<sub>91</sub>F<sub>6</sub>N<sub>9</sub>O<sub>12</sub>.CF<sub>3</sub>CO<sub>2</sub>H

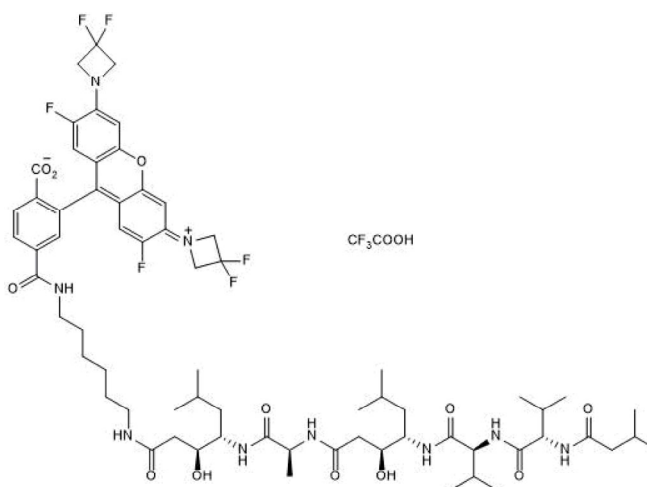
**Batch Molecular Weight:** 1442.53

**Physical Appearance:** Pink solid

**Solubility:** DMSO to 10 mM

**Storage:** Store at -20°C

**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 95.6% purity at 532 nm

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

**Mass Spectrum:** Consistent with structure

**UV Spectrum:** Consistent with structure

**λ<sub>max</sub>:** 530 nm (TFE + 0.1% TFA)

**λ<sub>ex</sub>:** 530 nm (TFE + 0.1% TFA)

**λ<sub>em</sub>:** 549 nm (TFE + 0.1% TFA)

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

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**1**

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**Description:**

Pepstatin A Janelia Fluor<sup>®</sup> 526 is a fluorogenic green-emitting lysosome tracker and stain. No wash step is required when used for multicolor microscopy experiments. Pepstatin A Janelia Fluor<sup>®</sup> 526 can be used for live cell imaging, in confocal microscopy and super-resolution microscopy techniques including 3D-SIM (structured illumination microscopy) and STED, as well as two-color lattice light-sheet microscopy (lls). Excitation maximum = 530 nm, emission maximum = 549 nm. To measure the absorbance spectrum of this dye we recommend the following solvent: TFE plus 0.1% TFA.

**Physical and Chemical Properties:**

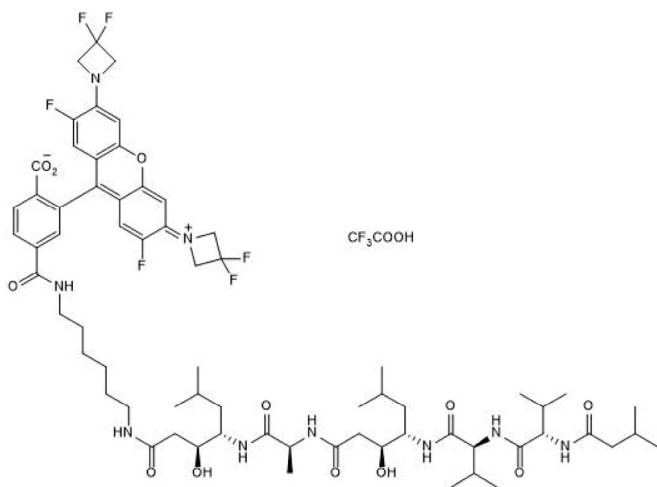
Batch Molecular Formula: C<sub>67</sub>H<sub>91</sub>F<sub>6</sub>N<sub>9</sub>O<sub>12</sub>.CF<sub>3</sub>CO<sub>2</sub>H

Batch Molecular Weight: 1442.53

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

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.

**Chen et al** (2000) Probing the cathepsin D using a BODIPY FL-pepstatin A: applications in fluorescence polarization and microscopy. *J.Biochem.Biophys.Methods* **42** 137. PMID: 10737220.

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