

Certificate of Analysis

Print Date: Sep 23rd 2024

www.tocris.com

Product Name: dTAG Janelia Fluor[®] 585 Catalog No.: 8103 Batch No.: 1

IUPAC Name: 2-(3-(3,3-Difluoroazetidin-1-ium-1-ylidene)-6-(3,3-difluoroazetidin-1-yl)-10,10-dimethyl-3,10-dihydroanthracen-9-yl)-

4-((2-(3-((R)-3-(3,4-dimethoxyphenyl)-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: $C_{70}H_{75}F_4N_5O_{13}$

Batch Molecular Weight: 1270.39 **Physical Appearance:** White solid

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

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 97.4% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure



Product Information

Print Date: Sep 23rd 2024

www.tocris.com

Product Name: dTAG Janelia Fluor® 585

Catalog No.: 8103

IUPAC Name:

2-(3-(3,3-Difluoroazetidin-1-ium-1-ylidene)-6-(3,3-difluoroazetidin-1-yl)-10,10-dimethyl-3,10-dihydroanthracen-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

Description:

Key Information: dTAG Janelia Fluor® 585 is a fluorogenic srTAG probe for live cell imaging of FKBP12F36V/L fusion proteins. Application: Suitable for confocal microscopy and Super Resolution Microscopy (SRM) including STED. dTAG Janelia Fluor® 585 is cell permeable. Properties and Photophysical Data: In FRAP (fluorescence recovery after photobleaching) experiment, the highest maximum recovery ratio (70%) was shown when U2OS cells expressing FKBPF36L were incubated with 10 μ M dTAG Janelia Fluor® 585; excitation and emission maxima (λ) are 590 nm and 620 nm, respectively; quantum yield = 0.52; extinction coefficient = 1... Please see product specific page on www.tocris.com for full description.

Physical and Chemical Properties:

Batch Molecular Formula: $C_{70}H_{75}F_4N_5O_{13}$

Batch Molecular Weight: 1270.39 Physical Appearance: White 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.

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.

References:

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

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