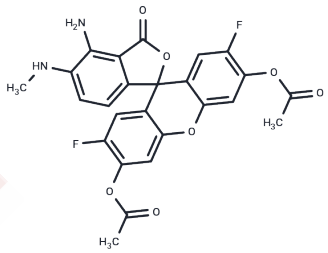
Data Sheet (Cat.No.T18965)

TargetMol

DAF-FM DA

Chemical Properties



CAS No. : 254109-22-3

Formula: C25H18F2N2O7

Molecular Weight: 496.42

Storage: Store at low temperature
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	DAF-FM DA (Diaminofluorescein-FM diacetate) is a reactive dye for the detection of nitric oxide (NO) and reactive nitrogen species (RNS) levels for bioimaging (Ex/Em=495/515 nm).
Targets(IC50)	Others
In vitro	BCa cells were pre-incubated with 5 μM DAF-FM DA for 30 minutes to load the probe. The DAF-FM DA probe quantifies nitric oxide (NO) levels in cells. [1]
In vivo	Using zebrafish embryo sections live-stained with DAF-FM DA (5 μM), it was confirmed that the fluorescent signal was primarily localized to areas of ongoing bone formation. [2]
Cell Research	Instructions: I. Solution preparation 1. Preparation of mother solution: Dissolve DAF-FM DA in DMSO to prepare a 10mM mother solution for standby use. 2. Preparation of working solution: Dilute the DAF-FM DA mother solution with PBS/H2O/DMEM to prepare a working solution for standby use. The commonly used concentration is 5-10μM. II. Operation steps 1. Pre-incubate BCa cells with 5 μM DAF-FM DA for 30 minutes to load the probe. 2. Subsequently, incubate the cells with fresh Hank's buffer for 20 minutes to complete deesterification. The DAF-FM DA probe can quantify the level of nitric oxide (NO) in cells. The above information is based on published literature. Experimental procedures should be appropriately modified to meet specific research demands.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0144 mL	10.0721 mL	20.1442 mL
5 mM	0.4029 mL	2.0144 mL	4.0288 mL
10 mM	0.2014 mL	1.0072 mL	2.0144 mL
50 mM	0.0403 mL	0.2014 mL	0.4029 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Xu Z, et al. RelB-activated GPX4 inhibits ferroptosis and confers tamoxifen resistance in breast cancer. Redox Biol. 2023 Dec;68:102952.

Wang X, Xu Y, Wang Y, et al.S-Nitrosylation of NOTCH1 Regulates Mesenchymal Stem Cells Differentiation Into Hepatocyte-Like Cells by Inhibiting Notch Signalling Pathway.Journal of Cellular and Molecular Medicine.2024, 28 (23): e70274.

Huysseune A, et al. Bone Formation in Zebrafish: The Significance of DAF-FM DA Staining for Nitric Oxide Detection. Biomolecules. 2023 Dec 12;13(12):1780.