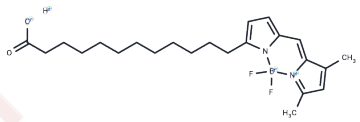
Data Sheet (Cat.No.T85898)

TargetMol

BODIPY FL C12

Chemical Properties



CAS No. : 158757-79-0

Formula: C23H33BF2N2O2

Molecular Weight: 418.33

Storage: 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	BODIPYFL C12 is a BODIPY dye, a small molecule dye with strong ultraviolet absorption ability, a sharp fluorescence peak, and high quantum yield. It is relatively insensitive to environmental polarity and pH and remains stable under different physiological conditions. Due to its structural asymmetry, BODIPY derivatives exhibit various structural products. BODIPY lipid droplet dyes effectively penetrate cell membranes, localize polar lipids, and specifically stain lipid droplets, making them suitable for labeling live and fixed cells [1]. Maximum excitation/emission wavelength: 480/508 nm [1].
Targets(IC50)	Others
In vitro	BODIPYFL C12: To prepare a 10 mM stock solution, dissolve 1 mg of BODIPYFL C12 in 382 μL anhydrous DMSO. It is recommended to aliquot and store the stock solution at -20°C or -80°C, protected from light. For the working solution, dilute the stock with pre-warmed serum-free cell culture medium or PBS to achieve a concentration of 1-10 μM as needed, and prepare freshly for each use. For staining suspension cells, centrifuge to collect cells, wash twice with PBS for 5 minutes each, maintain a cell density of 1×10^6/mL, and incubate with 1 mL of BODIPYFL C12 working solution at room temperature for 5-30 minutes. After incubation, centrifuge at 400 g for 3-4 minutes, discard the supernatant, wash cells twice with PBS for 5 minutes each, and resuspend in 1 mL serum-free medium or PBS for observation using a fluorescence microscope or flow cytometer. For adherent cells, culture them on sterile coverslips, remove excess medium, add 100 μL dye working solution with gentle agitation to cover the cells, incubate for 5-30 minutes, remove dye, wash with medium 2-3 times for 5 minutes each, and observe with a fluorescence microscope or flow cytometer. Store the product at -20°C, away from light for up to one year. Adjust BODIPYFL C12 concentration and incubation times as necessary and consider performing a positive control experiment by incubating control cells with 30 μM oleic acid for 8 hours. This product is intended for scientific research by professionals only; it is not for clinical, food, or drug use. Please wear lab coats and disposable gloves for safety. 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	2.3905 mL	11.9523 mL	23.9046 mL
5 mM	0.4781 mL	2.3905 mL	4.7809 mL
10 mM	0.239 mL	1.1952 mL	2.3905 mL
50 mM	0.0478 mL	0.239 mL	0.4781 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.

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