BODIPY-Cholesterol

Cat. No.: HY-125746

CAS No.: 878557-19-8

Molecular Formula: $C_{36}H_{51}BF_2N_2O$

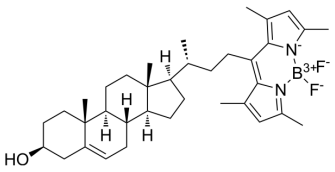
Molecular Weight: 576.61

Target: Fluorescent Dye

Pathway: Others

Storage: -20°C, protect from light

* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 1 mg/mL (1.73 mM; Need ultrasonic and warming)

H_2O : < 0.1 mg/mL (ultrasonic;warming;heat to 60°C) (insoluble)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	1.7343 mL	8.6714 mL	17.3427 mL
5 mM	---	---	---
10 mM	---	---	---

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

BODIPY-cholesterol is an intrinsically lipophilic, and cell-permeable analog of cholesterol with a fluorescent BODIPY group. BODIPY-cholesterol can be used to monitor sterol uptake and inter-organelle sterol flux in cells. (Excitation/Emission: 480/508 nm)[1].

In Vitro

BODIPY-cholesterol assay

To prepare a stock solution of BODIPY-cholesterol for this assay, the analogue is reconstituted in DMSO to a stock concentration of 1-10 μM[1].

Cells diluted with PBS (or other buffers) are washed (300×g, 10 min) to remove excess diluent and the loose pellet resuspended with vehicle media to a proper concentration[1].

Cell suspensions are labeled with BODIPY-cholesterol (final concentration of 0.5-5 μM), mixed thoroughly and incubated for 10 -20 mins at 37 °C[1].

The cells are diluted with each of the capacitation media conditions as outlined in Incubation media to a final concentration and incubated for 2 h prior to flow cytometric assessment[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Clin Epigenetics. 2022 Dec 24;14(1):184.
- Research Square Print. 2022 May.

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REFERENCES

[1]. Daniel Wüstner, et al.Potential of BODIPY-cholesterol for analysis of cholesterol transport and diffusion in living cells. Chem Phys Lipids. 2016 Jan;194:12-28.

[2]. Maarit Hölttä-Vuori, et al. BODIPY-cholesterol: a new tool to visualize sterol trafficking in living cells and organiss. Traffic. 2008 Nov;9(11):1839-49.

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