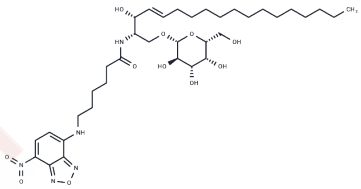
Data Sheet (Cat.No.T85989)

TargetMol

C6 NBD Galactosylceramide

Chemical Properties



CAS No. : 170212-26-7

Formula: C36H59N5O11

Molecular Weight: 737.88

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	C6 NBD galactosylceramide, an active derivative of galactosylceramide tagged with fluorescent nitrobenzoxadiazole (NBD), serves as a substrate for neutral β-glycosylceramidase (GCase) in studies of intracellular localization and metabolism of galactosylceramide (Ex=nm, Em=525) [1].
Targets(IC50)	Others
In vitro	C6-NBD-glucosylceramide (4 μM) undergoes transport to the Golgi apparatus in HT29 cells [1]. According to our recommended protocol, transcytosis of exogenous C6-NBD-GaICer follows these steps after endocytosis: Initially, C6-NBD-glucosylceramide is inserted at 10°C. Subsequently, cells are subjected to three cold HBSS rinses and maintained at 37°C in HBSS to facilitate endocytosis. After 10 minutes, residual probe on the cell surface is eliminated through either two (apical) or three (basal) 20-minute BSA washes at 10°C. Lipid analysis using one set of filters quantifies the endocytosis, while a second set incubated for either 0.5 or 1 hour at 37°C in HBSS + BSA measures the reemergence of intracellular C6-NBD-glucosylceramide on the cell surfaces. Post-incubation, a 10°C BSA wash is conducted before extracting the NBD lipids into chloroform/methanol from both apical and basal media, as well as the cells, which are then analyzed and quantitated by TLC. 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	1.3552 mL	6.7762 mL	13.5523 mL
5 mM	0.271 mL	1.3552 mL	2.7105 mL
10 mM	0.1355 mL	0.6776 mL	1.3552 mL
50 mM	0.0271 mL	0.1355 mL	0.271 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

Kok JW, et al. Sorting of sphingolipids in the endocytic pathway of HT29 cells. J Cell Biol. 1991 Jul;114(2):231-9.