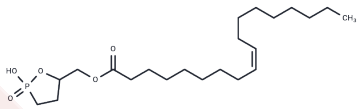
Data Sheet (Cat.No.T84482)

TargetMol

Oleoyl 3-carbacyclic Phosphatidic Acid

Chemical Properties



CAS No. : 779333-58-3

Formula: C22H41O5P

Molecular Weight: 416.5

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	Cyclic Phosphatidic Acids (cPAs) are naturally occurring lysophosphatidic acid (LPA) analogs, characterized by a 5-membered ring formed between the sn-2 hydroxy group and the sn-3 phosphate. Carba-derivatives of cPA (ccPA) modify the sn-2 (2-ccPA) or sn-3 (3-ccPA) linkage, hindering the conversion of cPA into LPA. Oleoyl 3-Carbacyclic Phosphatidic Acid (3-ccPA 18:1) incorporates the 18:1 fatty acid oleate at the sn-1 position on the glycerol backbone, acting as a cyclic LPA analog. This compound, at a concentration of 25 μM, blocks MM1 cells' transcellular migration through mesothelial cell monolayers induced by fetal bovine serum (by 90.1%) or LPA (by 99.9%), without impeding cell proliferation. Additionally, 3-ccPA 18:1, in the 0.1-1.0 μM range, notably suppresses autotaxin, which plays a vital role in various cancer cell behaviors including survival, growth, migration, invasion, and metastasis.
Targets(IC50)	Others

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.401 mL	12.0048 mL	24.0096 mL
5 mM	0.4802 mL	2.401 mL	4.8019 mL
10 mM	0.2401 mL	1.2005 mL	2.401 mL
50 mM	0.048 mL	0.2401 mL	0.4802 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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