

Oleoyl 3-carbacyclic Phosphatidic Acid

Chemical Properties

CAS No. : 779333-58-3

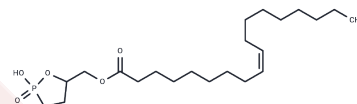
Formula: C₂₂H₄₁O₅P

Molecular Weight: 416.53

Store at low temperature

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	Oleoyl 3-carbacyclic Phosphatidic Acid are naturally occurring lysophosphatidic acid (LPA) analogs characterized by a five-membered ring formed between the sn-2 hydroxy group and the sn-3 phosphate moiety. Oleoyl 3-Carbacyclic Phosphatidic Acid (3-ccPA 18:1) contains the 18:1 fatty acid oleate at the sn-1 position of the glycerol backbone and functions as a cyclic lysophosphatidic acid analog. At a concentration of 25 μM, Oleoyl 3-Carbacyclic Phosphatidic Acid (3-ccPA 18:1) inhibits MM1 cell transcellular migration through mesothelial cell monolayers induced by fetal bovine serum by 90.1% and by lysophosphatidic acid by 99.9%, without affecting cell proliferation. Furthermore, Oleoyl 3-Carbacyclic Phosphatidic Acid (3-ccPA 18:1), at concentrations ranging from 0.1 to 1.0 μM, markedly suppresses autotaxin, a key regulator of cancer cell survival, growth, migration, invasion, and metastasis. These findings support the application of Oleoyl 3-Carbacyclic Phosphatidic Acid (3-ccPA 18:1) in studies of lysophospholipid signaling, cancer cell biology, cell migration, and autotaxin-mediated molecular mechanisms.
Targets(IC50)	Endogenous Metabolite

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4008 mL	12.0039 mL	24.0079 mL
5 mM	0.4802 mL	2.4008 mL	4.8016 mL
10 mM	0.2401 mL	1.2004 mL	2.4008 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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