

Methyl α -Linolenyl Fluorophosphonate

Chemical Properties

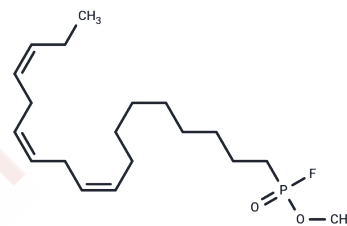
CAS No. :

Formula: C19H34FO2P

Molecular Weight: 344.4

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	Methyl α -Linolenyl Fluorophosphonate is an inhibitor of phospholipases. Methyl α -Linolenyl Fluorophosphonate (MLnFP), an analog of methyl Arachidonyl Fluorophosphonate (MAFP), has not been completely investigated for its pharmacological activity.
Targets(IC50)	Others
In vitro	In vitro: MethylArachidonyl Fluorophosphonate (MAFP) was reported to be a selective, active-site directed, irreversible inhibitor of cytosolic phospholipase A2 (cPLA2). MAFP could also potently inhibit the Ca ²⁺ -independent cytosolic phospholipase A2 (iPLA2) in a concentration-dependent manner. Such inhibition was not reversed upon extensive dilution of the enzyme into the assay mixture. The Preincubation of iPLA2 with MAFP led to a linear and time-dependent inactivation of enzyme activity, and the enzyme was protected from inactivation by the reversible inhibitor. The ability of MAFP to inhibit the iPLA 2 indicated that this enzyme proceeded via an acyl-enzyme intermediate. Further testing showed that MAFP could not inhibit the CoA-dependent acyltransferase, arachidonoyl-CoA synthetase, or CoA-independent transacylase activities. Therefore, MAFP was not a general inhibitor for enzymes acting on arachidonoyl substrates [1].

Solubility Information

Solubility	Ethanol: \leq 5 mg/mL, Sonication is recommended. DMSO: 5 mg/mL (14.52 mM), Sonication is recommended. ($<$ 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.9036 mL	14.518 mL	29.036 mL
5 mM	0.5807 mL	2.9036 mL	5.8072 mL
10 mM	0.2904 mL	1.4518 mL	2.9036 mL
50 mM	0.0581 mL	0.2904 mL	0.5807 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

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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