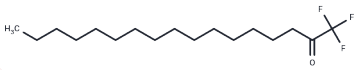
Data Sheet (Cat.No.T21907)

PACOCF3

Chemical Properties



CAS No. : 141022-99-3

Formula: C17H31F3O

Molecular Weight: 308.42

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	PACOCF3 (Palmityltrifluoromethylketone) (Palmityltrifluoromet hylketone) is an inhibitor of Ca(2+)-independent phospholipase A2(PLA2) with an IC 50 of 3.8 μM. PACOCF3 alters Ca 2+ signaling in renal tubular cells [1] [2].
Targets(IC50)	Phospholipase
In vitro	PACOCF3 does not affect basal cytosolic free calcium concentrations ([Ca2+]i) at 20 μM, but a dosage between 50-250 μM triggers an increase in [Ca2+]i through the stimulation of extracellular Ca2+ entry, which can be partially inhibited by 50 μM La3+[2]. This PACOCF3-induced effect is negated when extracellular Ca2+ is removed. At a concentration of 10 μM, PACOCF3 amplifies the peak and the area under the curve of the [Ca2+]i surge elicited by 10 μM ATP and 1 μM bradykinin, by enhancing extracellular Ca2+ influx without altering internal Ca2+ release[2].

Solubility Information

Solubility	DMSO: 45 mg/mL (145.9 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.2423 mL	16.2117 mL	32.4233 mL
5 mM	0.6485 mL	3.2423 mL	6.4847 mL
10 mM	0.3242 mL	1.6212 mL	3.2423 mL
50 mM	0.0648 mL	0.3242 mL	0.6485 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

E J Ackermann, et al. Inhibition of macrophage Ca(2+)-independent phospholipase A2 by bromoenol lactone and trifluoromethyl ketones. J Biol Chem. 1995 Jan 6;270(1):445-50.

C R Jan, et al. Dual action of palmitoyl trifluoromethyl ketone (PACOCF3) on Ca2+ signaling: activation of extracellular Ca2+ influx and alteration of ATP- and bradykinin-induced Ca2+ responses in Madin Darby canine kidney cells. Arch Toxicol. 2000 Oct;74.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481