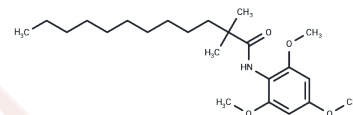


PD 128042

Chemical Properties

CAS No. : 114289-47-3
 Formula: C₂₃H₃₉NO₄
 Molecular Weight: 393.56
 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	PD 128042 (CI 976) is a potent, orally active, and selective ACAT inhibitor (IC ₅₀ : 73 nM) as well as a lysophospholipid acyltransferase (LPAT) inhibitor. CI 976 inhibits Golgi-associated LPAT activity (IC ₅₀ : 15 μM) and multiple membrane trafficking steps.
Targets(IC ₅₀)	Acyltransferase
In vitro	In the chronic cholesterol-fed rat model, CI 976 decreases non-high density lipoprotein (HDL)-cholesterol and increases HDL-cholesterol in rats with pre-established dyslipidemia[4].

Solubility Information

Solubility	DMSO: 25 mg/mL (63.52 mM), Sonication is recommended. DMF: 25 mg/mL (63.52 mM), Sonication is recommended. Ethanol: 25 mg/mL (63.52 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	2.5409 mL	12.7045 mL	25.4091 mL
5 mM	0.5082 mL	2.5409 mL	5.0818 mL
10 mM	0.2541 mL	1.2705 mL	2.5409 mL
50 mM	0.0508 mL	0.2541 mL	0.5082 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

- Chambers K, et al. A unique lysophospholipid acyltransferase (LPAT) antagonist, CI-976, affects secretory and endocytic membrane trafficking pathways. *J Cell Sci.* 2005;118(Pt 14):3061-3071.
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- Drecktrah D, et al. Inhibition of a Golgi complex lysophospholipid acyltransferase induces membrane tubule formation and retrograde trafficking. *Mol Biol Cell.* 2003;14(8):3459-3469.
- Krause BR, et al. In vivo evidence that the lipid-regulating activity of the ACAT inhibitor CI-976 in rats is due to inhibition of both intestinal and liver ACAT. *J Lipid Res.* 1993;34(2):279-294.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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