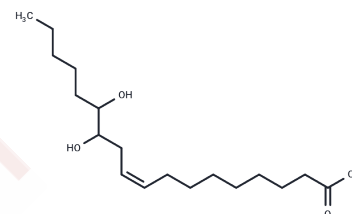


(\pm) 12(13)-DiHOME

Chemical Properties

CAS No. :	263399-35-5
Formula:	C ₁₈ H ₃₄ O ₄
Molecular Weight:	314.466
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	(\pm) 12(13)-DiHOME is the diol form of (\pm) 12(13)-EpOME, a cytochrome P450-derived epoxide of linoleic acid also known as isoleukotoxin. [1] It is formed from 12(13)-EpOME by soluble epoxide hydrolase (sEH) in neutrophils. [2] 12(13)-DiHOME is toxic to Sf21 cells expressing sEH and to lacZ-expressing control cells, unlike isoleukotoxin, which is only toxic to cells containing sEH.[1] [2] Levels of 12(13)-DiHOME are increased in rat spinal cord following burn injury, and it enhances cold tolerance, increases fatty acid uptake into brown adipocytes, and decreases serum triglyceride levels in mice. Levels are also elevated in bronchoalveolar lavage fluid (BALF) in humans following exposure to biodiesel exhaust and in exhaled breath condensate in patients with allergic asthma following allergen exposure.[5] [6] Plasma levels of 12(13)-DiHOME are increased immediately following moderate-intensity exercise in mice and humans, an effect that can be prevented by brown adipose tissue removal in the mouse.[7]
Targets(IC50)	Others,Endogenous Metabolite

Solubility Information

Solubility	DMSO: 20 mg/mL (63.6 mM),Sonication is recommended. PBS (pH 7.2): 10 µg/mL,Sonication is recommended. DMF: 20 mg/mL (63.6 mM),Sonication is recommended. Ethanol: 20 mg/mL (63.6 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	3.180 mL	15.8998 mL	31.7995 mL
5 mM	0.636 mL	3.180 mL	6.3599 mL
10 mM	0.318 mL	1.590 mL	3.180 mL
50 mM	0.0636 mL	0.318 mL	0.636 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

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