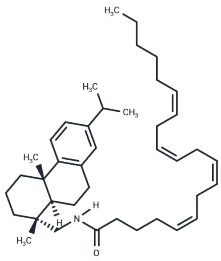
Data Sheet (Cat.No.T22581)

TargetMol

Arachidonic Acid Leelamide

Chemical Properties



CAS No. :

Formula: C40H61NO

Molecular Weight: 571.9

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	Arachidonic acid leelamide is a phospholipase A2 inhibitor. Phospholipase A is a hydrolase responsible for the release of arachidonic acid from the sn2 position of phospholipids. The released arachidonic acid is then converted to mediators of inflammation by the enzymes prostaglandin synthetase and 5lipoxygenase, respectively. The inhibition of phospholipase A leads to a decrease in the release of arachidonic acid and, consequently, the inflammatory mediators.
Targets(IC50)	Others
In vitro	Arachidonic acid leelamide is the arachidonic amide analog of leelamine with no published pharmacological properties. For leelamine, it was found that electron micrographs of leelamine-treated cancer cells had an accumulation of autophagosomes, membrane whorls, and lipofuscin-like structures. In addition, leelamine-mediated killing was a caspase-independent event triggered by cholesterol accumulation in the early process [1].
In vivo	In a previous study, authors identified the inductive effect of leelamine on CYP2B at doses of 5, 10, or 20 mg/kg in male ICR mice for 1 or 3 days. It was found that in the liver, the activity of CYP2B significantly increased 3.6-fold after leelamine treatment. Activities of benzyloxyresorufin O-dealkylase and pentoxyresorufin O-dealkylase significantly increased 6.3- and 5.3-fold, respectively, with a single treatment of 20 mg/kg leelamine. Moreover, immunoblot analyses showed that significantly and dose-dependently increased CYP2B10 protein levels in the liver. However, PCR results demonstrated that there were no significant changes in the CAR and CYP2B mRNA levels after leelamine treatment [2].

Solubility Information

Solubility	DMSO: ≤20 mg/mL,Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.7486 mL	8.7428 mL	17.4856 mL
5 mM	0.3497 mL	1.7486 mL	3.4971 mL
10 mM	0.1749 mL	0.8743 mL	1.7486 mL
50 mM	0.035 mL	0.1749 mL	0.3497 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.

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