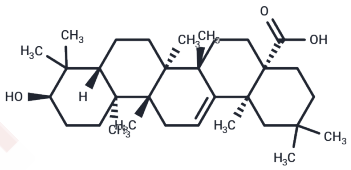
Data Sheet (Cat.No.TN1248)

TargetMol

3-Epioleanolic acid

Chemical Properties



CAS No. : 25499-90-5

Formula: C30H48O3

Molecular Weight: 456.7

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	3-Epioleanolic acid and oleanonic acid possess varying degrees of agonist activity on uterine smooth muscle with minor changes in the molecular structure affecting its intrinsic activity on uterine muscle.
Targets(IC50)	AChR
In vitro	In this investigation, the uterotonic properties of extracts from this tree were evaluated using both pregnant and non-pregnant guinea pig uterine smooth muscle in vitro. The extracts were prepared using water modified supercritical carbon dioxide at 400 atm and 80 degrees C. As samples of these extracts displayed positive results when screened for uterotonic activity, gravity column chromatography followed by NMR spectroscopy was performed in an attempt to isolate and elucidate the structures of the compounds that were present in the extract. The extract yielded five known compounds of which only two, viz. oleanonic acid and 3-Epioleanolic acid, displayed uterotonic activity. Receptor binding assays were subsequently performed with 3-Epioleanolic acid to ascertain its mode of action. Bradykinin (30 ng/100 microl) and acetylcholine (1 microg/100 microl) were used as the B2 and cholinergic receptor agonists respectively with icatibant (HOE 140) (30 ng/100 microl) and atropine (60 micro/100 microl) as their corresponding antagonists. 3-Epioleanolic acid was observed to mediate its effect through the cholinergic receptor.

Solubility Information

Solubility	DMSO: 55 mg/mL (120.43 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 2.5 mg/mL (5.47 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1896 mL	10.9481 mL	21.8962 mL
5 mM	0.4379 mL	2.1896 mL	4.3792 mL
10 mM	0.219 mL	1.0948 mL	2.1896 mL
50 mM	0.0438 mL	0.219 mL	0.4379 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

The uterotonic activity of compounds isolated from the supercritical fluid extract of Ekebergia capensis.J Pharm Biomed Anal. 2000 Dec;24(1):133-45.

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