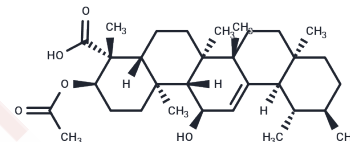


3-O-Acetyl-11-hydroxy-beta-boswellic acid

Chemical Properties

CAS No. :	146019-25-2
Formula:	C ₃₂ H ₅₀ O ₅
Molecular Weight:	514.74
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-O-Acetyl-11-hydroxy-beta-boswellic acid, the precursor of 3-O-acetyl-9,11-dehydro-beta-boswellic acid (a 5-lipoxygenase inhibitor),
Targets(IC50)	Lipoxygenase
In vitro	4 pentacyclic triterpenoid acids were isolated from <i>Boswellia carterii</i> and identified by NMR and Mass spectroscopic analysis (compounds 1, 3-O-acetyl-9,11-dehydro-β-boswellic acid; 2, 3-O-Acetyl-11-hydroxy-beta-boswellic acid ; 3. 3-O- acetyl-11-keto-β-boswellic acid and 4, 11-keto-β-boswellic acid. Their inhibitory activity on Jack bean urease were evaluated. Docking and pharmacophore analysis using AutoDock 4.2 and Ligandscout 3.03 programs were also performed to explain possible mechanism of interaction between isolated compounds and urease enzyme. It was found that compound 1 has the strongest inhibitory activity against Jack bean urease (IC ₅₀ = 6.27 ± 0.03 μM), compared with thiourea as a standard inhibitor (IC ₅₀ = 21.1 ± 0.3 μM)[1]

Solubility Information

Solubility	DMSO: 50 mg/mL (97.14 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (3.89 mM),Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9427 mL	9.7136 mL	19.4273 mL
5 mM	0.3885 mL	1.9427 mL	3.8855 mL
10 mM	0.1943 mL	0.9714 mL	1.9427 mL
50 mM	0.0389 mL	0.1943 mL	0.3885 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

Golbabaie S, et al. Urease inhibitory activities of β -boswellic acid derivatives. Daru. 2013 Jan 2;21(1):2.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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