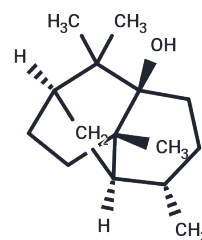


Patchouli alcohol

Chemical Properties

CAS No. :	5986-55-0
Formula:	C ₁₅ H ₂₆ O
Molecular Weight:	222.37
Storage:	Keep away from direct sunlight, Keep away from moisture Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	Patchouli alcohol (Patchoulol) is a naturally occurring tricyclic sesquiterpenoid found in patchouli oil. It is a key bioactive component known for its immunomodulatory, anti-inflammatory, antioxidant, antitumor, antibacterial, anti-atherosclerotic, antiemetic, and sedative properties.
Targets(IC50)	Antibacterial, Antifungal
In vitro	METHODS: H. pylori-infected GES-1 cells were treated with Patchouli alcohol (5-20 µg/mL) for 24 h. Apoptosis was detected by flow cytometry. RESULTS: Patchouli alcohol treatment significantly reduced H. pylori-induced apoptosis. [1] METHODS: H. pylori-infected GES-1 cells were treated with Patchouli alcohol (5-20 µg/mL) for 24 h, and cytokine levels were measured by ELISA. RESULTS: 5-20 µg/mL Patchouli alcohol treatment significantly reduced the production of TNF-α and MCP-1. [1]
In vivo	METHODS: To study the effect on H. pylori-associated gastritis, Patchouli alcohol (5-20 mg/kg) was administered orally to H. pylori-infected mice once daily for two weeks. RESULTS: Patchouli alcohol treatment increased SH-NP content and CAT activity, and significantly protected the gastric mucosa from H. pylori-induced damage. [1]

Solubility Information

Solubility	DMSO: 45 mg/mL (202.37 mM), Sonication is recommended. Ethanol: 15 mg/mL (67.46 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: 5 mg/mL (22.49 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	4.497 mL	22.485 mL	44.9701 mL
5 mM	0.8994 mL	4.497 mL	8.994 mL
10 mM	0.4497 mL	2.2485 mL	4.497 mL
50 mM	0.0899 mL	0.4497 mL	0.8994 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

- Lian DW, et al. Unraveling the Novel Protective Effect of Patchouli Alcohol Against Helicobacter pylori-Induced Gastritis: Insights Into the Molecular Mechanism in vitro and in vivo. *Front Pharmacol.* 2018 Nov 22; 9:1347.
- Yu Y, Zhang Y, Wang S, et al. Inhibition effects of patchouli alcohol against influenza a virus through targeting cellular PI3K/Akt and ERK/MAPK signaling pathways. *Virology Journal.* 2019, 16(1): 1-16
- Han H, Gao M, Wang F, et al. Protective effects of patchouli alcohol against DSS-induced ulcerative colitis. *Scientific Reports.* 2024, 14(1): 16745.
- Wu H, et al. Inhibitory effect and possible mechanism of action of patchouli alcohol against influenza A (H2N2) virus. *Molecules.* 2011 Aug 3;16(8):6489-501.
- Feng XX, et al. Effects of topical application of patchouli alcohol on the UV-induced skin photoaging in mice. *Eur J Pharm Sci.* 2014 Oct 15;63:113-23.
- Yu Y, Zhang Y, Wang S, et al. Inhibition effects of patchouli alcohol against influenza a virus through targeting cellular PI3K/Akt and ERK/MAPK signaling pathways[J]. *Virology Journal.* 2019, 16(1): 1-16.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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