

(+)-Aromadendrene

Chemical Properties

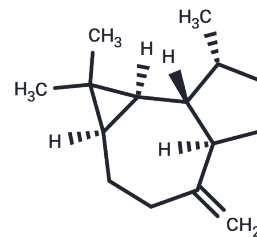
CAS No. : 489-39-4

Formula: C₁₅H₂₄

Molecular Weight: 204.35

Storage: Pure form: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	(+)-Aromadendrene is a natural product that has significant antibacterial activity against the Gram-positive and Gram-negative bacteria.
Targets(IC50)	Anti-infection, Antibacterial
In vitro	All Gram-positive bacteria were susceptible to Aromadendrene with different degrees of susceptibility as determined by microdilution method. The oil exerted a marked inhibition against multidrug-resistant bacteria such as methicillin-resistant Staphylococcus aureus (MRSA) and vancomycin-resistant enterococci (VRE) Enterococcus faecalis, aromadendrene might be responsible for the antimicrobial properties,

Solubility Information

Solubility	DMSO: 2.05 mg/mL (10.03 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: 1 mg/mL (4.89 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	4.8936 mL	24.4678 mL	48.9356 mL
5 mM	0.9787 mL	4.8936 mL	9.7871 mL
10 mM	0.4894 mL	2.4468 mL	4.8936 mL
50 mM	0.0979 mL	0.4894 mL	0.9787 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

Mulyaningsih S , , Frank S , Stefan Z , et al. Synergistic properties of the terpenoids aromadendrene and 1,8-cineole from the essential oil of Eucalyptus globulus against antibiotic-susceptible and antibiotic-resistant pathogens[J]. Phytomedicine International Journal of Phytotherapy & Phytopharmacology, 2010, 17(13):1061-1066.

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