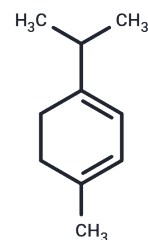


α -Terpinene

Chemical Properties

CAS No. :	99-86-5
Formula:	C ₁₀ H ₁₆
Molecular Weight:	136.23
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	α -Terpinene is a terpenoid, has acaricidal, antiprotozoal, and antioxidant properties
Targets(IC50)	Parasite, Antifungal
In vivo	α -terpinene associated with D.A. can be used as an alternative treatment for T. evansi infection. The compound α -terpinene from M. alternifolia essential oil is the one responsible for the trypanocidal effect, The increased longevity observed on treated mice[1].

Solubility Information

Solubility	DMSO: 11 mg/mL (80.75 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 (14.68 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	7.3405 mL	36.7026 mL	73.4053 mL
5 mM	1.4681 mL	7.3405 mL	14.6811 mL
10 mM	0.7341 mL	3.6703 mL	7.3405 mL
50 mM	0.1468 mL	0.7341 mL	1.4681 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

- Baldissera M D , Grando T H , Souza C F , et al. In vitro and in vivo action of terpinen-4-ol, γ -terpinene, and α -terpinene against *Trypanosoma evansi*[J]. *Experimental Parasitology*, 2016, 162:43-48.
- Kim H J . Evaluation of Antioxidant Activity of Australian Tea Tree (*Melaleuca alternifolia*) Oil and Its Components[J]. *J Agric Food Chem*, 2004, 52(10):1643-1648.

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