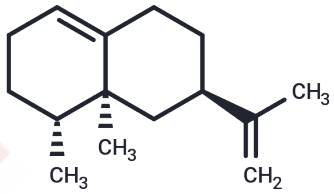
Data Sheet (Cat.No.T17214)

TargetMol

Valencene

Chemical Properties



CAS No. : 4630-07-3

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	Valencene (NSC-148969) is a sesquiterpenoid isolated from Cyperus rotundus and is an aroma component of citrus fruits and citrus-derived odors.ValenceneValencene has anti-allergic, anti-inflammatory, anti-melanogenic, and antioxidant activities. Valencene inhibits the overexpression of Th2 chemokines and pro-inflammatory chemokines by blocking the NF-κB pathway.
Targets(IC50)	Antioxidant,NF-κB,Interleukin

Solubility Information

Solubility	DMSO: 60 mg/mL (293.61 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 (9.79 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	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

Frohwitter J, et al. Production of the sesquiterpene (+)-valencene by metabolically engineered Corynebacterium glutamicum. J Biotechnol. 2014;191:205-213.
Yu Q, et al. Deficiency of valencene in mandarin hybrids is associated with a deletion in the promoter region of the valencene synthase gene. BMC Plant Biol. 2019;19(1):101.
Scholtmeijer K, et al. Production of (+)-valencene in the mushroom-forming fungus S. commune. Appl Microbiol Biotechnol. 2014;98(11):5059-5068.
Beekwilder J, et al. Valencene synthase from the heartwood of Nootka cypress (Callitropsis nootkatensis) for biotechnological production of valencene. Plant Biotechnol J. 2014;12(2):174-182.