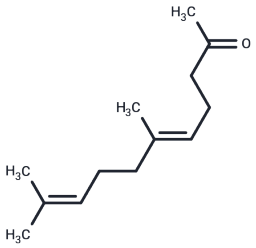
Data Sheet (Cat.No.T7920)

TargetMol

Geranylacetone

Chemical Properties



CAS No. : 3796-70-1

Formula: C13H22O

Molecular Weight: 194.31

Storage: Keep away from moisture
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	Geranylacetone (Geranyl acetone) is a sesquiterpenoid isolated from Ferula akitschkensis stems that reduces parasite burden in infected animals and can be used in studies of Trypanosoma congolense infections Geranylacetone is used as an antioxidant in the Spondylidinae subfamily Geranylacetone can be used as a pheromone component in the Spondylidinae subfamily of California longhorn beetles.
Targets(IC50)	Others
In vivo	Geranylacetone was used to treat T. congolense infected rats, at a dose of 50 and 100 mg/kg BW, for 14 days where it was found to reduce the parasite burden in the infected animals.?Moreover, 100 mg/kg BW of geranylacetone significantly (p <?0.05) ameliorated the anaemia, hepatic and renal damages caused by the parasite.?This is in addition to the alleviation of the parasite-induced hepatosplenomegaly and upsurge in free serum sialic acid levels in the infected animals which were associated with the observed anaemia amelioration by the compound[1].

Solubility Information

Solubility	DMSO: 100 mg/mL (514.64 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	5.1464 mL	25.7321 mL	51.4642 mL
5 mM	1.0293 mL	5.1464 mL	10.2928 mL
10 mM	0.5146 mL	2.5732 mL	5.1464 mL
50 mM	0.1029 mL	0.5146 mL	1.0293 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

Kimland, B., et al. Neutral oxygen-containing volatile constituents of greek tobacco. Phytochemistry, 11(1), 309-316.

Halloran, Sean, T, et al. Fuscumol and Geranylacetone as Pheromone Components of Californian Longhorn Beetles (Coleoptera: Cerambycidae) in the Subfamily Spondylidinae[J]. Environmental Entomology, 2018.