Pulegone

Cat. No.: HY-N1500

CAS No.: 89-82-7

Molecular Formula: $C_{10}H_{16}O$

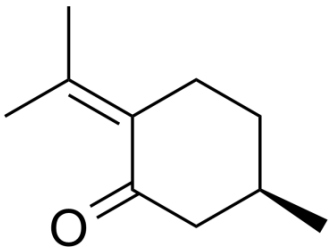
Molecular Weight: 152.23

Target: TRP Channel; Endogenous Metabolite

Pathway: Membrane Transporter/Ion Channel; Neuronal Signaling; Metabolic Enzyme/Protease

Storage:

Pure form	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 270 mg/mL (1773.63 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	6.5690 mL	32.8450 mL	65.6901 mL
5 mM	1.3138 mL	6.5690 mL	13.1380 mL
10 mM	0.6569 mL	3.2845 mL	6.5690 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.25 mg/mL (14.78 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.25 mg/mL (14.78 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.25 mg/mL (14.78 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Pulegone, the major chemical constituent of Calamintha nepeta (L.) Savi essential oil which is an aromatic herb with a mint-oregano flavor, is one of avian repellents[1]. The molecular target for the repellent action of Pulegone in avian species is nociceptive TRP ankyrin 1 (TRPA1). Pulegone stimulates both TRPM8 and TRPA1 channel in chicken sensory neurons and suppresses the former but not the latter at high concentrations[2].

IC_{50} & Target

Human Endogenous Metabolite

REFERENCES

[1]. Božović M, et al. Calamintha nepeta (L.) Savi and its Main Essential Oil Constituent Pulegone: Biological Activities and Chemistry. Molecules. 2017 Feb 14;22(2).

[2]. Majikina A, et al. Involvement of nociceptive transient receptor potential channels in repellent action of pulegone. Biochem Pharmacol. 2018 May;151:89-95.

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