Oct-1-en-3-ol

Cat. No.: HY-W010410

CAS No.: 3391-86-4

Molecular Formula: $C_8H_{16}O$

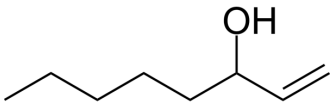
Molecular Weight: 128.22

Target: Others

Pathway: Others

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 : 100 mg/mL (779.91 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	7.7991 mL	38.9955 mL	77.9910 mL
5 mM	1.5598 mL	7.7991 mL	15.5982 mL
10 mM	0.7799 mL	3.8995 mL	7.7991 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: ≥ 2.5 mg/mL (19.50 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (19.50 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (19.50 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Oct-1-en-3-ol, a fatty acid fragrant, is a self-stimulating oxylipin messenger. Oct-1-en-3-ol serves as a signaling molecule in plant cellular responses, plant-herbivore interactions, and plant-plant interactions. Oct-1-en-3-ol causes dopamine neuron degeneration through disruption of dopamine handling[1][2].

REFERENCES

[1]. Haimin Chen, et al. 1-Octen-3-ol, a self-stimulating oxylipin messenger, can prime and induce defense of marine alga.

[2]. Arati A Inamdar, et al. Fungal-derived semiochemical 1-octen-3-ol disrupts dopamine packaging and causes neurodegeneration. Proc Natl Acad Sci U S A. 2013 Nov 26;110(48):19561-6.

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