Proteins

Product Data Sheet

B-Damascone

Cat. No.: HY-N10013 CAS No.: 23726-91-2 Molecular Formula: $C_{13}H_{20}O$ Molecular Weight: 192.3 Target: Others Pathway: Others

Pure form Storage: -20°C 3 years

2 years

In solvent -80°C 6 months

> -20°C 1 month

SOLVENT & SOLUBILITY

In Vitro

DMSO: 100 mg/mL (520.02 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	5.2002 mL	26.0010 mL	52.0021 mL
	5 mM	1.0400 mL	5.2002 mL	10.4004 mL
	10 mM	0.5200 mL	2.6001 mL	5.2002 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 (13.00 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (13.00 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (13.00 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

 β -Damascone is an aroma active rice volatile and is widely used in perfume compositions. β -Damascone has also received certain attention as a potential cancer chemopreventive and a mosquito and muscoid insecticide^{[1][2]}.

In Vitro

CYP101C1 is capable of binding and hydroxylating ionone derivatives including α - and β -ionone and β -damascone^[3]. Several of the key flavor compounds in rose essential oil are C_{13} -norisoprenoids, such as β -damascenone, β -Damascone, and β-ionone which are derived from carotenoid degradation^[4].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Mahattanatawee K, et al. Comparison of aroma active and sulfur volatiles in three fragrant rice cultivars using GC-olfactometry and GC-PFPD. Food Chem. 2014;154:1-6.
- [2]. Gabryś B, et al. Systemic deterrence of aphid probing and feeding by novel β-damascone analogues. J Pest Sci (2004). 2015;88(3):507-516.
- [3]. Ma M, et al. Structural Analysis of CYP101C1 from Novosphingobium aromaticivorans DSM12444. Chembiochem. 2011;12(1):88-99.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA

Page 2 of 2 www.MedChemExpress.com