Product Data Sheet

Lactonic sophorolipid

Cat. No.: HY-137371 CAS No.: 148409-20-5 Molecular Formula: C₃₄H₅₆O₁₄ Molecular Weight: 688.8

Target: Bacterial; Apoptosis; Antibiotic Pathway: Anti-infection; Apoptosis

Storage: -20°C Powder

3 years 2 years

In solvent -80°C 6 months

> -20°C 1 month

SOLVENT & SOLUBILITY

In Vitro

DMSO: 125 mg/mL (181.48 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	1.4518 mL	7.2590 mL	14.5180 mL
	5 mM	0.2904 mL	1.4518 mL	2.9036 mL
	10 mM	0.1452 mL	0.7259 mL	1.4518 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: ≥ 2.08 mg/mL (3.02 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (3.02 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

 $Lactonic\ sophorolipid\ is\ a\ natural\ antimicrobial\ surfactant\ for\ oral\ hygiene \ [1]{\ }.\ Lactonic\ sophorolipid\ ,\ a\ potential\ anticancer$ agent, induces apoptosis in human HepG2 cells through the caspase-3 pathway [1].

REFERENCES

[1]. M Elshikh, et al. Rhamnolipids and lactonic sophorolipids: natural antimicrobial surfactants for oral hygiene. J Appl Microbiol. 2017 Nov;123(5):1111-1123.

[2]. Xiao Wang, et al. Lactonic sophorolipid-induced apoptosis in human HepG2 cells through the Caspase-3 pathway. Appl Microbiol Biotechnol. 2021 Mar;105(5):2033-

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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