Proteins

D-(+)-Melezitose

Cat. No.: HY-N2340 CAS No.: 597-12-6 Molecular Formula: $C_{18}H_{32}O_{16}$ Molecular Weight: 504.44 Target: Bacterial

Pathway: Anti-infection Powder Storage:

-20°C 3 years 2 years

In solvent -80°C 2 years

> -20°C 1 year

Product Data Sheet

SOLVENT & SOLUBILITY

In Vitro

 $H_2O: 100 \text{ mg/mL}$ (198.24 mM; Need ultrasonic) DMSO: 100 mg/mL (198.24 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	1.9824 mL	9.9120 mL	19.8240 mL
	5 mM	0.3965 mL	1.9824 mL	3.9648 mL
	10 mM	0.1982 mL	0.9912 mL	1.9824 mL

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

In Vivo

- 1. Add each solvent one by one: PBS Solubility: 50 mg/mL (99.12 mM); Clear solution; Need ultrasonic and warming and heat to 60°C
- 2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (4.96 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (4.96 mM); Clear solution
- 4. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (4.96 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

D-(+)-Melezitose can be used to identify clinical isolates of indole-positive and indole-negative Klebsiella spp.

In Vitro

A total of 102 (84%) of the 122 isolates are negative for indole production, unable to assimilate histamine and d-melezitose or to grow at 10°C. All of these 102 isolates are identified as possible K. pneumoniae/K. variicola. Finally, one isolate (1%) is positive for indole production, histamine assimilation, and growth at 10° C and negative for ornithine and d-melezitose. This isolate is identified as possible R. planticola^[1].

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

REFERENCES

[1]. Alves MS, et al. Identification of clinical isolates of indole-positive and indole-negative Klebsiella spp. J Clin Microbiol. 2006 Oct;44(10):3640-6.

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

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