Dendrobine

Cat. No.: HY-N0638

CAS No.: 2115-91-5

Molecular Formula: $C_{16}H_{25}NO_2$

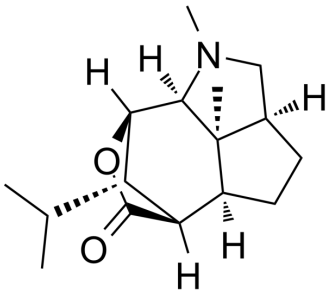
Molecular Weight: 263.38

Target: Influenza Virus

Pathway: Anti-infection

Storage: 4°C, protect from light

* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 33.33 mg/mL (126.55 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.7968 mL	18.9840 mL	37.9680 mL
	5 mM	0.7594 mL	3.7968 mL	7.5936 mL
	10 mM	0.3797 mL	1.8984 mL	3.7968 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 (9.49 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (9.49 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (9.49 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Dendrobine is an alkaloid isolated from Dendrobium nobile. Dendrobine possesses antiviral activity against influenza A viruses, with IC_{50}s of 3.39 μM, 2.16 μM and 5.32 μM for A/FM-1/1/47 (H1N1), A/Puerto Rico/8/34 H274Y (H1N1) and A/Aichi/2/68 (H3N2), respectively[1].

IC_{50} & Target

IC50: 3.39 μM (A/FM-1/1/47), 2.16 μM (A/Puerto Rico/8/34 H274Y), 5.32 μM (A/Aichi/2/68)[1]

CUSTOMER VALIDATION

- Drug Dev Res. 2022 Apr 13.

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REFERENCES

[1]. Li R, et al. Anti-influenza A Virus Activity of Dendrobine and Its Mechanism of Action. J Agric Food Chem. 2017 May 10;65(18):3665-3674.

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