Proteins

Pinocembrin

Cat. No.: HY-N0575 CAS No.: 480-39-7 Molecular Formula: $C_{15}H_{12}O_4$

256.25 Molecular Weight:

Target: Bacterial; Reactive Oxygen Species; Autophagy

Pathway: Anti-infection; Immunology/Inflammation; Metabolic Enzyme/Protease; NF-kB;

Autophagy

Storage: Powder -20°C 3 years

4°C 2 years

-80°C 6 months In solvent

> -20°C 1 month

Product Data Sheet

SOLVENT & SOLUBILITY

In Vitro

DMSO: 83.33 mg/mL (325.19 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	3.9024 mL	19.5122 mL	39.0244 mL
	5 mM	0.7805 mL	3.9024 mL	7.8049 mL
	10 mM	0.3902 mL	1.9512 mL	3.9024 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 (8.12 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (8.12 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (8.12 mM); Clear solution

BIOLOGICAL ACTIVITY

Description Pinocembrin ((+)-Pinocoembrin) is a flavonoid found in propolis, acts as a competitive inhibitor of histidine decarboxylase, and is an effective anti-allergic agent, with antioxidant, antimicrobial and anti-inflammatory properties^[1].

In Vitro Pinocembrin (5, 10, 25, 50, 100 or 200 μM, 24 hours) significantly reduces cell viability of RBL-2H3 cells^[1].

Pinocembrin (25 or 50 μM) suppresses iNOS, PGE-2 and COX-2 levels, increases p38-Mapk and IκB-α, and inhibits

phosphorylation of IkB- $\alpha^{[1]}$.

MCE has not independent Cell Viability Assay ^[1]	ntly confirmed the accuracy of these methods. They are for reference only.	
Cell Line:	RBL-2H3 cells	
Concentration:	5, 10, 25, 50, 100 or 200 μM	
Incubation Time:	24 hours	
Result:	Decreased cell viability by ⊠50% at ≥ 100 μM. Showed 75% cell viability at lower concentrations.	

CUSTOMER VALIDATION

- DNA Cell Biol. 2021 Sep 28.
- J Neurophysiol. 2022 Jan 5.

See more customer validations on $\underline{www.MedChemExpress.com}$

REFERENCES

[1]. Hanieh H, et al. Pinocembrin, a novel histidine decarboxylase inhibitor with anti-allergic potential in in vitro. Eur J Pharmacol. 2017 Nov 5;814:178-186.

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

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