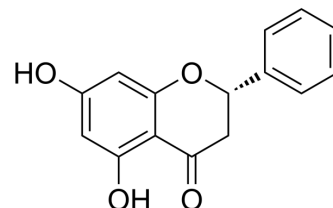


## Pinocembrin

<b>Cat. No.:</b>	HY-N0575												
<b>CAS No.:</b>	480-39-7												
<b>Molecular Formula:</b>	C <sub>15</sub> H <sub>12</sub> O <sub>4</sub>												
<b>Molecular Weight:</b>	256.25												
<b>Target:</b>	Bacterial; Reactive Oxygen Species; Autophagy												
<b>Pathway:</b>	Anti-infection; Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κB; Autophagy												
<b>Storage:</b>	<table border="0"> <tr> <td>Powder</td> <td>-20°C</td> <td>3 years</td> </tr> <tr> <td></td> <td>4°C</td> <td>2 years</td> </tr> <tr> <td>In solvent</td> <td>-80°C</td> <td>2 years</td> </tr> <tr> <td></td> <td>-20°C</td> <td>1 year</td> </tr> </table>	Powder	-20°C	3 years		4°C	2 years	In solvent	-80°C	2 years		-20°C	1 year
Powder	-20°C	3 years											
	4°C	2 years											
In solvent	-80°C	2 years											
	-20°C	1 year											



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 83.33 mg/mL (325.19 mM; Need ultrasonic)				
		Solvent Concentration	Mass		
	<b>Preparing Stock Solutions</b>		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.					
<b>In Vivo</b>	<ol style="list-style-type: none"> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 40% PEG300 &gt;&gt; 5% Tween-80 &gt;&gt; 45% saline Solubility: ≥ 2.08 mg/mL (8.12 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (8.12 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2.08 mg/mL (8.12 mM); Clear solution</li> </ol>				

### BIOLOGICAL ACTIVITY

<b>Description</b>	Pinocembrin ((+)-Pinocembrin) 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 <sup>[1]</sup> .
<b>In Vitro</b>	Pinocembrin (5, 10, 25, 50, 100 or 200 μM, 24 hours) significantly reduces cell viability of RBL-2H3 cells <sup>[1]</sup> . Pinocembrin (25 or 50 μM) suppresses iNOS, PGE-2 and COX-2 levels, increases p38-Mapk and IκB-α, and inhibits phosphorylation of IκB-α <sup>[1]</sup> .

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

#### Cell Viability Assay<sup>[1]</sup>

Cell Line:	RBL-2H3 cells
Concentration:	5, 10, 25, 50, 100 or 200 $\mu$ M
Incubation Time:	24 hours
Result:	Decreased cell viability by $\approx$ 50% at $\geq$ 100 $\mu$ M. Showed 75% cell viability at lower concentrations.

## CUSTOMER VALIDATION

- Foods. 2023 Dec 1, 12(23), 4337.
- Microorganisms. 2023 May 29, 11(6), 1429.
- DNA Cell Biol. 2021 Sep 28.
- J Neurophysiol. 2022 Jan 5.

See more customer validations on [www.MedChemExpress.com](http://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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