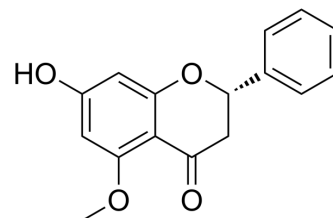


Alpinetin

Cat. No.:	HY-N0625A		
CAS No.:	36052-37-6		
Molecular Formula:	C ₁₆ H ₁₄ O ₄		
Molecular Weight:	270.28		
Target:	PPAR		
Pathway:	Cell Cycle/DNA Damage; Metabolic Enzyme/Protease; Vitamin D Related/Nuclear Receptor		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (184.99 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	3.6999 mL	18.4993 mL	36.9987 mL
	5 mM	0.7400 mL	3.6999 mL	7.3997 mL
	10 mM	0.3700 mL	1.8499 mL	3.6999 mL

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

In Vivo

- Add each solvent one by one: 0.5% CMC-Na/saline water
Solubility: 5 mg/mL (18.50 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.08 mg/mL (7.70 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.08 mg/mL (7.70 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.08 mg/mL (7.70 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Alpinetin is a flavonoid isolated from cardamom and has anti-inflammatory activity. Alpinetin inhibits lipopolysaccharide (LPS)-induced inflammation, activates PPAR-γ, activates Nrf2, and inhibits TLR4 expression to protect LPS-induced renal injury^{[1][2]}.

CUSTOMER VALIDATION

- Front Pharmacol. 2021 May 21;12:687491.
- Research Square Preprint. 2022 Jul.

See more customer validations on www.MedChemExpress.com

REFERENCES

- [1]. Hu K, et al. Alpinetin inhibits LPS-induced inflammatory mediator response by activating PPAR-γ in THP-1-derived macrophages. *Eur J Pharmacol.* 2013 Dec 5;721(1-3):96-102.
- [2]. Huang Y, et al. Alpinetin inhibits lipopolysaccharide-induced acute kidney injury in mice. *Int Immunopharmacol.* 2015 Oct;28(2):1003-8.

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

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