Prunetin

Cat. No.: HY-N2597

CAS No.: 552-59-0

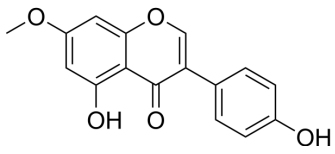
Molecular Formula: $C_{16}H_{12}O_5$

Molecular Weight: 284.26

Target: Aldehyde Dehydrogenase (ALDH)

Pathway: Metabolic Enzyme/Protease

Storage: 4°C, protect from light
* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (351.79 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.5179 mL	17.5895 mL	35.1791 mL
	5 mM	0.7036 mL	3.5179 mL	7.0358 mL
	10 mM	0.3518 mL	1.7590 mL	3.5179 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (8.79 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Prunetin, an O-methylated isoflavone, possesses anti-inflammatory activity. Prunetin is a potent human aldehyde dehydrogenases inhibitor[1][2].

In Vitro

Prunetin inhibited LPS-induced inflammatory cytokine production and MUC5?AC expression and secretion by inactivating the TLR4/MyD88 pathway in human nasal epithelial cells[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Hu H, et al. Prunetin inhibits lipopolysaccharide-induced inflammatory cytokine production and MUC5AC expression by inactivating the TLR4/MyD88 pathway in human nasal epithelial cells. Biomed Pharmacother. 2018 Oct;106:1469-1477.

[2]. Sheikh S, et al. Allosteric inhibition of human liver aldehyde dehydrogenase by the isoflavone prunetin. Biochem Pharmacol. 1997 Feb 21;53(4):471-8.

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