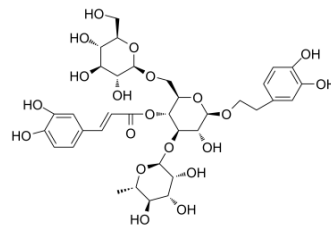


Echinacoside

Cat. No.:	HY-N0020		
CAS No.:	82854-37-3		
Molecular Formula:	C ₃₅ H ₄₆ O ₂₀		
Molecular Weight:	786.73		
Target:	Wnt; Reactive Oxygen Species		
Pathway:	Stem Cell/Wnt; Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κB		
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 : ≥ 100 mg/mL (127.11 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
	1 mM		1.2711 mL	6.3554 mL	12.7108 mL
5 mM		0.2542 mL	1.2711 mL	2.5422 mL	
10 mM		0.1271 mL	0.6355 mL	1.2711 mL	

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

In Vivo

- Add each solvent one by one: **10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline**
Solubility: ≥ 2.5 mg/mL (3.18 mM); Clear solution
- Add each solvent one by one: **10% DMSO >> 90% (20% SBE-β-CD in saline)**
Solubility: ≥ 2.5 mg/mL (3.18 mM); Clear solution
- Add each solvent one by one: **10% DMSO >> 90% corn oil**
Solubility: ≥ 2.5 mg/mL (3.18 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Echinacoside, one of the phenylethanoids isolated from the stems of *Cistanche salsa*, effectively inhibits **Wnt/β-catenin signaling**. Echinacoside elicits neuroprotection by activating Trk receptors and their downstream signal pathways. Antiosteoporotic activity^{[1][2][3]}.

In Vivo

Echinacoside (30-270 mg/kg body weight; p.o.; daily for 12 weeks) significantly reverses the increases of body weight,

serum hydroxyproline (HOP) levels, and the decreases of uterus wet weight and bone mineral density (BMD) in In ovariectomized (OVX) rats^[3].

Animal Model:	Fifty-six aged 6 months female Sprague-Dawley rats (OVX rat model) ^[3]
Dosage:	30, 90, 270 mg/kg body weight
Administration:	p.o.; daily for 12 weeks
Result:	The increases of body weight, serum hydroxyproline (HOP) levels, and the decreases of uterus wet weight and BMD were significantly reversed.

CUSTOMER VALIDATION

- J Neurosci Res. 2019 Aug 16.
- Biochem Biophys Res Commun. 2020 Mar 19. pii: S0006-291X(20)30530-1.

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- [3]. Li F, et al. Antiosteoporotic activity of echinacoside in ovariectomized rats. Phytomedicine. 2013 Apr 15;20(6):549-57.
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- [6]. Tang C, et al. Echinacoside inhibits breast cancer cells by suppressing the Wnt/ β -catenin signaling pathway. Biochem Biophys Res Commun. 2020 Mar 19. pii: S0006-291X(20)30530-1.

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

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