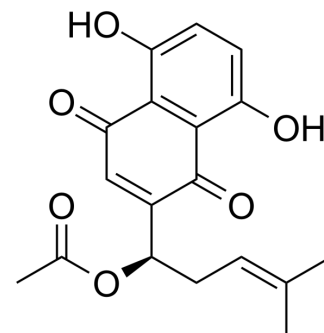


Acetylshikonin

Cat. No.:	HY-N2181
CAS No.:	24502-78-1
Molecular Formula:	C ₁₈ H ₁₈ O ₆
Molecular Weight:	330.33
Target:	Cytochrome P450; AChE
Pathway:	Metabolic Enzyme/Protease; Neuronal Signaling
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 50 mg/mL (151.36 mM; Need ultrasonic)					
	Preparing Stock Solutions	Solvent	Mass	1 mg	5 mg	10 mg
		Concentration				
		1 mM		3.0273 mL	15.1364 mL	30.2728 mL
		5 mM		0.6055 mL	3.0273 mL	6.0546 mL
10 mM		0.3027 mL	1.5136 mL	3.0273 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 (7.57 mM); Clear solution					

BIOLOGICAL ACTIVITY

Description	Acetylshikonin, derived from the root of Lithospermum erythrorhizon, has anti-cancer and antiinflammation activity. Acetylshikonin is a non-selective cytochrome P450 inhibitor against all P450s (IC ₅₀ values range from 1.4-4.0 μM). Acetylshikonin is an AChE inhibitor and exhibits potent antiapoptosis activity ^{[1][2][3]} .
IC₅₀ & Target	IC ₅₀ : 1.4-4.0 μM (all P450s) ^[2] AChE ^[3]

REFERENCES

- [1]. Park SH, et al. Identification of acetylshikonin as the novel CYP2J2 inhibitor with anti-cancer activity in HepG2 cells. *Phytomedicine*. 2017 Jan 15;24:134-140.
- [2]. Shon JC, et al. Acetylshikonin is a novel non-selective cytochrome P450 inhibitor. *Biopharm Drug Dispos*. 2017 Dec;38(9):553-556.

[3]. Wang Y, et al. Acetylshikonin, a Novel AChE Inhibitor, Inhibits Apoptosis via Upregulation of Heme Oxygenase-1 Expression in SH-SY5Y Cells. Evid Based Complement Alternat Med. 2013;2013:937370.

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

India Contact:

Life Technologies (India) Pvt. Ltd.

306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi – 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400, Fax: +91-11-42208444

Email: customerservice@lifetechindia.com Website: www.lifetechindia.com