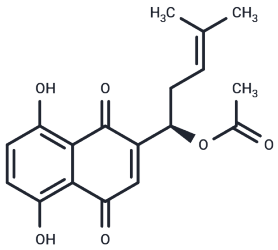
Data Sheet (Cat.No.T5S2343)

TargetMol

Acetylshikonin

Chemical Properties



CAS No. : 24502-78-1

Formula: C18H18O6

Molecular Weight: 330.33

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	1. Acetylshikonin exhibits weak cytotoxicity against human umbilical vein endothelial cells (HUVECs) with IC5 of over 2 microM, exhibits the antiangiogenic and antitumorigenic effects by suppressing proliferation and angiogenic factors. 2. Acetylshikonin inhibits the generation of NADPH oxidase complex in the activation of respiratory burst of PMNs, but does not directly inhibit the activity of NADPH oxidase already generated. 3. Certain shikonin derivatives(such as Acetylshikonin) act as modulators of the Nur77-mediated apoptotic pathway and identify a new shikonin-based lead that targets Nur77 for apoptosis induction. 4. Acetylshikonin, shikonin, and alkannin have accelerative effect on the proliferation of granulation tissue in rats. 5. Acetylshikonin has inhibitory effect on the edematous response is due neither to the release of steroid hormones from the adrenal gland nor to the glucocorticoid activity, but probably partly to the suppression of mast cell degranulation and partly to protection of the vasculature from mediator challenge. 6. Acetylshikonin induces apoptosis of hepatitis B virus X protein-expressing human hepatocellular carcinoma cells via endoplasmic reticulum stress.
Targets(IC50)	Cholinesterase (ChE),Cytochromes P450

Solubility Information

Solubility	DMSO: 3.3 mg/mL (10 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
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
50 mM	0.0605 mL	0.3027 mL	0.6055 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Singh B , Sharma M K , Meghwal P R , et al. Anti-inflammatory activity of shikonin derivatives from Arnebia hispidissima[J]. Phytomedicine, 2003, 10(5):375-380.