

Salvianolic acid B.

Chemical Properties

CAS No. : 121521-90-2

Formula: C₃₆H₃₀O₁₆

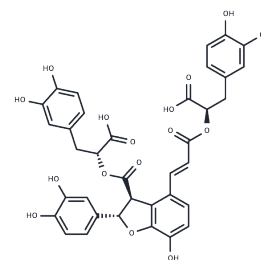
Molecular Weight: 718.61

Store at low temperature, Keep away from direct sunlight

Storage:

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

Actual storage temperature shall be subject to the COA.



Biological Description

Description	Salvianolic acid B is a water-soluble antioxidant from Salvia extract. Salvianolic acid B plays significant role of antioxidant effect; antiplatelet aggregation, anticoagulant, and antithrombotic effect.
Targets(IC50)	Autophagy, Sirtuin
In vitro	<p>METHODS: Rat brain microvascular endothelial cells rCMECs were pretreated with Salvianolic acid B (0-100 μM) for 30 min and incubated with H₂O₂ (200 μM) for 12 h. Apoptosis was detected by TUNEL assay.</p> <p>RESULTS: Salvianolic acid B pretreatment dose-dependently reduced H₂O₂-induced apoptosis. [1]</p> <p>METHODS: Mouse primary hepatic stellate cell HSCs were treated with Salvianolic acid B (10 μmol/L) for 48 h. Cell proliferation was detected by MTT assay.</p> <p>RESULTS: Cells treated with Salvianolic acid B significantly reduced cell proliferation at 48 h. [2]</p>
In vivo	The administration of Salvianolic acid B (10 mg/kg) significantly ameliorates the memory impairment induced by the Aβ ₂₅₋₃₅ peptide in the passive avoidance task (P<0.05). Additionally, Salvianolic acid B treatment reduces the number of activated microglia and astrocytes observed during the inflammatory reaction following the administration of the Aβ ₂₅₋₃₅ peptide. Furthermore, Salvianolic acid B markedly reduces the expression levels of inducible nitric oxide synthase and cyclooxygenase-2, as well as thiobarbituric acid reactive substances, which are increased by the administration of the Aβ ₂₅₋₃₅ peptide. Moreover, Salvianolic acid B administration significantly rescues the Aβ ₂₅₋₃₅ peptide-induced decrease in choline acetyltransferase and brain-derived neurotrophic factor protein levels[2].

Solubility Information

Solubility	DMSO: 257.5 mg/mL (358.33 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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A DRUG SCREENING EXPERT

In vivo Formulation	5% DMSO+95% Saline: 2.63 mg/mL (3.66 mM),Solution. 10% DMSO+90% Saline: 5 mg/mL (6.96 mM),Solution. Saline: 25 mg/mL (34.79 mM),Solution. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.3916 mL	6.9579 mL	13.9158 mL
5 mM	0.2783 mL	1.3916 mL	2.7832 mL
10 mM	0.1392 mL	0.6958 mL	1.3916 mL
50 mM	0.0278 mL	0.1392 mL	0.2783 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

- Liu CL, et al. Salvianolic acid B inhibits hydrogen peroxide-induced endothelial cell apoptosis through regulating PI3K/Akt signaling. PLoS One. 2007 Dec 19;2(12):e1321.
- Yu F, et al. Salvianolic acid B-induced microRNA-152 inhibits liver fibrosis by attenuating DNMT1-mediated Patched1 methylation. J Cell Mol Med. 2015 Nov;19(11):2617-32.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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