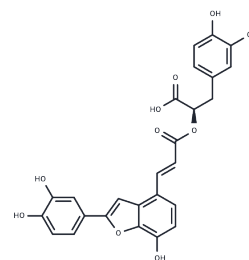


## Salvianolic Acid C

## Chemical Properties

CAS No. :	115841-09-3
Formula:	C <sub>26</sub> H <sub>20</sub> O <sub>10</sub>
Molecular Weight:	492.43
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 C is extracted from the root of <i>Salvia miltiorrhiza</i> , a perennial plant in the genus <i>Salvia</i> .
Targets(IC50)	Cytochromes P450
In vitro	<p><b>METHODS:</b> Human periodontal stem cells hPDLSCs were pretreated with Salvianolic acid C (0-5 mM) for 1 h, then cultured with LPS (1 µg/mL) for 24 h. Cytokines were detected using ELISA kits.</p> <p><b>RESULTS:</b> Salvianolic acid C treatment significantly inhibited the expression of TNFα, IL-6 and IL-1β in a dose-dependent manner. [1]</p> <p><b>METHODS:</b> HEK293T cells stably expressing human-ACE2 were treated with Salvianolic acid C (0-100 µM), and viral entry was studied using the SARS-CoV-2 HSCs pseudovirus (PsV) system.</p> <p><b>RESULTS:</b> Salvianolic acid C inhibited SARS-CoV-2 PsV entry on 293T/ACE2 cells with an IC50 of 3.85 µM.[2]</p>
In vivo	<p><b>METHODS:</b> To investigate the effects on liver injury, Salvianolic acid C (5-20 mg/kg) was intraperitoneally injected into C57BL/6J mice with CCl<sub>4</sub>-induced hepatic fibrosis once a day for six days, followed by APAP (400 mg/kg) to induce liver injury.</p> <p><b>RESULTS:</b> Salvianolic acid C protects hepatocytes from APAP-induced injury by attenuating mitochondrial oxidative stress, inflammatory response, and cystatinase-mediated anti-apoptotic effects via inhibition of the Keap1/Nrf2/HO-1 signaling axis. [3]</p>

## Solubility Information

Solubility	DMSO: 55 mg/mL (111.69 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 5.5 mg/mL (11.17 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>

### Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0307 mL	10.1537 mL	20.3075 mL
5 mM	0.4061 mL	2.0307 mL	4.0615 mL
10 mM	0.2031 mL	1.0154 mL	2.0307 mL
50 mM	0.0406 mL	0.2031 mL	0.4061 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

- Chan Yang, Xiaoyan Pan, Xinfeng Xu, Chen Cheng, Yuan Huang, Lin Li, Shibo Jiang, Wei Xu, Gengfu Xiao  
Salvianolic acid C potently inhibits SARS-CoV-2 infection by blocking the formation of six-helix bundle core of spike protein. *Signal Transduction and Targeted Therapy*. 2020 Oct 6;5(1):220
- Duan Y, et al. Salvianolic Acid C Attenuates LPS-Induced Inflammation and Apoptosis in Human Periodontal Ligament Stem Cells via Toll-Like Receptors 4 (TLR4)/Nuclear Factor kappa B (NF-κB) Pathway. *Med Sci Monit*. 2019 Dec 13;25:9499-9508.
- Yang C, et al. Salvianolic acid C potently inhibits SARS-CoV-2 infection by blocking the formation of six-helix bundle core of spike protein. *Signal Transduct Target Ther*. 2020 Oct 6;5(1):220.
- Zhang H, Liang B, Sang X, et al. Discovery of Potential Inhibitors of SARS-CoV-2 Main Protease by a Transfer Learning Method. *Viruses*. 2023, 15(4): 891.
- Wu M, Lin J, Huang D, et al. Salvianolic Acid C Inhibits the Epithelial-Mesenchymal Transition and Ameliorates Renal Tubulointerstitial Fibrosis. *Frontiers in Bioscience-Landmark*. 2023, 28(6): 121.
- Wu CT, et al. Salvianolic Acid C against Acetaminophen-Induced Acute Liver Injury by Attenuating Inflammation, Oxidative Stress, and Apoptosis through Inhibition of the Keap1/Nrf2/HO-1 Signaling. *Oxid Med Cell Longev*. 2019 May 12;2019:9056845.
- Xing Y, Huang D, Lin P, et al. Salvianolic acid C promotes renal gluconeogenesis in fibrotic kidneys through PGC1α. *Biochemical and Biophysical Research Communications*. 2024: 151174.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286 E\_mail: info@targetmol.com Address: 34 Washington Street, Wellesley Hills, MA 02481