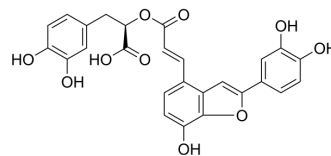


## Salvianolic acid C

<b>Cat. No.:</b>	HY-N0319
<b>CAS No.:</b>	115841-09-3
<b>Molecular Formula:</b>	C <sub>26</sub> H <sub>20</sub> O <sub>10</sub>
<b>Molecular Weight:</b>	492.43
<b>Target:</b>	Cytochrome P450
<b>Pathway:</b>	Metabolic Enzyme/Protease
<b>Storage:</b>	4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 50 mg/mL (101.54 mM; Need ultrasonic)																									
	<table border="1"> <thead> <tr> <th rowspan="2">Solvent Concentration</th> <th>Mass</th> <th>1 mg</th> <th>5 mg</th> <th>10 mg</th> </tr> </thead> <tbody> <tr> <td><b>Preparing Stock Solutions</b></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>1 mM</td> <td></td> <td>2.0307 mL</td> <td>10.1537 mL</td> <td>20.3075 mL</td> </tr> <tr> <td>5 mM</td> <td></td> <td>0.4061 mL</td> <td>2.0307 mL</td> <td>4.0615 mL</td> </tr> <tr> <td>10 mM</td> <td></td> <td>0.2031 mL</td> <td>1.0154 mL</td> <td>2.0307 mL</td> </tr> </tbody> </table>	Solvent Concentration	Mass	1 mg	5 mg	10 mg	<b>Preparing Stock Solutions</b>					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
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	Please refer to the solubility information to select the appropriate solvent.																									
<b>In Vivo</b>	<ol style="list-style-type: none"> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 40% PEG300 &gt;&gt; 5% Tween-80 &gt;&gt; 45% saline Solubility: ≥ 2.5 mg/mL (5.08 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (5.08 mM); Clear solution</li> </ol>																									

### BIOLOGICAL ACTIVITY

<b>Description</b>	Salvianolic acid C is a noncompetitive Cytochrome P4502C8 (CYP2C8) inhibitor and a moderate mixed inhibitor of Cytochrome P4502J2 (CYP2J2), with K <sub>i</sub> s of 4.82 μM and 5.75 μM for CYP2C8 and CYP2J2, respectively.	
<b>IC<sub>50</sub> &amp; Target</b>	CYP2C8 4.82 μM (K <sub>i</sub> )	CYP2J2 5.75 μM (K <sub>i</sub> )
<b>In Vitro</b>	Salvianolic acid C is a noncompetitive CYP2C8 inhibitor and a moderate mixed inhibitor of CYP2J2, with K <sub>i</sub> s of 4.82, 5.75 μM for CYP2C8 and CYP2J2, respectively <sup>[1]</sup> . 1 and 5 μM Salvianolic acid C (SalC) could significantly inhibit the NO production induced by LPS. Salvianolic acid C decreases the expression of iNOS significantly. Salvianolic acid C inhibits LPS-induced TNF-α, IL-1β, IL-6 and IL-10 overproduction. Salvianolic acid C inhibits LPS-induced NF κB activation. Salvianolic acid C also increases the expression of Nrf2 and HO-1 in BV2 microglial cells <sup>[2]</sup> .	

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MCE has not independently confirmed the accuracy of these methods. They are for reference only.

#### In Vivo

Salvianolic acid C (20 mg/kg) treatment could significantly decrease the escape latency. In addition, SalC (10 and 20 mg/kg) treatment significantly increase the platform crossing number compared with the LPS model group. Systemic administration of Salvianolic acid C down regulates the brain TNF- $\alpha$ , IL-1 $\beta$  and IL-6 levels compared with the model group. The iNOS and COX-2 levels in rat brain cortex and hippocampus are higher than that in the control group, while Salvianolic acid C treatment significantly down regulates the cortex and hippocampus regions. Salvianolic acid C (5, 10 and 20 mg/kg) treatment dose-dependently increases the p-AMPK, Nrf2, HO-1 and NQO1 levels in rat brain cortex and hippocampus<sup>[2]</sup>.  
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## CUSTOMER VALIDATION

- Pharmaceuticals. 2022, 15(12), 1444
- Int J Rheum Dis. 2023 Jun 15.

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## REFERENCES

[1]. Xu MJ, et al. Inhibitory Effects of Danshen components on CYP2C8 and CYP2J2. Chem Biol Interact. 2018 Jun 1;289:15-22.

[2]. Song J, et al. Activation of Nrf2 signaling by salvianolic acid C attenuates NF $\kappa$ B mediated inflammatory response both in vivo and in vitro. Int Immunopharmacol. 2018 Oct;63:299-310.

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

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