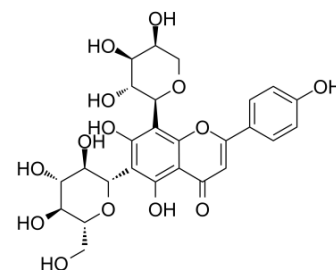


## Schaftoside

<b>Cat. No.:</b>	HY-N0703
<b>CAS No.:</b>	51938-32-0
<b>Molecular Formula:</b>	C <sub>26</sub> H <sub>28</sub> O <sub>14</sub>
<b>Molecular Weight:</b>	564.49
<b>Target:</b>	Toll-like Receptor (TLR); MyD88; Dynamin; Mitochondrial Metabolism; Autophagy
<b>Pathway:</b>	Immunology/Inflammation; Cytoskeleton; Metabolic Enzyme/Protease; Autophagy
<b>Storage:</b>	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 125 mg/mL (221.44 mM; Need ultrasonic)					
	<b>Preparing Stock Solutions</b>	<b>Solvent Concentration</b>	<b>Mass</b>	<b>1 mg</b>	<b>5 mg</b>	<b>10 mg</b>
		<b>1 mM</b>		1.7715 mL	8.8576 mL	17.7151 mL
		<b>5 mM</b>		0.3543 mL	1.7715 mL	3.5430 mL
		<b>10 mM</b>		0.1772 mL	0.8858 mL	1.7715 mL
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: <b>10% DMSO &gt;&gt; 40% PEG300 &gt;&gt; 5% Tween-80 &gt;&gt; 45% saline</b> Solubility: ≥ 2.08 mg/mL (3.68 mM); Clear solution</li> <li>Add each solvent one by one: <b>10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline)</b> Solubility: ≥ 2.08 mg/mL (3.68 mM); Clear solution</li> <li>Add each solvent one by one: <b>10% DMSO &gt;&gt; 90% corn oil</b> Solubility: ≥ 2.08 mg/mL (3.68 mM); Clear solution</li> </ol>					

### BIOLOGICAL ACTIVITY

<b>Description</b>	Schaftoside is a flavonoid found in a variety of Chinese herbal medicines, such as Eleusine indica. Schaftoside inhibits the expression of TLR4 and Myd88. Schaftoside also decreases Drp1 expression and phosphorylation, and reduces mitochondrial fission <sup>[1]</sup> .
<b>In Vitro</b>	Schaftoside inhibits three pro-inflammatory enzymatic activities: secretory phospholipase A2 (sPLA2), lipoxygenase (LOX), and cyclooxygenase 2 (COX-2). Schaftoside also inhibits mRNA and protein expressions of proinflammatory

---

cytokines(IL-1 $\beta$ , TNF- $\alpha$ , and IL-6)<sup>[1]</sup>.

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

---

## REFERENCES

[1]. Zhou K, et al. Schaftoside ameliorates oxygen glucose deprivation-induced inflammation associated with the TLR4/Myd88/Drp1-related mitochondrial fission in BV2 microglia cells. J Pharmacol Sci. 2019 Jan;139(1):15-22.

---

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA