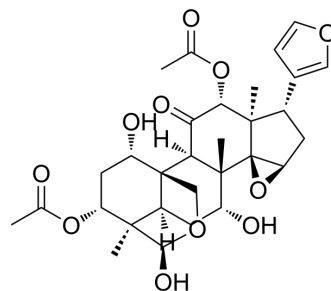


## Toosendanin

Cat. No.:	HY-N0263
CAS No.:	58812-37-6
Molecular Formula:	C <sub>30</sub> H <sub>38</sub> O <sub>11</sub>
Molecular Weight:	574.62
Target:	Others
Pathway:	Others
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



### SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (174.03 mM; Need ultrasonic)						
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg	
				1 mM	1.7403 mL	8.7014 mL	17.4028 mL
				5 mM	0.3481 mL	1.7403 mL	3.4806 mL
				10 mM	0.1740 mL	0.8701 mL	1.7403 mL
Please refer to the solubility information to select the appropriate solvent.							
In Vivo	1. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.17 mg/mL (3.78 mM); Clear solution						
	2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (3.62 mM); Clear solution						
	3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (3.62 mM); Clear solution						

### BIOLOGICAL ACTIVITY

Description	Toosendanin, a triterpenoid extracted from the bark of fruit of <i>Melia toosendan</i> Sieb. et Zucc., possesses analgesic, insecticidal and anti-inflammatory activities <sup>[1]</sup> .
In Vivo	Toosendanin (0.5 and 1 mg/kg, Intraperitoneal injection daily for 7 days) alleviates DSS-induced experimental colitis by inhibiting M1 macrophage polarization and regulating NLRP3 inflammasome and Nrf2/HO-1 signaling, and may provide a novel Chinese patent medicine for the treatment of murine colitis <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Forty-eight male C57BL/6 mice weighing 20-22 g <sup>[1]</sup> .
Dosage:	0.5 and 1 mg/kg.
Administration:	Intraperitoneal injection daily for 7 days.
Result:	Protected against DSS-induced colitis in mice. Inhibited the expression of proinflammatory cytokines in DSS-induced UC and improved oxidative stress.

## CUSTOMER VALIDATION

- Int Immunopharmacol. 2019 Nov;76:105909.
- BMC Oral Health. 2023 Nov 9;23(1):846.
- Research Square Print. December 1st, 2022.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

[1]. Fan H, et al. Toosendanin alleviates dextran sulfate sodium-induced colitis by inhibiting M1 macrophage polarization and regulating NLRP3 inflammasome and Nrf2/HO-1 signaling. Int Immunopharmacol. 2019 Sep 11;76:105909.

**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