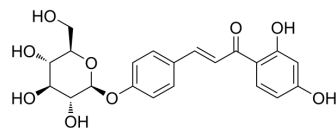


Isoliquiritin

Cat. No.:	HY-N0765
CAS No.:	5041-81-6
Molecular Formula:	C ₂₁ H ₂₂ O ₉
Molecular Weight:	418.39
Target:	Fungal
Pathway:	Anti-infection
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 125 mg/mL (298.76 mM; Need ultrasonic)				
		Solvent Concentration	Mass		
	Preparing Stock Solutions		1 mg	5 mg	10 mg
		1 mM	2.3901 mL	11.9506 mL	23.9011 mL
		5 mM	0.4780 mL	2.3901 mL	4.7802 mL
	10 mM	0.2390 mL	1.1951 mL	2.3901 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (4.97 mM); Clear solution 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (4.97 mM); Clear solution				

BIOLOGICAL ACTIVITY

Description	Isoliquiritin, isolated from Licorice Root, inhibits angiogenesis and tube formation. Isoliquiritin also exhibits antidepressant-like, anti-oxidative, anti-inflammatory effects and antifungal activity ^{[1][2][3]} .
In Vitro	Isoliquiritin (0-400 µg/mL) inhibits the growth of a panel of plant pathogenic fungi ^[3] . Isoliquiritin (0-100 µg/mL, 4 h) inhibits sporangia germination of <i>P. litchii</i> ^[3] . Isoliquiritin (20 µM, 24 h) protects cell from Corticosterone (400 µM)-induced apoptosis in PC12 cells, and reduces LDH release, increases the activity of SOD, CAT, decreases the ROS and MDA level ^[4] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Isoliquiritin (0.31-3.1 mg/kg, i.p., once a day for 5 days) inhibits granuloma angiogenesis in mice ^[1] . Isoliquiritin (10-40 mg/kg, oral gavage) shows antidepressant-like effects in FST and TST tests in mice ^[2] .

Isoliquiritin ((10 mg/kg/bw/day, p.o.) shows anti-oxidative and anti-inflammatory properties, and relieves cationic BSA-Induced membranous glomerulonephritis in experimental rat model^[5].

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

Animal Model:	Mice in Forced Swimming Test (FST) and the Tail Suspension Test (TST) ^[2]
Dosage:	10, 20 and 40 mg/kg
Administration:	oral gavage
Result:	Reduced the immobility time in the FST and TST in mice. Increased 5-HT and NE level and Reduced the ratio of 5-HIAA/5-HT in the hippocampus, hypothalamus and cortex.

CUSTOMER VALIDATION

- Phytother Res. 2023 Oct 19.

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REFERENCES

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- [3]. Kobayashi S, et al. Inhibitory effect of isoliquiritin, a compound in licorice root, on angiogenesis in vivo and tube formation in vitro. *Biol Pharm Bull.* 1995 Oct;18(10):1382-6.
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Caution: Product has not been fully validated for medical applications. For research use only.

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