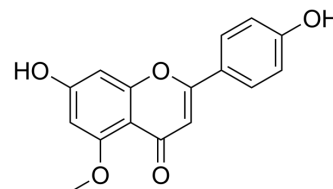


Thevetiaflavone

Cat. No.:	HY-N1157
CAS No.:	29376-68-9
Molecular Formula:	C ₁₆ H ₁₂ O ₅
Molecular Weight:	284.26
Target:	Bcl-2 Family; Caspase
Pathway:	Apoptosis
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 50 mg/mL (175.90 mM; Need ultrasonic)				
		Solvent Concentration	Mass		
	Preparing Stock Solutions		1 mg	5 mg	10 mg
		1 mM	3.5179 mL	17.5895 mL	35.1791 mL
		5 mM	0.7036 mL	3.5179 mL	7.0358 mL
	10 mM	0.3518 mL	1.7590 mL	3.5179 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: 1 mg/mL (3.52 mM); Suspended solution; Need ultrasonic				
	2. Add each solvent one by one: 10% DMSO >> 90% saline Solubility: ≥ 1 mg/mL (3.52 mM); Clear solution				

BIOLOGICAL ACTIVITY

Description	Thevetiaflavone could upregulate the expression of Bcl-2 and downregulate that of Bax and caspase-3.		
IC ₅₀ & Target	Bcl-2	Bax	Caspase-3
In Vitro	Thevetiaflavone, a natural flavonoid obtained from Wikstroemia indica, could improve cell viability and suppresses the leakage of lactate dehydrogenase from the cytoplasm. Further investigation of the mechanisms demonstrated that Thevetiaflavone decreases overproduction of ROS and ameliorates ROS-mediated mitochondrial dysfunction, including collapse of mitochondrial membrane potential and mitochondrial permeability transition pore opening. Thevetiaflavone reduces the intracellular Ca ²⁺ level, which is closely associated with mitochondrial function and interplays with ROS. Furthermore, Thevetiaflavone inhibits apoptosis in PC12 cells through upregulating the expression of Bcl-2 and downregulating that of Bax and caspase-3 in addition to increasing the activity of caspase-3. These results further indicate		

the protective effects of thevetiaflavone in vivo and its application in the clinic^[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Yao H, et al. Thevetiaflavone from *Wikstroemia indica* ameliorates PC12 cells injury induced by OGD/R via improving ROS-mediated mitochondrial dysfunction. *Mol Med Rep.* 2017 Dec;16(6):9197-9202.

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

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