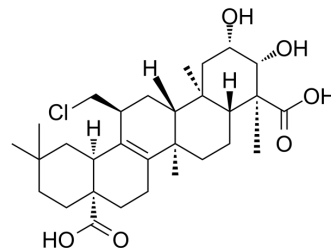


Tenuigenin

Cat. No.:	HY-N0802
CAS No.:	2469-34-3
Molecular Formula:	C ₃₀ H ₄₅ ClO ₆
Molecular Weight:	537.13
Target:	NF-κB; Bacterial
Pathway:	NF-κB; 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 : 100 mg/mL (186.17 mM; Need ultrasonic)						
	H ₂ O : < 0.1 mg/mL (insoluble)						
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg	
				1 mM	1.8617 mL	9.3087 mL	18.6175 mL
				5 mM	0.3723 mL	1.8617 mL	3.7235 mL
10 mM				0.1862 mL	0.9309 mL	1.8617 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: ≥ 2.5 mg/mL (4.65 mM); Clear solution						
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (4.65 mM); Clear solution						
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (4.65 mM); Clear solution						

BIOLOGICAL ACTIVITY

Description	Tenuigenin is a major active component isolated from the root of the Chinese herb <i>Polygala tenuifolia</i> . Tenuigenin protects against <i>S.aureus</i> -induced pneumonia by inhibiting NF-κB activation. Tenuigenin has anti-inflammatory effect ^[1] .
IC ₅₀ & Target	NF-κB
In Vivo	Tenuigenin (2, 4, 8 mg/kg) significantly attenuates <i>S.aureus</i> -induced lung histopathological changes. Tenuigenin also inhibits lung wet/dry (W/D) ratio, and inflammatory cytokines TNF-α and IL-1β production in Male BALB/c mice ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Yu B, et al. Protective effects of tenuigenin on Staphylococcus aureus-induced pneumonia in mice. Microb Pathog. 2017 Sep;110:385-389.

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

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