Curdione

MedChemExpress

Cat. No.:	HY-N0353				
CAS No.:	13657-68-6				
Molecular Formula:	C ₁₅ H ₂₄ O ₂				
Molecular Weight:	236.35				
Target:	Others				
Pathway:	Others				
Storage:	Powder	-20°C	3 years		
		4°C	2 years		
	In solvent	-80°C	2 years		
		-20°C	1 year		

SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (423.10 mM; Need ultrasonic)						
	Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg		
		1 mM	4.2310 mL	21.1551 mL	42.3101 mL		
		5 mM	0.8462 mL	4.2310 mL	8.4620 mL		
		10 mM	0.4231 mL	2.1155 mL	4.2310 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: ≥ 2.75 mg/mL (11.64 mM); Clear solution						
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.75 mg/mL (11.64 mM); Clear solution						
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.75 mg/mL (11.64 mM); Clear solution						

BIOLOGICAL ACTIVITY

Description

Curdione, one of the major sesquiterpene compounds from Curcuma zedoaria, has been shown to exhibit multiple bioactive properties.IC50 value: 60–80 µMTarget:In vitro: The study of the influence of curdione on the hemorheological changes in blood stasis model rats and thrombolysis in vitro showed that curdione only possessed thrombolytic effect in dose of 0.235 g·L-1 and 2.35 g·L-1, but has not the notable activity of thrombolysis [1]. The effects of curdione on human platelet aggregation induced by thrombin (0.3 U/ml) were tested in vitro. Curdione preferentially inhibited PAF- and thrombin-induced platelet aggregation in a concentration-dependent manner (IC50: 60–80 µM), whereas much higher concentrations of curdione were required to inhibit platelet aggregation induced by ADP and AA. Curdione also inhibited P-selectin

Product Data Sheet

expression in PAF-activated platelets. Moreover, curdione caused an increase in cAMP levels and attenuated intracellular Ca2+ mobilization in PAF-activated platelets. In vivo: Curdione showed significant antithrombotic activity [2].

CUSTOMER VALIDATION

• Front Cell Dev Biol. 2021 Nov 10;9:763864.

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REFERENCES

[1]. SI Li, et al. Effect of curdione on hemorheological indexs in rats with blood stasis syndrome. Anhui Medical and Pharmaceutical Journal, 2012-09

[2]. Quan Xia, et al. Inhibition of platelet aggregation by curdione from Curcuma wenyujin essential Oil. Thrombosis ResearchVolume 130, Issue 3, September 2012, Pages 409–414

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

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