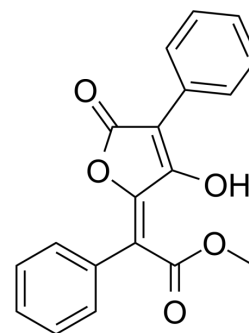


Vulpinic acid

Cat. No.:	HY-125919
CAS No.:	521-52-8
Molecular Formula:	C ₁₉ H ₁₄ O ₅
Molecular Weight:	322.31
Target:	Reactive Oxygen Species; Bacterial; Endogenous Metabolite
Pathway:	Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κB; Anti-infection
Storage:	4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 25 mg/mL (77.57 mM); ultrasonic and warming and heat to 60°C)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	3.1026 mL	15.5130 mL	31.0260 mL
5 mM	0.6205 mL	3.1026 mL	6.2052 mL
10 mM	0.3103 mL	1.5513 mL	3.1026 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 1.25 mg/mL (3.88 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 1.25 mg/mL (3.88 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Vulpinic acid, a lichen metabolite, decreases H₂O₂-induced ROS production, oxidative stress and oxidative stress-related damages in human umbilical vein endothelial cells (HUVEC). Vulpinic acid is active against staphylococci, enterococci, and anaerobic bacteria. Vulpinic acid has the potential for atherosclerosis research^{[1][2]}.

REFERENCES

- [1]. E Sahin, et al. Vulpinic acid, a lichen metabolite, emerges as a potential drug candidate in the therapy of oxidative stress-related diseases, such as atherosclerosis. Hum Exp Toxicol. 2019 Jun;38(6):675-684.

[2]. M Lauterwein, et al. In vitro activities of the lichen secondary metabolites vulpinic acid, (+)-usnic acid, and (-)-usnic acid against aerobic and anaerobic microorganisms. Antimicrob Agents Chemother. 1995 Nov;39(11):2541-3.

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