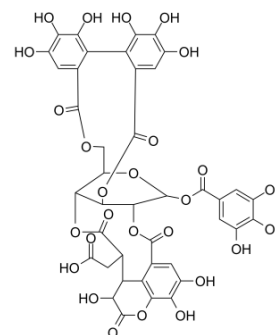


Chebulagic acid

Cat. No.:	HY-N1996		
CAS No.:	23094-71-5		
Molecular Formula:	C ₄₁ H ₃₀ O ₂₇		
Molecular Weight:	954.66		
Target:	COX; Lipoxygenase; SARS-CoV; Influenza Virus		
Pathway:	Immunology/Inflammation; Metabolic Enzyme/Protease; Anti-infection		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (104.75 mM; Need ultrasonic)			
		Solvent Concentration	Mass	
			1 mg	5 mg
			10 mg	
Preparing Stock Solutions	1 mM	1.0475 mL	5.2375 mL	10.4749 mL
	5 mM	0.2095 mL	1.0475 mL	2.0950 mL
	10 mM	0.1047 mL	0.5237 mL	1.0475 mL
Please refer to the solubility information to select the appropriate solvent.				
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 0.83 mg/mL (0.87 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 0.83 mg/mL (0.87 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 0.83 mg/mL (0.87 mM); Clear solution 			

BIOLOGICAL ACTIVITY

Description	Chebulagic acid is a COX-LOX dual inhibitor isolated from the fruits of Terminalia chebula Retz, on angiogenesis. Chebulagic acid is a M2 serine to asparagine 31 mutation (S31N) inhibitor and influenza antiviral. Chebulagic acid also against SARS-CoV-2 viral replication with an EC ₅₀ of 9.76 μM.
In Vitro	Chebulagic acid can enhance the autophagy. Chebulagic acid exert anti-inflammatory and anti-infective effects. Chebulagic acid also shows a protective effect against 1-methyl-4-phenylpyridinium (MPP ⁺)-induce cytotoxicity which mimics the pathological symptom of Parkinson's disease. Chebulagic acid inhibits the LPS-induced upregulation of TNF-α and IL-1β in a

dose- and time-dependent manner. Furthermore, LPS-activated MAPK signaling is inhibited by Chebulagic acid treatment in the EA.hy926 cells.

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

CUSTOMER VALIDATION

- Antivir Res. 2021, 105075.
- Molecules. 2020 Jun 24;25(12):2903.

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- [3]. Athira AP et al. Inhibition of Angiogenesis In Vitro by Chebulagic Acid: A COX-LOX Dual Inhibitor. *Int J Vasc Med*. 2013;2013:843897.
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- [5]. Ruikun Du, et al. Discovery of Chebulagic Acid and Punicalagin as Novel Allosteric Inhibitors of SARS-CoV-2 3CLpro. *Antivir Res*. 2021, 105075.

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