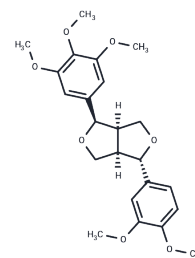


Epimagnolin A

Chemical Properties

CAS No. :	41689-51-4
Formula:	C ₂₃ H ₂₈ O ₇
Molecular Weight:	416.46
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	Epimagnolin A is a lignan obtained from the flower buds of <i>Magnolia fargesii</i> , which is traditionally used in Asian medicine for treating headache and nasal congestion.
Targets(IC50)	Parasite
In vitro	A herbal compound fargesin obtained from <i>M. fargesii</i> , has exerted anti-inflammatory effects in human monocytic THP-1 cells in the previous study. It was demonstrated that epimagnolin A reduced phorbol-12-myristate-13-acetate (PMA)-induced IL-6 promoter activity and IL-6 production in human monocytic THP-1 cells. Furthermore, it was investigated the modulating effects of epimagnolin A on mitogen-activated protein kinase, nuclear factor-kappa B (NF-κB), and activator protein 1 (AP-1) activities. Phosphorylation of p38 and nuclear translocation of p50 and c-Jun were down-regulated by epimagnolin A in the PMA-stimulated THP-1 cell. The results revealed that epimagnolin A attenuated the binding affinity of NF-κB and AP-1 transcription factors to IL-6 promoter and IL-6 production through p38/NF-κB and AP-1 signaling pathways in the PMA-stimulated THP-1 cells. These results suggest that epimagnolin A can be a useful drug for the treatment of inflammatory diseases[2].

Solubility Information

Solubility	DMSO: 12 mg/mL (28.81 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (4.8 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4012 mL	12.006 mL	24.0119 mL
5 mM	0.4802 mL	2.4012 mL	4.8024 mL
10 mM	0.2401 mL	1.2006 mL	2.4012 mL
50 mM	0.048 mL	0.2401 mL	0.4802 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

An insect growth inhibitory lignan from flower buds of *Magnolia fargesii*. *Phytochemistry*, 1994, 35(00):611613.
Hyun-Woo, Chun, Soo-Jin, et al. Epimagnolin A inhibits IL-6 production by inhibiting p38/NF- κ B and AP-1 signaling pathways in PMA-stimulated THP-1 cells. *Environmental Toxicology*, 2019.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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