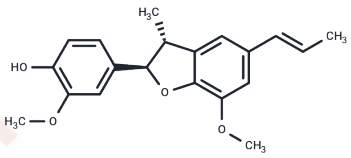
Data Sheet (Cat.No.T20728)

TargetMol

Licarin A

Chemical Properties



CAS No. : 51020-86-1

Formula: C20H22O4

Molecular Weight: 326.39

Storage: Keep away from direct sunlight
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	Licarin A is a natural anti-inflammatory lignan that inhibiting PKCα/βII and p38 MAPK pathways, thereby decreasing TNF-α and prostaglandin D2 (PGD2) secretion as well as COX-2 expression.
Targets(IC50)	COX,p38 MAPK,Prostaglandin Receptor,TNF
In vitro	Methods: DNP-HSA-stimulated RBL-2H3 cells were treated with Licarin A (0-20 μM) to study the antiallergic effect on antigen-stimulated rat mast cell line. Results: The level of PGD2 secretion in DNP-HSA-stimulated cells pretreated with Licarin A was lower than that in cells stimulated with DNP-HSA alone (positive control); 20 μM Licarin A treatment produced a slight inhibition of DNP-HSA-induced increase in COX-2 mRNA and protein levels; Licarin A reduced TNF-α and PGD2 secretion by inhibiting PKCα/βII and p38 MAPK pathways; this compound may be useful in alleviating immediate hypersensitivity reactions. [5]

Solubility Information

Solubility	DMSO: 40 mg/mL (122.55 mM),Sonication is recommended. H2O: < 0.1(insoluble) (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.0638 mL	15.3191 mL	30.6382 mL
5 mM	0.6128 mL	3.0638 mL	6.1276 mL
10 mM	0.3064 mL	1.5319 mL	3.0638 mL
50 mM	0.0613 mL	0.3064 mL	0.6128 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

Matsui T, Ito C, et al, Itoigawa M. Licarin A is a candidate compound for the treatment of immediate hypersensitivity via inhibition of rat mast cell line RBL-2H3 cells. J Pharm Pharmacol. 2015 Dec;67(12):1723-32. doi: 10.1111/jphp.12475. Epub 2015 Sep 17. PubMed PMID: 26376734.
Néris PL, et al. Neolignan Licarin A presents effect against Leishmania (Leishmania) major associated with immunomodulation in vitro. Exp Parasitol. 2013 Oct;135(2):307-13.
León-Díaz R, et al. Antitubercular activity and the subacute toxicity of (-)-Licarin A in BALB/c mice: a neolignan isolated from Aristolochia taliscana. Arch Med Res. 2013 Feb;44(2):99-104.
Pereira AC, et al. Enantiomeric resolution of (±)-licarin A by high-performance liquid-chromatography using a chiral stationary phase. J Chromatogr A. 2011 Sep 28;1218(39):7051-4.
Matsui T, et al. Licarin A is a candidate compound for the treatment of immediate hypersensitivity via inhibition of rat mast cell line RBL-2H3 cells. J Pharm Pharmacol. 2015 Dec;67(12):1723-32.