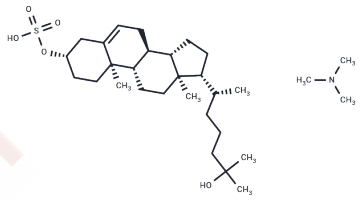
Data Sheet (Cat.No.T74147)

TargetMol

Larsucosterol trimethylamine

Chemical Properties



CAS No. :

Formula: C30H55NO5S

Molecular Weight: 541.83

Storage: Store at low temperature
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	Larsucosterol trimethylamine (DUR-928 trimethylamine) is a potent liver X receptor (LXR) antagonist that modulates endogenous epigenetics, reduces lipid accumulation in hepatocytes, attenuates lipopolysaccharide (LPS) and TNFα-induced inflammatory responses in macrophages, and alleviates LPS- and acetaminophen (ATMP)-induced multi-organ damage.
Targets(IC50)	Endogenous Metabolite,Liver X Receptor
In vitro	In a model of HG-induced MASLD in humanhepatocytes, Larsucosterol exhibits a specific inhibition of DNMTs. This results in the conversion of 5mCpG to CpG in the promoter regions of 1,074 genes within hepatocytes, leading to the upregulation of genes associated with key sig-naling pathways such as MAPK-ERK, calcium-AMPK, andtype II diabetes mellitus pathways. [1]
In vivo	In a mouse hepatectomy model, larsucosterol upregulates the expression of genes associated with cell replication, including Wt1 (Wilms' tumor 1),PCNA (proliferating cell nuclear antigen), cMyc (myelocyto-matosis oncogene), cyclin A, FoxM1b (Forkhead Box M1b),and CDC25b (M-phase inducer phosphatase 2), whereas con-currently downregulating the expression of cell cycle arrestgene Chek2 (checkpoint kinase 2) and the apoptotic geneApaf1 (apoptotic peptidase activating factor 1). [1]

Solubility Information

Solubility	DMSO: 20 mg/mL (36.91 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 (3.69 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8456 mL	9.228 mL	18.456 mL
5 mM	0.3691 mL	1.8456 mL	3.6912 mL
10 mM	0.1846 mL	0.9228 mL	1.8456 mL
50 mM	0.0369 mL	0.1846 mL	0.3691 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

Wang Y, et al. Larsucosterol: endogenous epigenetic regulator for treating chronic and acute liver diseases. Am J Physiol Endocrinol Metab. 2024 May 1;326(5):E577-E587.