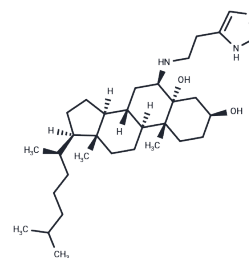


Dendrogenin A

Chemical Properties

CAS No. :	1191043-85-2
Formula:	C32H55N3O2
Molecular Weight:	513.80
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	Dendrogenin A (DDA) is a compound acting as a selective liver X receptor (LXR) modulator, cholesterol epoxide hydrolase inhibitor (K _i = 120 nM), and a metabolic product of cholesterol, originating from 5,6 α -epoxy cholesterol through histamine conjugation via DDA synthase. This compound is present in non-cancerous human mammary epithelial cells and melanocytes, but absent or minimally present in various breast carcinoma, melanoma cells, and isolated human breast tumor tissues. DDA impedes the activation of LXR β and LXR α induced by 22(R)-hydroxy cholesterol (IC ₅₀ s = 76 and 362 nM, respectively), yet it also functions as a partial LXR agonist, boosting the protein levels of Nur77, NOR-1, LC3-I, and LC3-II in B16/F10 murine melanoma cells. It shows a preference for LXR α and LXR β modulation while displaying selectivity over other receptors including pregnane X receptor (PXR), and various others at a concentration of 2.5 μ M. Moreover, DDA enhances LC3-II protein levels in cancer cells and prompts autophagic cell death at specific concentrations. Notably, DDA (0.37 μ g/kg) has been shown to diminish tumor growth in melanoma and mammary cancer murine models and promotes cancer cell differentiation both in vitro and in vivo.
Targets(IC50)	Others,Liver X Receptor

Solubility Information

Solubility	DMSO: 30 mg/mL (58.39 mM),Sonication is recommended. DMF: 30 mg/mL (58.39 mM),Sonication is recommended. Ethanol: 30 mg/mL (58.39 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9463 mL	9.7314 mL	19.4628 mL
5 mM	0.3893 mL	1.9463 mL	3.8926 mL
10 mM	0.1946 mL	0.9731 mL	1.9463 mL
50 mM	0.0389 mL	0.1946 mL	0.3893 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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