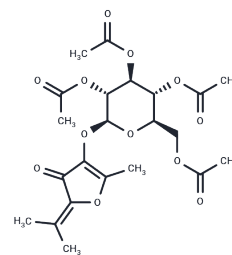


D228

Chemical Properties

CAS No. : 2676188-98-8
 Formula: C₂₂H₂₈O₁₂
 Molecular Weight: 484.45
 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	D228, a natural product from <i>Chimonanthus salicifolius</i> , is an orally available anti-inflammatory agent with favorable inhibitory activity on B and T lymphocytes, down-regulation of MyD88/TRAF6/p38 and up-regulation of IL-10 to reduce inflammation, and can be used for the treatment of inflammatory bowel disease (IBD).
Targets(IC50)	IL Receptor, MyD88, p38 MAPK
In vitro	D228 effectively inhibits Concanavalin A (ConA)-induced proliferation of human T lymphocytes, with an IC ₅₀ value of 42.85 μM. [1]
In vivo	In the DSS-induced chronic IBD model in C57BL/6 mice, oral administration of D228 (40 mg/kg/day for 14 consecutive days) significantly alleviated body weight loss and colon shortening. [1]

Solubility Information

Solubility	DMSO: 40 mg/mL (82.57 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	2.0642 mL	10.321 mL	20.642 mL
5 mM	0.4128 mL	2.0642 mL	4.1284 mL
10 mM	0.2064 mL	1.0321 mL	2.0642 mL
50 mM	0.0413 mL	0.2064 mL	0.4128 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

Tang ML, Xiong XY, Zhang H, Wang YZ, Cheng RQ, Zuo J, Jin L, Lin ZM, Chang J. From Hit to Lead: Discovery of First-In-Class Furanone Glycoside D228 Derived from *Chimonanthus salicifolius* for the Treatment of Inflammatory Bowel Disease. *J Med Chem.* 2024 Oct 10;67(19):17101-17123.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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