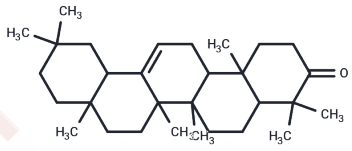
Data Sheet (Cat.No.TN3500)

TargetMol

beta-Amyrone

Chemical Properties



CAS No. : 638-97-1

Formula: C30H48O

Molecular Weight: 424.7

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	beta-Amyrone (β-Amyron) has antifungal activity against Chikungunya virus replication with an EC50 of 86 uM. beta-Amyrone has anti-inflammatory activity through inhibiting the expression of COX-2. beta-Amyrone exhibits anti-α-glucosidase inhibitory activity and moderate AChE activity. β-Amyrone can be used in the research of disease like inflammation, infection, and obesity.
Targets(IC50)	AChR,Antifection,Antifungal,COX,PPAR
In vitro	beta-Amyrone inhibits α-glucosidase AChE and fungal activity with IC50 values of 25 μM, 23 μM and 8 μg/mL, respectively[1]. In LPS-stimulated J774 cells, beta-Amyrone (2.5, 5, 10 μg/mL) inhibits NO production with an IC50 value of 4.61 μg/mL without obvious effects on cell viability[4]. beta-Amyrone (10 μg/mL) inhibits IL-6, IL-10 levels, and COX-2 expression at the dose of 10 μg/mL[4].
In vivo	In ear phenol-induced edema in Balb C mice, beta-Amyrone (0.1, 0.3, 0.6 mg/kg) inhibits ear edema formation in a dose-related manner[4].

Solubility Information

Solubility	DMSO: 4.25 mg/mL (10.01 mM),Sonication is recommended. Ethanol: < 0.1 mg/ml (insoluble) (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3546 mL	11.773 mL	23.546 mL
5 mM	0.4709 mL	2.3546 mL	4.7092 mL
10 mM	0.2355 mL	1.1773 mL	2.3546 mL
50 mM	0.0471 mL	0.2355 mL	0.4709 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

Bourjot M, et al. Chemical constituents of Anacolosa pervilleana and their antiviral activities. Fitoterapia. 2012 Sep; 83(6):1076-80.
Athar Ata, et al. Chemical constituents of Drypetes gossweileri and their enzyme inhibitory and anti-fungal activities. Phytochem. Lett., 2011, 4(1):34-7.
Hassabelrasoul Elfadil, et al. The In Vitro Antifungal Activity of Sudanese Medicinal Plants against Madurella mycetomatis, the Eumycetoma Major Causative Agent. PLoS Negl Trop Dis. 2015 Mar; 9(3): e0003488.
Patrícia D O de Almeida, et al. Anti-Inflammatory Activity of Triterpenes Isolated from Protium paniculatum Oil-Resins. Evid Based Complement Alternat Med. 2015;2015:293768.
Ki-Kwang Oh, et al. Elucidating Drug-Like Compounds and Potential Mechanisms of Corn Silk (Stigma Maydis) against Obesity: A Network Pharmacology Study. Curr Issues Mol Biol. 2021 Nov 6;43(3):1906-1936.

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