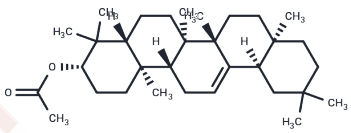
Data Sheet (Cat.No.TN1438)

TargetMol

beta-Amyrin acetate

Chemical Properties



CAS No. : 1616-93-9

Formula: C32H52O2

Molecular Weight: 468.75

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-Amyrin acetate inhibits HMG-CoA Reductase (HMGCR) and sEH activity with IC50 of 3.4 μM. beta-Amyrin acetate has anti-inflammatory, antifungal, antioxidant, and anti-hyperlipidemic activities.
Targets(IC50)	Antioxidant,HMG-CoA Reductase,Epoxide Hydrolase,Antifungal
In vitro	beta-Amyrin acetate (25 μM) decreases mEH activity to 61% of control activity[1]. beta-Amyrin acetate (50 μg/mL) inhibits heat-induced hemolysis and hypotonicity-induced hemolysis of human erythrocytes[2]. beta-Amyrin acetate (7.8-1000 μg/mL) inhibits all of the Candida fungal species tested (MIC: 30 - 250 μg/mL)[5].
In vivo	In Xylene-induced mouse ear topical edema model, beta-Amyrin acetate (100 μg/ear) significantly inhibits xylene-induced ear edema[2]. In normal and arthritic rats, beta-Amyrin acetate (40 mg/kg; s.c.) increases the ATP-phosphohydrolase activity in liver homogenates. In adult albino rats, beta-Amyrin acetate (40 mg/kg; i.p.) shows significant anti-inflammatory activities to 43.6% with mean average weight of granulation tissue of 9.2 mg after 6 days[4].

Solubility Information

Solubility	H2O: < 1 mg/mL (insoluble) DMSO: < 1 mg/mL (insoluble) Ethanol: < 1 mg/mL (insoluble) (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1333 mL	10.6667 mL	21.3333 mL
5 mM	0.4267 mL	2.1333 mL	4.2667 mL
10 mM	0.2133 mL	1.0667 mL	2.1333 mL
50 mM	0.0427 mL	0.2133 mL	0.4267 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

Lee GH, et al. Discovery of soluble epoxide hydrolase inhibitors from natural products. Food Chem Toxicol. 2014 Feb;64:225-30.
Nkeoma Nkasi Okoye, et al. beta-Amyrin and alpha-amyrin acetate isolated from the stem bark of Alstonia boonei display profound anti-inflammatory activity. Pharm Biol. 2014 Nov;52(11):1478-86.
Ranjani Maurya, et al. β-Amyrin acetate and β-amyrin palmitate as antidyslipidemic agents from Wrightia tomentosa leaves. Phytomedicine. 2012 Jun 15;19(8-9):682-5.
M.B.Gupta, et al. Biochemical study of the anti-inflammatory activity of α and β-amyrin acetate. Biochemical Pharmacology. 1971 Feb; 2(20): 401-405.
S Johann, et al. Antifungal activity of the amyrin derivatives and in vitro inhibition of Candida albicans adhesion to human epithelial cells. Lett Appl Microbiol. 2007 Aug;45(2):148-53.