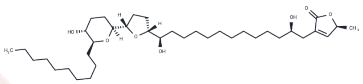
Data Sheet (Cat.No.T32290)

TargetMol

Jimenezin

Chemical Properties



CAS No. : 204185-17-1

Formula: C37H66O7

Molecular Weight: 622.92

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	Jimenezin is a type of annonaceous acetogenin. As waxy derivatives of fatty acids (usually C32 or C34), annonaceous acetogenins contain a terminal carboxylic acid and a 2-propanol unit at the C-2 position to form a methyl- substituted alpha,beta-unsaturated-gamma-lactone. One of their structural features is tetrahydrofuran (THF) or tetrahydropyran (THP) system with one or two flanking hydroxyl group(s) at the center of a long hydrocarbon chain. Jimenezin is a very weakly acidic compound (based on its pKa) and appears practically insoluble (in water). Jimenezin exists in alcoholic beverages and fruits. It can be used as a potential biomarker during the consumption of these food products. Jimenezin exists in alcoholic beverages and it is a constituent of the seeds of Rollinia mucosa (biriba).
Targets(IC50)	Others

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.6053 mL	8.0267 mL	16.0534 mL
5 mM	0.3211 mL	1.6053 mL	3.2107 mL
10 mM	0.1605 mL	0.8027 mL	1.6053 mL
50 mM	0.0321 mL	0.1605 mL	0.3211 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

Matsui Y, Takeuchi T, Kumamoto-Yonezawa Y, Takemura M, Sugawara F, Yoshida H, Mizushina Y. The relationship between the molecular structure of natural acetogenins and their inhibitory activities which affect DNA polymerase, DNA topoisomerase and human cancer cell growth. Exp Ther Med. 2010 Jan;1(1):19-26. Epub 2010 Jan 1. PubMed PMID: 23136587; PubMed Central PMCID: PMC3490394.

Takahashi S, Yonezawa Y, Kubota A, Ogawa N, Maeda K, Koshino H, Nakata T, Yoshida H, Mizushina Y. Pyranicin, a non-classical annonaceous acetogenin, is a potent inhibitor of DNA polymerase, topoisomerase and human cancer cell growth. Int J Oncol. 2008 Feb;32(2):451-8. PubMed PMID: 18202768.

Bandur NG, Brückner D, Hoffmann RW, Koert U. Total synthesis of jimenezin via an intramolecular allylboration. Org Lett. 2006 Aug 17;8(17):3829-31. PubMed PMID: 16898828.

Takahashi S, Maeda K, Hirota S, Nakata T. Total synthesis of a new cytotoxic acetogenin, jimenezin, and the revised structure. Org Lett. 1999 Dec 16;1(12):2025-8. PubMed PMID: 10905863.