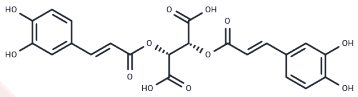
Data Sheet (Cat.No.T6S2391)

TargetMol

L-Chicoric Acid

Chemical Properties



CAS No. : 70831-56-0

Formula: C22H18O12

Molecular Weight: 474.37

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	L-Chicoric Acid (trans-Caffeoyltartaric acid) has been shown to inhibit hyaluronidase and HIV-1 integrase, and to possess phagoeytosis stimulatory activity in vitro and in vivo and antiviral acitivy. L-Chicoric acid may reduce acute alcohol-induced steatosis in mice through interfering with the induction of iNOS and iNOS-dependent signaling cascades in the liver. 3. L-Chicoric acid inhibited cell viability and induced apoptosis in 3T3-L1 preadipocytes which was characterized by chromatin condensation and poly ADP-ribose-polymerase (PARP) cleavage.
Targets(IC50)	HIV Protease,Endogenous Metabolite

Solubility Information

Solubility	DMSO: 250 mg/mL (527.01 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (4.22 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1081 mL	10.5403 mL	21.0806 mL
5 mM	0.4216 mL	2.1081 mL	4.2161 mL
10 mM	0.2108 mL	1.054 mL	2.1081 mL
50 mM	0.0422 mL	0.2108 mL	0.4216 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

Xiao H , Wang J , Yuan L , et al. Chicoric Acid Induces Apoptosis in 3T3-L1 Preadipocytes through ROS-Mediated PI3K/Akt and MAPK Signaling Pathways[J]. Journal of Agricultural and Food Chemistry, 2013, 61(7):1509-1520.
Jung D H, Lee A, Hwang Y H, et al.Therapeutic effects of Pulsatilla koreana Nakai extract on ovalbumin-induced allergic rhinitis by inhibition of Th2 cell activation and differentiation via the IL-4/STAT6/GATA3 pathway. Biomedicine & Pharmacotherapy.2023, 162: 114730.