Data Sheet (Cat.No.T25476)

TargetMol

Gypsogenin

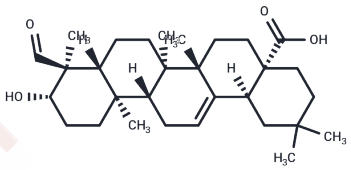
Chemical Properties

CAS No. : 639-14-5

Formula: C30H46O4

Molecular Weight: 470.68

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	Gypsogenin (639-14-5) is a naturally occurring biochemical that shows anti-ABL1 kinase and anti-chronic Myelogenous Leukemia activities.
Targets(IC50)	Bcr-Abl
In vitro	Gypsogenin (1) was obtained by acidic hydrolysis from its saponin.?While the parent compound 1 acted as a selective inhibitor for butyrylcholinesterase (from equus) possessing a moderate mixed-type inhibition of the enzyme, Ki values as low as 2.67 0.59 μM were determined for (3β,4α) 3-O-acetyl-olean-12-ene-23,28-dinitrile (11) and acetylcholinesterase (AChE, from electric eel).?Thus, 11 possesses one-fifth of the inhibitory activity of the 'gold standard' galantamine hydrobromide;?this compound is one of the first pentacyclic triterpenoids described as a potent AChE-selective inhibitor

Solubility Information

Solubility	DMSO: 27.5 mg/mL (58.43 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1246 mL	10.6229 mL	21.2459 mL
5 mM	0.4249 mL	2.1246 mL	4.2492 mL
10 mM	0.2125 mL	1.0623 mL	2.1246 mL
50 mM	0.0425 mL	0.2125 mL	0.4249 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

Heller L , Schwarz S , Weber B A , et al. Gypsogenin Derivatives: An Unexpected Class of Inhibitors of Cholinesterases[J]. Archiv Der Pharmazie, 2015, 347(10):707-716.

Ciftci HI, Ozturk SE, Ali TFS, Radwan MO, Tateishi H, Koga R, Ocak Z, Can M, Otsuka M, Fujita M. The First Pentacyclic Triterpenoid Gypsogenin Derivative Exhibiting Anti-ABL1 Kinase and Anti-chronic Myelogenous Leukemia Activities. Biol Pharm Bull. 2018 Apr 1;41(4):570-574. doi: 10.1248/bpb.b17-00902. Epub 2018 Jan 30. PubMed PMID: 29386476.

Qu YF, Gao JY, Wang J, Geng YM, Zhou Y, Sun CX, Li F, Feng L, Yu MJ, Wang GS. New Triterpenoid Saponins from the Herb Hylomecon japonica. Molecules. 2017 Oct 23;22(10). pii: E1731. doi: 10.3390/molecules22101731. PubMed PMID: 29065554.

Smułek W, Zdarta A, Pacholak A, Zgoła-Grześkowiak A, Marczak Ł, Jarzębski M, Kaczorek E. Saponaria officinalis L. extract: Surface active properties and impact on environmental bacterial strains. Colloids Surf B Biointerfaces. 2017 Feb 1;150:209-215. doi: 10.1016/j.colsurfb.2016.11.035. Epub 2016 Nov 27. PubMed PMID: 27918965.