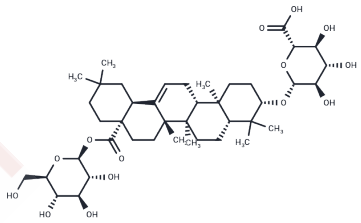
Data Sheet (Cat.No.T3863)

TargetMol

Chikusetsusaponin IVa

Chemical Properties



CAS No. : 51415-02-2

Formula: C42H66O14

Molecular Weight: 794.97

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	Chikusetsusaponin IVa (Calenduloside F) is a novel AMPK activator, can induce insulin secretion from βTC3 cells via GPR4 mediated calcium and PKC pathways, may be developed into a new potential for therapeutic agent used in T2DM patients.
Targets(IC50)	Nrf2,AMPK

Solubility Information

Solubility	DMSO: 245 mg/mL (308.19 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 10 mg/mL (12.58 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (12.58 mM),Solution. *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	1.2579 mL	6.2895 mL	12.5791 mL
5 mM	0.2516 mL	1.2579 mL	2.5158 mL
10 mM	0.1258 mL	0.629 mL	1.2579 mL
50 mM	0.0252 mL	0.1258 mL	0.2516 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

Li Y, ET AL. Chikusetsu saponin IVa regulates glucose uptake and fatty acid oxidation: implications in antihyperglycemic and hypolipidemic effects. J Pharm Pharmacol. 2015 Jul;67(7):997-1007.
Kiełkiewicz R M, Obrębski M, Śliwińska A A, et al.Detailed qualitative and quantitative UHPLC-DAD-ESI-MS3 analysis of Aralia spinosa L.(Araliaceae) phytochemical profile to evaluate its potential as novel plant material for bioactive compounds acquisition using in vitro culture.Industrial Crops and Products.2024, 219: 119123.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481