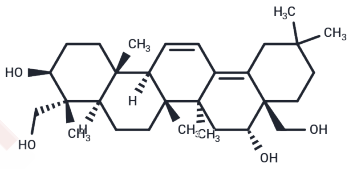
Data Sheet (Cat.No.TN2169)

TargetMol

Saikogenin D

Chemical Properties



CAS No. : 5573-16-0

Formula: C30H48O4

Molecular Weight: 472.7

Storage: Keep away from direct sunlight
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	Saikogenin D possesses dual mechanisms of action including inhibition of A23187-induced PGE2 production without direct cyclooxygenase suppression, and stimulation of intracellular calcium elevation through Ca2+ release from internal stores, while further displaying immunomodulatory properties demonstrated by its ability to attenuate IL-6 production in LPS-stimulated alveolar macrophages from B6 mice more strongly than in BALB mice, highlighting selective regulation of inflammatory responses.
Targets(IC50)	Calcium Channel,IL Receptor,Potassium Channel,Prostaglandin Receptor
In vitro	In C6 rat glioma cells, Saikogenin D (1-20 μM) inhibited calcium ionophore A23187-induced PGE2 production in a concentration-dependent manner, with an IC50 of 3 μM[1]. In C6 rat glioma cells, Saikogenin D (10-100 μM) increased intracellular calcium concentration ([Ca^{2+}]i) in a concentration-dependent manner regardless of the presence of extracellular calcium ions, with an EC50 of 35 μM[1].

Solubility Information

Solubility	DMSO: ≥ 80 mg/mL,Sonication is recommeded. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1155 mL	10.5775 mL	21.1551 mL
5 mM	0.4231 mL	2.1155 mL	4.231 mL
10 mM	0.2116 mL	1.0578 mL	2.1155 mL
50 mM	0.0423 mL	0.2116 mL	0.4231 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

Toriniwa Y, et al. Participation of epoxygenase activation in saikogenin D-induced inhibition of prostaglandin E(2) synthesis.J Pharm Pharmacol. 2006 Jun;58(6):859-66.

Dual effect of saikogenin D: in vitro inhibition of prostaglandin E2 production and elevation of intracellular free Ca2+ concentration in C6 rat glioma cells.Planta Medica, 2003, 69(8):765.