

Tigogenin

Chemical Properties

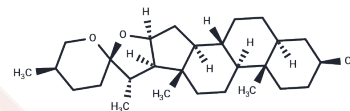
CAS No. : 77-60-1

Formula: C₂₇H₄₄O₃

Molecular Weight: 416.64

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	Tigogenin is one of steroidal sapogenins which is widely used for synthesizing steroid drugs. It might have protective effect on bone and be helpful in preventing the development of osteoporosis.
Targets(IC50)	Others
In vitro	Tigogenin enhanced the proliferation of BMSCs significantly. Tigogenin treatment reduced the adipogenic induction of lipid accumulation, visfatin secretion, and the expressions of peroxisome proliferation-activated receptor (PPAR)γ2 and adipocyte fatty acid-binding protein (ap)2. Moreover, tigogenin had no effect on the mitotic clonal expansion. On the other hand, tigogenin significantly elevated alkaline phosphatase (ALP) activity and the expressions of Cbfa1, collagen type I (COL I) and osteocalcin (OCN), as well as the content of matrix calcium in BMSCs[1].

Solubility Information

Solubility	H ₂ O: Insoluble, Ethanol: 10 mg/mL (24 mM) DMSO: Insoluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4002 mL	12.0008 mL	24.0015 mL
5 mM	0.480 mL	2.4002 mL	4.8003 mL
10 mM	0.240 mL	1.2001 mL	2.4002 mL
50 mM	0.048 mL	0.240 mL	0.480 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

Zhou H , Yang X , Wang N , et al. Tigogenin inhibits adipocytic differentiation and induces osteoblastic differentiation in mouse bone marrow stromal cells[J]. Molecular and Cellular Endocrinology, 2007, 270(1-2):17-22.

Liagre B , Vergne-Salle P , Leger D , et al. Inhibition of human rheumatoid arthritis synovial cell survival by hecogenin and tigogenin is associated with increased apoptosis, p38 mitogen-activated protein kinase activity and upregulation of cyclooxygenase-2[J]. International Journal of Molecular Medicine, 2007, 20(4):451---460.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only· Not for Human or Veterinary or Therapeutic Use

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