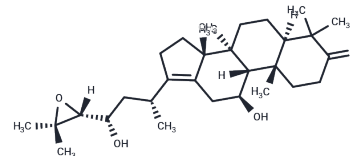


Alisol B

Chemical Properties

CAS No. :	18649-93-9
Formula:	C ₃₀ H ₄₈ O ₄
Molecular Weight:	472.7
Appearance:	no data available
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year



Biological Description

Description	Alisol B may be a potential novel therapeutic molecule for bone disorders through targeting the differentiation of osteoclasts as well as their functions. Alisol B also inhibited RANKL-induced expression of NFATc1 and c-Fos, which are key transcription factors for osteoclastogenesis.
Targets(IC50)	RANKL/RANK
In vitro	Alisol-B, a phyto-steroid from <i>Alisma orientale</i> Juzepczuk, exhibited inhibitory effects on osteoclastogenesis both in vitro and in vivo. Alisol-B did not affect the 1 α ,25(OH) ₂ D ₃ -induced expressions of RANKL, OPG and M-CSF mRNAs in osteoblasts, addition of alisol-B to co-cultures of mouse bone marrow cells and primary osteoblasts with 10 ⁻⁸ M 1 α ,25(OH) ₂ D ₃ caused significant inhibition of osteoclastogenesis. The direct effects of alisol-B on osteoclast precursors. Alisol-B strongly inhibited RANKL-induced osteoclast formation when added during the early stage of cultures, suggesting that alisol-B acts on osteoclast precursors to inhibit RANKL/RANK signaling. Among the RANK signaling pathways[1].

Solubility Information

Solubility	DMSO: 95 mg/mL (200.97 mM), (< 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.

Reference

Lee J W , Kobayashi Y , Nakamichi Y , et al. Alisol-B, a novel phyto-steroid, suppresses the RANKL-induced osteoclast formation and prevents bone loss in mice[j]. Biochemical Pharmacology, 2010, 80(3):352-361.

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:36 Washington Street,Wellesley Hills,MA 02481