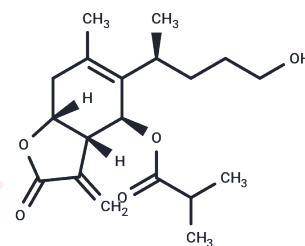


6-O-Isobutyrylbritannilactone

Chemical Properties

CAS No. :	1259933-02-2
Formula:	C ₁₉ H ₂₈ O ₅
Molecular Weight:	336.42
Storage:	Keep away from direct sunlight, Keep away from moisture Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	6-O-Isobutyrylbritannilactone is a natural sesquiterpene and melanogenesis inhibitor capable of suppressing IBMX-induced melanogenesis in B16F10 cells. It modulates ERK, CREB, and PI3K/AKT pathways while reducing pigmentation in zebrafish embryos.
Targets(IC50)	Melanocortin Receptor
In vitro	6-O-Isobutyrylbritannilactone (5-100 μ M, 48 hours) exhibited cytotoxicity against IBMX-stimulated B16F10 cells [1]. 6-O-Isobutyrylbritannilactone (5-30 μ M, 12 hours) dose-dependently inhibited the mRNA expression levels of whitening-related genes in IBMX-stimulated B16F10 cells [1]. 6-O-Isobutyrylbritannilactone (20 μ M, 1-9 hours) time-dependently suppressed the phosphorylation of ERK, AKT, and CREB [1].
In vivo	6-O-Isobutyrylbritannilactone (10-100 μ M, 48 hours) can significantly reduce pigmentation in zebrafish embryos [1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.9725 mL	14.8624 mL	29.7247 mL
5 mM	0.5945 mL	2.9725 mL	5.9449 mL
10 mM	0.2972 mL	1.4862 mL	2.9725 mL
50 mM	0.0594 mL	0.2972 mL	0.5945 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

Jang DK, et al. Anti-Melanogenesis Activity of 6-O-Isobutyrylbritannilactone from *Inula britannica* on B16F10 Melanocytes and In Vivo Zebrafish Models. *Molecules*. 2020 Aug 26;25(17):3887.

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