

Macranthoside B

Chemical Properties

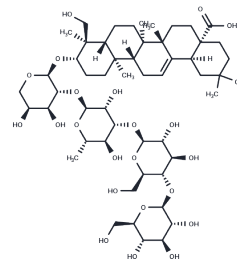
CAS No. : 146100-02-9

Formula: C53H86O22

Molecular Weight: 1075.24

Storage: Keep away from direct sunlight, Store under nitrogen
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	Macranthoside B is a natural product isolated from Flos Lonicerae, possesses anti-bacterial activity.
Targets(IC50)	Antibacterial
In vitro	Macranthoside B, a hederagenin saponin extracted from Lonicera macranthoides and its anti-tumor activities in vitro and in vivo[1].
Cell Research	The anticancer effect of Macranthoside B both in vitro and in vivo using cell proliferation assays and xenograft tumor growth assays. Macranthoside B inhibits the proliferation of various kinds of cancer cells with IC(50) values in the range of 10-20 microM. Moreover, the volume and weight of xenograft tumors in nude mice treated with 5mg/kg Macranthoside B were decreased remarkably compared to those of the vehicle control group. Furthermore, DAPI staining and flow cytometry analysis with Annexin V/PI double staining revealed that more apoptotic cells were observed following Macranthoside B treatment. In addition, degradation of PARP (poly-ADP-ribose polymerase), and activation of the caspase cascade for intrinsic pathways were observed. The expression of Bcl-2 protein decreased and the protein level of Bax increased which leading to an increase of the Bax/Bcl-2 ratio. Macranthoside B exhibited strong anti-tumor effect and mitochondrion-mediated apoptosis induction involved in it[1].

Solubility Information

Solubility	H2O: < 1 mg/mL (insoluble or slightly soluble) DMSO: 50 mg/mL (46.5 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.930 mL	4.6501 mL	9.3002 mL
5 mM	0.186 mL	0.930 mL	1.860 mL
10 mM	0.093 mL	0.465 mL	0.930 mL
50 mM	0.0186 mL	0.093 mL	0.186 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

Wang J , Zhao X Z , Qi Q , et al. Macranthoside B, a hederagenin saponin extracted from *Lonicera macranthoides* and its anti-tumor activities in vitro and in vivo[J]. *Food & Chemical Toxicology*, 2009, 47(7):0-1721.

Shan Y , Guan F , Zhao X , et al. Macranthoside B induces apoptosis and autophagy via reactive oxygen species accumulation in human ovarian cancer A2780 cells[J]. *Nutrition and Cancer*, 2016:1-10.

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