

Morelloflavone

Chemical Properties

CAS No. : 16851-21-1

Formula: C₃₀H₂₀O₁₁

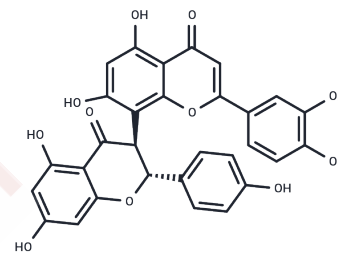
Molecular Weight: 556.47

Storage:

Keep away from direct sunlight, Store at low temperature, Keep away from moisture

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	Morelloflavone is a biflavonoid derived from <i>Garcinia cambogia</i> with anticancer property that inhibits tumor angiogenesis by targeting Rho GTPases and the extracellular signal-regulated kinase (ERK) signaling pathway. Fukugetin inhibits the cellular proliferation of a variety of cancer cell lines, such as Caspase-9, TNF- α , ER- α , HER-2.
Targets(IC50)	ERK, Antibiotic, GTPase
In vitro	<p>Methods: HUVEC cells were treated with Morelloflavone (5, 10, 20, 40, 80, 100 μM, 24 hours), PC-3 cells were treated with Morelloflavone (20, 40, 80, 100, 200, 400 μM, 24 hours), and cell viability was determined by MTS method.</p> <p>Results: Morelloflavone significantly inhibited VEGF-induced endothelial cell viability with an IC₅₀ value of 20 μM. Morelloflavone could significantly inhibit normal HUVEC cell viability at a higher concentration with an IC₅₀ value of 80 μM, indicating that Morelloflavone is more effective under angiogenic disease conditions; for PC-3 cells, the IC₅₀ value was greater than 100 μM. [1]</p>
In vivo	<p>Methods: Morelloflavone (8 mg/Kg, intraperitoneal injection, 15 days) was used to treat SCID male mice transplanted with prostate cancer cells (PC-3). The mice were scarred, and the tumors were excised and photographed. The tumor sizes of the control and morelloflavone groups were calculated.</p> <p>Results: Morelloflavone strongly inhibited tumor growth in the xenograft mouse prostate tumor model. The effect on mouse body weight was minimal, indicating that the compound had little toxicity at the tested concentrations. [1]</p>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.797 mL	8.9852 mL	17.9704 mL
5 mM	0.3594 mL	1.797 mL	3.5941 mL
10 mM	0.1797 mL	0.8985 mL	1.797 mL
50 mM	0.0359 mL	0.1797 mL	0.3594 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

Pang X, et al. Morelloflavone, a biflavonoid, inhibits tumor angiogenesis by targeting rho GTPases and extracellular signal-regulated kinase signaling pathways. *Cancer Res.* 2009 Jan 15;69(2):518-25.

Pinkaew D, et al. Morelloflavone, a biflavonoid inhibitor of migration-related kinases, ameliorates atherosclerosis in mice. *Am J Physiol Heart Circ Physiol.* 2012 Jan;302(2):H451-8.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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