

Garcinol

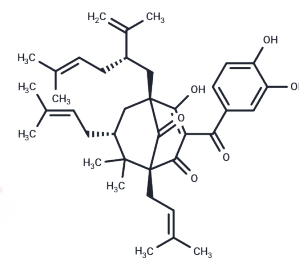
Chemical Properties

CAS No. : 78824-30-3

Formula: C₃₈H₅₀O₆

Molecular Weight: 602.8

Storage: Store at low temperature, Keep away from direct sunlight
 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	Garcinol also inhibits histone acetyltransferases (HATs, IC ₅₀ = 7 μM) and p300/CPB-associated factor (PCAF, IC ₅₀ = 5 μM). Garcinol has anti-inflammatory and anti-cancer activity. Garcinol, a polyisoprenylated benzophenone harvested from <i>Garcinia indica</i> , exerts anti-cholinesterase properties towards acetyl cholinesterase (AChE) and butyrylcholinesterase (BChE) with IC ₅₀ s of 0.66 μM and 7.39 μM, respectively.
Targets(IC ₅₀)	Apoptosis, Endogenous Metabolite, Histone Acetyltransferase, AChR, Cholinesterase (ChE)
In vitro	Garcinol (10-50 μM; 24-72 hours) induces apoptosis and inhibits the proliferation of HNSCC cells in a time- and dose-dependent manner, specifically in the cell lines CAL27 and UMSCC1. Additionally, Garcinol (50 μM; 1-6 hours) suppresses the phosphorylation and degradation of constitutive IκBα in a time-dependent manner.
In vivo	Garcinol induces significant inhibition of tumor growth.

Solubility Information

Solubility	Ethanol: 20 mg/mL (33.18 mM), Sonication and heating are recommended. DMSO: 20 mg/mL (33.18 mM), Sonication and heating are recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.6589 mL	8.2946 mL	16.5893 mL
5 mM	0.3318 mL	1.6589 mL	3.3179 mL
10 mM	0.1659 mL	0.8295 mL	1.6589 mL
50 mM	0.0332 mL	0.1659 mL	0.3318 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

- Lenta BN, et al. Leishmanicidal and cholinesterase inhibiting activities of phenolic compounds from *Allanblackia monticola* and *Symphonia globulifera*. *Molecules*. 2007 Jul 20;12(8):1548-57.
- Ciochina R, et al. Polycyclic polyprenylated acylphloroglucinols. *Chem Rev*. 2006 Sep;106(9):3963-86.
- Li F, et al. Garcinol, a polyisoprenylated benzophenone modulates multiple proinflammatory signaling cascades leading to the suppression of growth and survival of head and neck carcinoma. *Cancer Prev Res (Phila)*. 2013 Aug; 6(8):843-54.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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