

Garcinone D

Chemical Properties

CAS No. : 107390-08-9

Formula: C₂₄H₂₈O₇

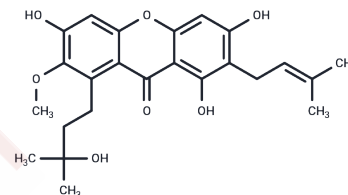
Molecular Weight: 428.47

Storage:

Keep away from direct sunlight, 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	Garcinone D shows significant cytotoxicity against the CEM-SS cell line, with IC(50) value of 3.2 microg/ml; it exhibits dose-dependent enzyme-based microsomal aromatase inhibitory activity. Garcinone D inhibits p65 activation with IC50 values of 3.2 microM.
Targets(IC50)	Reactive Oxygen Species, Nrf2, STAT, ROS
In vitro	Meanwhile, the root bark of the plant furnished six xanthones, namely alpha-mangostin (2), beta-mangostin (3), gamma-mangostin (4), Garcinone D (5), mangostanol (6), and gartanin (7). The hexane and chloroform extracts of the root bark of <i>G. mangostana</i> as well as the hexane extract of the stem bark were found to be active against the CEM-SS cell line. gamma-Mangostin (4) showed good activity with a very low IC(50) value of 4.7 microg/ml, while alpha-mangostin (2), mangostanol (6), and Garcinone D (5) showed significant activities with IC(50) values of 5.5, 9.6, and 3.2 microg/ml, respectively[1]

Solubility Information

Solubility	DMSO: 50 mg/mL (116.69 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (4.67 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3339 mL	11.6694 mL	23.3389 mL
5 mM	0.4668 mL	2.3339 mL	4.6678 mL
10 mM	0.2334 mL	1.1669 mL	2.3339 mL
50 mM	0.0467 mL	0.2334 mL	0.4668 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

Garcinia mangostana: a source of potential anti-cancer lead compounds against CEM-SS cell line. *J Asian Nat Prod Res.* 2008 May-Jun;10(5-6):475-9.

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