

Chrysosplenol D

Chemical Properties

CAS No. : 14965-20-9

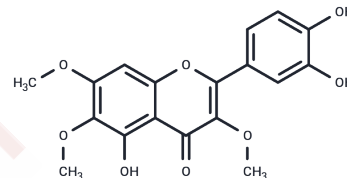
Formula: C₁₈H₁₆O₈

Molecular Weight: 360.31

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	Chrysosplenol D, an efflux pump inhibitor that can potentiate the activity of commercially important antibiotics and antimalarials.
Targets(IC50)	Apoptosis, NF-κB, IL Receptor, JNK
In vitro	Trace amounts of the antimalarial sesquiterpene lactone artemisinin may account for the activity of the n-hexane fraction but only the methoxylated flavonoids artemetin, chrysosplenetin, chrysosplenol-D and cirsilineol can account for the activity of the chloroform extract. These purified flavonoids were found to have IC ₅₀ values at 2.4 - 6.5 x 10 ⁽⁻⁵⁾ M against P. falciparum in vitro compared with an IC ₅₀ value of about 3 x 10 ⁽⁻⁸⁾ M for purified artemisinin[1]

Solubility Information

Solubility	DMSO: 55 mg/mL (152.65 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 (5.55 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	2.7754 mL	13.8769 mL	27.7539 mL
5 mM	0.5551 mL	2.7754 mL	5.5508 mL
10 mM	0.2775 mL	1.3877 mL	2.7754 mL
50 mM	0.0555 mL	0.2775 mL	0.5551 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

Antimalarial activity of Artemisia annua flavonoids from whole plants and cell cultures. Plant Cell Rep. 1992 Nov;11 (12):637-40.

Habib ES, et, al. Anti-inflammatory effect of methoxyflavonoids from Chiliadenus montanus (Jasonia Montana) growing in Egypt. Nat Prod Res. 2020 Aug 4;1-5.

Li YJ, et, al. Flavonoids casticin and chryso splenol D from Artemisia annua L. inhibit inflammation in vitro and in vivo. Toxicol Appl Pharmacol. 2015 Aug 1;286(3):151-8.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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