

Falcarindiol

Chemical Properties

CAS No. : 55297-87-5

Formula: C₁₇H₂₄O₂

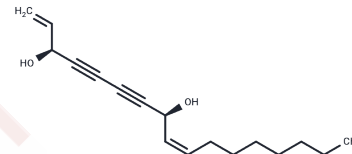
Molecular Weight: 260.37

Keep away from moisture, Keep away from direct sunlight

Storage:

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 | Falcarindiol is an orally active natural polyacetylene compound exhibiting anti-inflammatory and antiproliferative properties. It inhibits NO production in LPS-induced mouse macrophages, reduces tyrosine phosphorylation of JAK1 and JAK2, and modulates STAT1 nuclear translocation, thereby suppressing iNOS expression. |
| Targets(IC50) | NOS,STAT,NOD,JAK |
| In vitro | Falcarindiol (1-20 μM) exhibited low toxicity towards hMSCs and HT-29 cells, while demonstrating cytotoxicity at concentrations above 50 μM [2]. After 24 hours of treatment with Falcarindiol (5 μM), the expression of the PPARγ2 gene in HT-29 cells was significantly upregulated [2]. |
| In vivo | Falcarindiol (7 μg/g, diet) significantly upregulates the gene expression of cholesterol transporter (ABCA1) in colorectal tumor tissues of 5-week-old male F344 strain rats [2]. |

Solubility Information

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|------------|---|
| Solubility | DMSO: ≥ 25 mg/mL, Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble) |
|------------|---|

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|-------|-----------|------------|------------|
| 1 mM | 3.8407 mL | 19.2034 mL | 38.4069 mL |
| 5 mM | 0.7681 mL | 3.8407 mL | 7.6814 mL |
| 10 mM | 0.3841 mL | 1.9203 mL | 3.8407 mL |
| 50 mM | 0.0768 mL | 0.3841 mL | 0.7681 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

Tingting Lu, et al. Autophagy contributes to falcarindiol-induced cell death in breast cancer cells with enhanced endoplasmic reticulum stress. PLoS One. 2017 Apr 25;12(4):e0176348.

Camilla Bertel Andersen, et al. Falcarindiol Purified From Carrots Leads to Elevated Levels of Lipid Droplets and Upregulation of Peroxisome Proliferator-Activated Receptor- γ Gene Expression in Cellular Models. Front Pharmacol. 2020 Aug 28;11:565524.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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