

Yakuchinone A

Chemical Properties

CAS No. : 78954-23-1

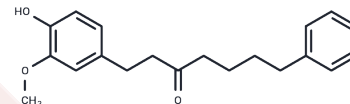
Formula: C₂₀H₂₄O₃

Molecular Weight: 312.4

High Volatility

Storage: Pure form: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	Yakuchinone A (Yakuchinone-A) is a natural product isolated from <i>Alpinia oxyphylla</i> Miquel. Yakuchinone-A has strong inhibitory effects on the synthesis of prostaglandins and leukotrienes in vitro. Yakuchinone A inhibits the expression of cyclooxygenase-2 and of inducible nitric oxide synthase (iNOS).
Targets(IC50)	Apoptosis,Others

Solubility Information

Solubility	DMSO: 22.5 mg/mL (72.02 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 (6.4 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	3.201 mL	16.0051 mL	32.0102 mL
5 mM	0.6402 mL	3.201 mL	6.402 mL
10 mM	0.3201 mL	1.6005 mL	3.201 mL
50 mM	0.064 mL	0.3201 mL	0.6402 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

Zhang Q, Cui C, Chen CQ, Hu XL, Liu YH, Fan YH, Meng WH, Zhao QC. Anti-proliferative and pro-apoptotic activities of *Alpinia oxyphylla* on HepG2 cells through ROS-mediated signaling pathway. *J Ethnopharmacol.* 2015 Jul 1;169:99-108. doi: 10.1016/j.jep.2015.03.073. Epub 2015 Apr 16. PubMed PMID: 25891473.

Yuan Y, Tan YF, Xu P, Li H, Li YH, Chen WY, Zhang JQ, Chen F, Huang GJ. Izalpinin from fruits of *Alpinia oxyphylla* with antagonistic activity against the rat bladder contractility. *Afr J Tradit Complement Altern Med.* 2014 Jun 4;11(4):120-5. eCollection 2014. PubMed PMID: 25392590; PubMed Central PMCID: PMC4202406.

Chen F, Li HL, Tan YF, Li YH, Lai WY, Guan WW, Zhang JQ, Zhao YS, Qin ZM. Identification of known chemicals and their metabolites from *Alpinia oxyphylla* fruit extract in rat plasma using liquid chromatography/tandem mass spectrometry (LC-MS/MS) with selected reaction monitoring. *J Pharm Biomed Anal.* 2014 Aug;97:166-77. doi: 10.1016/j.jpba.2014.04.037. Epub 2014 May 10. PubMed PMID: 24879483.

Chen F, Li HL, Tan YF, Guan WW, Zhang JQ, Li YH, Zhao YS, Qin ZM. Different accumulation profiles of multiple components between pericarp and seed of *Alpinia oxyphylla* capsular fruit as determined by UFLC-MS/MS. *Molecules.* 2014 Apr 10;19(4):4510-23. doi: 10.3390/molecules19044510. PubMed PMID: 24727421.

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