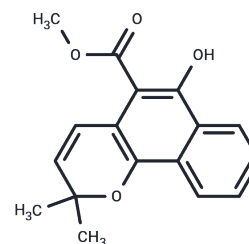


Mollugin

Chemical Properties

CAS No. :	55481-88-4
Formula:	C17H16O4
Molecular Weight:	284.31
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	Mollugin (Rubimallin) may be a JAK2 inhibitor and inhibits LPS-induced inflammatory responses by blocking the activation of the JAK-STAT pathway. Mollugin as a candidate for a chemotherapeutic agent in OSCCs via the upregulation of the HO-1 and Nrf2 pathways and the downregulation of NF- κ B. Mollugin may be a novel therapeutic candidate for bone loss-associated disorders including osteoporosis, rheumatoid arthritis, and periodontitis. Also, it has anticancer efficacy, can modulate the HER2 pathway in HER2-overexpressing Y cells with a potential role in the treatment and prevention of human breast and ovarian Y with HER2 overexpression.
Targets(IC50)	Apoptosis,NF- κ B,Reactive Oxygen Species,HER,c-Myc,JAK,ROS,VEGFR

Solubility Information

Solubility	DMSO: 31.56 mg/mL (111.01 mM),Sonication is recommended. Chloroform, Dichloromethane, Ethyl Acetate, Acetone: Soluble, (< 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 (7.03 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	3.5173 mL	17.5864 mL	35.1729 mL
5 mM	0.7035 mL	3.5173 mL	7.0346 mL
10 mM	0.3517 mL	1.7586 mL	3.5173 mL
50 mM	0.0703 mL	0.3517 mL	0.7035 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 L, et al. Biochem Biophys Res Commun. 2014 Jul 18;450(1):247-54.

Baek JM, et al. Phytomedicine. 2015 Jan 15;22(1):27-35.

Do MT, et al. J Cell Physiol. 2013 May;228(5):1087-97.

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