

Atractylenolide I

Chemical Properties

CAS No. : 73069-13-3

Formula: C₁₅H₁₈O₂

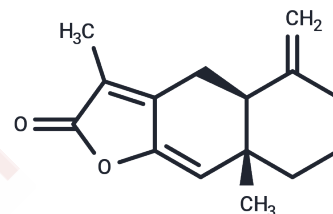
Molecular Weight: 230.30

Keep away from direct sunlight, Keep away from moisture, Store under nitrogen, Store at low temperature

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	1. Atractylenolide-I has an anti-inflammatory effect by inhibiting TNF- α and IL-6 production; ameliorates sepsis syndrome, liver and kidney functions by reduction of pro-inflammatory cytokines and LPS. 2. Atractylenolide-I significantly sensitizes the response of MyD88(+) EOC cells to paclitaxel by blocking MD-2-mediated TLR4/MyD88 signaling.
Targets(IC50)	STAT,IL Receptor,JAK,TLR,TNF

Solubility Information

Solubility	DMSO: 55.00 mg/mL (238.82 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: 2.00 mg/mL (8.68 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	4.3422 mL	21.7108 mL	43.4216 mL
5 mM	0.8684 mL	4.3422 mL	8.6843 mL
10 mM	0.4342 mL	2.1711 mL	4.3422 mL
50 mM	0.0868 mL	0.4342 mL	0.8684 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

Ji G , Chen R , Zheng J . Atractylenolide I inhibits lipopolysaccharide-induced inflammatory responses via mitogen-activated protein kinase pathways in RAW264.7 cells[J]. Immunopharmacology and Immunotoxicology, 2014, 36 (6):420-425.

Wang F, Li Z, Chen L, et al. Inhibition of ASCT2 induces hepatic stellate cell senescence with modified proinflammatory secretome through an IL-1 α /NF- κ B feedback pathway to inhibit liver fibrosis. Acta Pharmaceutica Sinica B. 2022

Yu Z, Niu P, Su Z, et al. Role of Atractylenolide I in Cerebral Ischemia Reperfusion Injury. Revista Brasileira de Farmacognosia. 2023: 1-10.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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