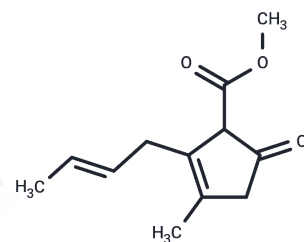


(±)-Methyl Jasmonate**Chemical Properties**

CAS No. :	39924-52-2
Formula:	C ₁₃ H ₂₀ O ₃
Molecular Weight:	224.3
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	Methyl 2-(3-oxo-2-(pent-2-en-1-yl)cyclopentyl)acetate ((±)-Jasmonic Acid methyl ester) induces the synthesis of proteinase inhibitors in plant leaves, suppresses proliferation, and induces apoptosis in cancer cells. It inhibits hexokinase bound to mitochondria, disrupting mitochondrial hexokinase activity to selectively target and kill cancer cells. Derivatives of Methyl 2-(3-oxo-2-(pent-2-en-1-yl)cyclopentyl)acetate also exhibit potential as anti-inflammatory agents, and the compound has been primarily detected in urine.
Targets(IC50)	Apoptosis,NF-κB,Glutathione Peroxidase,Endogenous Metabolite,ROS

Solubility Information

Solubility	H ₂ O: Insoluble, DMSO: 250 mg/mL (1114.58 mM),Sonication is recommended. Ethanol: 30 mg/mL (133.75 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 (8.92 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	4.4583 mL	22.2916 mL	44.5831 mL
5 mM	0.8917 mL	4.4583 mL	8.9166 mL
10 mM	0.4458 mL	2.2292 mL	4.4583 mL
50 mM	0.0892 mL	0.4458 mL	0.8917 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

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