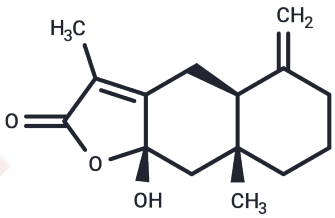
Data Sheet (Cat.No.T3902)

TargetMol

Atractylenolide III

Chemical Properties



CAS No. : 73030-71-4

Formula: C15H20O3

Molecular Weight: 248.32

Storage: Keep away from direct sunlight
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	Atractylenolide III (ICodonolactone) may have therapeutic potential in treating homocysteine-mediated cognitive impairment and neuronal injury. Atractylenolide III is a potential candidate for the treatment of human lung carcinoma by inducing the release of cytochrome c, upregulating the expression of Bax and translocating apoptosis-inducing factor.
Targets(IC50)	Apoptosis

Solubility Information

Solubility	Chloroform, Dichloromethane, Ethyl Acetate, Acetone: Soluble, DMSO: 257.5 mg/mL (1036.97 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 (8.05 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.0271 mL	20.1353 mL	40.2706 mL
5 mM	0.8054 mL	4.0271 mL	8.0541 mL
10 mM	0.4027 mL	2.0135 mL	4.0271 mL
50 mM	0.0805 mL	0.4027 mL	0.8054 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

Zhao H,et al. Neuroprotection and mechanisms of atractylenolide III in preventing learning and memory impairment induced by chronic high-dose homocysteine administration in rats. Neuroscience. 2015 Apr 2;290: 485-91.

Liu C,et al. Neuroprotection of atractylenolide III from Atractylodis macrocephalae against glutamate-induced neuronal apoptosis via inhibiting caspase signaling pathway. Neurochem Res. 2014 Sep;39(9):1753-8.