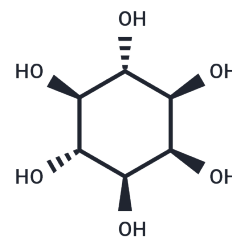


i-Inositol

Chemical Properties

CAS No. :	87-89-8
Formula:	C ₆ H ₁₂ O ₆
Molecular Weight:	180.16
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	i-Inositol (myo-Inositol) is an intracellular phosphate compound involved in cell signaling and may stimulate tumor cell differentiation.
Targets(IC50)	Endogenous Metabolite
In vitro	In vitro, Myo-Inositol is able to improve the sperm mitochondrial function in patients with altered sperm parameters[3].
In vivo	Myo-Inositol (MI) is one of the most abundant metabolites in the human brain located mainly in glial cells and functions as an osmolyte. its concentration is altered in many brain disorders. MI is a key precursor of membrane phospho-inositides and phospholipids and it is also involved in cell membrane and myelin sheet structures[1]. The addition of myo-inositol to folic acid in non PCOS-patients undergoing multiple follicular stimulation for in-vitro fertilization may reduce the numbers of mature oocytes and the dosage of rFSH whilst maintaining clinical pregnancy rate[2].

Solubility Information

Solubility	H ₂ O: 33 mg/mL (183.17 mM),Sonication is recommended. Ethanol: < 1 mg/mL (insoluble or slightly soluble), DMSO: 20 mg/mL (111.01 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: 1 mg/mL (5.55 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	5.5506 mL	27.7531 mL	55.5062 mL
5 mM	1.1101 mL	5.5506 mL	11.1012 mL
10 mM	0.5551 mL	2.7753 mL	5.5506 mL
50 mM	0.111 mL	0.5551 mL	1.1101 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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