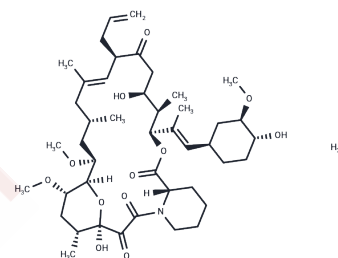


Tacrolimus monohydrate

Chemical Properties

CAS No. :	109581-93-3
Formula:	C ₄₄ H ₇₁ N ₁ O ₁₃
Molecular Weight:	822.05
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	Tacrolimus monohydrate (LCP-Tacro) is a macrolide from the culture broth of a strain of <i>Streptomyces tsukubaensis</i> , binds to FK506 binding protein (FKBP) to form a complex. Tacrolimus inhibits calcineurin phosphatase, which inhibits T-lymphocyte signal transduction and IL-2 transcription. Immunosuppressive properties. It prevents the activation of T-lymphocytes in response to antigenic or mitogenic stimulation in vitro and has strong immunosuppressive activity in vivo.
Targets(IC50)	Antibacterial, Antibiotic, Autophagy, FKBP, Phosphatase

Solubility Information

Solubility	DMSO: 125 mg/mL (152.06 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: 4 mg/mL (4.87 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	1.2165 mL	6.0824 mL	12.1647 mL
5 mM	0.2433 mL	1.2165 mL	2.4329 mL
10 mM	0.1216 mL	0.6082 mL	1.2165 mL
50 mM	0.0243 mL	0.1216 mL	0.2433 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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