

Pitavastatin calcium

Chemical Properties

CAS No. : 147526-32-7

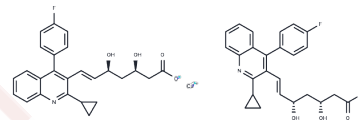
Formula: C₅₀H₄₆CaF₂N₂O₈

Molecular Weight: 880.98

Keep away from direct sunlight

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	Pitavastatin calcium (NK-104) is a potent inhibitor of HMG-CoA reductase (Ki: 1.7 nM). It lowers both total cholesterol and low-density lipoprotein cholesterol in animals and humans. Metabolism of pitavastatin by the cytochrome P450 system is minimal, reducing the risk of drug-drug interactions.
Targets(IC50)	Apoptosis,Mitophagy,Endogenous Metabolite,HMG-CoA Reductase,Autophagy
In vivo	Pitavastatin inhibits the progression of arterial atherosclerosis by blocking the synthesis of thromboxane and suppressing the migration or proliferation of vascular smooth muscle induced by angiotensin II, thereby stabilizing atherosclerotic plaques. It significantly reduces the levels of intracellular and synthesized cholesteryl esters. Moreover, pitavastatin enhances the extracellular expression of LDL receptors and increases the binding of LDL to LDL receptors. Compared to simvastatin and atorvastatin, pitavastatin is more effective in inducing the expression of LDL receptor mRNA.

Solubility Information

Solubility	DMSO: 250 mg/mL (283.77 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 (2.27 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	1.1351 mL	5.6755 mL	11.351 mL
5 mM	0.227 mL	1.1351 mL	2.2702 mL
10 mM	0.1135 mL	0.5675 mL	1.1351 mL
50 mM	0.0227 mL	0.1135 mL	0.227 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

Ahmad H, et al. *Cardiol Rev*, 2010, 18(5):264-267.

Zhang W, Pan X, Xu Y, et al. Mevalonate improves anti-PD-1/PD-L1 efficacy by stabilizing CD274 mRNA. *Acta Pharmaceutica Sinica B*. 2023

Martin G, et al. *J Clin Invest*, 2001, 107(11), 1423-1432.

Ohnaka K, et al. *Biochem Biophys Res Commun*, 2001, 287(2), 337-342.

Olsson AG, et al. *Cardiovasc Drug Rev*. 2002, 20(4):303-28.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286 E_mail: info@targetmol.com Address: 34 Washington Street, Wellesley Hills, MA 02481