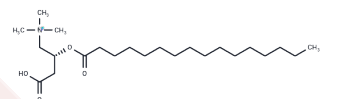


L-Palmitoylcarnitine chloride

Chemical Properties

CAS No. :	18877-64-0
Formula:	C23H46ClNO4
Molecular Weight:	436.07
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	L-Palmitoylcarnitine chloride (Palmitoyl-L-carnitine chloride) is a fatty acid metabolite with antithrombotic properties that protects mice from ischemic stroke by counteracting intracerebral thrombosis in the tMCAO model. L-Palmitoylcarnitine chloride (Palmitoyl-L-carnitine chloride) is a fatty acid metabolite with antithrombotic properties. Palmitoylcarnitine chloride inhibits the Na/K pump in the heart and inhibits FeCl ₃ -induced arterial thrombosis. Attenuates intracerebral thrombosis and inflammation in a mouse model of transient middle cerebral artery occlusion (tMCAO).
Targets(IC50)	ATPase, Endogenous Metabolite, Potassium Channel
In vitro	L-Palmitoylcarnitine chloride (1-20 μM) inhibits acetylcholine- and substance P-induced endothelium-dependent relaxation in a dose-dependent manner, while having no effect on resting tension and nitroglycerin-induced relaxation[1].
In vivo	In vivo, palmitoyl-L-carnitine increases intestinal absorption of the antibiotic cefoxitin in rat intestine.

Solubility Information

Solubility	DMSO: 25 mg/mL (57.33 mM), Sonication is recommended. H ₂ O: Slightly soluble, Sonication and heating are recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 10 mg/mL (22.93 mM), Solution. <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	2.2932 mL	11.466 mL	22.9321 mL
5 mM	0.4586 mL	2.2932 mL	4.5864 mL
10 mM	0.2293 mL	1.1466 mL	2.2932 mL
50 mM	0.0459 mL	0.2293 mL	0.4586 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

Inoue N, et al. Palmitoyl-L-carnitine modifies the function of vascular endothelium. *Cardiovasc Res.* 1994 Jan;28(1):129-34.

Haruna T, et al. Alteration of the membrane lipid environment by L-palmitoylcarnitine modulates K(ATP) channels in guinea-pig ventricular myocytes. *Pflugers Arch.* 2000;441(2-3):200-207.

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