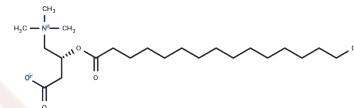


L-Palmitoylcarnitine

Chemical Properties

CAS No. :	2364-67-2
Formula:	C ₂₃ H ₄₅ NO ₄
Molecular Weight:	399.61
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 (L-PC) is an important endogenous fatty acid metabolite that inhibits Na/K ATPase activity and potentiates fibrinolytic enzymes and tPA to inhibit thrombosis.
Targets(IC50)	ATPase,Endogenous Metabolite,Potassium Channel
In vitro	METHODS: We investigated whether L-Palmitoylcarnitine (1 μ M) modulates K(ATP) channel activity in inside-out patches of guinea pig ventricular myocytes by altering the membrane lipid environment. RESULTS: L-Palmitoylcarnitine (1 μ M) inhibited KATP channel activity by interacting with Kir6.2 without affecting single-channel conductance; L-Palmitoylcarnitine also enhanced the ATP sensitivity of the channel, decreasing the IC ₅₀ from 62.0 \pm 2.7 to 30.3 \pm 5.5 μ M. [1]

Solubility Information

Solubility	Ethanol: 25 mg/mL (62.56 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.5024 mL	12.5122 mL	25.0244 mL
5 mM	0.5005 mL	2.5024 mL	5.0049 mL
10 mM	0.2502 mL	1.2512 mL	2.5024 mL
50 mM	0.050 mL	0.2502 mL	0.5005 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

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 Dec;441(2-3):200-7.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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