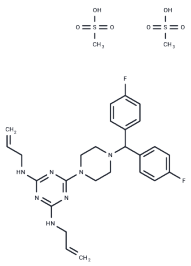
Data Sheet (Cat.No.T6978)

TargetMol

Almitrine mesylate

Chemical Properties



CAS No. : 29608-49-9

Formula: C28H37F2N7O6S2

Molecular Weight: 669.76

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	Almitrine mesylate (Almitrine dimesylate) inhibits selectively the Ca2+-dependent K+ channel and that in rat chemoreceptor cells,used in the treatment of hypoxemic chronic lung diseases.
Targets(IC50)	Potassium Channel
In vivo	Almitrine dimesylate is a drug used in the treatment of hypoxemic chronic lung diseases such as bronchitis and emphysema because it is a potent stimulant of the carotid bodies in human and different animal species that produces a long-lasting enhancement of alveolar ventilation, ameliorating arterial blood gases[1].

Solubility Information

Solubility	DMSO: 125 mg/mL (186.63 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 (5.97 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.4931 mL	7.4654 mL	14.9307 mL
5 mM	0.2986 mL	1.4931 mL	2.9861 mL
10 mM	0.1493 mL	0.7465 mL	1.4931 mL
50 mM	0.0299 mL	0.1493 mL	0.2986 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

J. R. LópezLópez, M. T. PérezGarcía, Canet E , et al. Effects of Almitrine Bismesylate on the Ionic Currents of Chemoreceptor Cells from the Carotid Body[J]. Molecular Pharmacology, 1998, 53(2):330-9.
Bee D , Emery C , Howard P . An analysis of the action of an analogue of almitrine bismesylate in the rat model of hypoxic lung disease[J]. Experimental Physiology, 1992, 77(6):819-828.