

ML418

Chemical Properties

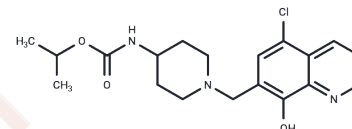
CAS No. : 1928763-08-9

Formula: C₁₉H₂₄ClN₃O₃

Molecular Weight: 377.87

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	ML418 is a potent, selective, and CNS-penetrating Kir7.1 potassium channel blocker (IC ₅₀ = 310 nM) that also effectively inhibits Kir6.2/SUR1.
Targets(IC ₅₀)	Potassium Channel

Solubility Information

Solubility	DMSO: 20 mg/mL (52.93 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 (5.29 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	2.6464 mL	13.2321 mL	26.4641 mL
5 mM	0.5293 mL	2.6464 mL	5.2928 mL
10 mM	0.2646 mL	1.3232 mL	2.6464 mL
50 mM	0.0529 mL	0.2646 mL	0.5293 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

ML418, et al. ML418: The First Selective, Sub-Micromolar Pore Blocker of Kir7.1 Potassium Channels. ACS Chem Neurosci. 2016 Jul 20;7(7):1013-23.

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