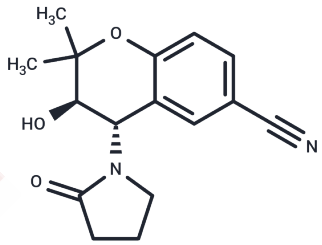
Data Sheet (Cat.No.T21478)

TargetMol

Cromakalim

Chemical Properties



CAS No. :	94470-67-4
Formula:	C16H18N2O3
Molecular Weight:	286.33
Storage:	Keep away from direct sunlight,Keep away from moisture 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	Cromakalim (BRL 34915) is an ATP-dependent K(+) channel opener and a smooth muscle relaxant.Cromakalim has antiepileptic and anticonvulsant activity and may be useful in studies of asthma and disorders associated with vasodilation.
Targets(IC50)	Potassium Channel

Solubility Information

Solubility	H2O: Insoluble, DMSO: 50 mg/mL (174.62 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 (6.98 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	3.4925 mL	17.4624 mL	34.9247 mL
5 mM	0.6985 mL	3.4925 mL	6.9849 mL
10 mM	0.3492 mL	1.7462 mL	3.4925 mL
50 mM	0.0698 mL	0.3492 mL	0.6985 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

Ostadhadi S, et al. Cromakalim, a Potassium Channel Opener, Ameliorates the Organophosphate and Carbamate-Induced Seizure in Mice. Acta Med Iran. 2018 Jan;56(1):14-20.
Sebille S, et al. Recent developments in the chemistry of potassium channel activators: the cromakalim analogs. Curr Med Chem. 2004 May;11(9):1213-22.
Shih CH, et al. Butylidenephthalide antagonizes cromakalim-induced systolic pressure reduction in conscious normotensive rats. BMC Complement Altern Med. 2015 Oct 5;15:344.
Spuler A, Lehmann-Horn F, Grafe P. Cromakalim (BRL 34915) restores in vitro the membrane potential of depolarized human skeletal muscle fibres. Naunyn Schmiedebergs Arch Pharmacol. 1989 Mar;339(3):327-31.