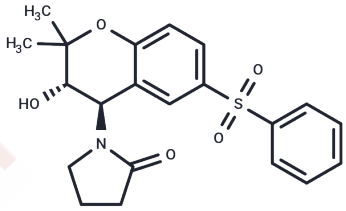
Data Sheet (Cat.No.T26086)

TargetMol

Rilmakalim

Chemical Properties



CAS No. : 132014-21-2

Formula: C21H23NO5S

Molecular Weight: 401.48

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	Rilmakalim is a potassium channel opener. Rilmakalim shows antivasoconstrictor effect.
Targets(IC50)	Others,Potassium Channel,Sodium Channel
In vitro	Rilmakalim (ventricular rat myocytes; patch-clamp technique) is a channel opener dose-dependently activated whole-cell currents [concentration for half-maximal activation (EC50) = 1.1 μM, Hill coefficient = 3.1, saturation concentration 10 microM].[2]

Solubility Information

Solubility	DMSO: 50 mg/mL (124.54 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4908 mL	12.4539 mL	24.9078 mL
5 mM	0.4982 mL	2.4908 mL	4.9816 mL
10 mM	0.2491 mL	1.2454 mL	2.4908 mL
50 mM	0.0498 mL	0.2491 mL	0.4982 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

Olbrich HG, et al. Glimepiride (Hoe490) inhibits the rilmakalim induced decrease in intracellular free calcium and contraction of isolated heart muscle cells from guinea pigs to a lesser extent than glibenclamide. Int J Cardiol. 1999;72(1):53-63.
Krause E, et al. Adenosine triphosphate-dependent K currents activated by metabolic inhibition in rat ventricular myocytes differ from those elicited by the channel opener rilmakalim. Pflugers Arch. 1995;429(5):625-635.
Wuest M, et al. Effect of rilmakalim on detrusor contraction in the presence and absence of urothelium. Naunyn Schmiedebergs Arch Pharmacol. 2005;372(3):203-212.
Kocić I, et al. Different mechanisms of positive chronotropic actions of isoprenaline and noradrenaline on isolated guinea pig right atria revealed by pretreatment with rilmakalim. Pol J Pharmacol. 2000;52(5):383-388.
Kocic I, et al. Hypotonic stress increases efficacy of rilmakalim, but not pinacidil, to activate ATP-sensitive K(+) current in guinea pig ventricular myocytes. J Pharmacol Sci. 2004;95(2):189-195.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481