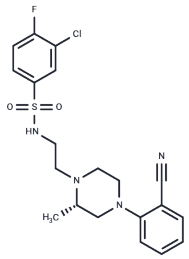
Data Sheet (Cat.No.T73267)

TargetMol

VU6036720

Chemical Properties



CAS No. :

Formula: C20H22ClFN4O2S

Molecular Weight: 436.93

Storage: Pure form: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	VU6036720 is a potent and selective inhibitor of the isomeric Kir4.1/5.1.VU6036720 inhibits Kir4.1/5.1 activity by decreasing the channel open-circuit probability and single-channel current amplitude.
Targets(IC50)	Potassium Channel
In vitro	VU6036720 inhibits Kir4.1/5.1 activity through a reduction of channel open-state probability and single-channel current amplitude (IC50=0.24 μM).[1]

Solubility Information

Solubility	DMSO: 45 mg/mL (102.99 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: 10 mg/mL (22.89 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	2.2887 mL	11.4435 mL	22.887 mL
5 mM	0.4577 mL	2.2887 mL	4.5774 mL
10 mM	0.2289 mL	1.1443 mL	2.2887 mL
50 mM	0.0458 mL	0.2289 mL	0.4577 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

McClenahan SJ, et al. VU6036720: The First Potent and Selective In Vitro Inhibitor of Heteromeric Kir4.1/5.1 Inward Rectifier Potassium Channels. Mol Pharmacol. 2022;101(5):357-370.