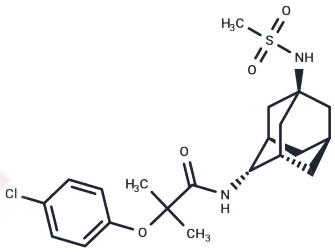
Data Sheet (Cat.No.T7653)

TargetMol

JNJ 303

Chemical Properties



CAS No. : 878489-28-2

Formula: C21H29ClN2O4S

Molecular Weight: 440.98

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	JNJ 303 is a potent blocker of IKs (IC50 : 64 nM).
Targets(IC50)	Potassium Channel
In vitro	Optical mapping was used to measure action potential durations (APDs) in the presence of the IKs blocker JNJ-303 and the IKr blocker E-4031.?JNJ-303 alone did not increase APD.?However, under isoprenaline (ISO), both the application of JNJ-303 and additional E-4031 significantly increased APD.?With JNJ-303, ISO decreased APD significantly more in the epicardium as compared to the endocardium, with subsequent application E-4031 increasing mid- and endocardial APD80 more significantly than in the epicardium.?We found that β-AR stimulation significantly augmented the effect of IKs blocker JNJ-303, in contrast to the reduced effect of IKr blocker E-4031[1].

Solubility Information

Solubility	DMSO: 11 mg/mL (24.94 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2677 mL	11.3384 mL	22.6768 mL
5 mM	0.4535 mL	2.2677 mL	4.5354 mL
10 mM	0.2268 mL	1.1338 mL	2.2677 mL
50 mM	0.0454 mL	0.2268 mL	0.4535 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

Kang C , Badiceanu A , Brennan J A , et al. β-adrenergic stimulation augments transmural dispersion of repolarization via modulation of delayed rectifier currents IKs and IKr in the human ventricle[J]. Scientific Reports, 2017, 7(1):15922.

Emily R Pfeiffer-Kaushik , Godfrey L Smith , Beibei Cai, et al.Electrophysiological Characterization of Drug Response in hSC-derived Cardiomyocytes Using Voltage-Sensitive Optical Platforms.J Pharmacol Toxicol Methods, 99, 106612 Sep-Oct 2019