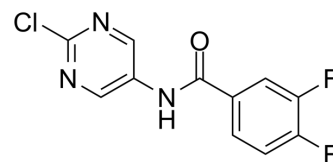


ICA-069673

Cat. No.:	HY-101396
CAS No.:	582323-16-8
Molecular Formula:	C ₁₁ H ₆ ClF ₂ N ₃ O
Molecular Weight:	269.63
Storage:	<div> Powder -20°C 3 years </div> <div> 4°C 2 years </div> <div> In solvent -80°C 2 years </div> <div> -20°C 1 year </div>



SOLVENT & SOLUBILITY

In Vitro	DMSO : 50 mg/mL (185.44 mM; Need ultrasonic)					
	Preparing Stock Solutions	<div>Solvent Concentration</div>	Mass	1 mg	5 mg	10 mg
		1 mM		3.7088 mL	18.5439 mL	37.0879 mL
		5 mM		0.7418 mL	3.7088 mL	7.4176 mL
		10 mM		0.3709 mL	1.8544 mL	3.7088 mL
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: 2.5 mg/mL (9.27 mM); Clear solution; Need ultrasonic					
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 2.5 mg/mL (9.27 mM); Suspended solution; Need ultrasonic					
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: 2.5 mg/mL (9.27 mM); Clear solution; Need ultrasonic					

BIOLOGICAL ACTIVITY

Description	ICA-069673 is a KCNQ2/Q3 potassium channel activator. ICA-069673 demonstrates greater selectivity for KV7.2/7.3 over KV7.3/KV7.5, with EC ₅₀ s of 0.69 μM and 14.3 μM, respectively. ICA-069673 inhibits spontaneous phasic and nerve-evoked contractions in guinea pig detrusor smooth muscle (DSM). ICA-069673 also decreases the global intracellular Ca(2+) concentration in DSM cells ^{[1][2]} .
IC ₅₀ & Target	IC ₅₀ : 0.69 μM (KV7.2/7.3), 14.3 μM (KV7.3/7.5) ^[1]
In Vitro	ICA-069673 (100 nM-30 μM) dose-dependently inhibits spontaneous phasic contraction, pharmacologically induced contraction, and 10 Hz EFS induced nerve-evoked contraction, in guinea pig DSM isolated strips ^[1] .

ICA-069673 (3 μ M, 10 μ M) inhibits 20 mM KCl induced DSM tonic contractions in guinea pig DSM isolated strips^[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Acta Pharmacol Sin. 2023 Mar 17.
- Research Square Print. September 6th, 2022

See more customer validations on www.MedChemExpress.com

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA