

LUF7244

Chemical Properties

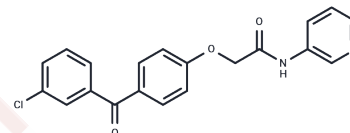
CAS No. : 1821638-43-0

Formula: C₂₀H₁₅ClN₂O₃

Molecular Weight: 366.8

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	LUF7244, a selective allosteric modulator of K _v 11.1 channels, effectively suppresses early afterdepolarizations and holds potential for anti-arrhythmia research [1].
Targets(IC50)	Others,Potassium Channel
In vitro	LUF7244, at concentrations ranging from 0 to 10 μM, specifically targets and binds to Kv11.1 channels in HEK293 cells, thereby enhancing the I _{Kv11.1} by preventing its inactivation in a dose-responsive manner [1]. In cardiomyocytes within the same concentration range, LUF7244 significantly shortens the action potential duration (APD) by about 50% and mitigates dofetilide-induced early afterdepolarizations (EAD) in isolated ventricular cardiomyocytes from both SR and CAVB dogs [1]. At a concentration of 10 μM, LUF7244 does not affect the currents I _{KIR2.1} , I _{Nav1.5} , I _{Ca-L} , and I _{Ks} , but it notably increases I _{Kr} twofold [1].
In vivo	LUF7244, administered intravenously at a dosage of 2.5 mg/kg over 15 minutes, effectively reduces repolarization parameters and exhibits antiarrhythmic properties, mitigating dofetilide-induced Torsades de Pointes (TdP) arrhythmias in dogs with chronic atrioventricular block (CAVB) [1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.7263 mL	13.6314 mL	27.2628 mL
5 mM	0.5453 mL	2.7263 mL	5.4526 mL
10 mM	0.2726 mL	1.3631 mL	2.7263 mL
50 mM	0.0545 mL	0.2726 mL	0.5453 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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