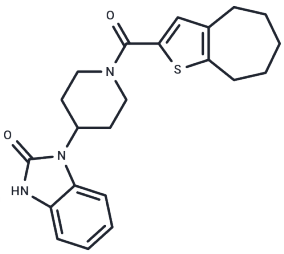
Data Sheet (Cat.No.T15425)

TargetMol

GSK1702934A

Chemical Properties



CAS No. : 924377-85-5

Formula: C22H25N3O2S

Molecular Weight: 395.52

Storage: Store at low temperature
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	GSK1702934A, a selective TRPC3 agonist, modulates cardiac contractility and arrhythmogenesis through TRPC3 activation.
Targets(IC50)	TRP/TRPV Channel
In vitro	GSK1702934A is capable of inducing TRPC3/6 currents in HEK293 cells transfected with recombinant human TRPC3/6 at EC50 values of 0.08 mM and 0.44 mM respectively, triggering transient, non-selective conductance and prolongation of action potentials in myocytes overexpressing TRPC3, and markedly enhancing NCX currents; however, these effects are not observed in wild-type myocytes[2].

Solubility Information

Solubility	DMSO: 80 mg/mL (202.27 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: 3.3 mg/mL (8.34 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	2.5283 mL	12.6416 mL	25.2832 mL
5 mM	0.5057 mL	2.5283 mL	5.0566 mL
10 mM	0.2528 mL	1.2642 mL	2.5283 mL
50 mM	0.0506 mL	0.2528 mL	0.5057 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

de la Cruz GG, et al. Intensified Microwave-Assisted N-Acylation Procedure - Synthesis and Activity Evaluation of TRPC3 Channel Agonists with a 1,3-Dihydro-2H-benzo[d]imidazol-2-one Core. Synlett. 2017 Apr;28(6):695-700.
Doleschal B, et al. TRPC3 contributes to regulation of cardiac contractility and arrhythmogenesis by dynamic interaction with NCX1. Cardiovasc Res. 2015 Apr 1;106(1):163-73.
Xu, X., et al. Schnackenberg, C. G. Characterization of Small Molecule TRPC3 and TRPC6 agonist and Antagonists. Biophysical Journal, 201104(2), 454a.