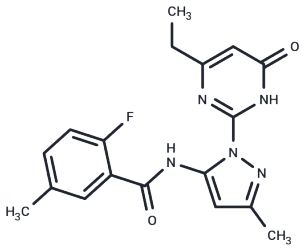
Data Sheet (Cat.No.T60003)

TargetMol

AC1-IN-1

Chemical Properties



CAS No. : 2762422-55-7

Formula: C18H18FN5O2

Molecular Weight: 355.37

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	AC1-IN-1 is a selective inhibitor of adenylyl cyclase type 1 (AC1, IC50 = 0.54 μM).
Targets(IC50)	AChR,Adenylate cyclase
In vitro	In HEK293 cells, AC1-IN-1 (30 μM, 1 hours) shows nontoxic to this human cell line[1].
In vivo	AC1-IN-1 (5.6 mg/kg; i.v.) exhibits statistically significant antiallodynic effects 1 hour post-treatment compared to the 0-minute time point[1].

Solubility Information

Solubility	DMSO: 11 mg/mL (30.95 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.814 mL	14.0698 mL	28.1397 mL
5 mM	0.5628 mL	2.814 mL	5.6279 mL
10 mM	0.2814 mL	1.407 mL	2.814 mL
50 mM	0.0563 mL	0.2814 mL	0.5628 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

Scott JA, et al. Optimization of a Pyrimidinone Series for Selective Inhibition of Ca2+/Calmodulin-Stimulated Adenylyl Cyclase 1 Activity for the Treatment of Chronic Pain. J Med Chem. 2022; 65(6):4667-4686.

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