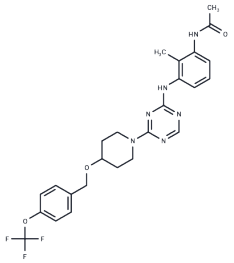
Data Sheet (Cat.No.T23439)

TargetMol

TC-N 1752

Chemical Properties



CAS No. : 1211866-85-1

Formula: C25H27F3N6O3

Molecular Weight: 516.52

Storage: Keep away from direct sunlight
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	TC-N 1752 is an orally active inhibitor of Nav1.7 channel with IC50 of 0.17 μM. TC-N 1752 shows analgesic activities.
Targets(IC50)	Sodium Channel
In vitro	TC-N 1752 exhibits IC50s of 0.2, 0.1, 1.6, 0.5 and 1.4 μM for hNav1.7, hNav1.8, hNav1.9, rNav1.9, and mNav1.9[1]. TC-N 1752 state-dependently inhibits Nav1.7 channel on channels that are 20% inactivated(IC50 = 170 nM) and on fully noninactivated channels (IC50 = 3.6 μM)[1].
In vivo	TC-N 1752 (5 mg/ml; i.v.) attenuates Freund's adjuvant-induced sensitization of C fiber nociceptors[2]. TC-N 1752 (3-30 mg/kg; orally) exhibits analgesic effects in a dose-dependent manner in a formalin model and reduces thermal hyperalgesia produced by inflammation[3].

Solubility Information

Solubility	DMSO: 112.5 mg/mL (217.8 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.936 mL	9.6802 mL	19.3603 mL
5 mM	0.3872 mL	1.936 mL	3.8721 mL
10 mM	0.1936 mL	0.968 mL	1.936 mL
50 mM	0.0387 mL	0.1936 mL	0.3872 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

Lin Z, et, al. Biophysical and Pharmacological Characterization of Nav1.9 Voltage Dependent Sodium Channels Stably Expressed in HEK-293 Cells. PLoS One. 2016 Aug 24;11(8):e0161450.
Matson DJ, et, al. Inhibition of Inactive States of Tetrodotoxin-Sensitive Sodium Channels Reduces Spontaneous Firing of C-Fiber Nociceptors and Produces Analgesia in Formalin and Complete Freund's Adjuvant Models of Pain. PLoS One. 2015 Sep 17;10(9):e013
Bregman H, et, al. Identification of a potent, state-dependent inhibitor of Nav1.7 with oral efficacy in the formalin model of persistent pain. J Med Chem. 2011 Jul 14;54(13):4427-45.