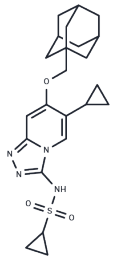
Data Sheet (Cat.No.TQ0014)

TargetMol

GNE-131

Chemical Properties



CAS No. : 1629063-81-5

Formula: C23H30N4O3S

Molecular Weight: 442.57

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	GNE-131 is a potent and specific inhibitor of human sodium channel NaV1.7 (IC50: 3 nM).
Targets(IC50)	Sodium Channel
In vitro	GNE-131 shows moderate clearance in human liver microsomes and excellent functional activity against human NaV1.7 (IC50: 0.003 μM).
In vivo	GNE-131 demonstrates low in vivo clearance in dogs, rats, and mice, and exhibits excellent efficacy in a transgenic mouse model of induced pain [1].

Solubility Information

Solubility	DMSO: 120 mg/mL (271.14 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: 4 mg/mL (9.04 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	2.2595 mL	11.2976 mL	22.5953 mL
5 mM	0.4519 mL	2.2595 mL	4.5191 mL
10 mM	0.226 mL	1.1298 mL	2.2595 mL
50 mM	0.0452 mL	0.226 mL	0.4519 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

Focken T, et al. Design of Conformationally Constrained Acyl Sulfonamide Isosteres: Identification of N-([1,2,4] Triazolo[4,3- a]pyridin-3-yl)methane-sulfonamides as Potent and Selective hNaV1.7 Inhibitors for the Treatment of Pain. J Med Chem. 2018 Jun 14;61(11):4810-4831.