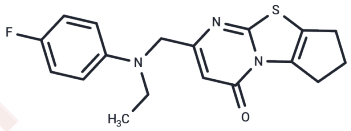
Data Sheet (Cat.No.T31981)

TargetMol

GNE-8324

Chemical Properties



CAS No. : 1698901-76-6

Formula: C18H18FN3OS

Molecular Weight: 343.42

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	GNE-8324 is a GluN2A selective positive allosteric modulator that selectively enhances NMDAR-mediated synaptic responses in inhibitory, but not excitatory, neurons.GNE-8324 is used in the study of neurological disorders.
Targets(IC50)	NMDAR,iGluR
In vitro	At GluN2A-type NMDARs, there is a reciprocal allosteric interaction between the binding sites for GNE-8324 and glutamate, meaning that glutamate binding promotes the binding of GNE-8324, and vice versa. GNE-8324 selectively enhances NMDARs containing the GluN2A subunit, with its potentiating effect significantly dependent on the occupancy of the glutamate site. The binding affinity of GNE-8324 is markedly higher in glutamate-bound NMDARs compared to those without bound glutamate. [1]

Solubility Information

Solubility	DMSO: 80 mg/mL (232.95 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 (11.65 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	2.9119 mL	14.5594 mL	29.1189 mL
5 mM	0.5824 mL	2.9119 mL	5.8238 mL
10 mM	0.2912 mL	1.4559 mL	2.9119 mL
50 mM	0.0582 mL	0.2912 mL	0.5824 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

Yao L, et al. Higher ambient synaptic glutamate at inhibitory versus excitatory neurons differentially impacts NMDA receptor activity. Nat Commun. 2018 Oct 1;9(1):4000.