

GNE-5729

Chemical Properties

CAS No. : 2026635-66-3

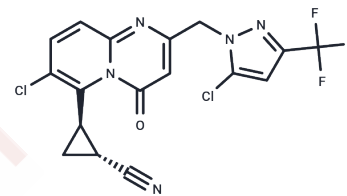
Formula: C₁₇H₁₀Cl₂F₃N₅O

Molecular Weight: 428.2

Store at low temperature

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-5729 is a positive allosteric modulator of NMDAR with the advantage of crossing the blood-brain barrier and being orally available, with EC ₅₀ values of 37 nM, 4.7 μM and 9.5 μM for GluN2A, GluN2C and GluN2D, respectively, and can be used for the study of neurological and psychiatric disorders.
Targets(IC50)	NMDAR,iGluR
In vitro	GNE-5729 is a brain-penetrant positive allosteric modulator of NMDA receptors, showing selective enhancement of GluN2A activity (EC ₅₀ = 37nM), with much weaker effects on GluN2C and GluN2D subtypes (EC ₅₀ = 4.7μM and 9.5μM, respectively) [1].

Solubility Information

Solubility	DMSO: 80 mg/mL (186.83 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 (7.71 mM),Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3354 mL	11.6768 mL	23.3536 mL
5 mM	0.4671 mL	2.3354 mL	4.6707 mL
10 mM	0.2335 mL	1.1677 mL	2.3354 mL
50 mM	0.0467 mL	0.2335 mL	0.4671 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

Villemure E, et al. GluN2A-Selective Pyridopyrimidinone Series of NMDAR Positive Allosteric Modulators with an Improved in Vivo Profile. ACS Med Chem Lett. 2016 Oct 31;8(1):84-89.

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