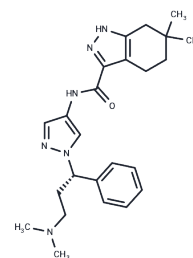


GNE-9822

Chemical Properties

CAS No. : 1557232-32-2
 Formula: C₂₄H₃₂N₆O
 Molecular Weight: 420.55
 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-9822 is a potent, orally active, and selective interleukin-2-inducible T-cell kinase (ITK) inhibitor with a K_i value of 0.7 nM and an EC_{50} value of 354.5 nM, exhibiting favorable ADME properties, GNE-9822 is extensively used in asthma and immunology research to explore T-cell signaling modulation and targeted anti-inflammatory therapeutic strategies.
Targets(IC ₅₀)	Tyrosine Kinases
In vitro	In cellular assays, GNE-9822 functioned as an inhibitor of Interleukin-2 Inducible T-Cell Kinase (ITK), inhibiting the phosphorylation of the downstream substrate Phospholipase C γ (PLC γ) with an IC_{50} of 55 nM. It was also referenced in degradation studies with an EC_{50} of 354.5 nM against ITK [1].

Solubility Information

Solubility	DMSO: 50 mg/mL (118.89 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3778 mL	11.8892 mL	23.7784 mL
5 mM	0.4756 mL	2.3778 mL	4.7557 mL
10 mM	0.2378 mL	1.1889 mL	2.3778 mL
50 mM	0.0476 mL	0.2378 mL	0.4756 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

Burch JD, et al. Property- and structure-guided discovery of a tetrahydroindazole series of interleukin-2 inducible T-cell kinase inhibitors. J Med Chem. 2014 Jul 10;57(13):5714-27.

Zhou D, et al. Discovery of Potent and Highly Selective Interleukin-2-Inducible T-Cell Kinase Degradable with In Vivo Activity. J Med Chem. 2023 Apr 13;66(7):4979-4998.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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