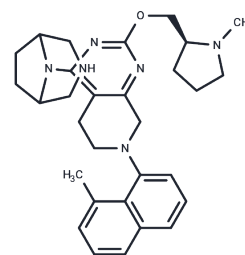


TH-Z827

Chemical Properties

CAS No. : 2847881-81-4
 Formula: C₃₀H₃₈N₆O
 Molecular Weight: 498.66
 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	TH-Z827 is a mutant-selective inhibitor targeting KRAS(G12D) with an IC ₅₀ of 2.4 μM, demonstrating specificity by not binding to KRAS(WT) or KRAS(G12C). Additionally, it disrupts the KRAS(G12D)-CRAF interaction with an IC ₅₀ of 42 μM [1].
Targets(IC ₅₀)	Ras
In vitro	In two pancreatic cancer cell lines bearing the KRAS G12D mutation (PANC-1 and Panc 04.03), TH-Z827 exhibited anti-proliferative effects with IC ₅₀ values of 4.4 and 4.7 μM, respectively. Treatment with TH-Z827 also resulted in reduced levels of pERK and pAKT in both PANC-1 and Panc 04.03 cells, confirming its ability to inhibit the activation of the MAPK and PI3K/mTOR signaling pathways [1].
In vivo	BALB/c nude mice were subcutaneously inoculated with Panc 04.03 cells and C57BL/6 mice with KPC cells. Within the nude mouse model, TH-Z827 (10-30mg/kg) significantly reduced tumor volume in a dose-dependent manner. However, intraperitoneal administration of 30mg/kg TH-Z827 resulted in observed weight loss, indicating potential off-target effects [1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0054 mL	10.0269 mL	20.0537 mL
5 mM	0.4011 mL	2.0054 mL	4.0107 mL
10 mM	0.2005 mL	1.0027 mL	2.0054 mL
50 mM	0.0401 mL	0.2005 mL	0.4011 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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