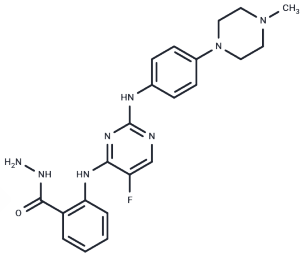
Data Sheet (Cat.No.T73549)

RSH-7

Chemical Properties



CAS No. : 2764609-97-2

Formula: C22H25FN8O

Molecular Weight: 436.49

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	RSH-7 is a potent dual inhibitor of BTK and FLT3, with IC50s of 47 and 12 nM, respectively.RSH-7 has antiproliferative and antitumor activities, inducing apoptosis and inhibiting BTK and FLT3 signaling.
Targets(IC50)	Apoptosis,FLT,BTK
In vitro	RSH-7 (1-1000 nM; 72 h) demonstrates antiproliferative activities against Jeko-1, MV-4-11, Molt4, and K562 cells with IC50 values of 17 nM, 3 nM, 11 nM, and 930 nM, respectively.[1] It dose-dependently reduces the expression of p-BTK (TYR223), p-PLCγ (Tyr1217), p-FLT3 (Tyr589), and p-STAT5 (TYR694), and triggers apoptosis while upregulating BAX, p53, and cleaved caspase 3 in Jeko-1 cells.[1]
In vivo	RSH-7 (25, 50 mg/kg; i.p.; daily for 16 days; Female NOD/SCID mice) suppressed tumor growth in a dose-dependent manner, with TGI values of 66.95% and 79.78% at doses of 25 and 50 mg/kg, respectively.[1]

Solubility Information

Solubility	DMSO: 75 mg/mL (171.83 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.291 mL	11.455 mL	22.910 mL
5 mM	0.4582 mL	2.291 mL	4.582 mL
10 mM	0.2291 mL	1.1455 mL	2.291 mL
50 mM	0.0458 mL	0.2291 mL	0.4582 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

Ran F, et al. Development of novel hydrazidoarylaminopyrimidine-based BTK/FLT3 dual inhibitors with potent in vivo anti-hematological malignancies effects. Eur J Med Chem. 2023 Jan 5;245(Pt 1):114913.