

RSH-7

## Chemical Properties

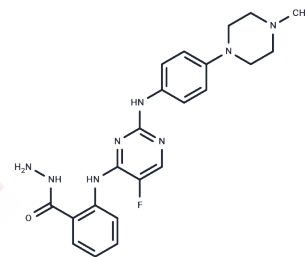
CAS No. : 2764609-97-2

Formula: C<sub>22</sub>H<sub>25</sub>FN<sub>8</sub>O

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 IC <sub>50</sub> s of 47 and 12 nM, respectively. RSH-7 has antiproliferative and antitumor activities, inducing apoptosis and inhibiting BTK and FLT3 signaling.
Targets(IC <sub>50</sub> )	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 IC <sub>50</sub> 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)
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### Preparing Stock Solutions

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	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

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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 hydrazidoarylamino-pyrimidine-based BTK/FLT3 dual inhibitors with potent in vivo anti-hematological malignancies effects. *Eur J Med Chem.* 2023 Jan 5;245(Pt 1):114913.

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