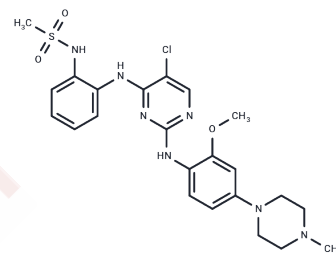


ZX-29

Chemical Properties

CAS No. : 2254805-62-2
 Formula: C₂₃H₂₈ClN₇O₃S
 Molecular Weight: 518.03
 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	ZX-29 is a potent and selective inhibitor of ALK with IC ₅₀ values of 2.1 nM, 1.3 nM, and 3.9 nM for ALK, ALK [L1196M], and ALK [G1202R] mutations, respectively. It also induces protective autophagy and exhibits antitumor effects.
Targets(IC ₅₀)	Apoptosis,ALK,Autophagy
In vitro	ZX-29 dose-dependently inhibits colony formation of NCI-H2228 cells. With an increase in ZX-29 concentration, the cell density decreased gradually, and the cells lost their normal morphology and become sharp and slender. In NCI-H2228 cells, ZX-29 (10 nM; 0-48 hours) inhibits the proliferation of and arrests the cells in G1 phase. ZX-29 (0-81 nM; 24-72 hours) treatment resulted in a decrease in the viability with time and dose. ZX-29 (10 nM; 24 hours) treatment causes typical signs of autophagy and the formation of autophagosomes and enhances the expression level of LC3 and Beclin1. ZX-29 (20 nM; 0-48 hours) treatment significantly increases the mRNA level of CHOP[1].
In vivo	In a mouse xenograft model, ZX-29 treatment suppresses tumor growth[1].

Solubility Information

Solubility	DMSO: 42.5 mg/mL (82.04 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: 2 mg/mL (3.86 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	1.9304 mL	9.652 mL	19.3039 mL
5 mM	0.3861 mL	1.9304 mL	3.8608 mL
10 mM	0.193 mL	0.9652 mL	1.9304 mL
50 mM	0.0386 mL	0.193 mL	0.3861 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

Gou W, et al. ZX-29, a novel ALK inhibitor, induces apoptosis via ER stress in ALK rearrangement NSCLC cells and overcomes cell resistance caused by an ALK mutation. *Biochim Biophys Acta Mol Cell Res.* 2020 Mar 26;1867(7): 118712.

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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