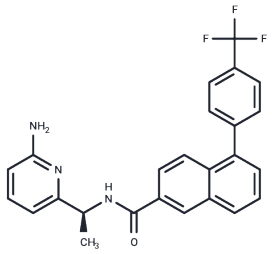
Data Sheet (Cat.No.T35545)

TargetMol

VT107

Chemical Properties



CAS No. : 2417718-63-7

Formula: C25H20F3N3O

Molecular Weight: 435.44

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	VT107 is a potent pan-TEAD autopalmitoylation inhibitor. VT-107 can be used in cancer therapy research.[1]
Targets(IC50)	YAP
In vitro	**METHODS**: HEK293T cells were treated with 3 μmol/L VT107 for 20 h. After incubation of cells with compounds and alkyne palmitate overnight, the relevant TEAD proteins were immunoprecipitated using specific TEAD antibodies, followed by click chemistry and streptavidin western blot analysis to examine the effects of these compounds on the palmitoylation of endogenous TEAD1, TEAD3, and TEAD4 proteins. **RESULTS** VT107 effectively blocked the palmitoylation of endogenous TEAD1 and TEAD3 proteins, and also effectively blocked the palmitoylation of endogenous TEAD4 protein. In addition, VT107 showed a strong inhibitory effect on the proliferation of NF2 mutant/deficient cell lines. [1]
In vivo	**METHODS**: VT107 was administered intravenously or orally at a dose of 10 mg/kg. Blood was drawn from the saphenous vein at designated time points. Compounds were quantified by LC/MS-MS using a QTRAP 6500 **RESULTS** The bioavailability of VT107 was 55%. The half-life after intravenous administration was 2.7 hours. [1]

Solubility Information

Solubility	DMSO: 260 mg/mL (597.1 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: 5 mg/mL (11.48 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2965 mL	11.4826 mL	22.9653 mL
5 mM	0.4593 mL	2.2965 mL	4.5931 mL
10 mM	0.2297 mL	1.1483 mL	2.2965 mL
50 mM	0.0459 mL	0.2297 mL	0.4593 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

Tang TT, et al . Small Molecule Inhibitors of TEAD Auto-palmitoylation Selectively Inhibit Proliferation and Tumor Growth of NF2-deficient Mesothelioma. Mol Cancer Ther. 2021 Jun;20(6):986-998.
Zhang S, Tan Y Q, Zhang X, et al.TFF3 drives Hippo dependent EGFR-TKI resistance in lung adenocarcinoma. Oncogene.2024: 1-16.