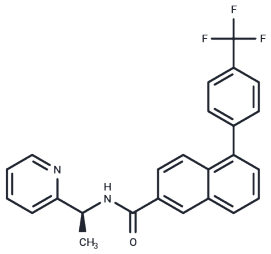
Data Sheet (Cat.No.T67872)

TargetMol

VT104

Chemical Properties



CAS No. : 2417718-25-1

Formula: C25H19F3N2O

Molecular Weight: 420.43

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	VT104 is a potent and orally active YAP/TAZ inhibitor for cancer research. VT104 blocks palmitoylation of endogenous TEAD1 and TEAD3 proteins.
Targets(IC50)	YAP
In vitro	**METHODS**: Huh7 cells were treated with the pan-TEAD inhibitor VT104 (0.1, 0.5, 1, 2.5, 5 μM) for 72 h and then subjected to WST assay to assess cell number or 24 h for qPCR of ANKRD1, ANLN, and KIF23. **RESULTS** VT104 reduced Huh7 cell proliferation and inhibited the TAZ-TEAD pathway, with reduced expression of TAZ-TEAD targets ANLN, KIF23, ANKRD1, CTGF, and CD274 in Huh7 cells. [3]
In vivo	**METHODS**: Mice after MET+CTNNB1-S45Y HTVI were treated with VT104 (10 mg/kg/day) for 6 weeks. **RESULTS** VT104 strongly inhibited HCC development in vivo driven by MET+CTNNB1-S45Y; VT104 significantly reduced Ki67+ proliferation and γH2AX-positive hepatocytes. [3]

Solubility Information

Solubility	DMSO: 250 mg/mL (594.63 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: 10 mg/mL (23.79 mM),Solution. 10% DMSO+90% Saline: < 10 mg/mL (23.79 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. *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	2.3785 mL	11.8926 mL	23.7852 mL
5 mM	0.4757 mL	2.3785 mL	4.757 mL
10 mM	0.2379 mL	1.1893 mL	2.3785 mL
50 mM	0.0476 mL	0.2379 mL	0.4757 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

Barry ER, et al. Recent Therapeutic Approaches to Modulate the Hippo Pathway in Oncology and Regenerative Medicine. Cells. 2021 Oct 11;10(10):2715.

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

Saito Y, et al. A Therapeutically Targetable TAZ-TEAD2 Pathway Drives the Growth of Hepatocellular Carcinoma via ANLN and KIF2Gastroenterology. 2023 Jun;164(7):1279-1292.