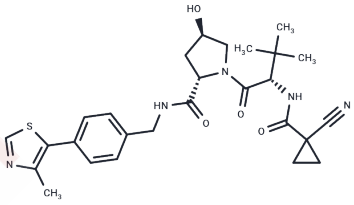
Data Sheet (Cat.No.TQ0121)

TargetMol

VH-298

Chemical Properties



CAS No. : 2097381-85-4

Formula: C27H33N5O4S

Molecular Weight: 523.65

Storage: Keep away from direct sunlight
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	VH-298 is a potent inhibitor of VHL that stabilizes HIF-α and elicits a hypoxic response via a different mechanism, that is the blockade of the VHL:HIF-α protein-protein interaction downstream of HIF-α hydroxylation by PHD enzymes.
Targets(IC50)	HIF/HIF Prolyl-Hydroxylase,HIF,Ligands for E3 Ligase
In vitro	VH298, a potent VHL inhibitor that stabilizes HIF-α and elicits a hypoxic response via a different mechanism, that is the blockade of the VHL:HIF-α protein-protein interaction downstream of HIF-α hydroxylation by PHD enzymes.?We show that VH298 engages with high affinity and specificity with VHL as its only major cellular target, leading to selective on-target accumulation of hydroxylated HIF-α in a concentration- and time-dependent fashion in different cell lines, with subsequent upregulation of HIF-target genes at both mRNA and protein levels.?VH298 represents a high-quality chemical probe of the HIF signalling cascade and an attractive starting point to the development of potential new therapeutics targeting hypoxia signalling.

Solubility Information

Solubility	DMSO: 78.3 mg/mL (149.53 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 (3.82 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	1.9097 mL	9.5484 mL	19.0967 mL
5 mM	0.3819 mL	1.9097 mL	3.8193 mL
10 mM	0.191 mL	0.9548 mL	1.9097 mL
50 mM	0.0382 mL	0.191 mL	0.3819 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

Frost J, et al. Potent and selective chemical probe of hypoxic signalling downstream of HIF-α hydroxylation via VHL inhibition. Nat Commun. 2016 Nov 4;7:13312.
Wang J, Wen Y, Zhang Y, et al.An interpretable artificial intelligence framework for designing synthetic lethality-based anti-cancer combination therapies.Journal of Advanced Research.2023