(S,R,S)-AHPC-C5-COOH

Cat. No.: HY-136055

CAS No.: 2267282-19-7

Molecular Formula: $C_{29}H_{42}N_4O_5S$

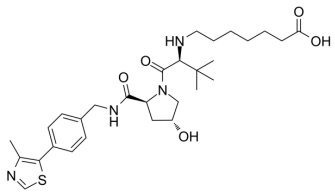
Molecular Weight: 558.73

Target: E3 Ligase Ligand-Linker Conjugates; HIF/HIF Prolyl-Hydroxylase

Pathway: PROTAC; Metabolic Enzyme/Protease

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (178.98 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	1.7898 mL	8.9489 mL	17.8977 mL
	5 mM	0.3580 mL	1.7898 mL	3.5795 mL
	10 mM	0.1790 mL	0.8949 mL	1.7898 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: 2.5 mg/mL (4.47 mM); Clear solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: 2.5 mg/mL (4.47 mM); Clear solution; Need ultrasonic
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: 2.5 mg/mL (4.47 mM); Clear solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

(S,R,S)-AHPC-C5-COOH (VH032-C5-COOH) is a synthesized E3 ligase ligand-linker conjugate, contains the VH032 VHL-based ligand and a linker to form PROTACs. VH-032 is a selective and potent inhibitor of VHL/HIF-1α interaction with a K_d of 185 nM, has the potential for the study of anemia and ischemic diseases[1].

IC_{50} & Target

VHL

In Vitro

PROTACs contain two different ligands connected by a linker; one is a ligand for an E3 ubiquitin ligase and the other is for

the target protein.
PROTACs exploit the intracellular ubiquitin-proteasome system to selectively degrade target proteins.The von Hippel–Lindau tumor suppressor protein is the substrate-binding subunit of the VHL E3 ubiquitin ligase, it targets hydroxylated α subunit of HIFs for ubiquitination and subsequent proteasomal degradation.
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Soares P, et al. Group-Based Optimization of Potent and Cell-Active Inhibitors of the von Hippel-Lindau (VHL) E3 Ubiquitin Ligase: Structure-Activity Relationships Leading to the Chemical Probe (2S,4R)-1-((S)-2-(1-Cyanocyclopropanecarboxamido)-3,3-dimethy

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