(2R,4S)-1-(tert-Butoxycarbonyl)-4-hydroxypyrrolidine-2-carboxylic acid

Cat. No.: HY-77593

CAS No.: 147266-92-0

Molecular Formula: $C_{10}H_{17}NO_5$

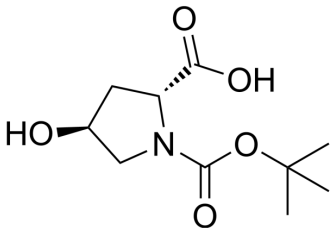
Molecular Weight: 231.25

Target: ADC Linker; PROTAC Linkers

Pathway: Antibody-drug Conjugate/ADC Related; PROTAC

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 (432.43 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	4.3243 mL	21.6216 mL	43.2432 mL
	5 mM	0.8649 mL	4.3243 mL	8.6486 mL
	10 mM	0.4324 mL	2.1622 mL	4.3243 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 (10.81 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (10.81 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (10.81 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

N-tert-Butoxycarbonyl-trans-4-hydroxy-D-proline is a non-cleavable ADC linker used in the synthesis of antibody-drug conjugates (ADCs). N-tert-Butoxycarbonyl-trans-4-hydroxy-D-proline is also a alkyl chain-based PROTAC linker that can be used in the synthesis of PROTACs.

IC_{50} & Target

Non-cleavable

In Vitro

ADCs are comprised of an antibody to which is attached an ADC cytotoxin through an ADC linker[1].

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[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Beck A, et al. Strategies and challenges for the next generation of antibody-drug conjugates. Nat Rev Drug Discov. 2017;16(5):315-337.

[2]. Nalawansha DA, et al. PROTACs: An Emerging Therapeutic Modality in Precision Medicine. Cell Chem Biol. 2020;27(8):998-985.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA