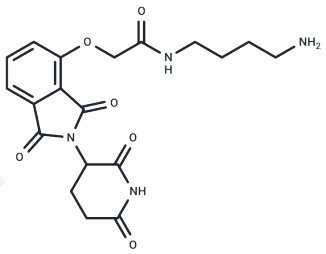
Data Sheet (Cat.No.T17818)

TargetMol

Thalidomide-O-amido-C4-NH2

Chemical Properties



CAS No. : 1799711-24-2

Formula: C19H22N4O6

Molecular Weight: 402.4

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	Thalidomide-O-amido-C4-NH2 (Cereblon Ligand-Linker Conjugates 6) is a synthesized compound combining a Thalidomide-based cereblon ligand with a linker, serving as an E3 ligase ligand-linker conjugate for the synthesis of PROTACs[1].
Targets(IC50)	Apoptosis,Others,Autophagy,E3 Ligase Ligand-Linker Conjugates,PROTAC Linker
In vitro	Thalidomide-O-amido-C4-NH2, also known as Compound 41, serves as an amine intermediate in the synthesis of heterobifunctional PROTAC BET degraders. These degraders target the bromodomain and extra-terminal (BET) family of proteins—BRD2, BRD3, BRD4, and BRDT—which are crucial in gene transcription regulation and are attractive therapeutic targets for cancer and other diseases. Utilizing the proteolysis targeting chimera (PROTAC) approach, these small molecules induce the degradation of BET proteins. Specifically, Thalidomide-O-amido-C4-NH2 functions as a degron-linker (Compound DL6-TL), a structure that covalently links a degron to a targeting ligand. The degron binds to an E3 ubiquitin ligase (e.g., cereblon), facilitating the targeted degradation of the protein(s) bound by the targeting ligand.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4851 mL	12.4254 mL	24.8509 mL
5 mM	0.497 mL	2.4851 mL	4.9702 mL
10 mM	0.2485 mL	1.2425 mL	2.4851 mL
50 mM	0.0497 mL	0.2485 mL	0.497 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

Zhou B, et al. Discovery of a Small-Molecule Degrader of Bromodomain and Extra-Terminal (BET) Proteins withPicomolar Cellular Potencies and Capable of Achieving Tumor Regression.J Med Chem. 2018 Jan 25;61(2):462-481.

James Bradner, et al. Methods to induce targeted protein degradation through bifunctional molecules. WO 2017024317 A2.