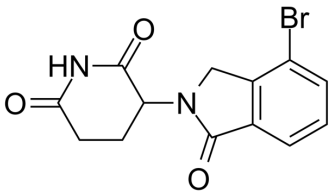
Lenalidomide-Br

Cat. No.:	HY-43722
CAS No.:	2093387-36-9
Molecular Formula:	$C_{13}H_{11}BrN_2O_3$
Molecular Weight:	323.14
Target:	Ligands for E3 Ligase
Pathway:	PROTAC
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 2 years -20°C 1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 10 mg/mL (30.95 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	3.0946 mL	15.4732 mL	30.9463 mL
	5 mM	0.6189 mL	3.0946 mL	6.1893 mL
	10 mM	0.3095 mL	1.5473 mL	3.0946 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: ≥ 1 mg/mL (3.09 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 1 mg/mL (3.09 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 1 mg/mL (3.09 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Lenalidomide-Br (Compound 41) is an analog of cereblon (CRBN) ligand Lenalidomide for E3 ubiquitin ligase, and is used in the recruitment of CRBN protein. Lenalidomide-Br can be connected to the ligand for protein by a linker to form PROTACs, such as the PROTAC STAT3 degrader SD-36 (HY-129602)[1][2].

IC_{50} & Target

Cereblon

In Vitro

Lenalidomide-Br can be connected to the ligand for protein by a linker to form PROTACs. PROTACs are inducers of

ubiquitination-mediated degradation of cancer-promoting proteins[1][2].

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

REFERENCES

[1]. Bai L, et al. A Potent and Selective Small-Molecule Degrader of STAT3 Achieves Complete Tumor Regression In Vivo. Cancer Cell. 2019 Nov 11;36(5):498-511.e17.

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

Caution: Product has not been fully validated for medical applications. For research use only.

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