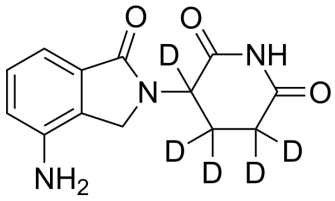
Lenalidomide-d_5

Cat. No.:	HY-A0003S
CAS No.:	1227162-34-6
Molecular Formula:	$C_{13}H_8D_5N_3O_3$
Molecular Weight:	264.29
Target:	Apoptosis; Ligands for E3 Ligase; Molecular Glues; Isotope-Labeled Compounds
Pathway:	Apoptosis; PROTAC; Others
Storage:	Powder -20°C 3 years In solvent -80°C 6 months -20°C 1 month



BIOLOGICAL ACTIVITY

Description	Lenalidomide-d_5 is deuterium labeled Lenalidomide. Lenalidomide (CC-5013), a derivative of Thalidomide, acts as molecular glue. Lenalidomide is an orally active immunomodulator. Lenalidomide (CC-5013) is a ligand of ubiquitin E3 ligase cereblon (CRBN), and it causes selective ubiquitination and degradation of two lymphoid transcription factors, IKZF1 and IKZF3, by the CRBN-CRL4 ubiquitin ligase. Lenalidomide (CC-5013) specifically inhibits growth of mature B-cell lymphomas, including multiple myeloma, and induces IL-2 release from T cells[1][2].
In Vitro	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

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[5]. Minzel W, et al. Small Molecules Co-targeting CKIα and the Transcriptional Kinases CDK7/9 Control AML in Preclinical Models. Cell. 2018 Sep 20;175(1):171-185.e25.

[6]. Nagashima, Takeyuki, et al. PHARMACEUTICAL COMPOSITION COMPRISING BICYCLIC NITROGEN-CONTAINING AROMATIC HETEROCYCLIC AMIDE COMPOUND AS ACTIVE INGREDIENT. Patent. 20170360780A1.

[7]. Omran A, et al. Effects of MRP8, LPS, and lenalidomide on the expressions of TNF-α , brain-enriched, and inflammation-related microRNAs in the primary astrocyte culture. ScientificWorldJournal. 2013 Sep 21;2013:208309.

[8]. Rozewski DM, et al. Pharmacokinetics and tissue disposition of lenalidomide in mice. AAPS J. 2012 Dec;14(4):872-82.

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

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