Product Data Sheet

Phthalimidinoglutarimide-5-piperazine

Cat. No.: HY-163233 Molecular Formula: $C_{17}H_{20}N_4O_3$ Molecular Weight: 328.37

Target: Ligands for E3 Ligase; Autophagy

Pathway: PROTAC; Autophagy

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

BIOLOGICAL ACTIVITY

Description	Phthalimidinoglutarimide-5-piperazine is a conjugate of E3 ligase ligand and linker, consisting of Thalidomide (HY-14658) and the corresponding Linker. Phthalimidinoglutarimide-5-piperazine can serve as a Cereblon ligand to recruit CRBN protein and serve as a key intermediate for the synthesis of complete PROTAC molecules.
IC ₅₀ & Target	Cereblon (CRBN) ^[1]

REFERENCES

[1]. Fischer ES, et al. Structure of the DDB1-CRBN E3 ubiquitin ligase in complex with thalidomide. Nature. 2014 Aug 7;512(7512):49-53.

[2]. Sun X, et al. Synergistic Inhibition of Thalidomide and Icotinib on Human Non-Small Cell Lung Carcinomas Through ERK and AKT Signaling. Med Sci Monit. 2018 May 15;24:3193-3203.

[3]. Bian C, et al. Thalidomide (THD) alleviates radiation induced lung fibrosis (RILF) via down-regulation of TGF-\(\beta\)/Smad3 signaling pathway in an Nrf2-dependent manner. Free Radic Biol Med. 2018 Dec;129:446-453.

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

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