

## **Lumiprobe Corporation**

115 Airport Dr Suite 160 Westminster, Maryland 21157

USA

Phone: +1 888 973 6353 Fax: +1 888 973 6354 Email: order@lumiprobe.com

## Thalidomide-carboxylic acid

http://www.lumiprobe.com/p/thalidomide-acid

Thalidomide-containing building block with carboxylic acid functionality for convenient PROTAC molecule assembly by attachment amino-functionalized linkers and ligands to thalidomide via 4-O-position.

Proteolysis targeting chimeras (PROTACs) are cell-permeable heterobifunctional molecules that can remove specific proteins from the cell. One end of such molecule contains a ligand to bind to the target, and the second end recruits the E3 ligase complex. Close proximity results in substrate polyubiquitination and subsequent protein degradation by cellular proteasome.

There are several types of E3 ligases that are practically suitable for such a purpose. Thalidomide is the ligand capable of recruiting Cereblon (CRBN) E3 ligase.

$$O = \bigvee_{N \to 0} O \to O \to O \to O \to O$$

## Structure of Thalidomide-carboxylic acid

## **General properties**

Appearance: beige powder

Molecular weight: 332.27

CAS number: 1061605-21-7 Molecular formula:  $C_{15}H_{12}N_2O_7$  Solubility: DMF, DMSO

Quality control: NMR <sup>1</sup>H and HPLC-MS (95+%)

Storage conditions: 24 months after receival at -20°C in the dark. Transportation: at room temperature for up to 3 weeks.

Desiccate.

Legal statement: Product is offered and sold for research purposes only. Product is not tested for safety and efficacy in

food, drug, medical device, cosmetic, no express or implied authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, for humans or animals or for commercial

purposes.