Thalidomide-4-OH

Cat. No.: HY-103596

CAS No.: 5054-59-1

Molecular Formula: $C_{13}H_{10}N_2O_5$

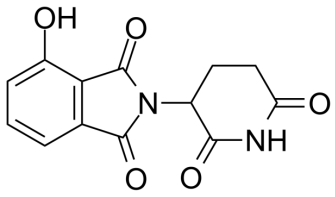
Molecular Weight: 274.23

Target: Ligands for E3 Ligase

Pathway: PROTAC

Storage: 4°C, stored under nitrogen

* In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 36.5 mg/mL (133.10 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions

Mass / Solvent / Concentration	1 mg	5 mg	10 mg
1 mM	3.6466 mL	18.2329 mL	36.4657 mL
5 mM	0.7293 mL	3.6466 mL	7.2931 mL
10 mM	0.3647 mL	1.8233 mL	3.6466 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: 2.5 mg/mL (9.12 mM); Suspended solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (9.12 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (9.12 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Thalidomide-4-OH (Cereblon ligand 2) is the Thalidomide-based Cereblon ligand used in the recruitment of CRBN protein. Thalidomide-4-OH (Cereblon ligand 2) can be connected to the ligand for protein by a linker to form PROTACs[1].

IC_{50} & Target

Cereblon

In Vitro

Thalidomide may exert anti-angiogenic effect in isolated blood vessels and endothelial cells. Thalidomide-OH is a putative hydroxylated thalidomide metabolite. Thalidomide-OH has weak anti-angiogenic activity (14% mean inhibition of blood vessel density at 100 mg). Thalidomide-OH does not have any anti-proliferative effect against the breast or neuroblastoma

cells, but do possess appreciable anti-proliferative activity against the endothelial cells[1].

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

REFERENCES

[1]. Marks MG, et al. Effects of putative hydroxylated thalidomide metabolites on blood vessel density in the chorioallantoic membrane (CAM) assay and on tumor and endothelial cell proliferation. Biol Pharm Bull. 2002 May;25(5):597-604.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA