

Thalidomide

Catalog No: tcsc1084



Available Sizes

Size: 200mg

Size: 500mg



Specifications

CAS No:

50-35-1

Formula:

$C_{13}H_{10}N_2O_4$

Pathway:

Metabolic Enzyme/Protease

Target:

E1/E2/E3 Enzyme

Purity / Grade:

>98%

Solubility:

DMSO : 50 mg/mL (193.63 mM; Need ultrasonic)

Observed Molecular Weight:

258.23

Product Description

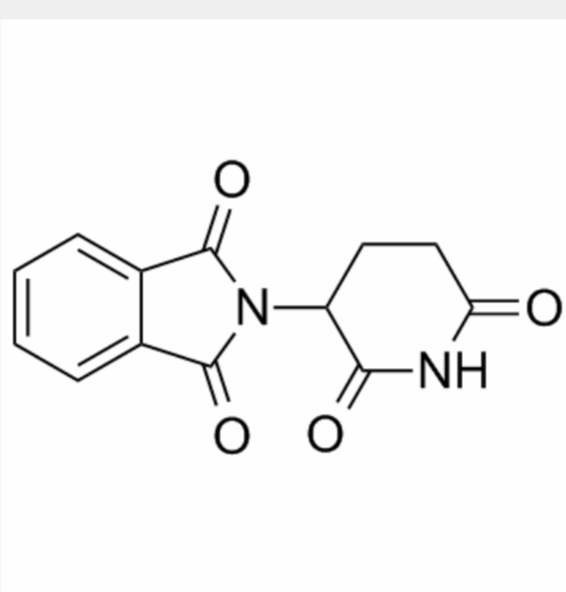
Thalidomide is initially promoted as a sedative, inhibits cereblon (CRBN), a part of the **cullin-4 E3 ubiquitin ligase** complex CUL4-RBX1-DDB1, with a K_d of ~250 nM, and has immunomodulatory, anti-inflammatory and anti-angiogenic cancer properties.

IC50 & Target: Kd: ~250 nM (CUL4^{CRBN})^[1]

In Vitro: Thalidomide is initially promoted as a sedative, has immunomodulatory, anti-inflammatory and anti-angiogenic cancer

properties, and targets cereblon (CRBN), a part of the cullin-4 E3 ubiquitin ligase complex CUL4-RBX1-DDB1, with a K_d of ~ 250 nM^[1]. Thalidomide (50 μ g/mL) potentiates the anti-tumor activity of icotinib against the proliferation of both PC9 and A549 cells, and this effect is correlated with apoptosis and cell migration. In addition, Thalidomide and icotinib inhibits the EGFR and VEGF-R2 pathways in PC9 cells^[3].

In Vivo: Thalidomide (100 mg/kg, p.o.) inhibits the collagen deposition, down-regulates the mRNA expression level of α -SMA and collagen I, and significantly reduces the pro-inflammatory cytokines in RILF mice. Thalidomide alleviates RILF via suppression of ROS and down-regulation of TGF- β /Smad pathway dependent on Nrf2 status^[2]. Thalidomide (200 mg/kg, p.o.) combined with icotinib shows synergistic anti-tumor effects in nude mice bearing PC9 cells, suppressing tumor growth and promoting tumor death^[3].



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