Data Sheet (Cat.No.T212062)

TargetMol

PROTAC HPK1 Degrader-5

Chemical Properties

CAS No. :

Formula:

Molecular Weight:

Storage: Keep away from direct sunlight
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	PROTACHPK1 Degrader-5 is a potent, orally active HPK1 PROTAC degrader with a DC50 of 5.0 nM and a Dmax of at least 99%. It significantly inhibits HPK1 by degrading it, reducing SLP76 phosphorylation, and enhancing ERK pathway activation, which in turn stimulates the release of IL-2 and IFN-γ. This compound effectively counteracts immune suppression induced by PGE2, NECA, or TGF-β. Alone, PROTACHPK1 Degrader-5 is capable of suppressing tumor growth in MC38 syngeneic mouse models. It is used in research for immunotherapy applications in cancers such as colorectal cancer.
Targets(IC50)	ERK,MAPK,IFNAR,Interleukin,PROTACs
In vitro	PROTAC HPK1 Degrader-5 (Compound 10m) at 30 nM, after 24 hours, facilitates the degradation of HPK1 in Jurkat cells, relying on the ubiquitin-proteasome system (UPS), CRBN, HPK1, and CRBN. At a concentration of 10 nM, this compound significantly and dose-dependently inhibits phosphorylation of SLP76 in Jurkat cells and in PBMCs stimulated with anti-CD3/CD28 antibodies, while enhancing activation of extracellular signal-regulated kinase (ERK), which aligns with HPK1 degradation.
In vivo	PROTAC HPK1 Degrader-5 (Compound 10m), administered orally at doses of 0.5-3 mg/kg every other day for 14 days, significantly inhibits tumor growth in MC38 syngeneic mouse models. When combined with a PD-1 inhibitor, it achieves superior antitumor effects.