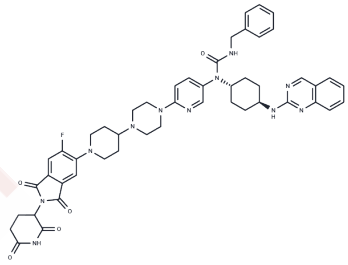
Data Sheet (Cat.No.T200845)

TargetMol

YJ1206

Chemical Properties



CAS No. : 3053716-98-3

Formula: C49H52FN11O5

Molecular Weight: 894.01

Storage: Store at low temperature
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	YJ1206 is a highly potent and selective CDK12/13 PROTAC degrader (IC50 =12.55 nM) with the advantages of oral administration and low toxicity, which triggers gene-length-dependent transcription elongation defects, leading to DNA damage and cell-cycle arrest, and inhibits the proliferation of a subpopulation of prostate cancer cells. YJ1206 can synergize with AKT pathway inhibitors to effectively inhibit prostate cancer.
Targets(IC50)	Apoptosis,CDK,PROTACs
In vitro	VCaP and 22Rv1 prostate cancer cells were treated with YJ1206 at concentrations ranging from 0 to 500 nM for 4 to 15 hours. Experiments included Western blot, RNA-seq, proteomics, and qPCR to evaluate degradation of CDK12/13 and downstream effects. YJ1206 showed an IC_{50} of 12.55 nM in VCaP cells and exhibited potent antiproliferative activity[1].
In vivo	In CD-1 immunocompetent mice bearing VCaP-CRPC, WA74 PDX, or PC310 PDX prostate tumor xenografts, YJ1206 was administered orally at 100 mg/kg, 3 times per week, for up to 21 days. Tumor samples were analyzed by Western blot, H&E staining, IHC, and TUNEL assays. YJ1206 significantly suppressed tumor growth with minimal observed toxicity[1].

Solubility Information

Solubility	DMSO: 50 mg/mL (55.93 mM),Sonication and heating are recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.1186 mL	5.5928 mL	11.1856 mL
5 mM	0.2237 mL	1.1186 mL	2.2371 mL
10 mM	0.1119 mL	0.5593 mL	1.1186 mL
50 mM	0.0224 mL	0.1119 mL	0.2237 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Chang Y,et al. Development of an orally bioavailable CDK12/13 degrader and induction of synthetic lethality with AKT pathway inhibition. Cell Rep Med. 2024 Oct 15;5(10):101752.