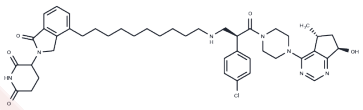
Data Sheet (Cat.No.T11664)

TargetMol

INY-03-041

Chemical Properties



CAS No. :

Formula: C44H56ClN7O5

Molecular Weight: 798.41

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	INY-03-041, a potent and highly selective PROTAC-based pan-AKT degrader, inhibits AKT1, AKT2, and AKT3 with IC50s of 2.0 nM, 6.8 nM, and 3.5 nM, respectively. This compound consists of the ATP-competitive AKT inhibitor GDC-0068 conjugated to Lenalidomide.
Targets(IC50)	Akt,PROTACs
In vitro	INY-03-041 exhibits potent in vitro inhibition of S6K1 (IC50 =37.3 nM) and PKG1 (IC50 = 33.2 nM). INY-03-041 displays enhanced anti-proliferative effects compared with GDC-0068 in MDA-MB-468 and HCC1937 cells.INY-03-041 (10-1000 nM; 2-24 hours; MDA-MB-468 cells) treatment induces potent degradation of all three AKT isoforms in a dose-dependent manner after a 12-h treatment, with maximal degradation observed between 100 and 250 nM. At concentrations of 500 nM and greater, AKT degradation is diminished. Treatment with 250 nM of INY-03-041 over time reveals partial degradation of all AKT isoforms within 4 h and progressive loss of AKT abundance out to 24 h.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.2525 mL	6.2624 mL	12.5249 mL
5 mM	0.2505 mL	1.2525 mL	2.505 mL
10 mM	0.1252 mL	0.6262 mL	1.2525 mL
50 mM	0.025 mL	0.1252 mL	0.2505 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

You I, et al. Discovery of an AKT Degrader with Prolonged Inhibition of Downstream Signaling. Cell Chem Biol. 2020 Jan 16;27(1):66-73.e7.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481