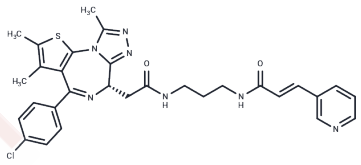
Data Sheet (Cat.No.T210348)

TargetMol

BRD4/NAMPT-IN-1

Chemical Properties



CAS No. : 3049218-28-9

Formula: C30H30ClN7O2S

Molecular Weight: 588.12

Storage: 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	BRD4/NAMPT-IN-1 (Compound A2) exhibits strong inhibitory effects on NAMPT and BRD4, with IC50 values of 35 nM (NAMPT) and 58 nM (BRD4). This compound significantly suppresses the growth and migration of liver cancer cells while promoting apoptosis. Additionally, BRD4/NAMPT-IN-1 demonstrates potent anticancer activity in HCCLM3 xenograft mouse models without noticeable toxicity.
Targets(IC50)	Epigenetic Reader Domain,NAMPT
In vitro	BRD4/NAMPT-IN-1 exhibits IC 50 values of 12 nM for BRD4(BD1) and 41 nM for BRD4 (BD2) against other members of the BET family. It inhibits cancer cell proliferation with IC 50 values of 2.37 μM in Hep3B, 6.49 μM in Huh7, 5.44 μM in HCCLM3, and 9.51 μM in LX-2 cells. Treating Hep3B cells with BRD4/NAMPT-IN-1 (1-10 μM; 72 h) suppresses the expression of BRD4-upregulated oncogenes, reduces NAPRT and NAMPT levels, significantly increases cell arrest in the G0/G1 phase, induces apoptosis in a dose-dependent manner, and inhibits cell migration ability. Additionally, BRD4/NAMPT-IN-1 (1-10 μM; 72 h) reduces NAD+ concentration in Hep3B and HCCLM3 cells in a dose-dependent fashion.
In vivo	Administered intraperitoneally (i.p.) at 40 mg/kg/day and 80 mg/kg/day for 27 consecutive days, BRD4/NAMPT-IN-1 shows a dose-dependent tumor suppressive effect in HCCLM3 xenograft nude mice.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.7003 mL	8.5017 mL	17.0033 mL
5 mM	0.3401 mL	1.7003 mL	3.4007 mL
10 mM	0.170 mL	0.8502 mL	1.7003 mL
50 mM	0.034 mL	0.170 mL	0.3401 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.

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