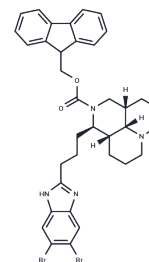


TOPOI/PARP-1-IN-1

Chemical Properties

CAS No. :	2948352-16-5
Formula:	C ₃₆ H ₃₈ Br ₂ N ₄ O ₂
Molecular Weight:	718.52
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	Compound B6, also known as TOPOI/PARP-1-IN-1, is a dual inhibitor targeting TOPOI and PARP, exhibiting low cytotoxicity and oral activity with a PARP1 IC ₅₀ of 0.09 μM. This compound effectively inhibits cancer cell proliferation and migration, induces cell cycle arrest at the G ₀ /G ₁ phase, and triggers apoptosis. In murine models, TOPOI/PARP-1-IN-1 demonstrated a tumor growth inhibition rate (TGI) of 75.4% [1].
Targets(IC ₅₀)	Apoptosis,PARP,Topoisomerase
In vitro	TOPOI/PARP-1-IN-1, at concentrations of 1.25-5 μM over 48 hours, inhibits the proliferation and migration of HGC-27 cells in a concentration-dependent manner. Within 24 hours and at the same concentration range, it induces apoptosis in a dose-dependent way in HGC-27 cells. It also causes DNA damage and suppresses TOPOI protein expression in these cells. Demonstrating antitumor activity, TOPOI/PARP-1-IN-1 shows IC ₅₀ values of 7.21 μM, 9.48 μM, 3.80 μM, and 2.49 μM against HeLa, A549, HepG-2, and HGC-27 cells, respectively. In a cell proliferation assay, HGC-27 cells treated with 1.25, 2.5, and 5 μM concentrations over 48 hours showed a dose-dependent inhibition of clonogenicity. Apoptosis analysis of HGC-27 cells revealed apoptosis induction rates of 15.5%, 43.1%, and 76.0% for the same concentrations over 24 hours.
In vivo	TOPOI/PARP-1-IN-1, administered orally at 40 mg/kg every two days for 17 days, inhibited the growth of HGC-27 tumors in a xenograft model using female BALB/c nude mice, resulting in a tumor growth inhibition (TGI) rate of 75.4% [1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.3917 mL	6.9587 mL	13.9175 mL
5 mM	0.2783 mL	1.3917 mL	2.7835 mL
10 mM	0.1392 mL	0.6959 mL	1.3917 mL
50 mM	0.0278 mL	0.1392 mL	0.2783 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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