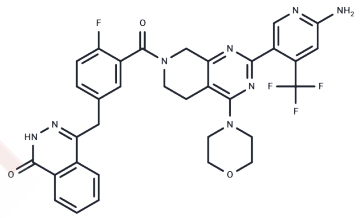
Data Sheet (Cat.No.T12365)

TargetMol

PARP/PI3K-IN-1

Chemical Properties



CAS No. : 2337386-47-5

Formula: C33H28F4N8O3

Molecular Weight: 660.62

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	PARP/PI3K-IN-1 is a novel dual poly (ADP-ribose) polymerase (PARP) and phosphatidylinositol 3-kinase (PI3K) dual inhibitor with anticancer, antitumour and antiproliferative activities for the study of breast, pancreatic and lung cancers.
Targets(IC50)	Apoptosis,PARP,PI3K
In vitro	PARP/PI3K-IN-1 (1 μM; 72 h) decreased the levels of self-phosphorylation of AKT and S6, while increasing the phosphorylation levels of ERK following treatment, indicating the inhibition of the PI3K pathway and activation of the ERK pathway by PARP/PI3K-IN-1, resulting in significantly increased apoptosis.[1]. In BRCA-deficient cells, PARP/PI3K-IN-1 not only exhibits significant inhibitory activity against HCC1937 and HCT116, but also demonstrates anti-proliferative activity against MDA-MB-231 and MDA-MB-468 [1].
In vivo	PARP/PI3K-IN-1 (IP; 50 mg/kg; treatment for 34 days) significantly inhibits tumor growth [1].

Solubility Information

Solubility	DMSO: 75 mg/mL (113.53 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.3 mg/mL (5 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.5137 mL	7.5686 mL	15.1373 mL
5 mM	0.3027 mL	1.5137 mL	3.0275 mL
10 mM	0.1514 mL	0.7569 mL	1.5137 mL
50 mM	0.0303 mL	0.1514 mL	0.3027 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

Wang J, et al.Discovery of Novel Dual Poly(ADP-ribose)polymerase and Phosphoinositide 3-Kinase Inhibitors as a Promising Strategy for Cancer Therapy.J Med Chem. 2020 Jan 9;63(1):122-139.