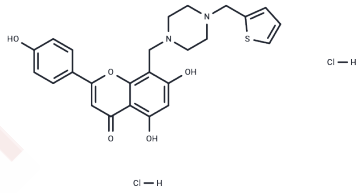
Data Sheet (Cat.No.T9610)

TargetMol

PARP1-IN-5 dihydrochloride

Chemical Properties



CAS No. : 2823308-89-8

Formula: C25H26Cl2N2O5S

Molecular Weight: 537.46

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	PARP1-IN-5 dihydrochloride is an orally active, potent and selective PARP-1 inhibitor (IC50 =14.7 nM). PARP1-IN-5 dihydrochloride can be used for the research of cancer.
Targets(IC50)	PARP
In vitro	PARP1-IN-5 dihydrochloride (0.1~320 μM) significantly enhances CBP cytotoxicity on A549 cells in a dose-dependent manner but has minimal cytotoxic effects on A549 cells alone. It also decreases MCM2-7 expression and PAR levels in SK-OV-3 cells and increases γ-H2AX expression, exhibiting antitumor effects via PARP-1[1].
In vivo	PARP1-IN-5 dihydrochloride (1000 mg/kg; p.o.) shows no significant difference in body weight and blood routine. PARP1-IN-5 dihydrochloride (25 and 50 mg/kg; p.o.; 12 days) significantly enhances the inhibitory effect of carboplatin on A549 cells at 50 mg/kg. PARP1-IN-5 dihydrochloride (50 mg/kg; p.o.) positively correlates with the expression of PARP-1. PARP1-IN-5 dihydrochloride decreases the expression of PAR and upregulates the expression of γ-H2AX [1].

Solubility Information

Solubility	DMSO: 125 mg/mL (232.58 mM),Sonication is recommended. H2O: 1 mg/mL (1.86 mM),Sonication and heating to 60°C are recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 4 mg/mL (7.44 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	1.8606 mL	9.303 mL	18.606 mL
5 mM	0.3721 mL	1.8606 mL	3.7212 mL
10 mM	0.1861 mL	0.9303 mL	1.8606 mL
50 mM	0.0372 mL	0.1861 mL	0.3721 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.