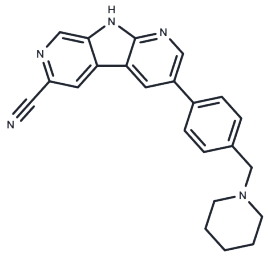
Data Sheet (Cat.No.T71259)

TargetMol

GNE-900

Chemical Properties



CAS No. : 1200126-26-6

Formula: C23H21N5

Molecular Weight: 367.45

Storage: Store at low temperature,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	GNE-900 is an ATP-competitive ChK1 inhibitor with selective and oral activity.GNE-900 inhibits ChKl and ChK2 with IC50 values of 0.0011 and 1.5 μM, respectively.GNE-900 enhances DNA damage and induces apoptosis. GNE-900 has antitumor activity.
Targets(IC50)	Apoptosis,Chk
In vitro	GNE-900 (1 μM; 1-48 h; HT-29 cells) induces apoptosis and enhances cleaved PARP expression when combined with gemcitabine (50 nM) in HT-29 cells.[1]
In vivo	GNE-900 (2.5-40 mg/kg, p.o., once; Sprague-Dawley rats) combined with gemcitabine (120 mg/kg) reduced tumor volume and increased DNA damage and γ-H2AX expression levels in rats.[1]

Solubility Information

Solubility	DMSO: 3.85 mg/mL (10.48 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: 1 mg/mL (2.72 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	2.7215 mL	13.6073 mL	27.2146 mL
5 mM	0.5443 mL	2.7215 mL	5.4429 mL
10 mM	0.2721 mL	1.3607 mL	2.7215 mL
50 mM	0.0544 mL	0.2721 mL	0.5443 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

Blackwood E, et al. Combination drug scheduling defines a "window of opportunity" for chemopotentiation of gemcitabine by an orally bioavailable, selective ChK1 inhibitor, GNE-900. Mol Cancer Ther. 2013 Oct;12(10):1968-80.