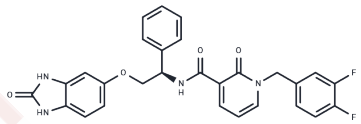
Data Sheet (Cat.No.T12398)

MP7

Chemical Properties



CAS No. :	1001409-50-2
Formula:	C28H22F2N4O4
Molecular Weight:	516.5
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	MP7 (PDK1 inhibitor) is an inhibitor of phosphoinositide-dependent kinase-1 (PDK1).
Targets(IC50)	PDK
In vitro	MP7 are able to decrease the number of viable cells. When combined together, GSC viability is further reduced with respect to single-treated cells. As observed in U87MG cells, when used at the highest concentrations (i.e., 1.5 μM Alisertib and 2.5 μM MP7), a significant enhancement in the number of dead cells is evidenced. Following 72 h treatment.

Solubility Information

Solubility	DMSO: ≥ 100 mg/mL (193.61 mM),Sonication is recommended. H2O: < 0.1 mg/mL (insoluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (3.87 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	1.9361 mL	9.6805 mL	19.3611 mL
5 mM	0.3872 mL	1.9361 mL	3.8722 mL
10 mM	0.1936 mL	0.9681 mL	1.9361 mL
50 mM	0.0387 mL	0.1936 mL	0.3872 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

Daniele S, et al. Dual Inhibition of PDK1 and Aurora Kinase A: An Effective Strategy to Induce Differentiation and Apoptosis of Human Glioblastoma Multiforme Stem Cells. ACS Chem Neurosci. 2017 Jan 18;8(1):100-114.