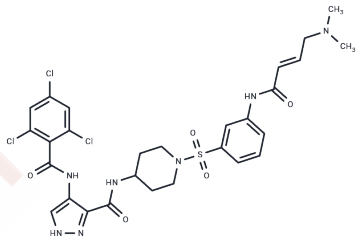
Data Sheet (Cat.No.T11309)

TargetMol

FMF-04-159-2

Chemical Properties



CAS No. : 2364489-81-4

Formula: C28H30Cl3N7O5S

Molecular Weight: 683.01

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	FMF-04-159-2 is a potent covalent cell cycle protein-dependent kinase 14 (CDK14) inhibitor with IC_{50} of 39.6 nM for CDK14 and 256 nM for CDK2.FMF-04-159-2 is able to reduce α-synuclein (α-Syn) aggregation in neurons and plays a role in Parkinson's disease models, and also inhibits triple-negative breast cancer (TNBC) progression and metastasis by attenuating Wnt/β-catenin signaling.
Targets(IC50)	Others,CDK,Wnt/beta-catenin
In vitro	FMF-04-159-2 can inhibit the proliferation of HCT116 cells with an IC50 of 1,144±190 nM. [1]

Solubility Information

Solubility	DMSO: 200 mg/mL (292.82 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: 5 mg/mL (7.32 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	1.4641 mL	7.3205 mL	14.6411 mL
5 mM	0.2928 mL	1.4641 mL	2.9282 mL
10 mM	0.1464 mL	0.7321 mL	1.4641 mL
50 mM	0.0293 mL	0.1464 mL	0.2928 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

Ferguson FM, et al. Discovery of Covalent CDK14 Inhibitors with Pan-TAIRE Family Specificity. Cell Chem Biol. 2019 Mar 11. pii: S2451-9456(19)30070-4.