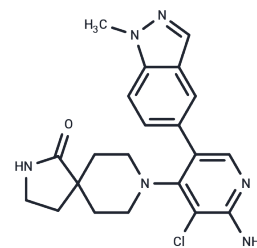


CCT-251921

Chemical Properties

CAS No. : 1607837-31-9
 Formula: C₂₁H₂₃ClN₆O
 Molecular Weight: 410.9
 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	CCT-251921 is a potent, selective, and orally bioavailable CDK8 inhibitor [IC ₅₀ : 2.3 nM].
Targets(IC ₅₀)	CDK
In vitro	CCT-251921 exhibits limited activity across a panel of 55 receptors, ion channels, and enzymes at 1 μM, as well as a panel of 279 kinases, while showing weak inhibition of CYPs. It effectively inhibits basal WNT pathway activity in human cancer cell lines with constitutive activation of WNT pathway signaling, specifically in LS174T (β-catenin mutant), SW480, and Colo205 (APC mutant) cell lines, and PA-1 human teratocarcinoma cells, which depend on WNT ligand.
In vivo	CCT-251921 exhibits enhanced oral pharmacokinetics and pharmaceutical properties, maintaining inhibition of STAT1SER727 phosphorylation for over 6 hours post-dose. In an APC-mutant SW620 human colorectal carcinoma xenograft model, CCT-251921 treatment reduced tumor weight in mice by 54.2% on day 15.

Solubility Information

Solubility	DMSO: 15 mg/mL (36.51 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: 2 mg/mL (4.87 mM), Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4337 mL	12.1684 mL	24.3368 mL
5 mM	0.4867 mL	2.4337 mL	4.8674 mL
10 mM	0.2434 mL	1.2168 mL	2.4337 mL
50 mM	0.0487 mL	0.2434 mL	0.4867 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

Mallinger A, et al. Discovery of Potent, Selective, and Orally Bioavailable Small-Molecule Modulators of the Mediator Complex-Associated Kinases CDK8 and CDK19. *J Med Chem.* 2016 Feb 11;59(3):1078-101.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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