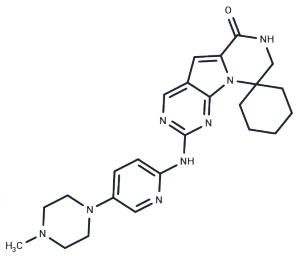
Data Sheet (Cat.No.T13202L)

TargetMol

Trilaciclib

Chemical Properties



CAS No. :	1374743-00-6
Formula:	C24H30N8O
Molecular Weight:	446.55
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	Trilaciclib is a short-acting, orally effective CDK4/6 inhibitor with IC_{50} values of 1 nM and 4 nM respectively. It transiently and reversibly induces G1 cell cycle arrest, mitigates chemotherapy-induced myelosuppression, and enhances antitumour immunity, making it applicable across multiple cancers.
Targets(IC50)	Cell Cycle Arrest,CDK
In vitro	**Methods**: HS68 cells were treated with Trilaciclib (10-3000nM, 24 hours), fixed and stained with propidium iodide and RNAse A, then analyzed using a Cyan ADP Analyzer. **Results**: After 24 hours of treatment with 300 nM trilaciclib, the proportion of HS68 cells in the G1 phase reached as high as 98%.[1]
In vivo	Method: FVB/N mice were orally administered Trilaciclib (50, 100, 150 mg/kg, single dose), followed by EdU injection to measure the proliferation of bone marrow Lineage-negative cells. **Results**: Trilaciclib exhibited a dose-dependent effect, effectively suppressing the proliferation of bone marrow HSPCs. [1]

Solubility Information

Solubility	DMSO: 4.5 mg/mL (10.08 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2394 mL	11.197 mL	22.3939 mL
5 mM	0.4479 mL	2.2394 mL	4.4788 mL
10 mM	0.2239 mL	1.1197 mL	2.2394 mL
50 mM	0.0448 mL	0.2239 mL	0.4479 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

Bisi JE, et al. Preclinical Characterization of G1T28: A Novel CDK4/6 Inhibitor for Reduction of Chemotherapy-Induced Myelosuppression. Mol Cancer Ther. 2016 May;15(5):783-93.