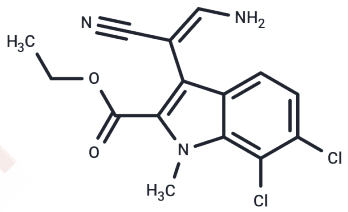
Data Sheet (Cat.No.T15657)

TargetMol

KH-CB19

Chemical Properties



CAS No. : 1354037-26-5

Formula: C15H13Cl2N3O2

Molecular Weight: 338.19

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	KH-CB19 is an effective and highly specific inhibitor of the CDC2-like kinase isoforms 1 and 4 (CLK1/CLK4).
Targets(IC50)	Others,CDK
In vitro	KH-CB19 showed potent inhibition of CLK1 (IC50: 20 nM), and for the pure isomer KH-CB19, almost 100-fold selectivity against the CLK3 isoform. Treatment of resting cells with 10 μM KH-CB19 significantly reduced the basal expression of flTF as well as HTF. Pretreatment of cells with KH-CB19 or TG003 led to a reduction of the TNF-α-induced increase in phosphorylation of all analyzed SR proteins compared with TNF-α-stimulated controls [1].

Solubility Information

Solubility	DMSO: 50 mg/mL (147.85 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: 2.5 mg/mL (7.39 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	2.9569 mL	14.7846 mL	29.5692 mL
5 mM	0.5914 mL	2.9569 mL	5.9138 mL
10 mM	0.2957 mL	1.4785 mL	2.9569 mL
50 mM	0.0591 mL	0.2957 mL	0.5914 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

Fedorov O, et al. Specific CLK inhibitors from a novel chemotype for regulation of alternative splicing. Chem Biol. 2011 Jan 28;18(1):67-76.
Grant SK, et al. Kinase inhibition that hinges on halogen bonds. Chem Biol. 2011 Jan 28;18(1):3-4.