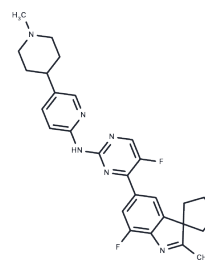


## CDK4/6/1 Inhibitor

## Chemical Properties

CAS No. :	2099128-41-1
Formula:	C <sub>28</sub> H <sub>30</sub> F <sub>2</sub> N <sub>6</sub>
Molecular Weight:	488.57
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	CDK4/6/1 Inhibitor (Crozbaciclib) is a type of CDK4/6 inhibitor (IC50s: 3 and 1 nM). CDK4/6 inhibitor is a class of compounds used for the treatment of some types of hormone receptor positive, HER2-negative breast cancer, which can block the process of breast cancer cell division and reproduction.
Targets(IC50)	CDK
In vitro	CDK4/6/1 Inhibitor is an anti-proliferative agent that arrests the U87MG cell line exclusively in G1 (IC50=15.3 nM in the anti-proliferation assay). U87MG cells exposed to varying concentrations of CDK4/6/1 Inhibitor for 24 hours show a dose-related increase in G1 arrest, and a significant increase in the percentage of cells in G1 is found in as little as 13.72 nM of CDK4/6/1 Inhibitor.[1]
In vivo	In an orthotopic xenograft mouse model of glioblastoma multiforme, CDK4/6/1 Inhibitor (3.125 to 50 mg/kg) has tumor growth inhibition values ranging from 62% to 99%, and no significant body weight loss is observed. The increase in life span based on the median survival time of vehicle-treated animals in mice administered a dose of 50 mg/kg is significant at 162%. [1]

## Solubility Information

Solubility	DMSO: Slightly soluble (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

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	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	2.0468 mL	10.2339 mL	20.4679 mL
5 mM	0.4094 mL	2.0468 mL	4.0936 mL
10 mM	0.2047 mL	1.0234 mL	2.0468 mL
50 mM	0.0409 mL	0.2047 mL	0.4094 mL

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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

Yin L, et al. A highly potent CDK4/6 inhibitor was rationally designed to overcome blood brain barrier in glioblastoma therapy. Eur J Med Chem. 2018;144:1-28.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

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