产品名称：

2-(4-(6-chloro-2-(4-(dimethylamino)phenyl)-3H-imidazo[4,5-b]pyridin-7-yl) piperazin-1-yl)-N-(thiazol-2-yl)acetamide

产品别名：**CCT129202**

生物活性：

Description	CCT129202 is an aurora kinase inhibitor with IC_{50}s of 42, 198, and 227 nM for aurora A, B and C, respectively.		
IC_{50} & Target	Aurora A	Aurora B	Aurora C
	42 nM (IC_{50})	198 nM (IC_{50})	227 nM (IC_{50})
In Vitro	CCT129202 causes the accumulation of human tumor cells with z4N DNA content, leading to apoptosis. CCT129202 is found to induce apoptosis with GI_{50} values that ranges between 0.08 and 1.7 μM. CCT120202-treated human tumor cells shows a delay in mitosis, abrogation of nocodazole-induced mitotic arrest, and spindle defects. CCT129202 Causes p21Up-regulation, Rb Hypophosphorylation, and H2F-DependentTK1Down-regulation[1].		
In Vivo	Growth of HCT116 xenografts in nude mice is inhibited after i.p. administration of CCT129202. p21, the cyclin-dependent kinase inhibitor, is induced by CCT129202. Up-regulation of p21 by CCT129202 in HCT116 cells led to Rb hypophosphorylation and E2F inhibition, contributing to a decrease in thymidine kinase 1 transcription[1].		

Solvent&Solubility

In Vitro:

DMSO： 1 mg/mL (**2.01 mM**; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.0120 mL	10.0600 mL	20.1199 mL
	5 mM	---	---	---
	10 mM	---	---	---

*请根据产品在不同溶剂中的溶解度选择合适的溶剂配制储备液；一旦配成溶液，请分装保存，避免反复冻融造成的产品失效。

储备液的保存方式和期限：-80°C, 6 months; -20°C, 1 month。-80°C 储存时，请在 6 个月内使用，-20°C 储存时，请在 1 个月内使用。

References

[1]. Chan F, et al. Mechanism of action of the Aurora kinase inhibitor CCT129202 and in vivo quantification of biological activity. Mol Cancer Ther. 2007 Dec;6(12 Pt 1):3147-57.

实验参考：

Cell Assay	The effects of CCT129202 on cell proliferation are analyzed with the MTT assay. Cells are plated in 96-well plates at 2,500 per well and are treated with a range of 0 to 50 μM of CCT129202 for 72 h. The absorbance is measured at 570 nm [1]
Animal Administration	Mice: For efficacy studies, human HCT116 colon carcinoma xenografts are established in female mice. CCT129202 is dissolved in DMSO and injected i.p in vehicle, which comprises 10% DMSO, 5% Tween 20, and 85% sterile saline at 0.1 mL/10 g body weight. Dosing with CCT129202 commenced when tumors are well established (f5 mm mean diameter); control animals receive an equivalent volume of vehicle. Mouse body weights and condition are monitored throughout the study. Tumors are measured thrice weekly[1]

References	[1]. Chan F, et al. Mechanism of action of the Aurora kinase inhibitor CCT129202 and in vivo quantification of biological activity. Mol Cancer Ther. 2007 Dec;6(12 Pt 1):3147-57.