

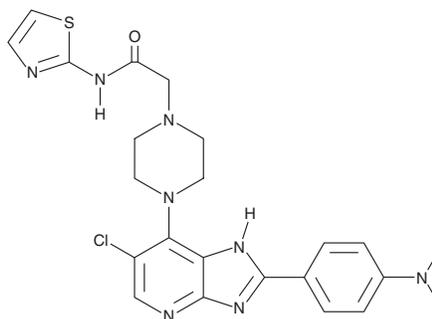
PRODUCT INFORMATION



CCT129202

Item No. 29053

CAS Registry No.: 942947-93-5
Formal Name: 4-[6-chloro-2-[4-(dimethylamino)phenyl]-3H-imidazo[4,5-b]pyridin-7-yl]-N-2-thiazolyl-1-piperazineacetamide
MF: C₂₃H₂₅ClN₈OS
FW: 497.0
Purity: ≥98%
UV/Vis.: λ_{max}: 267, 348, 404 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

CCT129202 is supplied as a crystalline solid. A stock solution may be made by dissolving the CCT129202 in the solvent of choice, which should be purged with an inert gas. CCT129202 is soluble in the organic solvent DMSO at a concentration of approximately 3 mg/ml.

Description

CCT129202 is an Aurora kinase inhibitor that inhibits Aurora A and B by 82 and 60%, respectively, when used at a concentration of 1 μM in cell-free assays.¹ It is selective for Aurora A and B over a panel of 13 kinases at 1 μM. CCT129202 inhibits growth of COLO 205, SW620, HCT116, HT-29, KW12, HeLa, A2780, OVCAR-8, MDA-MB-157, and MB4-11 cancer cells (GI₅₀S = 0.08-1.2 μM). It induces DNA accumulation and cell cycle arrest at the G₂/M phase, as well as apoptosis in HCT116 cells. CCT129202 increases the accumulation of doxorubicin and rhodamine 123 in multidrug-resistant (MDR) KBv200 and MCF-7/adr cells and increases the susceptibility of MDR KBv200, MCF-7/adr, S1-M1-80, and HL60/adr cells to cisplatin (Item No. 13119) and doxorubicin (Item No. 15007).² *In vivo*, CCT129202 (100 mg/kg) reduces tumor growth in an HCT116 mouse xenograft model.¹ It also potentiates the antitumor effects of vincristine (Item No. 11764) in a KBv200 mouse xenograft model.²

References

1. Chan, F., Sun, C., Perumal, M., *et al.* Mechanism of action of the Aurora kinase inhibitor CCT129202 and *in vivo* quantification of biological activity. *Mol. Cancer Ther.* **6(12 Pt 1)**, 3147-3157 (2007).
2. Cheng, C., Liu, Z.-G., Zheng, H., *et al.* Enhancing chemosensitivity in ABCB1- and ABCG2-overexpressing cells and cancer stem-like cells by an Aurora kinase inhibitor CCT129202. *Mol. Pharm.* **9(7)**, 1971-982 (2012).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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