

PRODUCT INFORMATION

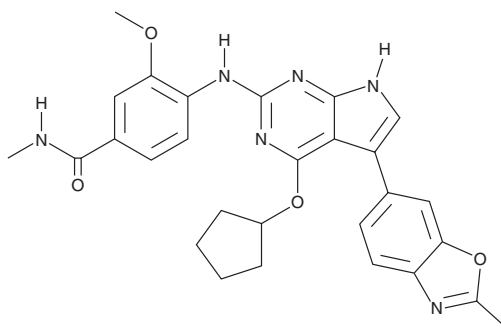


CC-671

Item No. 26184

CAS Registry No.: 1618658-88-0
Formal Name: 4-[[4-(cyclopentyloxy)-5-(2-methyl-6-benzoxazolyl)-7H-pyrrolo[2,3-d]pyrimidin-2-yl]amino]-3-methoxy-N-methyl-benzamide

MF: C₂₈H₂₈N₆O₄
FW: 512.6
Purity: ≥95%
UV/Vis.: λ_{max}: 282, 326 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

CC-671 is supplied as a crystalline solid. A stock solution may be made by dissolving the CC-671 in the solvent of choice. CC-671 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of CC-671 in ethanol and DMF is approximately 10 mg/ml and approximately 20 mg/ml in DMSO.

CC-671 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CC-671 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. CC-671 has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

CC-671 is a dual inhibitor of the spindle assembly checkpoint kinase Mps1/TTK and Cdc2-like kinase (Clk2; IC₅₀s = 5 and 3 nM, respectively).¹ It is selective for Mps1/TTK and Clk2 over a panel of 255 kinases at 3 μM, but does inhibit DYRK3, DYRK1A, PHKG, DYRK1B, and Clk1 (IC₅₀s = 99, 104, 136, 157, and 300 nM, respectively). CC-671 selectively inhibits the growth of Cal-51 triple negative breast cancer (TNBC) cells over BT-474 luminal breast cancer cells (IC₅₀s = 60 and 6,970 nM, respectively). *In vivo*, CC-671 (20 mg/kg) reduces tumor volume in a Cal-51 mouse xenograft model.

Reference

1. Riggs, J.R., Nagy, M., Elsner, J., *et al.* The discovery of a dual TTK protein kinase/CDC2-like kinase (CLK2) inhibitor for the treatment of triple negative breast cancer initiated from a phenotypic screen. *J. Med. Chem.* **60**(21), 8989-9002 (2017).

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.

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