

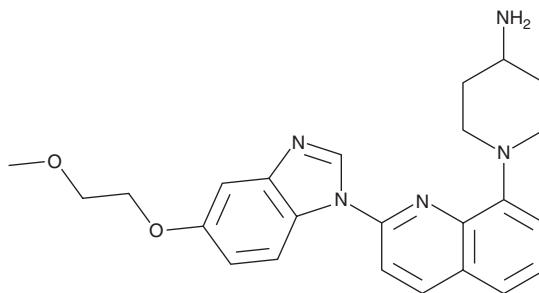
PRODUCT INFORMATION



CP-673,451

Item No. 19170

CAS Registry No.: 343787-29-1
Formal Name: 1-[2-[5-(2-methoxyethoxy)-1H-benzimidazol-1-yl]-8-quinolinyl]-4-piperidinamine
MF: C₂₄H₂₇N₅O₂
FW: 417.5
Purity: ≥98%
UV/Vis.: λ_{max}: 274 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

CP-673,451 is supplied as a crystalline solid. A stock solution may be made by dissolving the CP-673,451 in the solvent of choice, which should be purged with an inert gas. CP-673,451 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of CP-673,451 in these solvents is approximately 10, 2, and 5 mg/ml, respectively.

CP-673,451 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CP-673,451 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. CP-673,451 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

CP-673,451 is a selective inhibitor of the platelet-derived growth factor receptor platelet-derived growth factor receptor β (PDGFRβ) kinase with an IC₅₀ value of 1 nM.¹ It also inhibits the PDGFRα kinase (IC₅₀ = 10 nM), but exhibits greater than 450-fold selectivity over other angiogenic receptors such as VEGFR2, TIE-2, and FGFR2.¹ In several *in vivo* tumor models, CP-673,451 has antiangiogenic and antitumor activity.¹⁻³

References

1. Roberts, W.G., Whalen, P.M., Soderstrom, E., *et al.* Antiangiogenic and antitumor activity of a selective PDGFR tyrosine kinase inhibitor, CP-673,451. *Cancer Res.* **65**(3), 957-966 (2005).
2. Xi, Y., Chen, M., Liu, X., *et al.* CP-673451, a platelet-derived growth-factor receptor inhibitor, suppresses lung cancer cell proliferation and migration. *Oncotargets and Therapy* **7**, 1215-1221 (2014).
3. Ehnman, M., Missiaglia, E., Folestad, E., *et al.* Distinct effects of ligand-induced PDGFRα and PDGFRβ signaling in the human rhabdomyosarcoma tumor cell and stroma cell compartments. *Cancer Res.* **73**(7), 2139-2149 (2016).

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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