

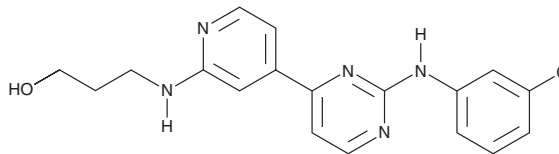
PRODUCT INFORMATION



CGP 60474

Item No. 29631

CAS Registry No.: 164658-13-3
Formal Name: 3-[[4-[2-[(3-chlorophenyl)amino]-4-pyrimidinyl]-2-pyridinyl]amino]-1-propanol
MF: C₁₈H₁₈ClN₅O
FW: 355.8
Purity: ≥98%
Supplied as: A 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

CGP 60474 is supplied as a solid. A stock solution may be made by dissolving the CGP 60474 in the solvent of choice, which should be purged with an inert gas. CGP 60474 is soluble in the organic solvent DMSO. The solubility of CGP 60474 in DMSO is approximately 10 mM.

Description

CGP 60474 is an inhibitor of cyclin-dependent kinases (CDKs; IC₅₀s = 0.017, 0.08, and 0.05 μM for Cdk1/cyclin B, Cdk2/cyclin A, and Cdk2/cyclin E, respectively).¹ It is selective for these CDKs over Cdk4/cyclin D1 (IC₅₀ = 0.7 μM) and a variety of other kinases, including several PKC isoforms (IC₅₀s = 1.9->100 μM), PKA (IC₅₀ = 160 μM), and FLT1 (IC₅₀ = 1 μM), among others, but does not inhibit PKCα and v-Abl (IC₅₀s = 0.25 and 0.4 μM, respectively). It inhibits proliferation of colon, breast, lung, prostate, and ovarian cancer cells (IC₅₀s = 25-84, 21-280, 40 and 68, 17 and 20, and 18-38 nM, respectively). CGP 60474 also reduces LPS-induced IL-6, TNF-α, and RANTES secretion from J774.1 cells in a concentration-dependent manner and inhibits poly(I:C)-induced NF-κB nuclear translocation in the same cells when used at concentrations of 8 and 32 nM.² It reduces plasma IL-6 levels and increases survival in a mouse model of LPS-induced endotoxemia when administered at a dose of 10 mg/kg.

References

1. Ruetz, S., Fabbro, D., Zimmermann, J., *et al.* Chemical and biological profile of dual Cdk1 and Cdk2 inhibitors. *Curr. Med. Chem. Anticancer Agents* **3**(1), 1-14 (2003).
2. Han, H.-W., Hahn, S., Jeong, H.Y., *et al.* LINCS L1000 dataset-based repositioning of CGP-60474 as a highly potent anti-endotoxemic agent. *Sci. Rep.* **8**(1), 14969 (2018).

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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