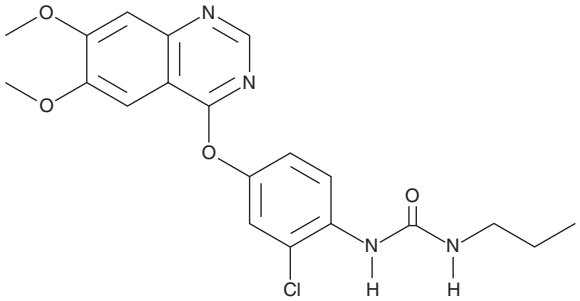
PRODUCT INFORMATION

KRN 633

Item No. 14871



CAS Registry No.:	286370-15-8
Formal Name:	N-[2-chloro-4-[(6,7-dimethoxy-4-quinazolinyl)oxy]phenyl]-N'-propyl-urea
MF:	$C_{20}H_{21}ClN_4O_4$
FW:	416.9
Purity:	≥95%
UV/Vis.:	λ_{max}: 210, 242, 320 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

KRN 633 is supplied as a crystalline solid. A stock solution may be made by dissolving the KRN 633 in the solvent of choice, which should be purged with an inert gas. KRN 633 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of KRN 633 in these solvents is approximately 0.3 and 10 mg/ml, respectively.

KRN 633 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, KRN 633 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. KRN 633 has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

KRN 633 is an ATP-competitive inhibitor of VEGFR kinase activity (IC_{50}s = 170, 160, and 125 nM for VEGFR1, 2, and 3, respectively).[1] At higher concentrations KRN 633 inhibits PDGFR-α and c-KIT with IC_{50} values of 0.97 and 4.3 µM, respectively, and is inactive towards a panel of 17 additional kinases.[1] KRN 633 suppresses VEGF-dependent activation of MAPK and cell proliferation and demonstrates antitumor and antiangiogenic activity by inhibiting vessel formation and vascular permeability in human tumor xenograft models.[2]

References

1. Fedorov, O., Marsden, B., Pogacic, V., *et al.* A systematic interaction map of validated kinase inhibitors with Ser/Thr kinases. *Proc. Natl. Acad. Sci. USA* **104(51)**, 20523-20528 (2007).
2. Nakamura, K., Yamamoto, A., Kamishohara, M., *et al.* KRN633: A selective inhibitor of vascular endothelial growth factor receptor-2 tyrosine kinase that suppresses tumor angiogenesis and growth. *Mol. Cancer Ther.* **3(12)**, 1639-1649 (2004).

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