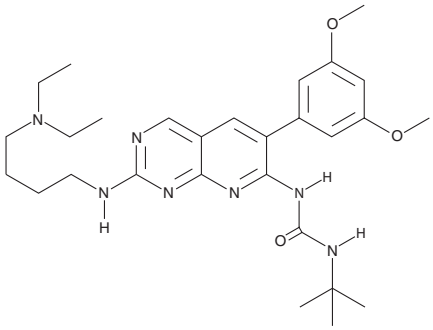
PRODUCT INFORMATION

PD 173074

Item No. 13032

CAS Registry No.:	219580-11-7
Formal Name:	N-[2-[[4-(diethylamino)butyl]amino]-6-(3,5-dimethoxyphenyl)pyrido[2,3-d]pyrimidin-7-yl]-N'-(1,1-dimethylethyl)-urea
MF:	$C_{28}H_{41}N_7O_3$
FW:	523.7
Purity:	≥95%
UV/Vis.:	λ_{max}: 238, 284, 368 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

PD 173074 is supplied as a crystalline solid. A stock solution may be made by dissolving the PD 173074 in the solvent of choice, which should be purged with an inert gas. PD 173074 is soluble in organic solvents such as ethanol and DMSO. The solubility of PD 173074 in these solvents is approximately 25 mg/ml and 1 mg/ml, respectively.

Description

The fibroblast growth factor receptors (FGFRs) are cell surface receptors with intrinsic tyrosine kinase activity, which is necessary for receptor activation and signal propagation. PD 173074 is a potent and selective inhibitor of FGFR tyrosine kinase activity, blocking autophosphorylation of FGFR1 with an IC_{50} value of 21.5 nM.[1] For comparison, it weakly inhibits PDGFR and c-Src (IC_{50} = 17.6 and 19.8 µM, respectively) and has no effect on EGFR, InsR, MEK, or PKC.[1] PD 173074 also prevents signaling, at nanomolar levels, through FGFR2-5.[2-6] Inhibition of FGFR signaling using PD 173074, impairs angiogenesis as well as self-renewal of stem cells *via* ERK1/2 activation.[2,5-8]

References

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