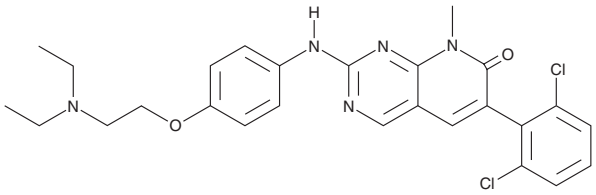
PRODUCT INFORMATION

PD 166285

Item No. 26804

CAS Registry No.:	185039-89-8
Formal Name:	6-(2,6-dichlorophenyl)-2-[[4-[2-(diethylamino)ethoxy]phenyl]amino]-8-methyl-pyrido[2,3-d]pyrimidin-7(8H)-one
MF:	$C_{26}H_{27}Cl_2N_5O_2$
FW:	512.4
Purity:	≥98%
UV/Vis.:	λ_{max}: 214, 263, 300, 365 nm
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

PD 166285 is supplied as a solid. A stock solution may be made by dissolving the PD 166285 in the solvent of choice, which should be purged with an inert gas. PD 166285 is soluble in the organic solvent DMSO.

Description

PD 166285 is a tyrosine kinase inhibitor.[1] It inhibits Src, FGFR1, EGFR, and PDGFRβ (IC_{50}s = 8.4, 39.3, 87.5, and 98.3 nM, respectively), as well as WEE1 (IC_{50} = 24 nM).[1,2] PD 166285 inhibits PDGF- or EGF-induced receptor autophosphorylation in vascular smooth muscle cells (VSMCs) and A431 cells, respectively, and bFGF-induced tyrosine phosphorylation in Sf9 cells (IC_{50}s = 6.5, 1,600, and 97.3 nM, respectively).[1] It also inhibits chemotaxis and growth of, as well as adhesion to vitronectin by, VSMCs (IC_{50}s = 80-120 nM). PD 166285 inhibits radiation-induced cell cycle arrest at the G_2/M phase and enhances radiation-induced cell death in HT-29 cells.[2] *In vivo*, PD 166285 (1, 5, and 10 mg/kg) inhibits angiogenesis and induces tumor regression in a 16c murine mammary carcinoma model when administered in combination with photodynamic therapy (PDT).[3]

References

1. Panek, R.L., Lu, G.H., Klutchko, S.R., *et al.* In vitro pharmacological characterization of PD 166285, a new nanomolar potent and broadly active protein tyrosine kinase inhibitor. *J. Pharmacol. Exp. Ther.* **283(3)**, 1433-1444 (1997).
2. Wang, Y., Li, J., Booher, R.N., et al. Radiosensitization of p53 mutant cells by PD0166285, a novel G_2 checkpoint abrogator. *Cancer Res.* **61(22)**, 8211-8217 (2001).
3. Dimitroff, C.J., Klohs, W., Sharma, A., *et al.* Anti-angiogenic activity of selected receptor tyrosine kinase inhibitors, PD166285 and PD173074: Implications for combination treatment with photodynamic therapy. *Invest. New Drugs* **17(2)**, 121-135 (1999).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM