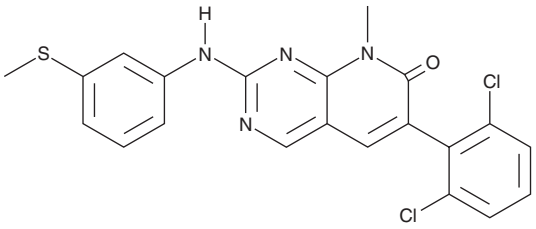
PRODUCT INFORMATION

PD 173955

Item No. 30618

CAS Registry No.:	260415-63-2
Formal Name:	6-(2,6-dichlorophenyl)-8-methyl-2-[[3-(methylthio)phenyl]amino]-pyrido[2,3-d]pyrimidin-7(8H)-one
MF:	$C_{21}H_{16}Cl_2N_4OS$
FW:	443.4
Purity:	≥98%
UV/Vis.:	λ_{max}: 210, 255, 361 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 173955 is supplied as a crystalline solid. A stock solution may be made by dissolving the PD 173955 in the solvent of choice, which should be purged with an inert gas. PD 173955 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of PD 173955 in these solvents is approximately 1 mg/ml.

Description

PD 173955 is a tyrosine kinase inhibitor.[1,2] It inhibits c-Src, Yes, and LCK (IC_{50}s = 25, 22, and 5 nM, respectively), as well as Bcr-Abl and c-Kit (IC_{50}s = 1-2 and 25 nM, respectively), and is selective for these kinases over the insulin receptor (InsR), α-FGFR, basic FGFR (bFGFR), PDGFR, and PKC.[1-3] PD 173955 (5,000 nM) induces cell cycle arrest at the G_2/M phase in DU145 prostate, SKOV3 ovarian, HT-29 colon, A549 lung, and A431 skin cancer cells.[1] It inhibits proliferation of MDA-MB-468 and MCF-7 breast cancer cells (IC_{50}s = 500 and 1,000 nM, respectively), as well as patient-derived peripheral blood chronic myelogenous leukemia (CML) progenitor cells (IC_{50}= ~7.5 nM).[1,2]

References

1. Moasser, M.M., Srethapakdi, M., Sachar, K.S., *et al.* Inhibition of Src kinases by a selective tyrosine kinase inhibitor causes mitotic arrest. *Cancer Res.* **59(24)**, 145-152 (1999).
2. Wisniewski, D., Lambek, C.L., Liu, C., *et al.* Characterization of potent inhibitors of the Bcr-Abl and the c-kit receptor tyrosine kinases. *Cancer Res.* **62(15)**, 4244-4255 (2002).
3. Kraker, A.J., Hartl, B.G., Amar, A.M., *et al.* Biochemical and cellular effects of c-Src kinase-selective pyrido[2, 3-d]pyrimidine tyrosine kinase inhibitors. *Biochem. Pharmacol.* **60(7)**, 885-898 (2000).

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