PRODUCT INFORMATION



PD 089828

Item No. 21435

CAS Registry No.: 179343-17-0

Formal Name: N-[2-amino-6-(2,6-dichlorophenyl)pyrido[2,3-d]

pyrimidin-7-yl]-N'-(1,1-dimethylethyl)-urea

Synonym: EGF/FGF/PDGF Receptor Tyrosine Kinase Inhibitor

MF: $C_{18}H_{18}CI_{2}N_{6}O$

405.3 FW: **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

PD 089828 is supplied as a solid. A stock solution may be made by dissolving the PD 089828 in the solvent of choice, which should be purged with an inert gas. PD 089828 is soluble in organic solvents such as ethanol and DMSO. The solubility of PD 089828 in these solvents is approximately 1 and 25 mg/ml, respectively.

Description

PD 089828 is a competitive inhibitor of the receptor tyrosine kinases FGFR1, PDGFRβ, and EGFR (IC₅₀s = 0.15, 1.76, and 5.47 μ M, respectively) and a noncompetitive inhibitor of the nonreceptor tyrosine kinase c-Src (IC $_{50}$ = 0.18 μ M).¹ It is selective for these targets over insulin receptor tyrosine kinase, PKC, and CDK4 (IC $_{50}$ s = >50 μ M) but does inhibit MAPK (IC $_{50}$ = 7.1 μ M). PD 089828 decreases PDGF-BB-, EGF-, and bFGF-induced phosphorylation of PDGFR, EGFR, and FGFR1, respectively, in a concentration-dependent manner in vitro. It also decreases serum-stimulated growth (IC₅₀ = 1.8 μM after 8 days) and migration (IC₅₀ = 4.5 μ M) of rat aortic smooth muscle cells.

Reference

1. Dahring, T.K., Lu, G.H., Hamby, J.M., et al. Inhibition of growth factor-mediated tyrosine phosphorylation in vascular smooth muscle by PD 089828, a new synthetic protein tyrosine kinase inhibitor. J. Pharmacol. Exp. Ther. 281(3), 1446-1456 (1997).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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.

WARRANTY AND LIMITATION OF REMEDY

subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website

Copyright Cayman Chemical Company, 11/04/2022

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