

Certificate of Analysis

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Product Name: PP 2 Catalog No.: 1407 Batch No.: 3

CAS Number: 172889-27-9

IUPAC Name: 3-(4-chlorophenyl) 1-(1,1-dimethylethyl)-1*H*-pyrazolo[3,4-*d*]pyrimidin-4-amine

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{15}H_{16}CIN_5$ Batch Molecular Weight: 301.78

Physical Appearance: White crystalline powder

Solubility: DMSO to 25 mM with gentle warming

ethanol to 10 mM with gentle warming

Storage: Desiccate at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.27$ (Dichloromethane:Methanol [98:2])

HPLC: Shows 100% purity

¹H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 59.7 5.34 23.21 Found 59.67 5.35 23.3



Product Information

Print Date: Sep 27th 2013

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Description:

Selective inhibitor of Src-family tyrosine kinases. Inhibits p56 $^{\rm lck}$ and p59 $^{\rm fynT}$ (IC $_{50}$ values are 4 and 5 nM respectively). Displays > 10000-fold selectivity over ZAP-70 and JAK2. Moderately inhibits CSK (IC $_{50}$ = 0.73 μ M). Negative control PP 3 (Cat. No. 2794) also available.

Physical and Chemical Properties:

Batch Molecular Formula: $C_{15}H_{16}CIN_5$ Batch Molecular Weight: 301.78

Physical Appearance: White crystalline powder

Minimum Purity: >99%

Batch Molecular Structure:

Storage: Desiccate at +4°C

Solubility & Usage Info:

DMSO to 25 mM with gentle warming ethanol to 10 mM with gentle warming

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Hanke *et al* (1996) Discovery of a novel, potent, and Src family-selective tyrosine kinase inhibitor. J.Biol.Chem. **271** 695. PMID: 8557675.

Lawrence and Niu (1998) Protein kinase inhibitors: the tyrosine-specific protein kinases. Pharmacol.Ther. **77** 81. PMID: 9578319.

Sanna et al (2000) A role for Src kinase in spontaneous epileptiform activity in the CA3 region of the hippocampus. Proc.Natl.Acad.Sci.U.S.A. **97** 8653. PMID: 10890901.

Bain et al (2003) The specificities of protein kinase inhibitors: an update. Biochem.J. 371 199. PMID: 12534346.

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