

Product Name: PP 1

Catalog No.: 1397

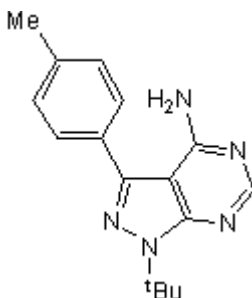
Batch No.: 2

CAS Number: 172889-26-8

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

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₆H₁₉N₅
Batch Molecular Weight: 281.36
Physical Appearance: White crystalline solid
Solubility: DMSO to 10 mM
 ethanol to 10 mM
Storage: Desiccate at +4°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.3 (Dichloromethane:Methanol [98:2])
Melting Point: Between 200 - 201°C
HPLC: Shows 100% purity
¹H NMR: Consistent with structure
 Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	68.3	6.81	24.89
Found	68.16	6.83	24.78

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

Potent inhibitor of Src-family tyrosine kinases. Inhibits p56^{lck} and p59^{lyn}T (IC₅₀ values are 5 and 6 nM respectively). Displays > 8000-fold selectivity over ZAP-70 and JAK2. Also moderately inhibits p38, CSK, PDGF receptors, RET-derived oncoproteins, c-Kit and Bcr-Abl.

Physical and Chemical Properties:

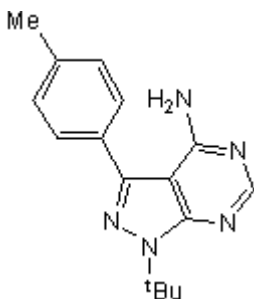
Batch Molecular Formula: C₁₆H₁₉N₅

Batch Molecular Weight: 281.36

Physical Appearance: White crystalline solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Desiccate at +4°C

Solubility & Usage Info:

DMSO to 10 mM

ethanol to 10 mM

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.

Liu et al (1999) Structural basis for selective inhibition of Src family kinases by PP1. *Chem.Biol.* **6** 671. PMID: 10467133.

Carlomagno et al (2002) The kinase inhibitor PP1 blocks tumorigenesis induced by *RET* oncogenes. *Cancer Res.* **62** 1077. PMID: 11861385.

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

Tatton et al (2003) The src-selective kinase inhibitor PP1 also inhibits Kit and Bcr-Abl tyrosine kinases. *J.Biol.Chem.* **278** 4847. PMID: 12475982.

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