

## Certificate of Analysis

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**Product Name:** PD 158780

**Catalog No.:** 2615

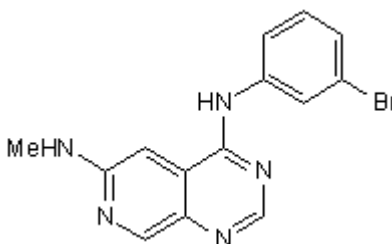
**Batch No.:** 1

CAS Number: 171179-06-9

IUPAC Name: *N*<sup>4</sup>-(3-Bromophenyl)-*N*<sup>6</sup>-methyl-pyrido[3,4-*d*]pyrimidine-4,6-diamine

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>14</sub>H<sub>12</sub>BrN<sub>5</sub>  
**Batch Molecular Weight:** 330.18  
**Physical Appearance:** Yellow solid  
**Solubility:** DMSO to 100 mM  
 ethanol to 25 mM  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.26 (Diether ether:Ethyl acetate [1:1])  
**HPLC:** Shows 99.6% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	50.93	3.66	21.21
Found	50.71	3.77	21.04

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

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**Description:**

Potent inhibitor of ErbB receptor family tyrosine kinases (IC<sub>50</sub> values are 0.008, 49 and 52 nM for EGFR, ErbB2 and ErbB2/ErbB4 respectively) that does not inhibit FGF or PDGF-mediated tyrosine phosphorylation. Induces G<sub>1</sub> cell cycle arrest in MCF10A cells and is antiproliferative in A431 human epidermal carcinoma cells.

**Physical and Chemical Properties:**

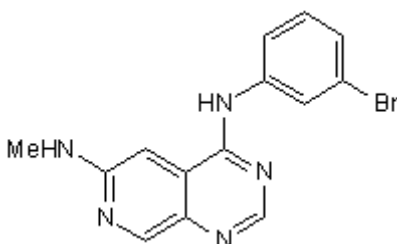
Batch Molecular Formula: C<sub>14</sub>H<sub>12</sub>BrN<sub>5</sub>

Batch Molecular Weight: 330.18

Physical Appearance: Yellow solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**Storage:** Store at -20°C

**Solubility & Usage Info:**

DMSO to 100 mM  
ethanol to 25 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:**

**Fry *et al* (1997)** Biochemical and antiproliferative properties of 4-[ar(alk)ylmino]pyridopyrimidines, a new chemical class of potent and specific epidermal growth factor receptor tyrosine kinase inhibitor. *Biochem.Pharmacol.* **54** 877. PMID: 9354588.

**Sun *et al* (1999)** Growth inhibition of nasopharyngeal carcinoma cells by EGF receptor tyrosine kinase inhibitors. *Anticancer Res.* **19** 919. PMID: 10368634.

**Gonzales *et al* (2005)** G1 cell cycle arrest due to inhibition of erbB family receptor tyrosine kinases does not require the retinoblastoma protein. *Exp.Cell Res.* **303** 56. PMID: 15572027.

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**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

www.tocris.com/distributors

Tel:+1 612 379 2956