

## Certificate of Analysis

[www.tocris.com](http://www.tocris.com)

**Product Name:** PKI 166 hydrochloride

**Catalog No.:** 4941

**Batch No.:** 2

CAS Number: 2230253-82-2

IUPAC Name: 4-[4-[[*(1R)*-1-Phenylethyl]amino]-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]phenol hydrochloride

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>20</sub>H<sub>18</sub>N<sub>4</sub>O.HCl.H<sub>2</sub>O

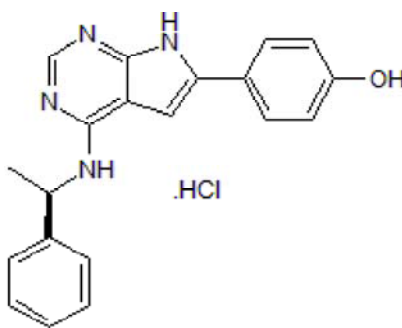
**Batch Molecular Weight:** 384.86

**Physical Appearance:** Off-white solid

**Solubility:** DMSO to 100 mM  
ethanol to 50 mM

**Storage:** Store at +4°C

**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**HPLC:** Shows 98.4% purity

**<sup>1</sup>H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon Hydrogen Nitrogen		
Theoretical	62.42	5.5	14.56
Found	62.36	5.44	14.52

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

**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](http://www.tocris.com/distributors)

Tel: +1 612 379 2956

**Product Name:** PKI 166 hydrochloride

**Catalog No.:** 4941

**Batch No.:** 2

CAS Number: 2230253-82-2

IUPAC Name: 4-[4-[(1*R*)-1-Phenylethyl]amino]-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]phenol hydrochloride

**Description:**

Potent EGFR-kinase inhibitor (IC<sub>50</sub> = 0.7 nM). Displays >3000-fold selectivity against a panel of serine/threonine kinases. Reduces metastasis and angiogenesis in a mouse model of pancreatic cancer. Antihypertensive and orally bioavailable.

**Physical and Chemical Properties:**

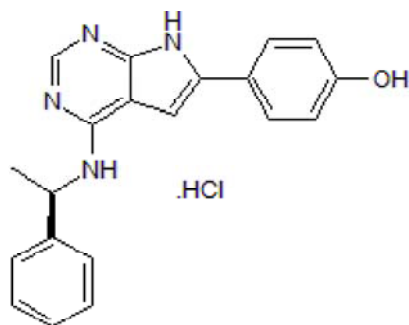
Batch Molecular Formula: C<sub>20</sub>H<sub>18</sub>N<sub>4</sub>O.HCl.H<sub>2</sub>O

Batch Molecular Weight: 384.86

Physical Appearance: Off-white solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**Storage:** Store at +4°C

**CAUTION** - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

**Solubility & Usage Info:**

DMSO to 100 mM

ethanol to 50 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:**

**Ulu *et al*** (2013) Epidermal growth factor receptor inhibitor PKI-166 governs cardiovascular protection without beneficial effects on the kidney in hypertensive 5/6 nephrectomized rats. *J.Pharmacol.Exp.Ther.* **345** 393. PMID: 23528611.

**Kaspersen *et al*** (2012) Activity of 6-aryl-pyrrolo[2,3-*d*]pyrimidine-4-amines to Tetrahymena. *Bioorg.Chem.* **44** 35. PMID: 22832269.

**Bruns *et al*** (2000) Blockade of the epidermal growth factor receptor signaling by a novel tyrosine kinase inhibitor leads to apoptosis of endothelial cells and therapy of human pancreatic carcinoma. *Cancer Res.* **60** 2926. PMID: 10850439.

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

**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