

## Certificate of Analysis

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**Product Name:** PS 1145 dihydrochloride

**Catalog No.:** 4569

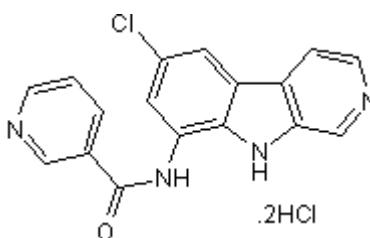
**Batch No.:** 1

CAS Number: 1049743-58-9

IUPAC Name: *N*-(6-Chloro-9*H*-pyrido[3,4-*b*]indol-8-yl)-3-pyridinecarboxamide dihydrochloride

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>17</sub>H<sub>11</sub>ClN<sub>4</sub>O.2HCl  
**Batch Molecular Weight:** 395.67  
**Physical Appearance:** Yellow solid  
**Solubility:** DMSO to 5 mM with gentle warming  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.2 (Chloroform:Methanol [9:1])  
**HPLC:** Shows 99.5% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	51.6	3.31	14.16
Found	51.26	3.31	13.85

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

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**Description:**

Selective IκB kinase (IKK) inhibitor (IC<sub>50</sub> = 100 nM). Has no effect on PKA, PKC and CKII activity. Inhibits IκB-α phosphorylation and NFκB activation in HeLa cells. Inhibits NFκB-mediated proinflammatory gene expression in human airway epithelial cells. Enhances TNF-α-induced apoptosis in a multiple myeloma cell line. Attenuates LPS-induced TNF-α production in vivo. Orally active.

**Physical and Chemical Properties:**

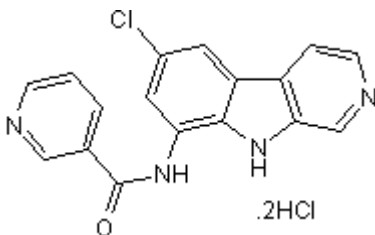
Batch Molecular Formula: C<sub>17</sub>H<sub>11</sub>ClN<sub>4</sub>O.2HCl

Batch Molecular Weight: 395.67

Physical Appearance: Yellow solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**References:**

**Hideshima et al** (2002) NF-kappa B as a therapeutic target in multiple myeloma. *J.Biol.Chem.* **277** 16639. PMID: 11872748.

**Castro et al** (2003) Novel IKK inhibitors: beta-carbolines. *Bioorg.Med.Chem.Lett.* **13** 2419. PMID: 12824047.

**Newton et al** (2007) Repression of inflammatory gene expression in human pulmonary epithelial cells by small-molecule IκappaB kinase inhibitors. *J.Pharmacol.Exp.Ther.* **321** 734. PMID: 17322026.

**Storage:** Store at +4°C

**Solubility & Usage Info:**

DMSO to 5 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.

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