

**Product Name:** API-1

**Catalog No.:** 3897

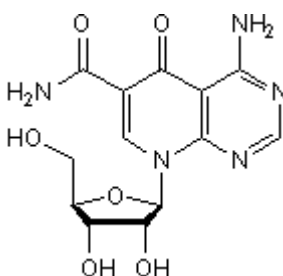
**Batch No.:** 3

CAS Number: 36707-00-3

IUPAC Name: 4-Amino-5,8-dihydro-5-oxo-8-β-D-ribofuranosyl-pyrido[2,3-d]pyrimidine-6-carboxamide

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>13</sub>H<sub>15</sub>N<sub>5</sub>O<sub>6</sub>  
**Batch Molecular Weight:** 337.29  
**Physical Appearance:** Pale pink solid  
**Solubility:** DMSO to 100 mM  
**Storage:** Store at RT  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**TLC:** R<sub>f</sub> = 0.25 (Dichloromethane:Methanol [80:20])  
**HPLC:** Shows 96.9% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	46.29	4.48	20.76
Found	46.01	4.54	20.5

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**Description:**

Akt/protein kinase B (PKB) inhibitor. Binds the pleckstrin homology domain of Akt and blocks Akt membrane translocation. Inhibits EGF-induced kinase activity of Akt1, Akt2 and Akt3. Induces cell growth arrest and apoptosis in human cancer cells expressing constitutively active Akt. Displays antitumor activity in vitro and in vivo.

**Physical and Chemical Properties:**

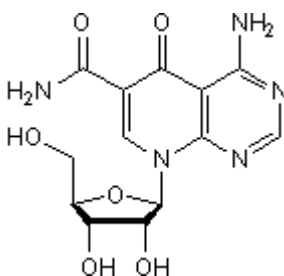
Batch Molecular Formula: C<sub>13</sub>H<sub>15</sub>N<sub>5</sub>O<sub>6</sub>

Batch Molecular Weight: 337.29

Physical Appearance: Pale pink solid

**Minimum Purity:** >96%

**Batch Molecular Structure:**



**References:**

**Kim et al** (2010) A small molecule inhibits Akt through direct binding to Akt and preventing Akt membrane translocation. *J.Biol.Chem.* **285** 8383. PMID: 20068047.

**Storage:** Store at RT

**Solubility & Usage Info:**

DMSO to 100 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.

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