

## Certificate of Analysis

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**Product Name:** NSC 693868

**Catalog No.:** 1937

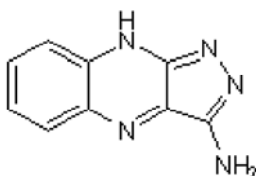
**Batch No.:** 2

CAS Number: 40254-90-8

IUPAC Name: 1*H*-Pyrazolo[3,4-*b*]quinoxalin-3-amine

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>9</sub>H<sub>7</sub>N<sub>5</sub>  
**Batch Molecular Weight:** 185.19  
**Physical Appearance:** Red crystalline solid  
**Solubility:** DMSO to 100 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.61 (Dichloromethane:Methanol [9:1])  
**Melting Point:** Between 272 - 274°C  
**HPLC:** Shows 100% purity  
**<sup>1</sup>H NMR:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	58.37	3.81	37.82
Found	58.51	3.82	37.68

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

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**Description:**

Cyclin-dependent kinase (cdk) inhibitor (reported IC<sub>50</sub> values are 0.4, 0.6, 4.4 - 5.6 μM for cdk5, cdk1 and cdk2, respectively). Also inhibits GSK-3 (IC<sub>50</sub> = 1 μM).

**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.

**Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>9</sub>H<sub>7</sub>N<sub>5</sub>

Batch Molecular Weight: 185.19

Physical Appearance: Red crystalline solid

**Solubility & Usage Info:**

DMSO to 100 mM

**Minimum Purity:** >99%

**Stability and Solubility Advice:**

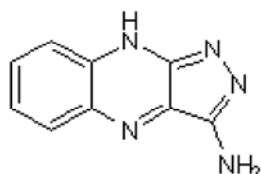
Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

**Batch Molecular Structure:**

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:**

**Jorda et al** (2018) How selective are pharmacological inhibitors of cell-cycle-regulating cyclin-dependent kinases? *J.Med.Chem.* **61** 9105. PMID: 30234987 .

**Ortega et al** (2002) Pyrazolo[3,4-*b*]quinoxalines. A new class of cyclin-dependent kinases inhibitors. *Bioorg.Med.Chem.Lett.* **10** 2177. PMID: 11983514.

**Monge et al** (1995) 3-Amino-2-quinoxalinecarbonitrile. New fused quinoxalines with potential cytotoxic activity. *J.Heterocycl.Chem.* **31** 1135.

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