

## Certificate of Analysis

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**Product Name:** Paprotrain

**Catalog No.:** 4813

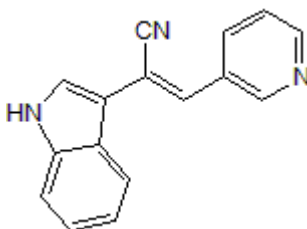
**Batch No.:** 1

CAS Number: 57046-73-8

IUPAC Name: (Z)- $\alpha$ -(3-Pyridinylmethylene)-1H-indole-3-acetonitrile

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>16</sub>H<sub>11</sub>N<sub>3</sub>  
**Batch Molecular Weight:** 245.28  
**Physical Appearance:** Yellow solid  
**Solubility:** DMSO to 100 mM  
 ethanol to 10 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.12 (Ethyl acetate:Petroleum ether [1:2])  
**HPLC:** Shows 99.4% purity  
<sup>1</sup>H NMR: Consistent with structure  
 Mass Spectrum: Consistent with structure  
 Microanalysis:

	Carbon Hydrogen Nitrogen		
Theoretical	78.35	4.52	17.13
Found	78.32	4.34	17.34

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

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**Description:**

Reversible, non-ATP competitive inhibitor of mitotic kinesin-like protein 2 (MKLP-2) ( $K_i = 3.4 \mu\text{M}$ ). Inhibits the basal ATPase activity of MKLP-2 ( $\text{IC}_{50} = 1.35 \mu\text{M}$ ). Exhibits selectivity for MKLP-2 over 12 other members of the kinesin superfamily, including the closely-related MKLP-1. Cell permeable.

**Physical and Chemical Properties:**

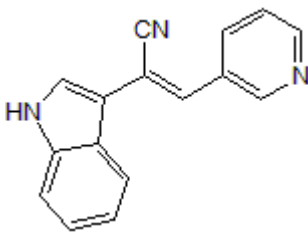
Batch Molecular Formula:  $\text{C}_{16}\text{H}_{11}\text{N}_3$

Batch Molecular Weight: 245.28

Physical Appearance: Yellow solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**References:**

**Tcherniuk et al** (2010) Relocation of Aurora B and survivin from centromeres to the central spindle impaired by a kinesin-specific MKLP-2 inhibitor. *Agnew Chem.Int.Ed.Engl.* **49** 8228. PMID: 20857469.

**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 10 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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