

## Certificate of Analysis

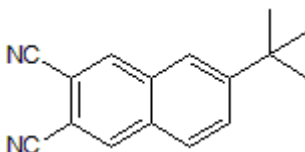
[www.tocris.com](http://www.tocris.com)

**Product Name:** BRD 9876  
**CAS Number:** 32703-82-5  
**IUPAC Name:** 6-(1,1-Dimethylethyl)-2,3-naphthalenedicarbonitrile

**Catalog No.:** 5454 **Batch No.:** 1

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>16</sub>H<sub>14</sub>N<sub>2</sub>  
**Batch Molecular Weight:** 234.3  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 50 mM  
ethanol to 10 mM with sonication  
**Storage:** Store at RT  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**HPLC:** Shows 99.8% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	82.02	6.02	11.96
Found	81.81	6.01	12.04

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## Product Information

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**Catalog No.:** 5454

**Batch No.:** 1

**CAS Number:** 32703-82-5

**IUPAC Name:** 6-(1,1-Dimethylethyl)-2,3-naphthalenedicarbonitrile

### Description:

ATP non-competitive kinesin Eg5 inhibitor. Selectively inhibits microtubule-bound Eg5. Inhibits multiple myeloma cell growth ( $IC_{50}$  = 2.2  $\mu$ M).

### Physical and Chemical Properties:

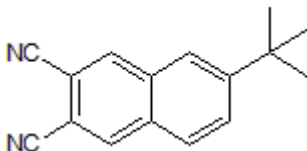
Batch Molecular Formula:  $C_{16}H_{14}N_2$

Batch Molecular Weight: 234.3

Physical Appearance: White solid

**Minimum Purity:** >99%

### Batch Molecular Structure:



**Storage:** Store at RT

### Solubility & Usage Info:

DMSO to 50 mM

ethanol to 10 mM with sonication

### 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:

**Chattopadhyay et al** (2015) Niche-based screening in multiple myeloma identifies a kinesin-5 inhibitor with improved selectivity over hematopoietic progenitors. *Cell Rep.* **10** 755. PMID: 25660025.

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