

## Certificate of Analysis

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

**Product Name:** AG 879

**Catalog No.:** 2617

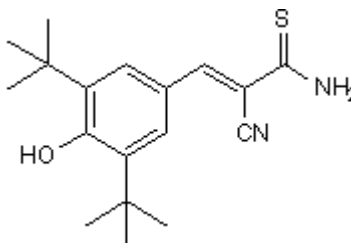
**Batch No.:** 2

CAS Number: 148741-30-4

IUPAC Name: (2E)-3-[3,5-Bis(1,1-dimethylethyl)-4-hydroxyphenyl]-2-cyano-2-propenethioamide

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>18</sub>H<sub>24</sub>N<sub>2</sub>OS  
**Batch Molecular Weight:** 316.46  
**Physical Appearance:** Yellow solid  
**Solubility:** DMSO to 100 mM  
 ethanol to 25 mM  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.8 (Ethyl acetate:Petroleum ether [2:3])  
**HPLC:** Shows 99.5% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

|             | Carbon | Hydrogen | Nitrogen |
|-------------|--------|----------|----------|
| Theoretical | 68.32  | 7.64     | 8.85     |
| Found       | 67.73  | 7.29     | 8.87     |

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

**Product Name:** AG 879

**Catalog No.:** 2617

**Batch No.:** 2

CAS Number: 148741-30-4

IUPAC Name: (2E)-3-[3,5-Bis(1,1-dimethylethyl)-4-hydroxyphenyl]-2-cyano-2-propenethioamide

**Description:**

Inhibitor of the tyrosine kinase activity of nerve growth factor (NGF) TrkA. Decreases cellular proliferation in human muscular sarcoma cell lines. Also inhibits ErbB2 and VEGFR-2 (IC<sub>50</sub> values are approximately 1 µM for both).

**Physical and Chemical Properties:**

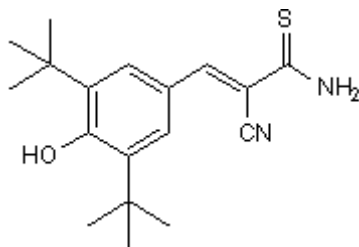
Batch Molecular Formula: C<sub>18</sub>H<sub>24</sub>N<sub>2</sub>OS

Batch Molecular Weight: 316.46

Physical Appearance: Yellow solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**Storage:** Store at -20°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 25 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.

**References:**

**He et al** (2004) The Tyr-kinase inhibitor AG879, that blocks the ETK-PAK1 interaction, suppresses the RAS-induced PAK1 activation and malignant transformation. *Cancer Biol. Ther.* **3** 96. PMID: 14726663.

**Rende et al** (2006) Role of nerve growth factor and its receptors in non-nervous cancer growth: efficacy of a tyrosine kinase inhibitor (AG879) and neutralizing antibodies antityrosine kinase receptor A and antinerve growth factor: an in-vitro and in-vivo study. *Anticancer Drugs* **17** 929. PMID: 16940803.

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

**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

www.tocris.com/distributors

Tel: +1 612 379 2956