

## Certificate of Analysis

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**Product Name:** AG 99

**Catalog No.:** 0497

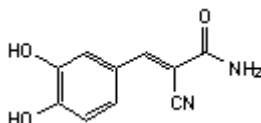
**Batch No.:** 1

**CAS Number:** 122520-85-8

**IUPAC Name:** (E)-2-Cyano-3-(3,4-dihydroxyphenyl)-2-propenamide

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>10</sub>H<sub>8</sub>N<sub>2</sub>O<sub>3</sub>  
**Batch Molecular Weight:** 204.18  
**Physical Appearance:** Yellow solid  
**Solubility:** ethanol to 5 mM  
 DMSO to 100 mM  
**Storage:** Desiccate at +4°C  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.65 (Dichloromethane:Methanol [10:1])  
**HPLC:** Shows >99.4% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon Hydrogen Nitrogen		
Theoretical	58.82	3.95	13.71
Found	58.63	3.91	13.62

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

## Product Information

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### Description:

Epidermal growth factor receptor (EGFR) kinase inhibitor ( $IC_{50}$  = 10  $\mu$ M) that is selective over insulin receptor kinase. Blocks tyrosine phosphorylation of p145<sup>met</sup> and promotes cell death of normal and cancer cells via activation of caspase-like proteases *in vitro*.

### Physical and Chemical Properties:

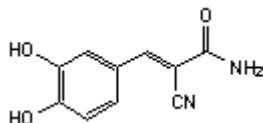
Batch Molecular Formula: C<sub>10</sub>H<sub>8</sub>N<sub>2</sub>O<sub>3</sub>

Batch Molecular Weight: 204.18

Physical Appearance: Yellow solid

**Minimum Purity:** >99%

### Batch Molecular Structure:



**Storage:** Desiccate at +4°C

### Solubility & Usage Info:

ethanol to 5 mM

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.

### References:

**Gazit et al** (1989) Tyrphostins. I. Synthesis and biological activity of protein tyrosine kinase inhibitors. *J.Med.Chem.* **32** 2344. PMID: 2552117.

**Levitzki and Gilon** (1991) Tyrphostins as molecular tools and potential antiproliferative drugs. *TiPS* **12** 171. PMID: 1862529.

**Gazit** (1996) Tyrphostins. 6. Dimeric benzylidenemalononitrile tyrphostins: potent inhibitors of EGF receptor tyrosine kinase *in vitro*. *J.Med.Chem.* **39** 4905. PMID: 8960549.

**Yamamoto et al** (2006) Tyrosine phosphorylation of p145<sup>met</sup> mediated by EGFR and Src is required for serum-independent survival of human bladder carcinoma cells. *J.Cell Sci.* **119** 4623. PMID: 17062641.

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