Print Date: Oct 30th 2014

# Certificate of Analysis

www.tocris.com

**Product Name:** **17-AAG** **Catalog No.: 1515** **Batch No.: 4**

CAS Number: 75747-14-7

IUPAC Name: 17-Demethoxy-17-(2-propenylamino)geldanamycin

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** $C_{31}H_{43}N_3O_8$

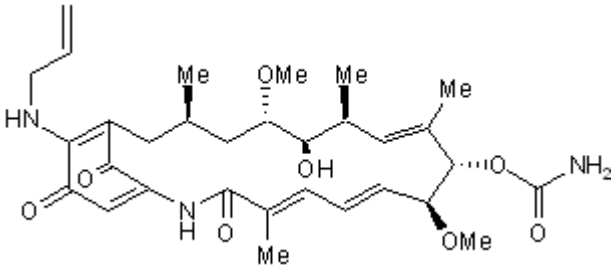
**Batch Molecular Weight:** 585.7

**Physical Appearance:** Dark purple solid

**Solubility:** DMSO to 100 mM

**Storage:** Desiccate at -20°C

**Batch Molecular Structure:**




## 2. ANALYTICAL DATA

**HPLC:** Shows 99.7% purity

**Mass Spectrum:** Consistent with structure

# Product Information



**Product Name:** **17-AAG** **Catalog No.: 1515** **Batch No.: 4**

CAS Number: 75747-14-7

IUPAC Name: 17-Demethoxy-17-(2-propenylamino)geldanamycin

**Description:**

Inhibitor of heat shock protein 90 (Hsp90) chaperone activity, and an analog of geldanamycin (Cat. No. 1368). Subsequently inhibits the activity of oncogenic proteins such as $p185^{erbB-2}$ ($IC_{50}$ = 31 nM), N-ras, Ki-ras and c-Akt. Antitumor in vivo. Also protects neuroprogenitor cells against stress-induced apoptosis at low concentrations (10 nM) in vitro.

**Physical and Chemical Properties:**

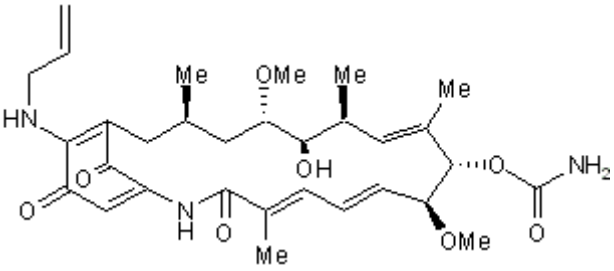
Batch Molecular Formula: $C_{31}H_{43}N_3O_8$

Batch Molecular Weight: 585.7

Physical Appearance: Dark purple solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**




**Storage:** Desiccate 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

This product is supplied as a lyophilized solid and may be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

**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:**

**Schnur** *et al* (1995) Inhibition of the oncogene product $p185^{erbB-2}$ in vitro and in vivo by geldanamycin and dihydrogeldanamycin derivatives. J.Med.Chem. ***38*** 3806. PMID: 7562911.

**Yang** *et al* (2001) Disruption of the EF-2 kinase/Hsp90 protein complex: a possible mechanism to inhibit glioblastoma by geldanamycin. Cancer Res. ***61*** 4010. PMID: 11358819.

**Hostein** *et al* (2001) Inhibition of signal transduction by the Hsp90 inhibitor 17-allylamino-17-demethoxygeldanamycin results in cytostasis and apoptosis. Cancer Res. ***61*** 4003. PMID: 11358818.

**Wang** *et al* (2011) Protection of murine neural progenitor cells by the Hsp90 inhibitor 17-allylamino-17-demethoxygeldanamycin in the low nanomolar concentration range. J.Neurochem. ***117*** 703. PMID: 21395580.