

## Certificate of Analysis

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**Product Name:** TNP 470

**Catalog No.:** 3750

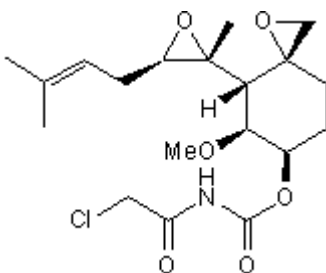
**Batch No.:** 4

CAS Number: 129298-91-5

IUPAC Name: *N*-(2-Chloroacetyl)carbamic acid (3*R*,4*S*,5*S*,6*R*)-5-Methoxy-4-[(2*R*,3*R*)-2-methyl-3-(3-methyl-2-buten-1-yl)-2-oxiranyl]-1-oxaspiro[2.5]oct-6-yl ester

### 1. PHYSICAL AND CHEMICAL PROPERTIES

<b>Batch Molecular Formula:</b>	C <sub>19</sub> H <sub>28</sub> ClNO <sub>6</sub>
<b>Batch Molecular Weight:</b>	401.88
<b>Physical Appearance:</b>	White solid
<b>Solubility:</b>	DMSO to 100 mM
<b>Storage:</b>	Store at -20°C
<b>Batch Molecular Structure:</b>	



### 2. ANALYTICAL DATA

<b>HPLC:</b>	Shows 97.3% purity
<b><sup>1</sup>H NMR:</b>	Consistent with structure
<b>Mass Spectrum:</b>	Consistent with structure

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

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**Description:**

Analog of Fumagillin (Cat. No. 1768) that displays potent antiangiogenic activity in vitro and in vivo. Inhibits methionine aminopeptidase type II (MetAP2). Potently inhibits the proliferation of endothelial cells.

**Physical and Chemical Properties:**

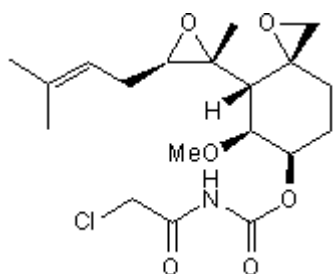
Batch Molecular Formula: C<sub>19</sub>H<sub>28</sub>ClNO<sub>6</sub>

Batch Molecular Weight: 401.88

Physical Appearance: White solid

**Minimum Purity:** >97%

**Batch Molecular Structure:**



**References:**

**Huang et al** (2003) TNP-470 promotes initial vascular sprouting in xenograft tumors. *Mol.Cancer Ther.* **3** 335.

**Miura et al** (2004) Carcinoma-induced endothelial cells tube formation through KDR/FLK-1 is blocked by TNP-470. *Cancer Letts.* **203** 45.

**Arico-Muendel et al** (2009) Carbamate analogues of fumagillin as potent, targeted inhibitors of methionine aminopeptidase-2. *J.Med.Chem.* **52** 8047. PMID: 19929003.

**Hines et al** (2010) Reversal of TNP-470-induced endothelial cell growth arrest by guanine and guanine nucleosides. *J.Pharm.Exp.Ther.* **334** 729.

**Storage:** Store at -20°C

**Solubility & Usage Info:**

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.

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