

Certificate of Analysis

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Product Name: Combretastatin A4

Catalog No.: 1495

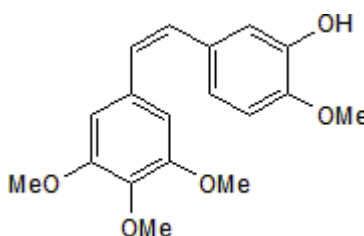
Batch No.: 3

CAS Number: 117048-59-6

IUPAC Name: 2-Methoxy-5-[(1Z)-2-(3,4,5-trimethoxyphenyl)ethenyl]phenol

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₈H₂₀O₅
Batch Molecular Weight: 316.35
Physical Appearance: White crystalline solid
Solubility: ethanol to 100 mM
 DMSO to 100 mM
Storage: Desiccate at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.5 (Ethyl acetate:Hexane [1:1])
Melting Point: Between 84 - 85°C
HPLC: Shows >99.7% purity
¹H NMR: Consistent with structure
 Mass Spectrum: Consistent with structure
 Microanalysis:

Carbon Hydrogen Nitrogen

Theoretical	68.34	6.37
Found	68.3	6.33

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

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Description:

Antitumor, antiangiogenic and antimetastatic agent, in vitro and in vivo. Inhibits tubulin polymerization.

Physical and Chemical Properties:

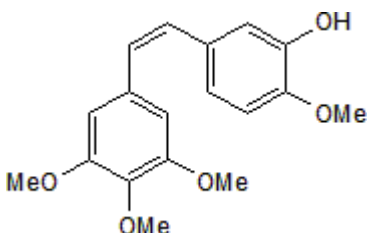
Batch Molecular Formula: C₁₈H₂₀O₅

Batch Molecular Weight: 316.35

Physical Appearance: White crystalline solid

Minimum Purity: >99%

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:

ethanol to 100 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:

Dorr et al (1996) Antitumor activity of combretastatin-A4 phosphate, a natural product tubulin inhibitor. *Invest.New Drugs* **14** 131. PMID: 8913833.

Griggs et al (2001) Potent anti-metastatic activity of combretastatin-A4. *Int.J.Oncol.* **19** 821. PMID: 11562761.

Lin et al (2007) Combretastatin A4-induced differential cytotoxicity and reduced metastatic ability by inhibition of AKT function in human gastric cancer cells. *J.Pharmacol.Exp.Ther.* **323** 365. PMID: 17646428.

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