

Product Name: Aphidicolin

Catalog No.: 5736

Batch No.: 9

CAS Number: 38966-21-1

IUPAC Name: (3*R*,4*R*,4*aR*,6*aS*,8*R*,9*R*,11*aS*,11*bS*)-Tetradecahydro-3,9-dihydroxy-4,11*b*-dimethyl-8,11*a*-methano-11*aH*-cyclohepta[*a*]naphthalene-4,9-dimethanol

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₀H₃₄O₄·¼H₂O

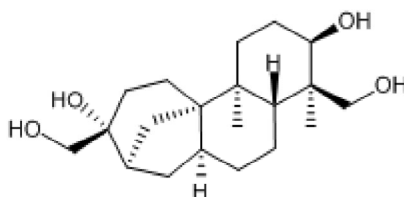
Batch Molecular Weight: 342.98

Physical Appearance: Off White solid

Solubility: DMSO to 25 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.5% purity

Microanalysis:

| | Carbon | Hydrogen | Nitrogen |
|-------------|--------|----------|----------|
| Theoretical | 70.04 | 10.14 | |
| Found | 69.2 | 10.01 | |

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

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Description:

Aphidicolin is a DNA polymerase α , δ and ϵ inhibitor. Exhibits selectivity over DNA polymerase β and γ . Antimitotic, antibiotic and antiviral.

Physical and Chemical Properties:

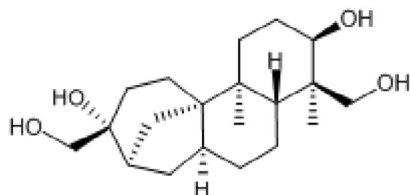
Batch Molecular Formula: C₂₀H₃₄O₄·¼H₂O

Batch Molecular Weight: 342.98

Physical Appearance: Off White solid

Minimum Purity: ≥98%

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 25 mM

This product is supplied in lyophilized form. It may appear as a solid, gel or film and 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. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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:

Syvöja et al (1990) DNA polymerases α , δ , and ϵ : three distinct enzymes from HeLa cells. Proc.Natl.Acad.Sci.U.S.A. **87** 6664. PMID: 1975694.

Spadari et al (1984) Control of DNA replication and cell proliferation in eukaryotes by aphidicolin. Toxicol.Pathol. **12** 143. PMID: 11478315.

Bucknall et al (1973) Antiviral effects of aphidicolin, a new antibiotic produced by *Cephalosporium aphidicola*. Antimicrob.Agents Chemother. **4** 294. PMID: 4357181.

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