

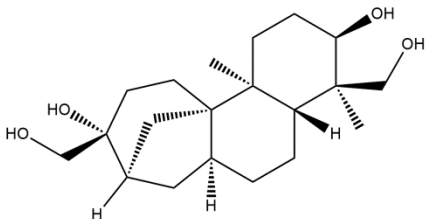
Aphidicolin

12/19

ALTERNATE NAMES: (3R,4R,4aR,6aS,8R,9R,11aS,11bS)-tetradecahydro-3,9-dihydroxy-4,11b-dimethyl-8,11a-methano-11aH-cyclohepta[a]naphthalene-4,9-dimethanol; (3R,4R,4aR,6aS,8R,9R,11aS,11bS)-4,9-bis(hydroxymethyl)-4,11b-dimethyltetradecahydro-8,11a-methanocyclohepta[a]naphthalene-3,9-diol; NSC 234714; ICI 69653; NSC 351140

CATALOG #: B2956-1 1 mg
B2956-5 5 mg

STRUCTURE:



MOLECULAR FORMULA: C₂₀H₃₄O₄

MOLECULAR WEIGHT: 338.48

CAS NUMBER: 38966-21-1

APPEARANCE: Solid

PURITY: ≥98%

SOLUBILITY: ~50 mg/ml in DMSO

DESCRIPTION: Aphidicolin is a natural tetracyclic diterpene antibiotic which shows antiviral activity against herpes simplex. In eukaryotic cells, it is a cell-permeable, reversible inhibitor of DNA replication, specifically blocking the activity of DNA polymerases α, δ, and ε. It inhibits HeLa DNA polymerases at a concentration of 10 μg/ml. It is used as a cell synchronization agent and blocks the cell cycle at early S-phase.

STORAGE TEMPERATURE: -20°C. Protect from air. Store under desiccating conditions.

HANDLING: Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

REFERENCES:

1. Bucknall, R.A., Moores, H., Simms, R., et al. Antiviral effects of aphidicolin, a new antibiotic produced by *Cephalosporium aphidicola*. *Antimicrobial Agents and Chemotherapy* 4(3), 294-298 (1973).
2. Syväoja, J., Suomensaari, S., Nishida, C. et al. DNA polymerases alpha, delta, and epsilon: three distinct enzymes from HeLa cells. *Proc Natl Acad Sci U S A.* 87(17):6664-8 (1990).

RELATED PRODUCTS:

Azidothymidine (Cat. No. B1113)
 Clemizole (Cat. No. 2481)
 6-Azauridine (Cat. No. B1024)
 Mithramycin A (Cat. No. B1532)
 Actinomycin D (Cat. No. 1036)

DISCLAIMER: ***FOR RESEARCH USE ONLY! Not to be used on humans.***