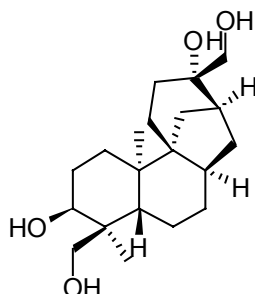


Aphidicolin

Code: **BIA-A1217**

Pack sizes: **1 mg, 5 mg**



Synonyms : **ICI 69653**

Specifications

CAS # : **38966-21-1**
Molecular Formula : **C₂₀H₃₄O₄**
Molecular Weight : **338.5**
Source : ***Nigrospora oryzae***
Appearance : **White to off-white powder**
Purity : **> 97%**
Long Term Storage : **- 20°C**
Solubility : **Soluble in methanol, DMSO.**

Application Notes

Aphidicolin is a tetracyclic diterpene antibiotic isolated from species in several genera of fungi, notably *Cephalosporium*, *Nigrospora*, *Harziella* and *Phoma*. Aphidicolin has antibiotic, antiviral and antimitotic properties blocking the cell cycle at early S-phase. This property has been used to synchronise cell division and has found use as a tool in cell differentiation research. Aphidicolin is a reversible inhibitor of DNA replication by inhibition of selected DNA polymerases. Aphidicolin induces apoptosis, prolongs the half-life of DNA methyltransferase, is active against Leishmania parasites and acts synergistically with the antitumor agents, vincristine and doxorubicin.

References

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2. The production of aphidicolin by *Nigrospora sphaerica*. Starratt A.N. & Loschiavo S.R., Can. J. Microbiol. 1974, 20, 416.
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4. Effect of aphidicolin on DNA methyltransferase in the nucleus. Suetake I. et al., Cell Struct. Funct. 1998, 23, 137.
5. Cytotoxicity of aphidicolin and its derivatives against neuroblastoma cells *in vitro*: synergism with doxorubicin and vincristine. Michaelis M. et al., Anticancer Drugs 2000, 11, 479.
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