PRODUCT DATA SHEET

Aphidicolin

Synonyms: ICI 69653

Specifications

- **CAS #**: 38966-21-1
- **Molecular Formula**: C_{20}H_{34}O_{4}
- **Molecular Weight**: 338.5
- **Source**: Nigrospora oryzae
- **Appearance**: White to off-white powder
- **Purity**: >97% by HPLC
- **Long Term Storage**: -20°C
- **Solubility**: Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.

Application Notes

Aphidicolin is a tetracyclic diterpene antibiotic isolated from 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 is useful as a tool in cell differentiation research. Aphidicolin is a reversible inhibitor of DNA replication by inhibiting 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