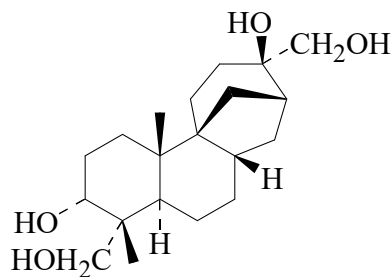




>>Entry Name: Aphidicolin

Synonym(s): 3 α ,16 β ,17,18-Aphidicolanetetrol. ICI 69653



CAS Registry Number: 38966-21-1

Molecular Formula: C₂₀H₃₄O₄

Molecular Weight: 338.486

Accurate Mass: 338.24571

Percentage Composition: C 70.97%; H 10.12%; O 18.91%

General Statement: Diterpene antibiotic

Biological Source: Isol. from *Cephalosporium aphidicola*, *Nigrospora sphaerica*, *Harziella entomophilla* and *Phoma betae*

Use/Importance: Antiviral, antineoplastic and antimitotic antibiotic

Physical Description: Cryst.

Melting Point: Mp 227-233°

Optical Rotation: [α]_D²⁷+12 (c, 1 in MeOH)

Solubility: BERDY SOL: Sol. MeOH, Et₂O; poorly sol. H₂O, hexane

Calculated Log P Data: Log P 1.31 (calc)

UV: [neutral] $\lambda_{\max}$ 0 (end) (ϵ) (MeOH) (Derep) [neutral] $\lambda_{\max}$ (MeOH) (Berdy)

Fluka: 10797

Sigma: A0781

>>Derivative: 17-Ac

CAS Registry Number: 51103-57-2

Molecular Formula: C₂₂H₃₆O₅

Molecular Weight: 380.523

Accurate Mass: 380.256275

Percentage Composition: C 69.44%; H 9.54%; O 21.02%

Biological Source: From *Phoma betae*

Use/Importance: Inhibits DNA polymerase and synthesis, and root growth of seedlings

Physical Description: Cryst.

Melting Point: Mp 196-199°

Optical Rotation: [α]_D²⁶+5

Solubility: BERDY SOL: Sol. MeOH, Et₂O, C₆H₆; poorly sol. H₂O, hexane

UV: [neutral] $\lambda_{\max}$ (MeOH) (Berdy)

>>Derivative: 3,18-Orthoacetate

CAS Registry Number: 92681-39-5

Molecular Formula: C₂₂H₃₆O₅

Molecular Weight: 380.523

Accurate Mass: 380.256275

Percentage Composition: C 69.44%; H 9.54%; O 21.02%

Biological Source: From *Phoma betae*

Use/Importance: Phytotoxin. Inhibits the root growth of rice and lettuce seedlings

Physical Description: Oil

Optical Rotation: [α]_D²⁵-5.4 (c, 1.6 in CHCl₃)