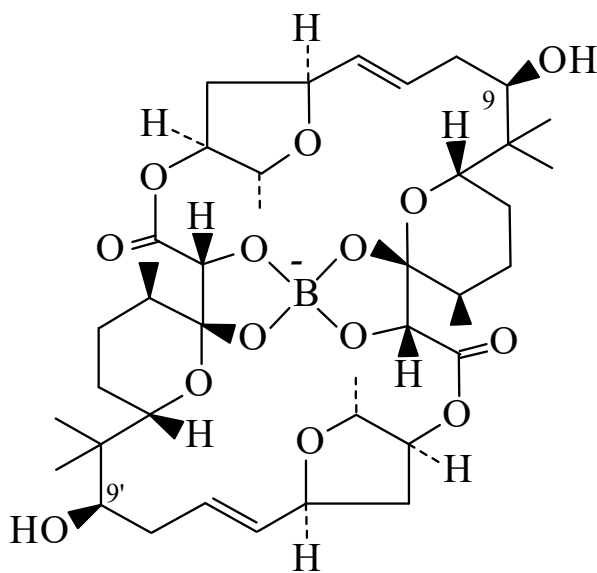




>>Entry Name: Aplasmomycin

Synonym(s): Aplasmomycin A



CAS Registry Number: 61230-25-9

Molecular Formula: $C_{40}H_{60}BO_{14}^{(-)}$

Molecular Weight: 775.717

Accurate Mass: 775.407615

Percentage Composition: C 61.93%; H 7.80%; B 1.39%; O 28.88%

Biological Source: Isol. from *Streptomyces griseus*

Use/Importance: Active against gram-positive bacteria and shows insecticidal and acaricidal props.

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

UV: [neutral] λ_{max} (MeOH) (Berdy)

Other Data: Belongs to small group of boron-containing antibiotics. Closely related to Boromycin [CJZ23-I](#)

Hazard & Toxicity: LD₅₀ (mus, ipr) 125 mg/kg ; BERDY HAZD : LD₅₀ (mus, ipr) 125 mg/kg

>>Derivative: Na salt

Physical Description: Needles (MeOH aq.)

Melting Point: Mp 283-285 dec.°

Optical Rotation: $[\alpha]_D^{22} +225$ (c, 1.24 in CHCl₃)

UV: [neutral] λ_{max} 0 (end) (ϵ) (MeOH) (Derep)

>>Derivative: 9-Ac

Synonym(s): Aplasmomycin B

CAS Registry Number: 68193-20-4

Molecular Formula: $C_{42}H_{62}BO_{15}^{(-)}$

Molecular Weight: 817.754

Accurate Mass: 817.41818

Percentage Composition: C 61.69%; H 7.64%; B 1.32%; O 29.35%

Biological Source: From *Streptomyces griseus*

Use/Importance: Active against gram-positive bacteria

Optical Rotation: $[\alpha]_D +188$ (MeOH) (as Na salt)

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

UV: [neutral] λ_{max} (MeOH) (Berdy)

>>Derivative: 9,9'-Di-Ac

Synonym(s): Aplasmomycin C

CAS Registry Number: 68193-21-5

Molecular Formula: $C_{44}H_{64}BO_{16}^{(-)}$