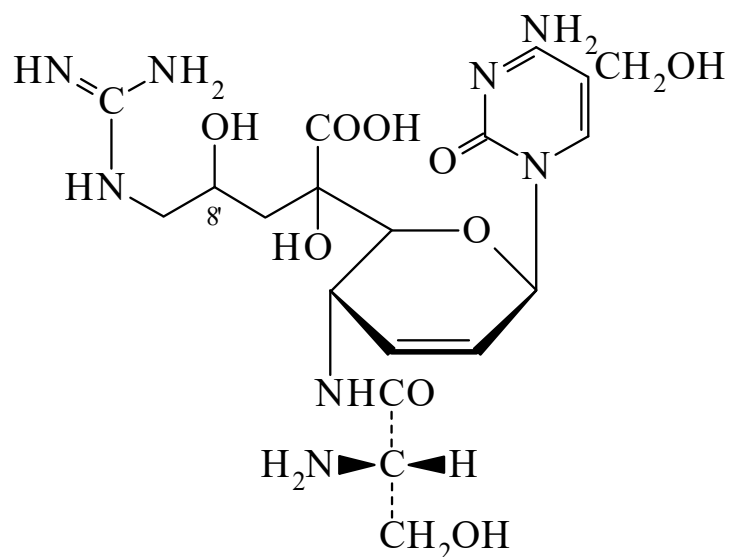




>>Entry Name: Mildiomycin

Synonym(s): B 98891. Antibiotic B 98891



CAS Registry Number: 67527-71-3

Related CAS Registry Numbers(s): 78162-87-5 78162-88-6 78162-89-7 78162-90-0 78162-91-1

Molecular Formula: C₁₉H₃₀N₈O₉

Molecular Weight: 514.494

Accurate Mass: 514.213577

Percentage Composition: C 44.36%; H 5.88%; N 21.78%; O 27.99%

Biological Source: Isol. from *Streptovercillium rimofaciens*

Use/Importance: Active against gram-positive and -negative bacteria, yeasts and fungi. Fungicide against powdery mildew

Melting Point: Mp 300 dec.°

Optical Rotation: $[\alpha]_D^{23} +100$ (c, 1 in H₂O)

Solubility: BERDY SOL: Sol. H₂O; fairly sol. Py, DMSO, dioxan, THF; poorly sol. MeOH, hexane

UV: [acid] $\lambda_{\max}$ 266 (ϵ 8470) (MeOH/HCl) (Derep) [base] $\lambda_{\max}$ (MeOH) (Derep) [neutral] $\lambda_{\max}$ 284 (ϵ 9380) (MeOH) (Derep) [neutral] $\lambda_{\max}$ 271 (E1%/1cm 157) (pH 7 buffer) (Berdy) [base] $\lambda_{\max}$ 271 (E1%/1cm 154) (NaOH) (Berdy) [acid] $\lambda_{\max}$ 280 (E1%/1cm 247) (HCl) (Berdy) [neutral] $\lambda_{\max}$ 271 (ϵ 8720) (H₂O) (Berdy)

Hazard & Toxicity: BERDY HAZD : LD₅₀ (mus, ivn) 500 - 1500 mg/kg , LD₅₀ (mus, orl) 5000 mg/kg

>>Derivative: 8'-Deoxy

Synonym(s): Mildiomycin D

CAS Registry Number: 86432-24-8

Molecular Formula: C₁₉H₃₀N₈O₈

Molecular Weight: 498.495

Accurate Mass: 498.218662

Percentage Composition: C 45.78%; H 6.07%; N 22.48%; O 25.68%

Biological Source: Isol. from *Streptovercillium rimofaciens*

Use/Importance: Weakly active against gram-positive and -negative bacteria, phytopathogenic fungi and some yeasts

Physical Description: Powder + 2H₂O

Melting Point: Mp 210 dec.°

Optical Rotation: $[\alpha]_D^{20} +119.4$ (c, 1 in H₂O)

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

UV: [acid] $\lambda_{\max}$ 266 (ϵ 8470) (MeOH/HCl) (Derep) [base] $\lambda_{\max}$ (MeOH) (Derep) [neutral] $\lambda_{\max}$ 284 (ϵ 9380) (MeOH) (Derep) [neutral] $\lambda_{\max}$ 271 (ϵ 9100) (H₂O) (Berdy) [base] $\lambda_{\max}$ 271 (ϵ 9100) (NaOH) (Berdy) [acid] $\lambda_{\max}$ 280 (ϵ 13600) (HCl) (Berdy)

Hazard & Toxicity: BERDY HAZD : LD₅₀ (mus, ipr) 1000 - 3000 mg/kg

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