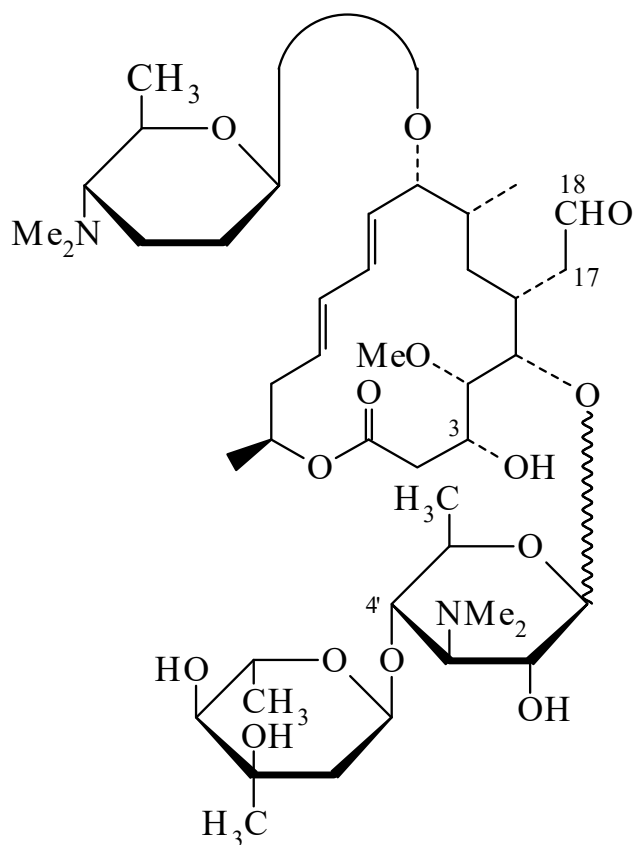




>>Entry Name: Foromacidin A

Synonym(s): 9-*O*-[5-(Dimethylamino)tetrahydro-6-methyl-2*H*-pyran-2-yl]leucomycin V, 9Cl. Spiramycin I, 8Cl. Spiramycin A. Espiramicin



CAS Registry Number: 24916-50-5

Molecular Formula: C₄₃H₇₄N₂O₁₄

Molecular Weight: 843.063

Accurate Mass: 842.514008

Percentage Composition: C 61.26%; H 8.85%; N 3.32%; O 26.57%

General Statement: Macrolide antibiotic

Biological Source: Produced by a *Streptomyces ambofaciens*

Biological Use/Importance: Broad-spectrum antibiotic

Physical Description: Cryst.

Melting Point: Mp 134-138°

Optical Rotation: $[\alpha]_D^{20} -96$ (c, 0.34 in MeOH)

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

Calculated Log P Data: Log P 0.92 (uncertain value) (calc)

UV: [neutral] $\lambda_{\max}$ 232 (ϵ 26500) (MeOH) (Derep) [neutral] $\lambda_{\max}$ 231 (E1%/1cm 322) (EtOH) (Berdy)

Hazard & Toxicity: LD₅₀ (mus, scu) 1010 mg/kg ; BERDY HAZD : LD₅₀ (mus, ivn) 200 mg/kg , LD₅₀ (mus, orl) 5000 mg/kg

>>Derivative: 3-Ac

Synonym(s): Foromacidin B. Spiramycin II. Spiramycin B

CAS Registry Number: 24916-51-6

Molecular Formula: C₄₅H₇₆N₂O₁₅

Molecular Weight: 885.1

Accurate Mass: 884.524573

Percentage Composition: C 61.07%; H 8.65%; N 3.16%; O 27.11%

Biological Source: Prod. by *Streptomyces ambofaciens*

Biological Use/Importance: Shows broad-spectrum antimicrobial props.

Physical Description: Cryst.

Melting Point: Mp 130-133°

Optical Rotation: $[\alpha]_D -86$ (c, 0.82 in EtOH)

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

UV: [neutral] $\lambda_{\max}$ 231 (E1%/1cm 307) (EtOH) (Berdy)

Hazard & Toxicity: BERDY HAZD : LD₅₀ (mus, ivn) 250 mg/kg , LD₅₀ (mus, scu) 1520 mg/kg