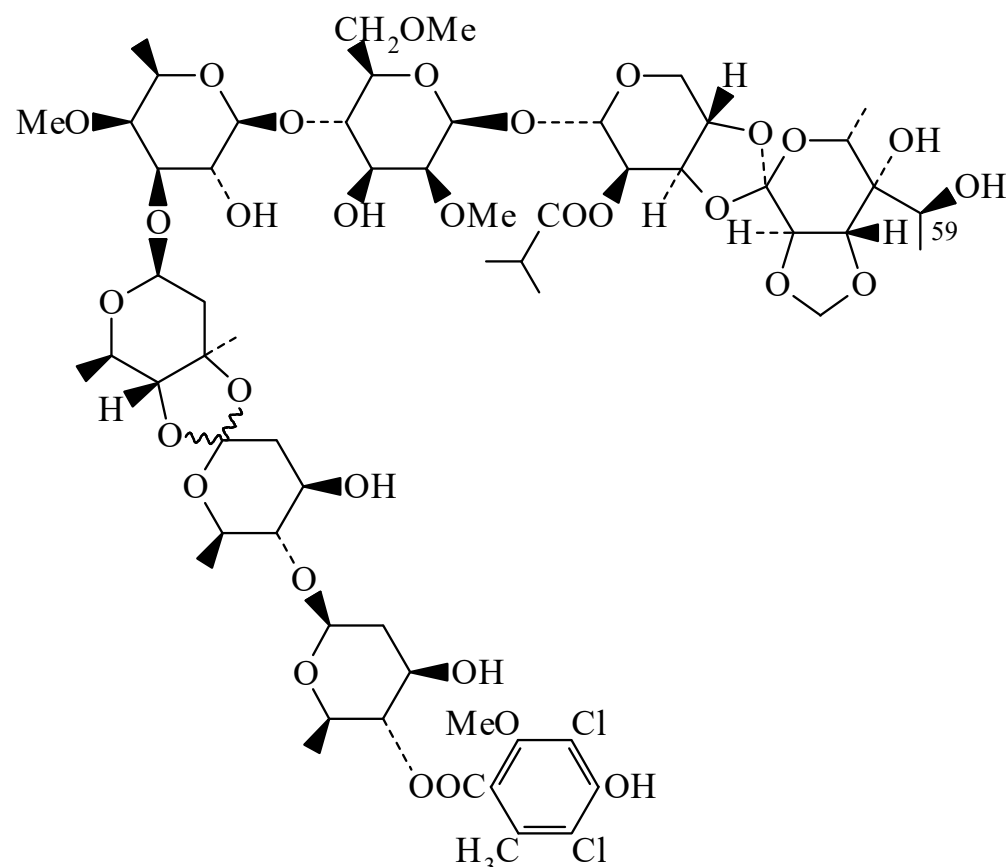




>>Entry Name: Avilamycin C



CAS Registry Number: 69787-80-0

Related CAS Registry Numbers(s): 11051-71-1

Molecular Formula: $C_{61}H_{90}Cl_2O_{32}$

Molecular Weight: 1406.268

Accurate Mass: 1404.479234

Percentage Composition: C 52.10%; H 6.45%; Cl 5.04%; O 36.41%

General Statement: Major component of polyether-type antibiotic complex which consists of 16 components

Biological Source: Isol. from *Streptomyces viridochromogenes*

Use/Importance: Active against gram-positive bacteria

Physical Description: Fine plates + 2H₂O

Melting Point: Mp 188-189°

Optical Rotation: $[\alpha]_D -4.8$ (c, 1.44 in CHCl₃)

Solubility: BERDY SOL: Sol. MeOH, CHCl₃

Calculated Log P Data: Log P -0.24 (uncertain value) (calc)

UV: [base] λ_{max} 292 (ϵ 8270) (0.1N NaOH) (Derep) [neutral] λ_{max} 228 (ϵ 13200); 286 (ϵ 2000); 300 (sh) (ϵ 1320) (MeOH) (Derep) [neutral] λ_{max} 218 (ϵ 13200); 284 (ϵ 2140) (MeOH) (Berdy)

>>Derivative: 59-Ketone

Synonym(s): Avilamycin A. Dehydroavilamycin C

CAS Registry Number: 69787-79-7

Molecular Formula: $C_{61}H_{88}Cl_2O_{32}$

Molecular Weight: 1404.252

Accurate Mass: 1402.463584

Percentage Composition: C 52.18%; H 6.32%; Cl 5.05%; O 36.46%

Biological Source: From *Streptomyces viridochromogenes*

Use/Importance: Active against gram-positive bacteria

Physical Description: Needles (CHCl₃/petrol)

Melting Point: Mp 181-182°

Optical Rotation: $[\alpha]_D -8$ (EtOH)

Solubility: BERDY SOL: Sol. MeOH, CHCl₃; poorly sol. Et₂O, hexane

Calculated Log P Data: Log P -1.35 (uncertain value) (calc)

UV: [base] λ_{max} 292 (ϵ 8270) (0.1N NaOH) (Derep) [neutral] λ_{max} 228 (ϵ 13200); 286 (ϵ 2000); 300 (sh) (ϵ 1320) (MeOH) (Derep) [neutral] λ_{max} 216 (ϵ 14120); 281 (ϵ 851); 288 (ϵ 812) (MeOH) (Berdy) [neutral] λ_{max} 227 (ϵ 14200); 286 (ϵ 2140); 300 (ϵ 1260) (EtOH) (Berdy)

Other Data: Medical prod. known as Avilamycin, BAN, INN, USAN contains small amounts of other components

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

References: