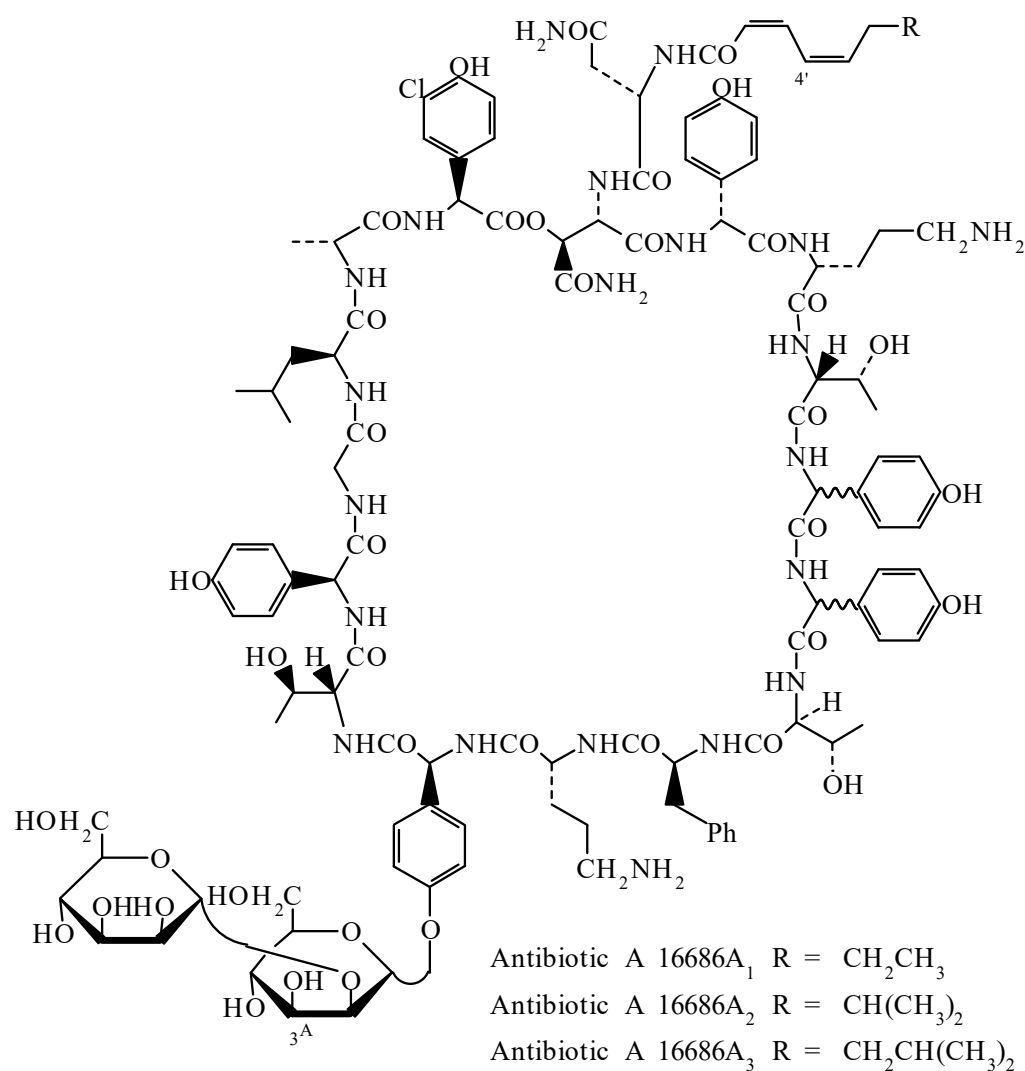




>>Entry Name: Ramoplanin, INN, USAN

Synonym(s): A 16686. Antibiotic A 16686. MDL 62198



CAS Registry Number: 76168-82-6

Source/Synthesis: Prod. by *Actinoplanes* sp. ATCC 33076

Use/Importance: Active against gram-positive bacteria. Shows antiplaque activity. Inhibits cell wall biosynthesis

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

UV: [neutral] λ_{max} 232 (E1%/1cm 178); 265 (E1%/1cm 107) (MeOH) (Berdy) [acid] λ_{max} 231 (E1%/1cm 167); 270 (E1%/1cm 96) (MeOH-HCl) (Berdy) [base] λ_{max} 250 (E1%/1cm 232) (MeOH-NAOH) (Berdy) [acid] λ_{max} 232 (ε 52200); 270 (ε 25400) (HCl) (Berdy)

Hazard & Toxicity: LD₅₀ (rat, orl) 2000 mg/kg. LD₅₀ (mus, ipr) 500 mg/kg ; BERDY HAZD : LD₅₀ (mus, ipr) 500 - 750 mg/kg

>>Variant: Antibiotic A 16686A₁

Synonym(s): Ramoplanin A₁

CAS Registry Number: 81988-87-6

Molecular Formula: C₁₁₈H₁₅₂ClN₂₁O₄₀

Molecular Weight: 2540.068

Accurate Mass: 2538.019406

Percentage Composition: C 55.80%; H 6.03%; Cl 1.40%; N 11.58%; O 25.20%

Physical Description: Powder

Melting Point: Mp 210-220 dec.°

Optical Rotation: [α]_D²⁰ +57 (c, 0.51 in H₂O)

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

UV: [acid] λ_{max} 232 (ε 53900); 270 (ε 26800) (0.1M HCl) (Derep) [base] λ_{max} 250 (ε 76600); 290 (sh) (ε 28000) (0.1M KOH) (Derep) [neutral] λ_{max} 232 (ε 56400); 268 (ε 28100) (H₂O at pH 7.5) (Derep) [neutral] λ_{max} 233 (E1%/1cm 202); 266 (E1%/1cm 106) (MeOH) (Berdy) [acid] λ_{max} 232 (E1%/1cm 219); 270 (E1%/1cm 110) (MeOH-HCl) (Berdy) [base] λ_{max} 251 (E1%/1cm 264) (MeOH-NAOH) (Berdy)

Other Data: Minor component of complex. λ_{max} 233, 266 nm (MeOH)