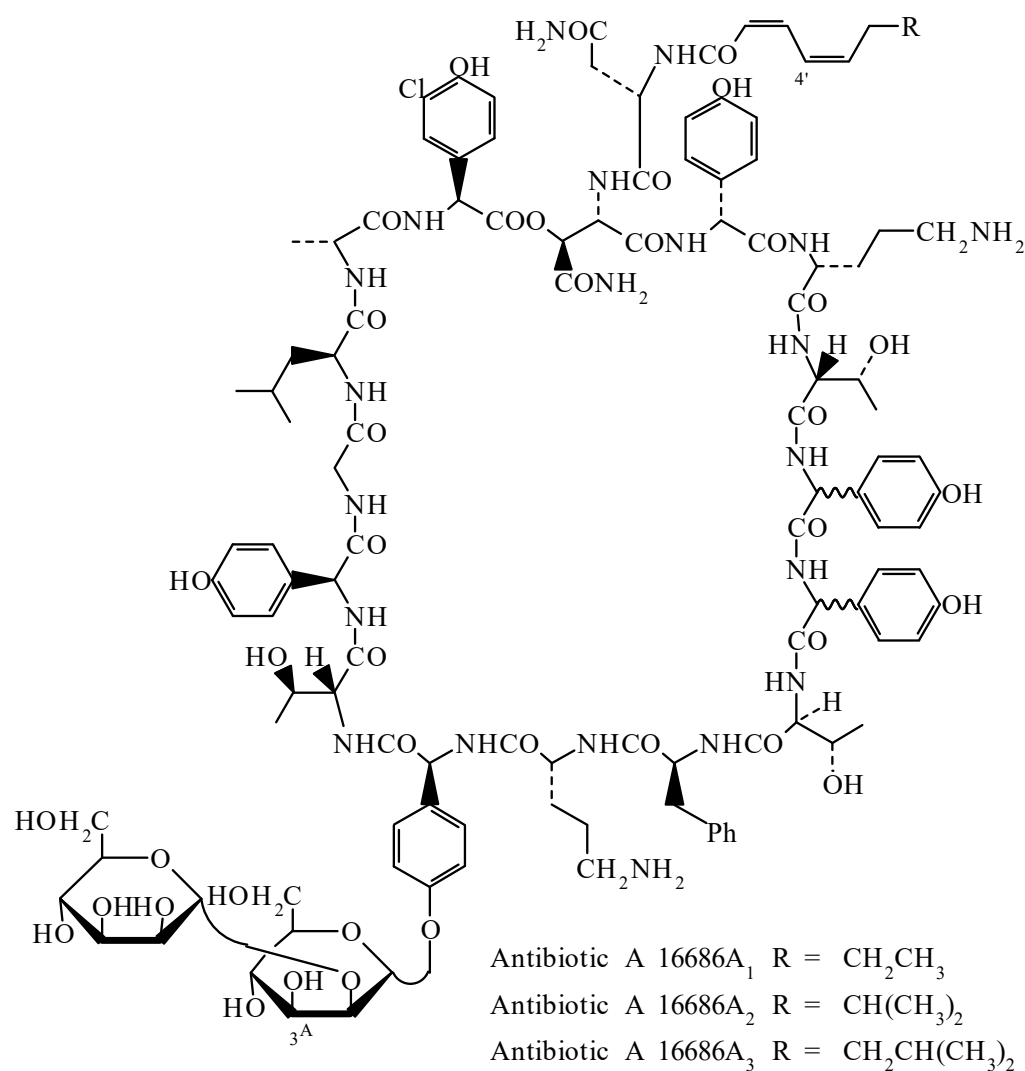




>>Entry Name: Ramoplanin, INN, USAN

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. H<sub>2</sub>O, DMF, butanol, MeOH; poorly sol. Et<sub>2</sub>O, hexane

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

Hazard & Toxicity: LD<sub>50</sub> (rat, orl) 2000 mg/kg. LD<sub>50</sub> (mus, ipr) 500 mg/kg; BERDY HAZD : LD<sub>50</sub> (mus, ipr) 500 - 750 mg/kg

>>Variant: Antibiotic A 16686A<sub>1</sub>

Synonym(s): Ramoplanin A<sub>1</sub>

CAS Registry Number: 81988-87-6

Molecular Formula: C<sub>118</sub>H<sub>152</sub>ClN<sub>21</sub>O<sub>40</sub>

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:  $[\alpha]_D^{20} +57$  (c, 0.51 in H<sub>2</sub>O)

Solubility: BERDY SOL: Sol. MeOH, H<sub>2</sub>O, DMF, EtOH; fairly sol. butanol; poorly sol. Et<sub>2</sub>O, hexane

UV: [acid]  $\lambda_{\max}$  232 ( $\epsilon$  53900); 270 ( $\epsilon$  26800) (0.1M HCl) (Derep) [base]  $\lambda_{\max}$  250 ( $\epsilon$  76600); 290 (sh) ( $\epsilon$  28000) (0.1M KOH) (Derep) [neutral]  $\lambda_{\max}$  232 ( $\epsilon$  56400); 268 ( $\epsilon$  28100) (H<sub>2</sub>O at pH 7.5) (Derep) [neutral]  $\lambda_{\max}$  233 (E1%/1cm 202); 266 (E1%/1cm 106) (MeOH) (Berdy) [acid]  $\lambda_{\max}$  232 (E1%/1cm 219); 270 (E1%/1cm 110) (MeOH-HCl) (Berdy) [base]  $\lambda_{\max}$  251 (E1%/1cm 264) (MeOH-NAOH) (Berdy)

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