



CAS Registry Number: 522-70-3

Molecular Formula: C₂₆H₃₆N₂O₉

Molecular Weight: 520.578

Accurate Mass: 520.242083

Percentage Composition: C 59.99%; H 6.97%; N 5.38%; O 27.66%

Biological Source: From *Streptomyces blastmyceticus*

Use/Importance: Antifungal, antiviral and antitumour agent

Physical Description: Needles (C₆H₆/petrol)

Melting Point: Mp 174.5-175°

Optical Rotation: [α]_D²⁶+79.4 (c, 1 in CHCl₃)

Calculated Log P Data: Log P 4.54 (calc)

UV: [acid] $\lambda_{\max}$ (no shifts reported) (Derep) [base] $\lambda_{\max}$ 222 (ε 40000); 343 (ε 8220) (MeOH/NaOH) (Derep) [neutral] $\lambda_{\max}$ 226 (ε 35700); 319 (ε 6200) (MeOH) (Derep)

Hazard & Toxicity: LD₅₀ (mus, scu) 1.6 mg/kg

Sigma: A0399

>> **Derivative:** De(3-methylbutanoyl)

Synonym(s): Deisovalerylblastmycin

CAS Registry Number: 60504-95-2

Molecular Formula: C₂₁H₂₈N₂O₈

Molecular Weight: 436.461

Accurate Mass: 436.184568

Percentage Composition: C 57.79%; H 6.47%; N 6.42%; O 29.33%

Biological Source: From *Streptomyces* spp.

Use/Importance: Antifungal agent

Melting Point: Mp 186-188°

Optical Rotation: [α]_D²⁴+36 (c, 1 in MeOH)

Solubility: BERDY SOL: Sol. MeOH, Me₂CO, EtOAc, butanol; fairly sol. C₆H₆, CHCl₃, Et₂O; poorly sol. H₂O, hexane

UV: [acid] $\lambda_{\max}$ (no shifts reported) (Derep) [base] $\lambda_{\max}$ 225 (ε 35300); 345 (ε 8500) (MeOH/NaOH) (Derep) [neutral] $\lambda_{\max}$ 226 (ε 30400); 320 (ε 6000) (MeOH) (Derep)

[neutral] $\lambda_{\max}$ 226 (ε 30400); 320 (ε 6000) (MeOH) (Berdy) [base] $\lambda_{\max}$ 225 (ε 35300); 345 (ε 8500) (MeOH-NAOH) (Berdy)

Hazard & Toxicity: LD₅₀ (mus, ipr) 25 mg/kg ; BERDY HAZD : LD₅₀ (mus, ivn) 15 mg/kg , LD₅₀ (mus, ipr) 25 mg/kg

>> **Variant:** Antimycin A₄

CAS Registry Number: 27220-59-3

Molecular Formula: C₂₅H₃₄N₂O₉

Molecular Weight: 506.552

Accurate Mass: 506.226433

Percentage Composition: C 59.28%; H 6.77%; N 5.53%; O 28.43%

Biological Source: From *Streptomyces* spp.

Use/Importance: Antifungal agent

Optical Rotation: [α]_D +111 (CHCl₃)

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

UV: [acid] $\lambda_{\max}$ (no shifts reported) (Derep) [base] $\lambda_{\max}$ 222 (ε 40000); 343 (ε 8220) (MeOH/NaOH) (Derep) [neutral] $\lambda_{\max}$ 226 (ε 35700); 319 (ε 6200) (MeOH) (Derep)

[neutral] $\lambda_{\max}$ 228 (E1%/1cm 650); 325 (E1%/1cm 100) (MeOH) (Berdy) [neutral] $\lambda_{\max}$ 227 (ε 31900); 317 (ε 3300) (EtOH) (Berdy) [base] $\lambda_{\max}$ 341 (ε 7900) (EtOH-NaOH)

(Berdy)

Hazard & Toxicity: LD₅₀ (mus, scu) 25 mg/kg

Sigma: A0524