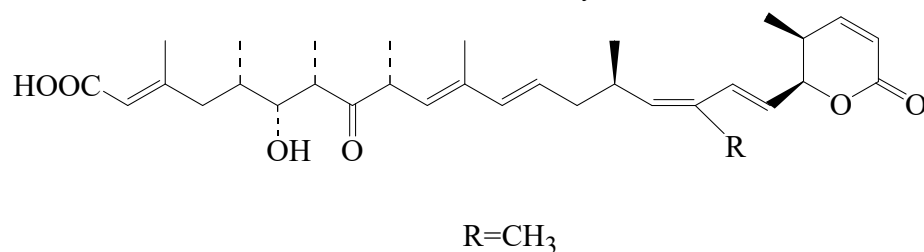




>>Entry Name: Leptomycin A

Synonym(s): ATS 1287A. PD 118607. Antibiotic ATS 1287A. Antibiotic PD 118607. Jildamycin



CAS Registry Number: 87081-36-5

Molecular Formula: C₃₂H₄₆O₆

Molecular Weight: 526.712

Accurate Mass: 526.32944

Percentage Composition: C 72.97%; H 8.80%; O 18.23%

Biological Source: Prod. by *Streptomyces* sp. ATS 1287 and *Streptomyces aburaviensis*

Use/Importance: Active against yeasts and fungi. Antitumour agent

Physical Description: Sticky yellow oil

Optical Rotation: [α]_D −31.8 (c, 0.15 in MeOH)

UV: [neutral] $\lambda_{\max}$ 235 (ϵ 35000); 292 (ϵ 1500) (MeOH) (Derep)

Other Data: Related to Kazusamycin [GQM91-D](#). The abs. config. shown here is as determined for Leptomycin B [CKC69-W](#)

>>Derivative: 24-Alcohol

Synonym(s): Reductoleptomycin A

CAS Registry Number: 149598-69-6

Molecular Formula: C₃₂H₄₈O₅

Molecular Weight: 512.728

Accurate Mass: 512.350175

Percentage Composition: C 74.96%; H 9.44%; O 15.60%

Biological Source: Prod. by *Streptomyces* sp. MJ132-NF5

Physical Description: Yellow oil

Optical Rotation: [α]_D²⁴ −56.7 (c, 0.59 in EtOH)

Solubility: BERDY SOL: Sol. MeOH, Me₂CO, EtOAc; poorly sol. H₂O

UV: [neutral] $\lambda_{\max}$ 204 (ϵ 25000); 240 (ϵ 27000); 295 (ϵ 3700) (EtOH) (Derep) [neutral] $\lambda_{\max}$ 204 (ϵ 25000); 240 (ϵ 27000); 295 (ϵ 3700) (MeOH) (Berdy)

Hazard & Toxicity: BERDY HAZD : LD₅₀ (mus, ipr) 3.1-6.2 mg/kg

References:

- Hamamoto, T. *et al.*, *J. Antibiot.*, 1983, **36**, 639; 646, (*isol, struct*)
Eur. Pat., 1985, 139 457; 139 458; *CA*, **103**, 36175; 36176, (*isol*)
Komiyama, K. *et al.*, *J. Antibiot.*, 1985, **38**, 220; 224, (*struct, props*)
Tunac, J.B. *et al.*, *J. Antibiot.*, 1985, **38**, 460, (*isol, struct, props*)
Hurley, T.R. *et al.*, *J. Antibiot.*, 1986, **39**, 1651
U.S. Pat., 1988, 4 792 522; *CA*, **110**, 191264, (*isol*)
Hosokawa, N. *et al.*, *J. Antibiot.*, 1993, **46**, 676, (*Reductoleptomycin A*)
Kobayashi, M. *et al.*, *Tet. Lett.*, 1998, **39**, 8291-8294, (*abs config*)