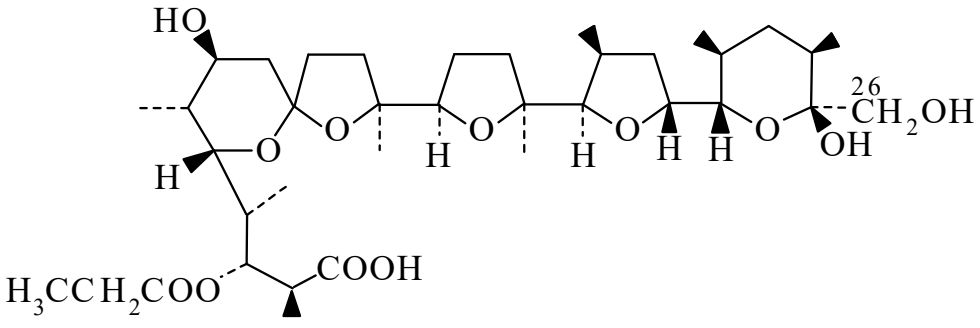
>>**Entry Name: Laidlomycin,** 9CI, BAN, INN
Synonym(s): 16-Deethyl-3-*O*-demethyl-16-methyl-3-*O*-(1-oxopropyl)monensin, 9CI



CAS Registry Number: 56283-74-0
Extra CAS Registry Numbers(s): 61489-98-3

Molecular Formula: $C_{37}H_{62}O_{12}$
Molecular Weight: 698.89
Accurate Mass: 698.42413
Percentage Composition: C 63.59%; H 8.94%; O 27.47%

Biological Source: Prod. by *Streptoverticillium eurocidicum*
Use/Importance: Ionophore, coccidiostat
Physical Description: Prisms (EtOAc)
Optical Rotation: $[\alpha]_D$ +53.2 ($CHCl_3$)
Solubility: BERDY SOL: Sol. AcOH, bases, Py, DMSO; poorly sol. hexane, H_2O
Calculated Log P Data: Log P 2.5 (calc)
UV: [neutral] λ_{max} (MeOH) (Berdy) [neutral] λ_{max} 220 (E1%/1cm 170) (EtOH) (Berdy)
Hazard & Toxicity: LD_{50} (mus, ipr) 5 mg/kg ; BERDY HAZD : LD_{50} (mus, ipr) 5 mg/kg , LD_{50} (mus, ivn) 1 mg/kg , LD_{50} (mus, scu) 2.5 mg/kg

>>**Derivative:** Na salt

Melting Point: Mp 227-229°

>>**Derivative:** 26-Deoxy
Synonym(s): 26-Deoxylaidlomycin. Antibiotic TM 611A. TM 611A

CAS Registry Number: 102674-88-4
Extra CAS Registry Numbers(s): 121421-16-7

Molecular Formula: $C_{37}H_{62}O_{11}$
Molecular Weight: 682.89
Accurate Mass: 682.429215
Percentage Composition: C 65.08%; H 9.15%; O 25.77%
Biological Source: Prod. by *Streptoverticillium eurocidicum* and *Streptoverticillium olivoreticuli*
Use/Importance: Active against gram-positive bacteria and coccidia
Optical Rotation: $[\alpha]_D$ +29.1 ($CHCl_3$)

>>**Derivative:** 26-Propanoyl, K salt
Synonym(s): Laidlomycin propionate potassium, USAN**.** Cattlyst. RS11988

CAS Registry Number: 84799-02-0

Molecular Formula: $C_{40}H_{65}KO_{13}$
Molecular Weight: 793.044
Accurate Mass: 792.406227
Percentage Composition: C 60.58%; H 8.26%; K 4.93%; O 26.23%
Use/Importance: Coccidiostatic; growth promotor (veterinary)
Melting Point: Mp 190-192°

References:

Kitame, F. *et al.*, *J. Antibiot.*, 1974, **27**, 884; 1976, **29**, 759, *(isol, ir, nmr, ms, struct, pmr, cmr)*
Clark, R.D. *et al.*, *J. Antibiot.*, 1982, **35**, 1527, *(deriv)*
Fukazawa, Y. *et al.*, *CA*, 1986, **105**, 3127, *(26-Deoxylaidlomycin)*
Grafe, U. *et al.*, *J. Basic Microbiol.*, 1989, **29**, 149, *(26-Deoxylaidlomycin)*
Havlicek, V. *et al.*, *J. Mass Spectrom.*, 1995, **30**, 1089-1094, *(ms)*
Lewis, R.J.*, Sax's Dangerous Properties of Industrial Materials, 8th edn., Van Nostrand Reinhold*, 1992, DAK000