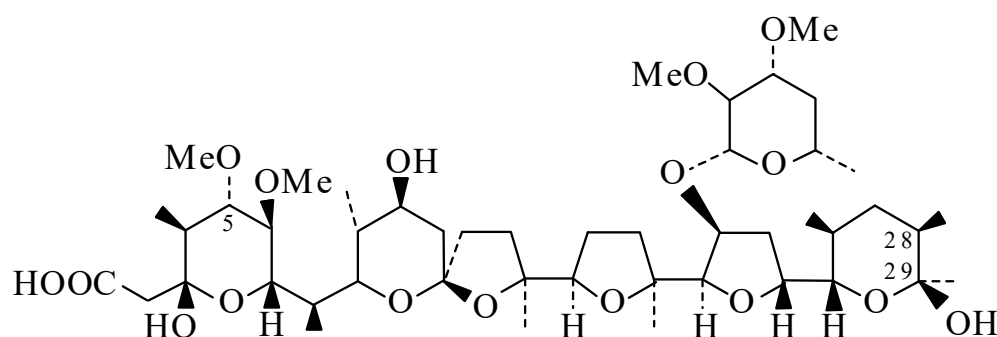




>>Entry Name: Antibiotic X 14868A

Synonym(s): Maduramicin, INN, USAN. Maduramicin α . Cygro. X 14868A. CL 273703. LL-C 23024 α -A. Antibiotic CL 273703. Antibiotic LL-C 23024 α -A



CAS Registry Number: 79356-08-4

Related CAS Registry Numbers(s): 84878-61-5

Molecular Formula: C₄₇H₈₀O₁₇

Molecular Weight: 917.139

Accurate Mass: 916.539555

Percentage Composition: C 61.55%; H 8.79%; O 29.66%

General Statement: Polyether antibiotic

Biological Source: Prod. by *Actinomadura yunnaense* and *Nocardia* sp. X-14868

Use/Importance: Shows anticoccidial props., ionophoric, active against *Treponema hyodysenteriae*. Possesses anticryptosporidial activity

UV: [neutral] $\lambda_{\max}$ 0 (end) (ϵ) (MeOH) (Derep)

Hazard & Toxicity: Cardiotoxic in cattle

>>Derivative: Na salt

Physical Description: Cryst. (EtOAc/hexane)

Melting Point: Mp 193-194°

Optical Rotation: $[\alpha]_{\text{D}}^{25} +40.6$ (c, 1 in CHCl₃)

>>Derivative: Tl salt

Physical Description: Cryst. (Et₂O/hexane)

Melting Point: Mp 193-195°

Optical Rotation: $[\alpha]_{\text{D}}^{25} +41.4$ (c, 1 in MeOH)

>>Derivative: 28-Epimer

Synonym(s): Antibiotic X 14868D. X 14868D

CAS Registry Number: 79331-54-7

Molecular Formula: C₄₇H₈₀O₁₇

Molecular Weight: 917.139

Accurate Mass: 916.539555

Percentage Composition: C 61.55%; H 8.79%; O 29.66%

Biological Source: Prod. by *Nocardia* sp. X-14868

Use/Importance: Shows anticoccidial and ionophoric props.

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

>>Derivative: 28-Epimer, Na salt

Physical Description: Cryst.

Melting Point: Mp 194-195°

Optical Rotation: $[\alpha]_{\text{D}}^{25} +41.4$ (c, 1 in CHCl₃)

>>Derivative: O²⁹-Me

Synonym(s): Antibiotic X 14868B. X 14868B

CAS Registry Number: 79296-11-0

Molecular Formula: C₄₈H₈₂O₁₇

Molecular Weight: 931.166

Accurate Mass: 930.555205

Percentage Composition: C 61.91%; H 8.88%; O 29.21%

Biological Source: Isol. from *Nocardia* sp. X-14868

Use/Importance: Shows anticoccidial and ionophoric props.