

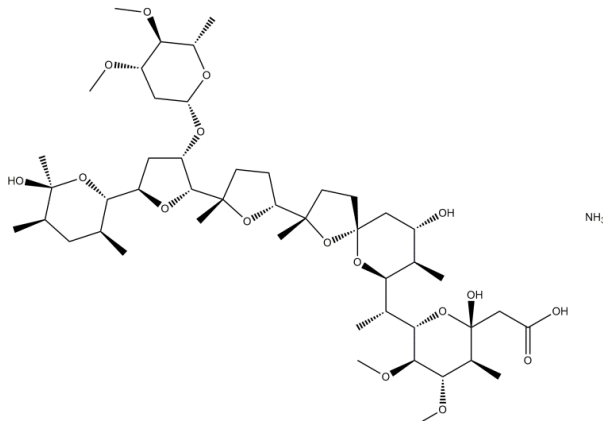
Maduramicin Ammonium

05/20

ALTERNATE NAMES: azane,2-[(2R,3S,4S,5R,6S)-6-[(1R)-1-[(2S,5R,7S,8R,9S)-2-[(2R,5S)-5-[(2R,3S,5R)-3-[(2R,4S,5S,6S)-4,5-dimethoxy-6-methyloxan-2-yl]oxy-5-[(2S,3S,5R,6S)-6-hydroxy-3,5,6-trimethyloxan-2-yl]oxolan-2-yl]-5-methyloxolan-2-yl]-7-hydroxy-2,8-dimethyl-1,10-dioxaspiro[4.5]decan-9-yl]ethyl]-2-hydroxy-4,5-dimethoxy-3-methyloxan-2-yl]acetic acid; Cygro; Maduramicin ammonium; Cygro; Prinicin ammonium

CATALOG #: B3022-5 5 mg
B3022-25 25 mg

STRUCTURE:



MOLECULAR FORMULA: C₄₇H₈₃NO₁₇

MOLECULAR WEIGHT: 934.16

CAS NUMBER: 84878-61-5

APPEARANCE: White powder

PURITY: >95%

SOLUBILITY: Soluble in DMSO

DESCRIPTION: Maduramicin is a natural polyether ionophore antibiotic first isolated from the actinomycete *Actinomadura rubra*. It is commonly used in veterinary medicine as an anti-coccidial agent. It is cytotoxic against *Cryptosporidium parvum* infection in Swiss mice at a dosage of 1-2.5 mg/kg body weight. Maduramicin has an EC₅₀ of 14.8 nM against late-stage gametocyte viability and significantly blocks *in vivo* transmission in a mouse model of malaria transmission.

STORAGE TEMPERATURE: -20°C

HANDLING: Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

REFERENCES:

1. Maron, M.I., Magle, C.T., Czeny, B., et al. Maduramicin rapidly eliminates malaria parasites and potentiates the gametocytocidal activity of the pyrazoleamide PA21A050. *Antimicrob. Agents Chemother.* 60(3), 1492-1499 (2015).
2. Blagburn, B.L., Sundermann, C.A., Lindsay, D.S., et al. Inhibition of *Cryptosporidium parvum* in neonatal Hsd:(ICR)BR Swiss mice by polyether ionophores and aromatic amidines. *Antimicrob. Agents Chemother.* 35(7), 1520-1523 (1991).

RELATED PRODUCTS:

Nystatin, USP (Cat. No. B1509)
 Nigericin sodium salt (Cat. No. 2096)
 Gramicidin A (Cat. No. B2967)
 Salinomycin Sodium (Cat. No. B1584)
 Monensin A Sodium (Cat. No. B1623)

DISCLAIMER: **FOR RESEARCH USE ONLY! Not to be used on humans.**