

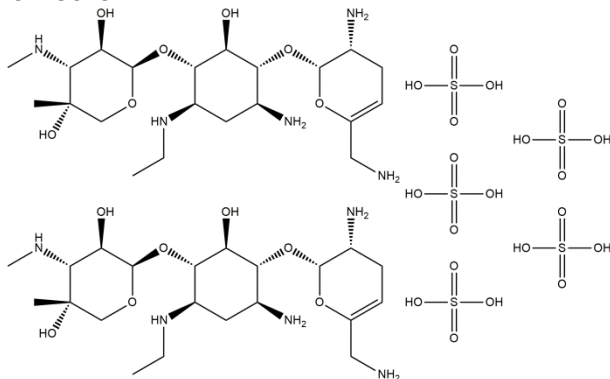
Netilmicin Sulfate

ALTERNATE NAMES:

Certomycin; Netromycin; Netillin; (2R,3R,4R,5R)-2-[[[(1S,2S,3R,4S,6R)-4-amino-3-[[[(2S,3R)-3-amino-6-(aminomethyl)-3,4-dihydro-2H-pyran-2-yl]oxy]-6-(ethylamino)-2-hydroxycyclohexyl]oxy-5-methyl-4-(methylamino)oxane-3,5-diol;sulfuric acid; bis((2R,3R,4R,5R)-2-[[[(1S,2S,3R,4S,6R)-4-amino-3-[[[(2S,3R)-3-amino-6-(aminomethyl)-3,4-dihydro-2H-pyran-2-yl]oxy]-6-(ethylamino)-2-hydroxycyclohexyl]oxy)-5-methyl-4-(methylamino)oxane-3,5-diol]; pentakis(sulfuric acid); Netilyn; 1-N-Ethylsisomicin

CATALOG #:

B3023-1 1 mg
 B3023-5 5 mg

STRUCTURE:

MOLECULAR FORMULA:
 $C_{42}H_{92}N_{10}O_{34}S_5$
MOLECULAR WEIGHT:

1441.55

CAS NUMBER:

56391-57-2

APPEARANCE:

White to pale yellow powder

PURITY:
 $\geq 95\%$
SOLUBILITY:
 ~ 10 mg/ml in water

DESCRIPTION:

Netilmicin is an aminoglycoside antibiotic. It is active against *S. aureus*, *N. gonorrhoeae*, *E. coli*, *P. mirabilis*, and *P. aeruginosa* (MIC values = 0.4, 3.1, 0.8, 1.6, and 0.4 μ g/ml, respectively) as well as *Enterococci*, *Enterobacter*, *Citrobacter*, and *Klebsiella* species (MIC values = 3.1, 0.4, 0.8, and ≤ 0.2 μ g/ml, respectively). Netilmicin induces nephrotoxicity in rats when administered at doses ranging from 50 to 150 mg/kg.

STORAGE TEMPERATURE:
 -20°C . Protect from air. Store under desiccating conditions.

HANDLING:

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

REFERENCES:

1. Sanders, C.C., Sanders W.E., J., and Goering, R.V. In vitro studies with Sch 21420 and Sch 22591: Activity in comparison with six other aminoglycosides and synergy with penicillin against enterococci. *Antimicrob. Agents Chemother.* 14(2), 178-184 (1978).
2. Bowman, R.L., Silverblatt, F.J., and Kaloyanides, G.J. Comparison of the nephrotoxicity of netilmicin and gentamicin in rats. *Antimicrob. Agents Chemother.* 12(4), 474-478 (1977).

RELATED PRODUCTS:

Gramicidin (Cat. No. B1624)
 Amphotericin B, USP (Cat. No. 2497)
 Ampicillin sodium (Cat. No. 2484)
 Gramicidin A (Cat. No. B2967)
 Anidulafungin (Cat. No. B2966)

DISCLAIMER:

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