

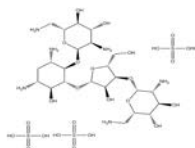
PRODUCT: Neomycin Sulfate

ALTERNATE NAME: 5-amino-2-(aminomethyl)-6-[4,6-diamino-2-[4-[3-amino-6-(aminomethyl)-4,5-dihydroxyoxan-2-yl]oxy-3-hydroxy-5-(hydroxymethyl)oxolan-2-yl]oxy-3-hydroxycyclohexyl]oxyoxane-3,4-diol;sulfuric acid

CATALOG #: 9620-25G, 100G

AMOUNT: 25 g, 100 g

STRUCTURE:



MOLECULAR FORMULA: $C_{23}H_{46}N_6O_{13} \cdot 3H_2SO_4$

MOLECULAR WEIGHT: 908.90

CAS NUMBER: 1405-10-3

APPEARANCE: White to off-white solid

SOLUBILITY: H_2O (~50 mg/ml)

PURITY: ≥90%

STORAGE: Store at -20°C. Protect from air and moisture

DESCRIPTION: Neomycin sulfate is a broad spectrum aminoglycoside antibiotic composed of a number of related neomycin compounds including neomycin A (neamine), neomycin B (framycetin), neomycin C, and a few minor compounds found in much lower quantities. Neomycin B is the most active component in neomycin followed by neomycin C and neomycin A. This product acts by binding to the 30S and 50S subunits, causing miscoding and inhibiting initiation and elongation during protein synthesis. Neomycin also blocks voltage-sensitive Ca^{2+} channels without affecting the Na^+/Ca^{2+} antiporter in neurons.

REFERENCE: Leitner, M.G., *et al.* (2011). *Mol. Pharmacol.* **79**, 51-60.

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

RELATED PRODUCTS:

Amphotericin B (Cat. No. 2497-250, 1G, 5G)
 Ampicillin trihydrate (Cat. No. 2483-1 G, 5G, 25 G)
 Ampicillin sodium (Cat. No. 2484-1G, 5G, 25G)
 EZSolution™ Ampicillin sodium (Cat. No. 2499-10)
 Betulinic Acid (Cat. No. 1552-25)
 Bexarotene (Cat. No. 1575-5, 50)
 Blasticidin S, Hydrochloride (Cat. No. 1859-25,100)
 Capecitabine (Cat. No. 1741-100, 1000)
 Carboplatin (Cat. No. 1553-100)
 Chloramphenicol (Cat. No. 2486-25G, 100G, 500G)
 Cisplatin (Cat. No. 1550-100,1000)
 Cycloheximide (Cat. No. 1041-1G, 5G)
 Cycloheximide (100 mM) (Cat. No. 1041-1)
 Daunorubicin.HCl (1524-10,50,500)
 Doxorubicin HCl (Cat. No. 1527-5)
 Fludarabine Phosphate (Cat. No. 1763-10, 50)
 G-418 Sulfate (Cat. No. 1557-100, 5G, 25G)
 Gemcitabine Hydrochloride (Cat. No. 1759-25, 100)
 Genistein (Cat. No. 1533-10)
 Nedaplatin (Cat. No. 1576-5)
 Oxaliplatin (Cat. No. 1577-25)
 Paclitaxel (Cat. No. 1567-25)
 Penicillin G sodium (Cat. No. 2503-100, 500)
 Penicillin G potassium (Cat. No. 2504-25, 100)
 Polymyxin B Sulfate (Cat. No. 2496-10, 50, 100)
 Puromycin DiHydrochloride (Cat. No. 1860-25, 100, 250, 500,1000)
 EZSolution™ Puromycin Dihydrochloride (Cat. No. 1861-100)
 Streptozocin (Cat. No. 1930-100, 500, 1000)
 Tamoxifen Citrate (Cat. No. 1551-1000)

USAGE: **FOR RESEARCH USE ONLY! Not to be used in humans**