

Product Name: Viomycin

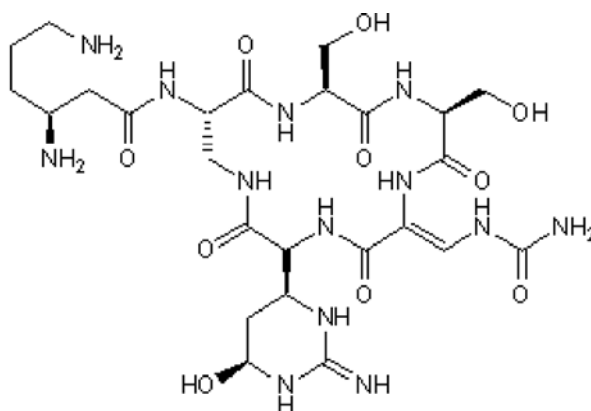
Catalog No.: 3787

Batch No.: 1

IUPAC Name: (S)-3,6-Diamino-N-((3S,9S,12S,15S,Z)3((2R,4S)-6-amino-4-hydroxy-1,2,3,4-tetrahydropyridin-2-yl)-9,12-bis(hydroxymethyl)-2,5,8,11,14-pentaoxo-6-(ureidomethylene)-1,4,7,10,13-pentaazacyclohexadecan-15-yl)hexanamide disulfate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₅H₄₃N₁₃O₁₀·2H₂SO₄·4½H₂O
Batch Molecular Weight: 962.92
Physical Appearance: Off-white solid
Solubility: water to 75 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	31.18	5.86	18.91
Found	31.4	6.13	18.63

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

Member of the tuberactinomycin family of antibiotics. Inhibits group I intron splicing and prokaryotic protein synthesis. Freezes bacterial ribosomes in either the pre- or post-translational state. Facilitates trans-cleavage of the Neurospora VS ribozyme.

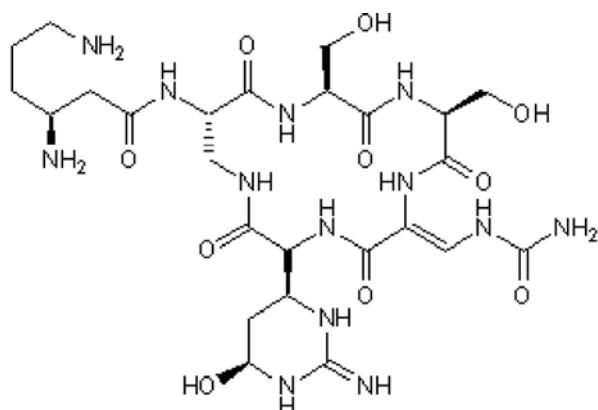
Physical and Chemical Properties:

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Storage: Store at -20°C

Solubility & Usage Info:

water to 75 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

Licensing Information:

Sold for research purposes under agreement from Pfizer Inc.

References:

Ermolenko et al (2007) The antibiotic vio. traps the ribosome in an intermediate state of translocation. *Nat.Struct.Mol.Biol.* **14** 493. PMID: 17515906.

Schroeder et al (2000) Modulation of RNA function by aminoglycoside antibiotics. *EMBO J.* **19** 1. PMID: 10619838.

Hausner et al (1988) The allosteric three-site model for the ribosomal elongation cycle. *J.Biol.Chem.* **263** 13103. PMID: 2843509.

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