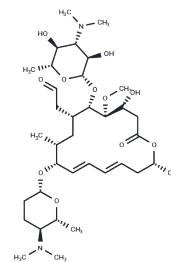


Neospiramycin I

Chemical Properties

CAS No. :	70253-62-2
Formula:	C ₃₆ H ₆₂ N ₂ O ₁₁
Molecular Weight:	698.895
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	Neospiramycin I is a macrolide antibiotic and derivative of spiramycin I. It is active against the macrolide-sensitive KB210, but not the macrolide-resistant KB224, strain of <i>S. aureus</i> (MICs = 3.12 and >100 µg/ml, respectively), as well as <i>B. cereus</i> , <i>B. subtilis</i> , <i>M. luteus</i> , <i>E. coli</i> , and <i>K. pneumoniae</i> (MICs = 1.56, 3.12, 3.12, 0.2, 50, and 12.5 µg/ml, respectively). Neospiramycin I binds to <i>E. coli</i> ribosomes with an IC ₅₀ value of 1.2 µM. It protects against mortality in a mouse model of <i>S. pneumoniae</i> type III infection (ED ₅₀ = 399.8 mg/kg). ²
Targets(IC ₅₀)	Others, Antibacterial, Antibiotic

Solubility Information

Solubility	DMSO: Soluble (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.4308 mL	7.1541 mL	14.3082 mL
5 mM	0.2862 mL	1.4308 mL	2.8616 mL
10 mM	0.1431 mL	0.7154 mL	1.4308 mL
50 mM	0.0286 mL	0.1431 mL	0.2862 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Sano, H., Inoue, M., and Mura, S. Chemical modification of spiramycins. II. Synthesis and antimicrobial activity of 4'-deoxy derivatives of neospiramycin I and their 12-(Z)-isomers. *J. Antibiot. (Tokyo)* 37(7)738-749(1984)

Sano, H., Inoue, M., Yamashita, K., et al. Chemical modification of spiramycins. I. Synthesis of the acetal derivatives of neospiramycin I. *J. Antibiot. (Tokyo)* 36(10)1336-1344(1983)

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