

# PRODUCT INFORMATION

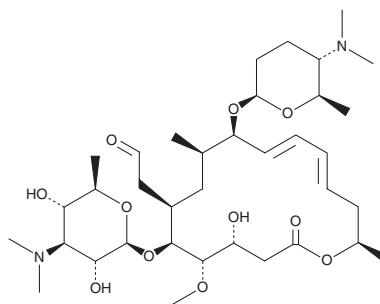


## Neospiramycin I

Item No. 34060

**CAS Registry No.:** 70253-62-2  
**Formal Name:** 4A-O-de(2,6-dideoxy-3-C-methyl- $\alpha$ -L-ribo-hexopyranosyl)-9-O-[(2R,5S,6R)-5-(dimethylamino)tetrahydro-6-methyl-2H-pyran-2-yl]-leucomycin V

**MF:** C<sub>36</sub>H<sub>62</sub>N<sub>2</sub>O<sub>11</sub>  
**FW:** 698.9  
**Purity:**  $\geq$ 95%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:**  $\geq$ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Neospiramycin I is supplied as a solid. A stock solution may be made by dissolving the neospiramycin I in the solvent of choice, which should be purged with an inert gas. Neospiramycin I is soluble in the organic solvent DMSO.

### Description

Neospiramycin I is a macrolide antibiotic and derivative of spiramycin I.<sup>1</sup> It is active against the macrolide-sensitive KB210, but not the macrolide-resistant KB224, strain of *S. aureus* (MICs = 3.12 and  $>100$   $\mu$ g/ml, respectively), as well as *B. cereus*, *B. subtilis*, *M. luteus*, *E. coli*, and *K. pneumoniae* (MICs = 1.56, 3.12, 3.12, 0.2, 50, and 12.5  $\mu$ g/ml, respectively). Neospiramycin I binds to *E. coli* ribosomes with an IC<sub>50</sub> value of 1.2  $\mu$ M. It protects against mortality in a mouse model of *S. pneumoniae* type III infection (ED<sub>50</sub> = 399.8 mg/kg).<sup>2</sup>

### References

1. Sano, H., Inoue, M., and Ōmura, 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).
2. 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).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897

[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM