

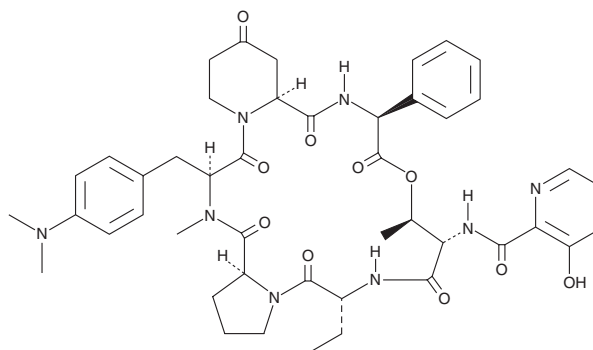
PRODUCT INFORMATION



Streptogramin B

Item No. 28086

CAS Registry No.: 3131-03-1
Formal Name: 4-[4-(dimethylamino)-N-methyl-L-phenylalanine]-virginiamycin S₁
Synonyms: Mikamycin I_A, NSC 92554, Ostreogrycin B, Pristinamycin I_A, Vernamycin B_α, Virginiamycin B
MF: C₄₅H₅₄N₈O₁₀
FW: 867.0
Purity: ≥98%
UV/Vis.: λ_{max}: 262, 304 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Streptogramin B is supplied as a crystalline solid. A stock solution may be made by dissolving the streptogramin B in the solvent of choice, which should be purged with an inert gas. Streptogramin B is soluble in organic solvents such as DMSO, dimethyl formamide, and chloroform. The solubility of streptogramin B in these solvents is approximately 30 mg/ml.

Streptogramin B is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, streptogramin B should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Streptogramin B has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Streptogramin B is a macrolide antibiotic.¹ It inhibits the growth of *Clostridium*, *Peptostreptococcus*, and *Propionibacterium* bacterial species (MIC₉₀S = 2, 0.5, and 8 µg/ml, respectively).² Streptogramin B inhibits protein synthesis by interacting with the 50S ribosome.¹ Resistance to streptogramin B is conferred by erythromycin ribosome methylation (*erm*) genes, which code for methylases that methylate the 50S ribosome, interfering with streptogramin B binding.

References

1. Roberts, M.C., Sutcliffe, J., Courvalin, P., et al. Nomenclature for macrolide and macrolide-lincosamide-streptogramin B resistance determinants. *Antimicrob. Agents Chemother.* **43**(12), 2823-2830 (1999).
2. Laforest, H., Furgeaud, M., Richet, H., et al. Comparative in vitro activities of pristinamycin, its components, and other antimicrobial agents against anaerobic bacteria. *Antimicrob. Agents Chemother.* **32**(7), 1094-1096 (1988).

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.

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