LKT Laboratories, Inc.

Virginiamycin S1

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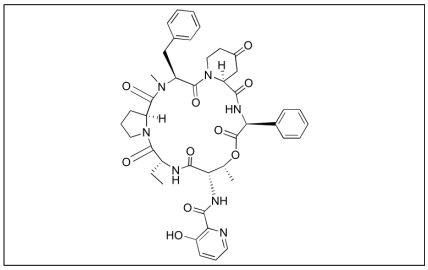
Product Information

Product ID V3326
CAS No. 23152-29-6
Chemical Name



Synonym Virginiamycin factor S, Staphylomycin S, N-((3-Hydroxy-2-pyridinyl)carbonyl)-L-threonyl-D-alpha-aminobutyryl-L-prolyl-N-methyl-L-phenylalanyl-4-oxo-L-pipecolyl-L-2-phenylglycine rho-lactone

Formula $C_{43}H_{49}N_7O_{10}$
Formula Wt. 823.89
Melting Point 179-186°C
Purity ≥99%
Solubility Soluble in ethanol, methanol, DMSO, Dichloromethane, DMF, and sparingly, in water.
Store Temp -20°C
Ship Temp Ambient

Bulk quanitites available upon request

Product ID	Size
V3326	1 mg
V3326	5 mg

Description Virginiamycin S1 is a macrolide antibiotic commonly used in livestock as a growth promoter; it is also occasionally used to prevent microbial contamination in ethanol fuels. Virginiamycin S1 is an antibacterial that binds 23S rRNA of the bacterial 50S ribosome, inhibiting peptidyl transferase activity. This compound displays insecticidal activity against *Leptinotarsa* and acaricidal activity against *Tetranychus*.

References

Compart DM, Carlson AM, Crawford GI, et al. Presence and biological activity of antibiotics used in fuel ethanol and corn co-product production. J Anim Sci. 2013 May;91(5):2395-404. PMID: 23463564.

Qiu Y, Yang F, Liu Z, et al. Determination of virginiamycin M1 and S1 residues in livestock and poultry products by liquid chromatography-tandem mass spectrometry. Se Pu. 2012 May;30(5):463-7. PMID: 22934408.

Champney WS, Tober CL. Specific inhibition of 50S ribosomal subunit formation in Staphylococcus aureus cells by 16-membered macrolide, lincosamide, and streptogramin B antibiotics. Curr Microbiol. 2000 Aug;41(2):126-35. PMID: 10856379.

Prikrylová V, Samoukina GV, Kandybin NV, et al. Pesticidal activity of virginiamycins S1 and M1. Folia Microbiol (Praha). 1992;37 (5):386-8. PMID: 1493906.