

PRODUCT INFORMATION



Linearmycin A

Item No. 33132

CAS Registry No.: 163596-98-3
Formal Name: 60-amino-15S,17R,29,33,35S,37S,41R,43S,45R,47S,51,55S,57R-tridecahydroxy-2,14,16S,30-tetramethyl-31-oxo-2E,4E,6E,8E,12E,18E,20E,22E,24E,26E,38E,48E,52E-hexacontatridecaenoic acid

MF: $C_{64}H_{101}NO_{16}$

FW: 1,140.5

Purity: $\geq 80\%$

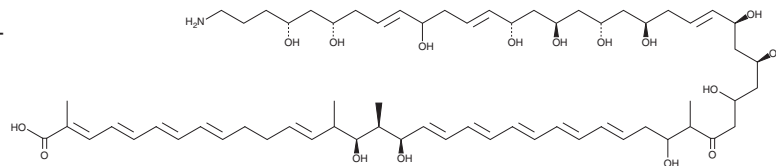
Supplied as: A solid

Storage: $-20^{\circ}C$

Stability: ≥ 4 years

Item Origin: Bacterium/*Streptomyces* sp.

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



Laboratory Procedures

Linearmycin A is supplied as a solid. A stock solution may be made by dissolving the linearmycin A in the solvent of choice, which should be purged with an inert gas. Linearmycin A is soluble in methanol and DMSO.

Description

Linearmycin A is a polyene antibiotic that has been found in *Streptomyces*.¹ It is active against the bacteria *S. aureus* and *E. coli* (MICs = 3.1 and 1.6 $\mu\text{g}/\text{disc}$, respectively), the fungi *S. cerevisiae* and *C. albicans* (MICs = 0.1 and 1.6 $\mu\text{g}/\text{disc}$, respectively), and the plant pathogenic fungus *A. niger* in disc assays (MIC = 0.2 $\mu\text{g}/\text{disc}$). Linearmycin A induces lysis and degradation of *B. subtilis* as a component of *Streptomyces* Mg1 extract.²

References

1. Sakuda, S., Guce-Bigol, U., Itoh, M., *et al.* Novel linear polyene antibiotics: Linearmycins. *J. Chem. Soc., Perkin Trans. 1* **18**, 2315-2319 (1996).
2. Stubbendieck, R.M. and Straight, P.D. Escape from lethal bacterial competition through coupled activation of antibiotic resistance and a mobilized subpopulation. *PLoS Genet.* **11(12)**, e1005722 (2015).

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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