

# PRODUCT INFORMATION



## Leptomycin A

Item No. 21762

**CAS Registry No.:** 87081-36-5  
**Formal Name:** (2E,6R)-19-[(2S,3S)-3,6-dihydro-3-methyl-6-oxo-2H-pyran-2-yl]-6-hydroxy-3,5S,7S,9R,11,15R,17-heptamethyl-8-oxo-2,10E,12E,16Z,18E-nonadecapentaenoic acid

**Synonym:** NSC 369326

**MF:** C<sub>32</sub>H<sub>46</sub>O<sub>6</sub>

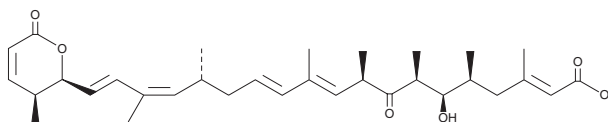
**FW:** 526.7

**Purity:** ≥99%

**Supplied as:** A solution in ethanol

**Storage:** -20°C

**Stability:** ≥2 years



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

### Laboratory Procedures

Leptomycin A is supplied as solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol and methanol, purged with an inert gas, can be used.

### Description

Leptomycin A is an inhibitor of CRM1 (exportin 1) that blocks CRM1 interaction with nuclear export signals, preventing the nuclear export of a broad range of proteins.<sup>1</sup> Leptomycin A inhibits Rev translocation, though less potently than leptomycin B (Item No. 10004976) with IC<sub>50</sub> values of 0.8 and 0.1 nM, respectively after 7 hours.<sup>2</sup> Rev export to the cytoplasm is required for HIV-1 replication. Leptomycin A was originally identified as an antifungal agent.

### References

1. Kudo, N., Wolff, B., Sekimoto, T., *et al.* Leptomycin B inhibition of signal-mediated nuclear export by direct binding to CRM1. *Exp. Cell Res.* **242**, 540-547 (1998).
2. Wang, Y., Ponelle, M., Sanglier, J.-J., *et al.* Novel leptomycins from a *Streptomyces* strain A92-308902: Inhibitors of the nucleo-cytoplasmic translocation of the HIV-1 regulatory protein rev. *Helv. Chim. Acta.* **80(7)**, 2157-2167 (1997).

#### 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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