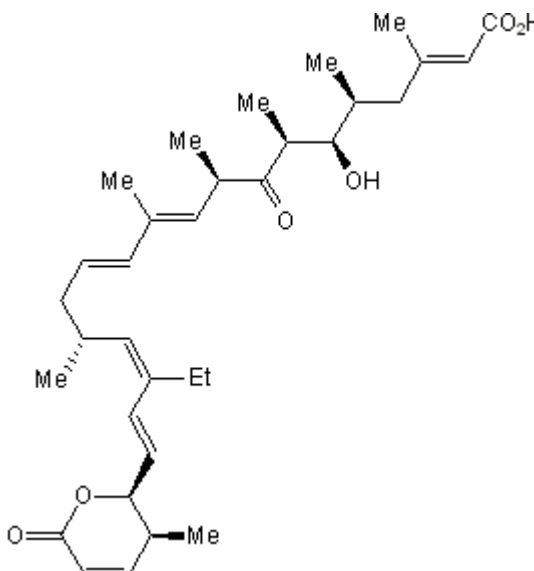


Product Name: Leptomycin B	Catalog No.: 1987	Batch No.: 5
CAS Number: 87081-35-4		
IUPAC Name: (2E,5S,6R,7S,9R,10E,12E,15R,16Z,18E)-19-[(2S,3S)-3,6-Dihydro-3-methyl-6-oxo-2H-pyran-2-yl]-17-ethyl-6-hydroxy-3,5,7,9,11,15-hexamethyl-8-oxo-2,10,12,16,18-nonadecapentaenoic acid		

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	C ₃₃ H ₄₈ O ₆
Batch Molecular Weight:	540.74
Physical Appearance:	Colourless solution
Solubility:	Soluble in ethanol (supplied pre-dissolved in anhydrous ethanol, 27µg/ml)
Storage:	Desiccate at -20°C
Batch Molecular Structure:	



2. ANALYTICAL DATA

HPLC:	Shows 100% purity
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Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

Antifungal antibiotic that is an inhibitor of the nuclear export of proteins; acts by binding directly to and inhibiting CRM1/exportin-1. Inhibits the nuclear export of the HIV regulatory protein Rev and stabilizes p53. Antitumor in vitro and in vivo.

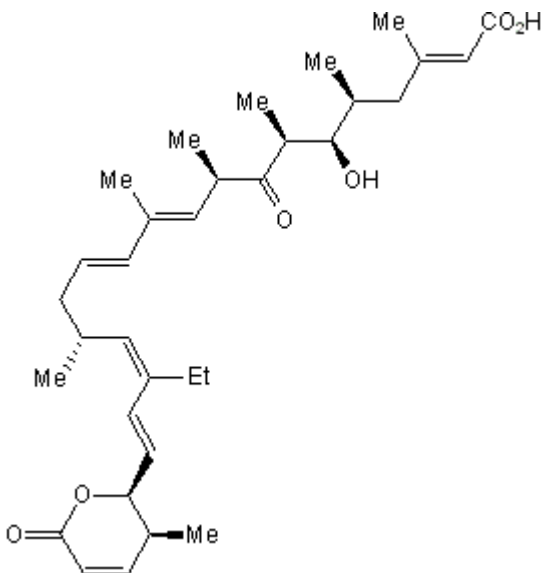
Physical and Chemical Properties:

Batch Molecular Formula: C₃₃H₄₈O₆

Batch Molecular Weight: 540.74

Physical Appearance: Colourless solution

Batch Molecular Structure:



Storage: Desiccate at -20°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:

Soluble in ethanol (supplied pre-dissolved in anhydrous ethanol, 27µg/ml)

This product is supplied dissolved in anhydrous ethanol at a concentration of 27µg/ml.

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Roberts et al (1986) *In vivo* and *in vitro* anticancer activity of the structurally novel and highly potent antibiotic CI 940 and its hydroxy analog (PD 114,721). *Cancer Chemother.Pharmacol.* **16** 95. PMID: 3081269.

Wolff et al (1997) Leptomycin B is an inhibitor of nuclear export: inhibition of nucleocytoplasmic translocation of the human immunodeficiency virus type 1 (HIV-1) Rev protein and Rev-dependent mRNA. *Chem.Biol.* **4** 139. PMID: 9190288.

Freedman and Levine (1998) Nuclear export is required for degradation of endogenous p53 by MDM2 and human papillomavirus E6. *Mol.Cell.Biol.* **18** 7288. PMID: 9819415.

Kudo et al (1998) Leptomycin B inhibition of signal-mediated nuclear export by direct binding to CRM1. *Exp.Cell Res.* **242** 540. PMID: 9683540.

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