abcam

Product datasheet

Leptomycin B (ethanol solution), Antibiotic, antifungal. Inhibitor of CRM-1 mediated nuclear export. ab120501

2 References 2 Images

Overview

Product name Leptomycin B (ethanol solution), Antibiotic, antifungal. Inhibitor of CRM-1 mediated nuclear export.

Description Antibiotic, antifungal. Inhibitor of CRM-1 mediated nuclear export.

Biological description Potent inhibitor of CRM-1-mediated (exportin-1) nuclear export. Displays antibiotic, antifungal,

and antitumor properties and blocks the cell cycle at G_1 and G_2 phases. Potent inhibitor of nucleo-

cytoplasmic translocation of Rev. Also shown to suppress HIV-1 replication in human monocytes

 $(IC_{50} = 600 \text{ pM}).$

General notes Supplied in ethanol (25 μg/ml).

CAS Number 87081-35-4

Chemical structure

Properties

Chemical name (2*E*,5*S*,6*R*,7*S*,9*R*,10*E*,12*E*,15*R*,16*Z*,18*E*)-19-[(2*S*,3*S*)-3,6-Dihydro-3-methyl-6-oxo-2*H*-pyran-2-

yl]-17-ethyl-6-hydroxy-3,5,7,9,11,15-hexamethyl-8-oxo-2,10,12,16,18-nonadecapentaenoic acid

Molecular weight 540.74

Molecular formula $C_{33}H_{48}O_6$

PubChem identifier 6917907

Storage instructions Store at -20°C (desiccating conditions).

Solubility overview Supplied in ethanol (25 μg/ml)

Handling Providing storage is as stated on the product vial and the vial is kept tightly sealed, the product

can be stored for up to 6 months. Before use, and prior to opening the vial we recommend that

you allow your product to equilibrate to room temperature for at least 1 hour.

Refer to SDS for further information.

Need more advice on solubility, usage and handling? Please visit our frequently asked

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questions (FAQ) page for more details.

(C)/C=C(C=C[C@@H]1OC(=O)C=C[C@@H]1C)CC

Source Steptomyces sp.

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab120501 in the following tested applications.

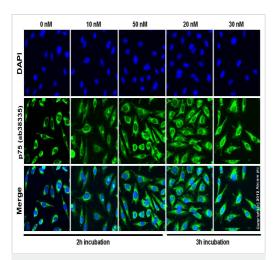
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Functional Studies		Use at an assay dependent concentration.

Images

Chemical Structure - Leptomycin B (ethanol solution), Antibiotic, antifungal. Inhibitor of CRM-1 mediated nuclear export. (ab120501)

2D chemical structure image of ab120501, Leptomycin B (ethanol solution), Antibiotic, antifungal. Inhibitor of CRM-1 mediated nuclear export.



Functional Studies - Leptomycin B (ethanol solution), Antibiotic, antifungal. Inhibitor of CRM-1 mediated nuclear export. (ab120501)

<u>ab38335</u> staining p75 in HeLa cells treated with Leptomycin B (ethanol solution) (ab120501), by ICC/IF. Increase in p75 expression in the nucleous and cytoplasm correlates with increased concentration of Leptomycin B (ethanol solution), as described in literature.

The cells were incubated at 37°C for 2h in media containing different concentrations of ab120501 (Leptomycin B (ethanol solution)) in DMSO, fixed with 100% methanol for 5 minutes at - 20°C and blocked with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% tween for 2h at room temperature. Staining of the treated cells with ab38335 (1 $\mu\text{g/ml}$) was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight 488 goat anti-rabbit polyclonal antibody (ab96899) at 1/250 dilution was used as the secondary antibody. Nuclei were counterstained with DAPI and are shown in blue.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES, NOT FOR USE IN HUMANS"

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