Product Name: Ascomycin
Catalog No.: 4210
Batch No.: 1
CAS Number: 104987-12-4
IUPAC Name: (3S,4R,5S,8R,9E,12S,14S,15R,16S,18R,19R,26aS)-8-Ethyl-5,6,8,11,12,13,14,15,16,17,18,19,24,25,26,26a-hexadecahydro-5,19-dihydroxy-3-{(1E)-2-[(1R,3R,4R)-4-hydroxy-3-methoxycyclohexyl]-1-methylethenyl]-14,16-dimethoxy-4,10,12,18-tetramethyl-15,19-epoxy-3H-pyrido[2,1-c][1,4]oxaazacyclotricosine-1,7,20,21(4H,23H)tetrone

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C_{43}H_{69}NO_{12}
Batch Molecular Weight: 792.01
Physical Appearance: White lyophilised solid
Solubility: DMSO to 50 mM ethanol to 50 mM
Storage: Store at -20°C

2. ANALYTICAL DATA

HPLC: Shows 99.1% purity
Mass Spectrum: Consistent with structure
Microanalysis:

<table>
<thead>
<tr>
<th>Element</th>
<th>Theoretical</th>
<th>Found</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon</td>
<td>65.21</td>
<td>64.91</td>
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<tr>
<td>Hydrogen</td>
<td>8.78</td>
<td>8.64</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>1.77</td>
<td>1.75</td>
</tr>
</tbody>
</table>

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
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Description:
Analog of FK 506 (Cat. No. 3631); binds to FK 506-binding protein 12 (FKBP12) in order to inhibit calcineurin phosphatase activity (IC_{50} = 49 nM) and activation of nuclear factor of activated T cells (NFAT). Displays antifungal and immunosuppressive activities.

Physical and Chemical Properties:
- Batch Molecular Formula: C_{43}H_{69}NO_{12}
- Batch Molecular Weight: 792.01
- Physical Appearance: White lyophilised solid

Storage: Store at -20°C

Solubility & Usage Info:
- DMSO to 50 mM
- ethanol to 50 mM

This product is supplied as a lyophilized solid and may be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

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: