Product Name: Actinomycin D
Catalog No.: 1229
Batch No.: 12
CAS Number: 50-76-0
EC Number: 200-063-6
IUPAC Name: 2-Amino-((N,N)-1-bis(hexadecahydro-6,13-diisopropyl-2,5,9-trimethyl-1,4,7,11,14-pentaaxo-1H-pyrrolo[2,1]-[1,4,7,10,13] oxatetraazacyclocacdecin-10-yl)-4,6-dimethyl-3-oxo-3H-phenoxazine-1,9-dicarboxamide

1. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batch Molecular Formula</td>
<td>C_{62}H_{86}N_{12}O_{16}</td>
</tr>
<tr>
<td>Batch Molecular Weight</td>
<td>1255.43</td>
</tr>
<tr>
<td>Physical Appearance</td>
<td>Orange solid</td>
</tr>
<tr>
<td>Solubility</td>
<td>DMSO to 50 mM</td>
</tr>
<tr>
<td>Storage</td>
<td>Store at -20°C</td>
</tr>
</tbody>
</table>

2. ANALYTICAL DATA

<table>
<thead>
<tr>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPLC</td>
<td>Shows 98.1% purity</td>
</tr>
<tr>
<td>Mass Spectrum</td>
<td>Consistent with structure</td>
</tr>
</tbody>
</table>

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
Product Name: Actinomycin D
Catalog No.: 1229
CAS Number: 50-76-0
EC Number: 200-063-6
IUPAC Name: 2-Amino-(N,N)-1-bis(hexadecahydro-6,13-diisopropyl-2,5,9-trimethyl-1,4,7,11,14-pentaaxo-1H-pyrrolo[2,1]-[1,4,7,10,13] oxatetraazacyclohexadecin-10-yl)-4,6-dimethyl-3-oxo-3H-phenoxazine-1,9-dicarboxamide

Description:
Actinomycin D is an anti-neoplastic antibiotic. Inhibits RNA polymerase and is a potent inducer of apoptosis.

Physical and Chemical Properties:
Batch Molecular Formula: C_{62}H_{166}N_{12}O_{16}
Batch Molecular Weight: 1255.43
Physical Appearance: Orange solid
Minimum Purity: ≥95%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:
DMSO to 50 mM

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:
Glynn et al (1992) Apoptosis induced by actinomycin D, camptothecin or aphidicolin can occur in all phases of the cell cycle. Biochem.Soc.Trans. 20 84S. PMID: 1634006.