1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C_{22}H_{34}O_{7}

**Batch Molecular Weight:** 410.51

**Physical Appearance:** White solid

**Solubility:**
- ethanol to 10 mM
- DMSO to 25 mM

**Storage:** Store at -20°C

**Batch Molecular Structure:**

![Molecular Structure]

2. ANALYTICAL DATA

**HPLC:** Shows 99.1% purity

**¹H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

<table>
<thead>
<tr>
<th>Carbon</th>
<th>Hydrogen</th>
<th>Nitrogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theoretical</td>
<td>64.37</td>
<td>8.35</td>
</tr>
<tr>
<td>Found</td>
<td>64.36</td>
<td>8.43</td>
</tr>
</tbody>
</table>
**Product Name:** Forskolin  
**Catalog No.:** 1099  
**Batch No.:** 4

**CAS Number:** 66575-29-9  
**EC Number:** 266-410-9

**IUPAC Name:** (3R,4aR,5S,6S,6aS,10S,10aR,10bS)-5-(Acetyloxy)-3-ethenyldodecahydro-6,10,10b-trihydroxy-3,4a,7,7,10a-pentamethyl-1H-naphtho[2,1-b]pyran-1-one

**Description:**
Cell-permeable activator of adenylyl cyclase. Hypotensive and vasodilatory agent. Induces neuronal differentiation in stem cells and in several neuroblastoma. Used to reprogram mouse embryonic fibroblasts to induced pluripotent stem cells in combination with three other small molecules (Cat. Nos. 3742, 4423 and 4703). Negative Control also available.

**Physical and Chemical Properties:**
- **Batch Molecular Formula:** C22H34O7
- **Batch Molecular Weight:** 410.51
- **Physical Appearance:** White solid
- **Minimum Purity:** ≥98%

**Storage:** Store at -20°C

**Solubility & Usage Info:**
- **ethanol to 10 mM**
- **DMSO to 25 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:**