Product Name: Andrographolide  
Catalog No.: 4626  
Batch No.: 1

CAS Number: 5508-58-7  
EC Number: 226-852-5

IUPAC Name: \((3E,4S)-3-[2-[(1R,4aS,5R,6R,8aS)-Decahydro-6-hydroxy-5-(hydroxymethyl)-5,8a-dimethyl-2-methylene-1-naphthalenyl][ethylidene]dihydro-4-hydroxy-2(3H)-furanone] \)

1. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batch Molecular Formula:</td>
<td>( \text{C}<em>{20}\text{H}</em>{30}\text{O}_{5} )</td>
</tr>
<tr>
<td>Batch Molecular Weight:</td>
<td>350.45</td>
</tr>
<tr>
<td>Physical Appearance:</td>
<td>White solid</td>
</tr>
<tr>
<td>Solubility:</td>
<td>DMSO to 100 mM, ethanol to 10 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 99.8% purity</td>
</tr>
<tr>
<td>(^1\text{H NMR} )</td>
<td>Consistent with structure</td>
</tr>
<tr>
<td>Mass Spectrum</td>
<td>Consistent with structure</td>
</tr>
<tr>
<td>Optical Rotation</td>
<td>([\alpha]_D = -98.3 ) (Concentration = 1, Solvent = Acetic acid)</td>
</tr>
<tr>
<td>Microanalysis</td>
<td>\begin{align*} &amp; \text{Carbon} \ &amp; \text{Hydrogen} \ &amp; \text{Nitrogen} \end{align*} \begin{align*} \text{Theoretical} &amp; = 68.54 &amp; 8.63 \ \text{Found} &amp; = 68.4 &amp; 8.67 \end{align*}</td>
</tr>
</tbody>
</table>

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
Product Name: Andrographolide
CAS Number: 5508-58-7
IUPAC Name: (3E,4S)-3-[2-[1R,4aS,5R,6R,8aS)-Decahydro-6-hydroxy-5-(hydroxymethyl)-5,8a-dimethyl-2-methylene-1-naphthalenyl]ethyldiene]dihydro-4-hydroxy-2(3H)-furanone

Description:
Inhibitor of NF-κB signaling; also attenuates concanavaline-induced IFNγ production in murine T cells (IC_{50} = 1.7μM). Blocks androgen receptor (AR) expression in AR-expressing C4-2 cells. Activates Nrf2 in BEAS-2B cells in response to cigarette smoke extract.

Physical and Chemical Properties:
Batch Molecular Formula: C_{20}H_{29}O_{5}
Batch Molecular Weight: 350.45
Physical Appearance: White solid
Minimum Purity: >99%

Storage: Store at -20°C

Solubility & Usage Info:
DMSO to 100 mM
ethanol to 10 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:

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