Product Name: (-)-Cannabidiol
CAS Number: 13956-29-1
IUPAC Name: 2-[[1(R,6R)-3-Methyl-6-(1-methylethenyl)-2-cyclohexen-1-yl]-5-pentyl-1,3-benzenediol

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( \text{C}_{21}\text{H}_{30}\text{O}_{2} \)
Batch Molecular Weight: 314.47
Physical Appearance: Light Beige solid
Solubility: ethanol to 75 mM
DMSO to 75 mM
Storage: Store at -20°C

2. ANALYTICAL DATA

TLC: \( R_f = 0.61 \) (Diethyl ether:Petroleum ether [25:75])
HPLC: Shows >99.7% purity
\(^1\text{H} \text{NMR:} \) Consistent with structure
Mass Spectrum: Consistent with structure
Optical Rotation: \([\alpha]_D = -136 \) (Concentration = 0.45, Solvent = Ethanol)
Microanalysis:

<table>
<thead>
<tr>
<th>Element</th>
<th>Theoretical</th>
<th>Found</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon</td>
<td>80.21</td>
<td>80.22</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>9.62</td>
<td>9.66</td>
</tr>
</tbody>
</table>

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
**Product Name:** (-)-Cannabidiol  
**Catalog No.:** 1570  
**Batch No.:** 5

**CAS Number:** 13956-29-1  
**IUPAC Name:** 2-[(1R,6R)-3-Methyl-6-(1-methylethenyl)-2-cyclohexen-1-yl]-5-pentyl-1,3-benzenediol

**Description:**
Non-psychotropic constituent of cannabis that is anticonvulsive, antihyperalgesic and neuroprotective in vivo. GPR55 and weak CB₁ antagonist (IC₅₀ values are 0.445 and 3.35 μM), CB₂ receptor inverse agonist and inhibitor of anandamide uptake (IC₅₀ = 27.5 μM). Also a weak agonist at VR1 vanilloid receptors (EC₅₀ = 3.5 μM).

**Physical and Chemical Properties:**
Batch Molecular Formula: C₂₁H₂₉O₂
Batch Molecular Weight: 314.47
Physical Appearance: Light Beige solid
Minimum Purity: >98%

**Storage:** Store at -20°C
**CAUTION** - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

**Solubility & Usage Info:**
ethanol to 75 mM  
DMSO to 75 mM  
This product is supplied as a lyophilized oil 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.

**Other Information:**
**INFORMATION FOR CUSTOMERS IN THE USA ONLY**
This product is a Schedule I DEA controlled substance and customers in the USA are required to hold a controlled substance registration in order to purchase and possess this material (in accordance with Title 21 code of federal regulations part 1300 to end).

**INFORMATION FOR CUSTOMERS IN CANADA ONLY**
This product is a Schedule II CDSA controlled substance and customers in Canada require an import permit to purchase this material.

**References:**


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