

**Product Name:** (-)-Cannabidiol

**Catalog No.:** 1570

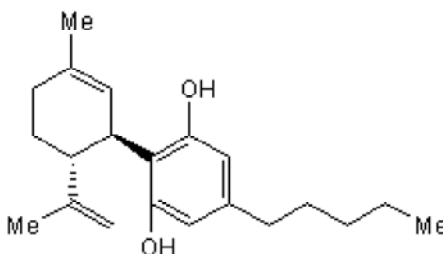
**Batch No.:** 10

CAS Number: 13956-29-1

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

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>21</sub>H<sub>30</sub>O<sub>2</sub>  
**Batch Molecular Weight:** 314.47  
**Physical Appearance:** Off-white solid  
**Solubility:** ethanol to 75 mM  
 DMSO to 75 mM  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 100% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Optical Rotation:** [α]<sub>D</sub> = -130.2 (Concentration = 1, Solvent = Ethanol)

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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**Description:**

(-)-Cannabidiol is a non-psychotropic constituent of cannabis that is anticonvulsive, antihyperalgesic and neuroprotective in vivo. GPR55 and weak CB<sub>1</sub> antagonist (IC<sub>50</sub> values are 0.445 and 3.35 μM), CB<sub>2</sub> receptor inverse agonist and inhibitor of anandamide uptake (IC<sub>50</sub> = 27.5 μM). Also inhibits FABPs and a weak agonist at TRP vanilloid receptors (EC<sub>50</sub> = 3.5 μM).

**Physical and Chemical Properties:**

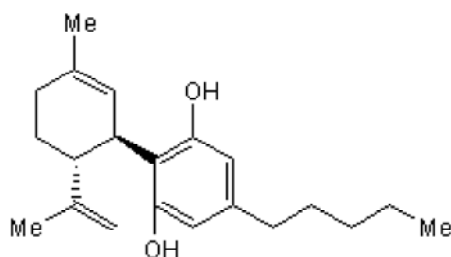
Batch Molecular Formula: C<sub>21</sub>H<sub>30</sub>O<sub>2</sub>

Batch Molecular Weight: 314.47

Physical Appearance: Off-white solid

**Minimum Purity:** ≥99%

**Batch Molecular Structure:**



**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

**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:**

**Deutsch** (2016) A personal retrospective: Elevating Anandamide (AEA) by targeting fatty acid amide hydrolase (FAAH) and the fatty acid binding proteins (FABPs). *Front.Pharmacol.* **7** 370. PMID: 27790143.

**Ryberg et al** (2007) The orphan receptor GPR55 is a novel cannabinoid receptor. *Br.J.Pharmacol.* **152** 1092. PMID: 17876302.

**Thomas et al** (2007) Cannabidiol displays unexpectedly high potency as an antagonist of CB<sub>1</sub> and CB<sub>2</sub> receptor agonists *in vitro*. *Br.J.Pharmacol.* **150** 613. PMID: 17245363.

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