

Product Name: (-)-Cannabidiol

Catalog No.: 1570

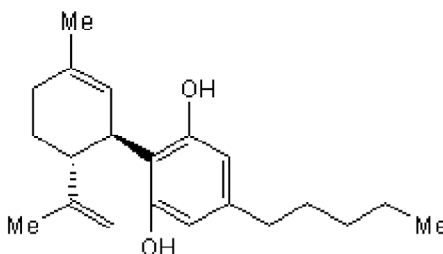
Batch No.: 10

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 ₂₁ H ₃₀ O ₂
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 99.8% purity
¹ H NMR:	Consistent with structure
Mass Spectrum:	Consistent with structure
Optical Rotation:	[α] _D = -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 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 inhibits FABPs and a weak agonist at TRP vanilloid receptors (EC₅₀ = 3.5 μM). Reduces inflammation and LPS-induced cytokine production in cultured microglial cells.

Physical and Chemical Properties:

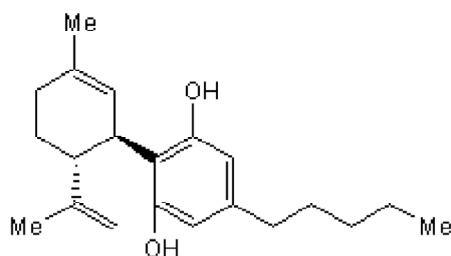
Batch Molecular Formula: C₂₁H₃₀O₂

Batch Molecular Weight: 314.47

Physical Appearance: Off-white solid

Minimum Purity: ≥99%

Batch Molecular Structure:



References:

Dos-Santos-Pereira et al (2020) Cannabidiol prevents LPS-induced microglial inflammation by inhibiting ROS/NF- κ B-dependent signaling and glucose consumption. *Glia* **68** 561. PMID: 31647138.

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.

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. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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.

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