

## Certificate of Analysis

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**Product Name:** Abn-CBD

**Catalog No.:** 1297

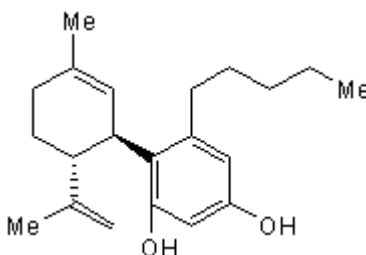
**Batch No.:** 5

CAS Number: 22972-55-0

IUPAC Name: 4-[(1*R*,6*R*)-3-Methyl-6-(1-methylethenyl)-2-cyclohexen-1-yl]-5-pentyl-1,3-benzenediol

### 1. PHYSICAL AND CHEMICAL PROPERTIES

<b>Batch Molecular Formula:</b>	C <sub>21</sub> H <sub>30</sub> O <sub>2</sub>
<b>Batch Molecular Weight:</b>	314.47
<b>Physical Appearance:</b>	Colourless liquid
<b>Solubility:</b>	Soluble in methyl acetate (supplied pre-dissolved - 5mg/ml)
<b>Storage:</b>	Desiccate at -20°C
<b>Batch Molecular Structure:</b>	



### 2. ANALYTICAL DATA

<b>TLC:</b>	R <sub>f</sub> = 0.04 (Chloroform)
<b>HPLC:</b>	Shows >99.7% purity
<b><sup>1</sup>H NMR:</b>	Consistent with structure
<b>Mass Spectrum:</b>	Consistent with structure
<b>Optical Rotation:</b>	[α] <sub>D</sub> = -82.5 (Concentration = 1, Solvent = Chloroform)

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

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**Description:**

Neurobehaviorally inactive cannabinoid that acts as a selective agonist for GPR55 (EC<sub>50</sub> values are 2.5, >30 and >30 μM at GPR55, CB<sub>1</sub> and CB<sub>2</sub> receptors respectively). Increases phosphorylation of protein kinases in, and migration of, human umbilical vein endothelial cells.

**Physical and Chemical Properties:**

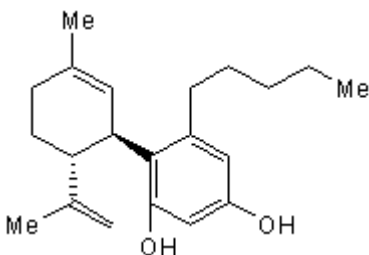
Batch Molecular Formula: C<sub>21</sub>H<sub>30</sub>O<sub>2</sub>

Batch Molecular Weight: 314.47

Physical Appearance: Colourless liquid

**Minimum Purity:** >97%

**Batch Molecular Structure:**



**Storage:** Desiccate 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:**

Soluble in methyl acetate (supplied pre-dissolved - 5mg/ml)

This compound is supplied pre-dissolved in Methyl acetate (5mg/ml). To change the solvent, evaporate the methyl acetate under a gentle stream of nitrogen and immediately add the chosen solvent (preferably purged with nitrogen beforehand). The solubility of Abn-CBD is greater than 50mM in both DMSO and Ethanol. We do not recommend storing aqueous solutions for more than a day.

**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:**

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

**Mo et al (2004)** Atypical cannabinoid stimulates endothelial cell migration via a G<sub>i</sub>/G<sub>o</sub>-coupled receptor distinct from CB<sub>1</sub>, CB<sub>2</sub> or EDG-1. *Eur.J.Pharmacol.* **489** 21. PMID: 15063151.

**Ho and Hiley (2003)** Vasodilator actions of abnormal-cannabidiol in rat isolated small mesenteric artery. *Br.J.Pharmacol.* **138** 1320. PMID: 12711633.

**Jarai et al (1999)** Cannabinoid-induced mesenteric vasodilation through an endothelial site distinct from CB1 or CB2 receptors. *Proc.Natl.Acad.Sci.U.S.A.* **96** 14136. PMID: 10570211.

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