# biotechne<sup>®</sup> TOCRIS

# **Certificate of Analysis**

# www.tocris.com

Product Name: JWH 133

## Catalog No.: 1343 Batch No.: 10

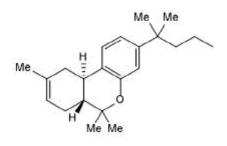
CAS Number: IUPAC Name: 259869-55-1

(6aR,10aR)-3-(1,1-Dimethylbutyl)-6a,7,10,10a-tetrahydro-6,6,9-trimethyl-6H-dibenzo[b,d]pyran

# 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: Batch Molecular Weight: Physical Appearance: Solubility: C<sub>22</sub>H<sub>32</sub>O 312.49 White solid ethanol to 100 mM DMSO to 20 mM Store at -20°C

Storage: Batch Molecular Structure:



# 2. ANALYTICAL DATA

HPLC: <sup>1</sup>H NMR: Mass Spectrum: Optical Rotation: Microanalysis:

Shows 99.8% purity Consistent with structure Consistent with structure  $[\alpha]_D = -184$  (Concentration = 1.00, Solvent = Chloroform) Carbon Hydrogen Nitrogen Theoretical 84.56 10.32 0 Found 84.63 10.53 0.1

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

bio-techne.com	North America	China	Europe Middle East Africa	Rest of World
info@bio-techne.com techsupport@bio-techne.com	Tel: (800) 343 7475	info.cn@bio-techne.com Tel: +86 (21) 52380373	Tel: +44 (0)1235 529449	www.tocris.com/distributors Tel:+1 612 379 2956

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Print Date: Apr 3rd 2023

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CAS Number: 259869-55-1

IUPAC Name:

(6aR,10aR)-3-(1,1-Dimethylbutyl)-6a,7,10,10a-tetrahydro-6,6,9-trimethyl-6H-dibenzo[b,d]pyran

### **Description:**

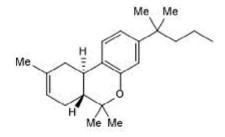
JWH 133 is a potent CB<sub>2</sub> selective agonist (K<sub>i</sub> = 3.4 nM). Approx. 200-fold selective over CB<sub>1</sub> receptors. Active in vivo, reducing spasticity in a murine model of multiple sclerosis. Activity also enhances the release of IL-10 by LPS/IFN- $\gamma$ -stimulated macrophages and results in downregulation of the IL-12 subunit p40.

### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>22</sub>H<sub>32</sub>O Batch Molecular Weight: 312.49 Physical Appearance: White solid

#### Minimum Purity: ≥98%

#### **Batch Molecular Structure:**



#### Storage: Store at -20°C

Solubility & Usage Info: ethanol to 100 mM DMSO to 20 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  $45-60^{\circ}C$  water bath).

Catalog No.: 1343

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:**

**Correa** *et al* (2005) Activation of cannabinoid CB<sub>2</sub> receptor negatively regulates IL-12p40 production in murine macrophages: role of IL-10 and ERK1/2 kinase signaling. Br.J.Pharmacol. **145** 441. PMID: 15821753.

Baker et al (2000) Cannabinoids control spasticity and tremor in a multiple sclerosis model. Nature 404 84. PMID: 10716447.

**Huffman** *et al* (1999) 3-(1'-Dimethylbutyl)-1-deoxy- $\Delta$ 8-THC and related compounds: synthesis of selective ligands for the CB<sub>2</sub> receptor. Bioorg.Med.Chem. **7** 2905. PMID: 10658595.

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