



Certificate of Analysis

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Product Name: JWH 133 Catalog No.: 1343 Batch No.: 10

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

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{22}H_{32}O$ Batch Molecular Weight:312.49Physical Appearance:White solid

Solubility: ethanol to 100 mM

DMSO to 20 mM

Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 99.7% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Optical Rotation: $[\alpha]_D = -184$ (Concentration = 1.00, Solvent = Chloroform)

Microanalysis: 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



Product Information

Print Date: Jan 15th 2025

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Description:

JWH 133 is a potent CB_2 selective agonist ($K_i = 3.4$ nM). Approx. 200-fold selective over CB_1 receptors. Active in vivo, reducing spasticity in a murine model of multiple sclerosis. Activity also enhances the release of IL-10 by LPS/IFN- γ -stimulated macrophages and results in downregulation of the IL-12 subunit p40.

Physical and Chemical Properties:

Batch Molecular Formula: C₂₂H₃₂O 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°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.

References:

Correa et al (2005) Activation of cannabinoid CB_2 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-Δ8-THC and related compounds: synthesis of selective ligands for the CB₂ receptor. Bioorg.Med.Chem. **7** 2905. PMID: 10658595.

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