Certificate of Analysis

Product Name: **HU 211** **Catalog No.: 2861** **Batch No.: 1**

CAS Number: 112924-45-5

IUPAC Name: (6a*S*,10a*S*)-3-(1,1-Dimethylheptyl)-6a,7,10,10a-tetrahydro-1-hydroxy-6,6-dimethyl-6*H*-dibenzo[*b*,*d*]pyran-9-methanol

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{25}H_{38}O_3$

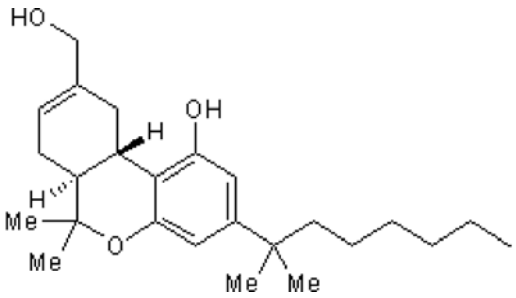
Batch Molecular Weight: 386.57

Physical Appearance: White solid

Solubility: DMSO to 100 mM
ethanol to 100 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.12 (Ethyl acetate:Petroleum ether [1:3])

HPLC: Shows 97.7% purity

^{1}H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Optical Rotation: $[\alpha]_D$ = +202 (Concentration = 1, Solvent = Chloroform)

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	77.68	9.91	
Found	77.33	9.77	

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Product Information

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Description:

NMDA antagonist (IC_{50} = 11 µM for inhibition of [^{3}H]MK-801 binding to rat forebrain membranes). Protects against NMDA- and quisqualate-induced neurotoxicity (EC_{50} = 3.8 µM) and enhances dopamine D_1 receptor activity. Inhibits NF-κB, reducing TNF-α, IL-6 and nitric oxide production, and acts as a free radical scavenger. Exhibits beneficial effects in experimental models of multiple sclerosis, bacterial meningitis, septic shock, epilepsy, and traumatic and ischemic brain injury. Brain penetrant.

Physical and Chemical Properties:

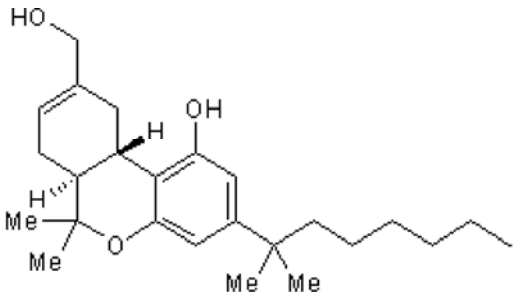
Batch Molecular Formula: $C_{25}H_{38}O_3$

Batch Molecular Weight: 386.57

Physical Appearance: White solid

Minimum Purity: ≥97%

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:

DMSO to 100 mM
ethanol to 100 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.

Other Information:

INFORMATION FOR CUSTOMERS IN THE UK ONLY

This product is a Schedule 1 Home Office controlled substance and customers in the UK are required to hold the relevant licence or be exempt from restrictions in order to purchase and possess this material.

References:

Juttler *et al* (2004) The cannabinoid dexanabinol is an inhibitor of the nuclear factor kappa B (NF-κB). Neuropharmacology ***47*** 580. PMID: 15380375.

Gallily *et al* (1997) Protection against septic shock and suppression of tumor necrosis factor α and nitric oxide production by dexanabinol (HU-211), a nonpsychotropic cannabinoid. J.Pharmacol.Exp.Ther. ***283*** 918. PMID: 9353414.

Striem *et al* (1997) Interaction of dexanabinol (HU-211), a novel NMDA receptor antagonist, with the DArgic system. Eur.J.Pharmacol. ***338*** 205. PMID: 9424014.

Eshhar *et al* (1993) HU-211, a non-psychotropic cannabinoid, rescues cortical neurones from excitatory amino acid toxicity in culture. Neuroreport ***5*** 237. PMID: 8298080.