

**Product Name:** O-2050

**Catalog No.:** 1655

**Batch No.:** 4

CAS Number: 851320-29-1

IUPAC Name: (6a*R*,10a*R*)-3-(1-Methanesulfonylamino-4-hexyn-6-yl)-6a,7,10,10a-tetrahydro-6,6,9-trimethyl-6*H*-dibenzo[*b,d*]pyran

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>23</sub>H<sub>31</sub>NO<sub>4</sub>S·½H<sub>2</sub>O

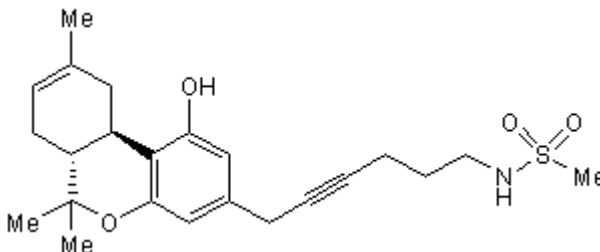
**Batch Molecular Weight:** 426.57

**Physical Appearance:** Yellow solid

**Solubility:** ethanol to 100 mM  
DMSO to 100 mM

**Storage:** Store at -80°C

**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**TLC:** R<sub>f</sub> = 0.57 (Ethyl acetate:Petroleum ether [3:2])

**HPLC:** Shows 97.2% purity

**<sup>1</sup>H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	64.76	7.56	3.28
Found	64.65	7.44	3.34

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

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**Description:**

Originally defined as a high affinity cannabinoid CB<sub>1</sub> receptor silent antagonist. Acts as a partial agonist in inhibiting forskolin-induced cyclic AMP stimulation (EC<sub>50</sub> = 40.4 nM). Decreases food intake and stimulates locomotor activity in rodents. Antagonizes effects of CP55,940 (Cat. No. 0949) in vitro.

**Physical and Chemical Properties:**

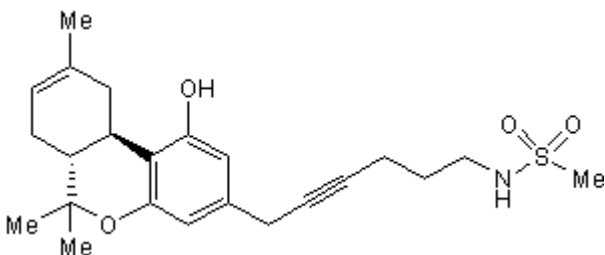
Batch Molecular Formula: C<sub>23</sub>H<sub>31</sub>NO<sub>4</sub>S.½H<sub>2</sub>O

Batch Molecular Weight: 426.57

Physical Appearance: Yellow solid

**Minimum Purity:** >97%

**Batch Molecular Structure:**



**References:**

**Martin et al** (2002) Agonists and silent antagonists in a series of cannabinoid sulfonamides. Symposium on the Cannabinoids, International Canna.

**Gardner and Mallet** (2006) Suppression of feeding, drinking, and locomotion by a putative cannabinoid receptor 'silent antagonist.' *Eur.J.Pharmacol.* **530** 103. PMID: 16380113.

**Wiley et al** (2011) Structural and pharmacological analysis of O-2050, a putative neutral cannabinoid CB<sub>1</sub> receptor antagonist. *Eur.J.Pharmacol.* **651** 96. PMID: 21114999.

**Storage:** Store at -80°C

**Solubility & Usage Info:**

ethanol to 100 mM

DMSO 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.

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