

# **Certificate of Analysis**

Print Date: Jan 13<sup>th</sup> 2016

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Product Name: WIN 55,212-3 mesylate Catalog No.: 2327 Batch No.: 3

CAS Number: 131543-25-4

IUPAC Name: [(3S)-2,3-Dihydro-5-methyl-3-(4-morpholinylmethyl)pyrrolo[1,2,3-de]-1,4-benzoxazin-6-yl]-1-naphthalenyl-

methanone monomethanesulfonate

#### 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{27}H_{26}N_2O_3.CH_3SO_3H.4H_2O$ 

Batch Molecular Weight: 527.11

Physical Appearance: Off-white solid

**Solubility:** DMSO to 100 mM with gentle warming

Storage: Store at +4°C

**Batch Molecular Structure:** 

### 2. ANALYTICAL DATA

HPLC: Shows 99.2% purity
Chiral HPLC: Shows 100% purity

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

**Optical Rotation:**  $[\alpha]_D = -35$  (Concentration = 1, Solvent = DMF)

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 63.8 5.83 5.31 Found 63.72 5.98 5.18



# **Product Information**

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methanone monomethanesulfonate

#### **Description:**

Novel, low potency  $CB_2$  receptor silent antagonist and  $CB_1$  receptor partial inverse agonist. Competitively antagonizes effects of CP 55,940 ( $pA_2$  = 6.1) and SR 144528 ( $pEC_{50}$  = 5.3) at  $CB_2$  receptors and acts as a partial inverse agonist at  $CB_1$  receptors ( $pIC_{50}$  = 5.5). Displays modest activity at human melatonin  $MT_1$  and muscarinic  $M_4$  receptors, but is selective over several other GPCRs.

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

Batch Molecular Formula: C<sub>27</sub>H<sub>26</sub>N<sub>2</sub>O<sub>3</sub>.CH<sub>3</sub>SO<sub>3</sub>H.1/4H<sub>2</sub>O

Batch Molecular Weight: 527.11 Physical Appearance: Off-white solid

# Minimum Purity: >98%

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

Storage: Store at +4°C

# Solubility & Usage Info:

DMSO to 100 mM with gentle warming

### 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 relevent licence or be exempt from restrictions in order to purchase and posess this material.

# References:

**Savinainen** *et al* (2005) Identification of WIN55212-3 as a competitive neutral antagonist of the human cannabinoid CB<sub>2</sub> receptor. Br.J.Pharmacol. *145* 636. PMID: 15852035.