



# **Certificate of Analysis**

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Product Name: MS 245 oxalate Catalog No.: 4208 Batch No.: 1

CAS Number: 275363-58-1

IUPAC Name: 5-Methoxy-*N*,*N*-dimethyl-1-(phenylsulfonyl)-1*H*-indole-3-ethanamine oxalate

### 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{19}H_{22}N_2O_3S.C_2H_2O_4$ 

Batch Molecular Weight: 448.49

Physical Appearance: Off-white solid

Solubility: DMSO to 50 mM

Storage: Store at +4°C

**Batch Molecular Structure:** 

## 2. ANALYTICAL DATA

**TLC:**  $R_f = 0.4$  (Chloroform:Methanol [9:1])

**HPLC:** Shows 99.5% purity

<sup>1</sup>H NMR: Consistent with structure Mass Spectrum: consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 56.24 5.39 6.25

Found 56.18 5.35 6.17



# **Product Information**

Print Date: Jan 15<sup>th</sup> 2016 **WWW.tocris.com** 

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IUPAC Name: 5-Methoxy-*N*,*N*-dimethyl-1-(phenylsulfonyl)-1*H*-indole-3-ethanamine oxalate

# **Description:**

High affinity  $5\text{-HT}_6$  antagonist ( $K_i = 2.1 \text{ nM}$ ). Potentiates the hypolocomotor actions of (-)-nicotine in mice.

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

Batch Molecular Formula: C<sub>19</sub>H<sub>22</sub>N<sub>2</sub>O<sub>3</sub>S.C<sub>2</sub>H<sub>2</sub>O<sub>4</sub>

Batch Molecular Weight: 448.49 Physical Appearance: Off-white solid

**Minimum Purity:** >99%

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

Storage: Store at +4°C

#### Solubility & Usage Info:

DMSO to 50 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.

# References:

**Glennon** *et al* (2000) 2-substituted tryptamines: agents with selectivity for 5-HT<sub>6</sub> serotonin receptors. J.Med.Chem. *43* 1011. PMID: 10715164.

Young et al (2006) Effect of the 5-HT<sub>6</sub> serotonin antagonist MS-245 on the actions of (-)nicotine. Pharmacol.Biochem.Behav. **85** 170. PMID: 16950502.

**Dukat** *et al* (2008) Binding of serotonin and  $N_1$ -benzenesulfonyltryptamine-related analogs at human 5-HT<sub>6</sub> serotonin receptors: receptor modeling studies. J.Med.Chem. *51* 603. PMID: 18201064.

Nirogi et al (2010) Novel and potent 5-piperazinyl methyl- $N_1$ -aryl sulfonyl indole derivatives as 5-HT<sub>6</sub> receptor ligands. ACS Med.Chem.Lett. **1** 340.