

**Certificate of Analysis** 

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Print Date: Jan 15th 2016

Product Name: Mesulergine hydrochloride Catalog No.: 1644 Batch No.: 1

CAS Number: 72786-12-0

IUPAC Name: N'-[(8- $\alpha$ 1,6-dimethylergolin-8-yl]-N,N-dimethylsulfamide hydrochloride

## 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{18}H_{26}N_4O_2S.HCI$ 

**Batch Molecular Weight:** 398.95 **Physical Appearance:** White solid

**Solubility:** DMSO to 100 mM

water to 5 mM with gentle warming

Storage: Desiccate at RT

**Batch Molecular Structure:** 

# 2. ANALYTICAL DATA

**HPLC:** Shows 99.6% purity

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

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 54.19 6.82 14.04 Found 54.08 6.9 13.98



# **Product Information**

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# **Description:**

 $5\text{-HT}_{2A}$  and  $_{2C}$  receptor antagonist (pA $_2$  values are 9.1 for each receptor) and D $_2$ -like dopamine receptor partial agonist (K $_i$  = 8 nM). Displays antiprolactin and antiparkinsonian effects in vivo.

# **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>18</sub>H<sub>26</sub>N<sub>4</sub>O<sub>2</sub>S.HCl

Batch Molecular Weight: 398.95 Physical Appearance: White solid

Minimum Purity: >99%

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

# Storage: Desiccate at RT

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

water to 5 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.

## References:

**Markstei** (1983) Mesulergine and its 1,20-N,N-bidemethylated metabolite interact directly with  $D_1$ - and  $D_2$ -receptors. Eur.J.Pharmacol. **95** 101. PMID: 6230246.

Marko (1984) Dopamine agonistic potency of two novel prolactin release-inhibiting ergolines. Eur.J.Pharmacol. 101 263. PMID: 6468500.

**Hoyer** *et al* (1994) VII. International Union of Pharmacology classification of receptors for 5-hydroxytryptamine (serotonin). Pharmacol.Rev. *46* 157. PMID: 7938165.