# TOCR a biotechne

### Print Date: Aug 13th 2020

# **Certificate of Analysis**

### www.tocris.com

Batch No.: 4

Catalog No.: 3083

#### Product Name: **DMCM** hydrochloride

CAS Number: 1215833-62-7

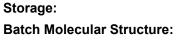
**IUPAC Name:** 4-Ethyl-6,7-dimethoxy-9H-pyrido[3,4-b]indole-3-carboxylic acid methyl ester hydrochloride

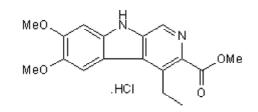
### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula: Batch Molecular Weight: Physical Appearance:** Solubility:

C17H18N2O4.HCI 350.8 Yellow solid water to 100 mM DMSO to 20 mM Desiccate at RT

Found





7.99

7.92

### 2. ANALYTICAL DATA

HPLC: Shows 98.7% purity <sup>1</sup>H NMR: Consistent with structure Mass Spectrum: Consistent with structure **Microanalysis:** Carbon Hydrogen Nitrogen Theoretical 58.21 5.46

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57.98

5.45

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## **Product Information**

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CAS Number: 1215833-62-7

IUPAC Name: 4-Ethyl-6,7-dimethoxy-9H-pyrido[3,4-b]indole-3-carboxylic acid methyl ester hydrochloride

### Description:

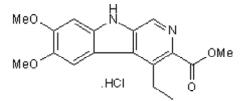
Benzodiazepine inverse agonist that displays anxiogenic and potent convulsant activity.

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

Batch Molecular Formula: C<sub>17</sub>H<sub>18</sub>N<sub>2</sub>O<sub>4</sub>.HCl Batch Molecular Weight: 350.8 Physical Appearance: Yellow solid

Minimum Purity: ≥98%

**Batch Molecular Structure:** 



#### Storage: Desiccate at RT

Solubility & Usage Info: water to 100 mM DMSO to 20 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  $45-60^{\circ}C$  water bath).

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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:**

**Conto** *et al* (2005) Behavioral differences between subgroups of rats with high and low threshold to clonic convulsions induced by DMCM, a benzodiazepine inverse agonist. Pharmacol.Biochem.Behav. **82** 417. PMID: 16297441.

Sieve et al (2001) Pain and negative affect: evidence the inverse benzodiazepine agonist DMCM inhibits pain and learning in rats. Psychopharmacol. 153 180.

Petersen (1983) DMCM: a potent convusive benzodiazepine receptor ligand. Eur.J.Pharmacol. 94 117. PMID: 6317396.

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