

**Certificate of Analysis** 

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Print Date: Jan 14th 2016

Product Name: TC-E 5005 Catalog No.: 4572 Batch No.: 1

CAS Number: 959705-64-7

IUPAC Name: 2-Methoxy-6,7-dimethyl-9-propyl-imidazo[1,5-a]pyrido[3,2-e]pyrazine

### 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{15}H_{18}N_4O.4H_2O$ 

Batch Molecular Weight: 274.83
Physical Appearance: Yellow solid

Solubility: 1eq. HCl to 100 mM

ethanol to 100 mM DMSO to 20 mM

Storage: Store at +4°C

Batch Molecular Structure:

## 2. ANALYTICAL DATA

**TLC:**  $R_f = 0.18$  (Dichloromethane:Methanol:2M NH3 [100:1])

HPLC: Shows >99.6% purity

1H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 65.56 6.78 20.39 Found 65.65 6.66 20.61



# **Product Information**

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Cotalon No. 4570 Datab No. 4

Product Name: TC-E 5005 Catalog No.: 4572 Batch No.: 1

CAS Number: 959705-64-7

IUPAC Name: 2-Methoxy-6,7-dimethyl-9-propyl-imidazo[1,5-a]pyrido[3,2-e]pyrazine

#### **Description:**

Potent and selective PDE10A inhibitor ( $IC_{50}$  values are 7.28, 239, 779, 919, 3100 and 3700 nM at PDE10A, 2A, 11A, 5A, 7B and 3A respectively and >5000 nM at PDE1B, 4A, 6, 8A and 9A). Reverses MK 801-induced hyperactivity in vivo.

## **Physical and Chemical Properties:**

Batch Molecular Formula:  $C_{15}H_{18}N_4O.1/4H_2O$ 

Batch Molecular Weight: 274.83 Physical Appearance: Yellow solid

Minimum Purity: >99%

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

Storage: Store at +4°C

# Solubility & Usage Info:

1eq. HCl to 100 mM ethanol 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°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:

**Hofgen** *et al* (2010) Discovery of imidazo[1,5-*a*]pyrido[3,2-*e*]pyrazines as a new class of phosphodiesterase 10A inhibitiors. J.Med.Chem. *53* 4399. PMID: 20450197.