

# **Certificate of Analysis**

Print Date: Jan 16th 2016

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Product Name: VU 0422288 Catalog No.: 5378 Batch No.: 1

CAS Number: 1630936-95-6

IUPAC Name: N-[3-Chloro-4-[(5-chloro-2-pyridinyl)oxy]phenyl]-2-pyridinecarboxamide

#### 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{17}H_{11}CI_2N_3O_2$ 

Batch Molecular Weight: 360.19

Physical Appearance: Off White solid

Solubility: DMSO to 100 mM

Storage: Store at +4°C

**Batch Molecular Structure:** 

## 2. ANALYTICAL DATA

**TLC:**  $R_f = 0.29$  (Ethyl acetate:Petroleum ether [4:1])

HPLC: Shows 99.7% purity

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

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 56.69 3.08 11.67 Found 56.75 3.09 11.67



# **Product Information**

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### **Description:**

Group III mGlu receptor positive allosteric modulator (EC $_{50}$  values are 108, 125 and 146 nM for mGlu $_{4}$ , mGlu $_{8}$  and mGlu $_{7}$  respectively). Exhibits selectivity over a panel of 68 other GPCRs, ion channels and transporters. Potentiates mGlu $_{7}$ -mediated reductions in excitatory post synaptic potentials in hippocampal slices.

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

Batch Molecular Formula: C<sub>17</sub>H<sub>11</sub>Cl<sub>2</sub>N<sub>3</sub>O<sub>2</sub> Batch Molecular Weight: 360.19 Physical Appearance: Off White solid

Minimum Purity: >98%

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

Storage: Store at +4°C

#### Solubility & Usage Info:

DMSO to 100 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:

Jalan-Sakrikar et al (2014) Identification of positive allosteric modulators VU0155094 (ML397) and VU0422288 (ML396) reveals new insights into the biology of metabotropic glutamate receptor 7. ACS Chem.Neurosci. 5 1221. PMID: 25225882.