



# **Certificate of Analysis**

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Product Name: A 1070722 Catalog No.: 4431 Batch No.: 1

CAS Number: 1384424-80-9

IUPAC Name: 1-(7-Methoxyquinolin-4-yl)-3-[6-(trifluoromethyl)pyridin-2-yl]urea

## 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{17}H_{13}F_3N_4O_2$ 

Batch Molecular Weight: 362.31
Physical Appearance: Yellow solid

Solubility: DMSO to 100 mM

Storage: Store at RT

**Batch Molecular Structure:** 

#### 2. ANALYTICAL DATA

**TLC:**  $R_f = 0.2$  (Chloroform:Methanol [97.5:2.5])

HPLC: Shows 99.2% purity

1H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 56.36 3.62 15.46 Found 56.36 3.72 15.53



# **Product Information**

Print Date: Dec 5th 2012

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## **Description:**

Potent glycogen synthase kinase-3 (GSK-3) inhibitor ( $K_i$  = 0.6 nM for GSK-3 $\alpha$  and GSK-3 $\beta$ ). Displays high selectivity (> 50-fold) for GSK-3 over a panel of other kinases tested, including CDK family members. Decreases phosphorylation of microtubule-associated protein Tau in vitro; protects rat primary cortical neurons against  $\beta$  amyloid and glutamate challenge. Brain penetrant.

## **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>17</sub>H<sub>13</sub>F<sub>3</sub>N<sub>4</sub>O<sub>2</sub> Batch Molecular Weight: 362.31

Physical Appearance: Yellow solid

**Minimum Purity: >99%** 

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

Storage: Store at RT

#### 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:

**Bakker** *et al* (2011) A-1070722, a potent, selective, and centrally active glycogen synthase kinase-3 (GSK-3) inhibitor for the treatment of psychiatric and neurodegenerative disorders. Society for Neuroscience (Abstract) 568.

