

# **Certificate of Analysis**

Print Date: Aug 8th 2018

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Product Name: CP 43 Catalog No.: 6558 Batch No.: 1

CAS Number: 850467-66-2

IUPAC Name: N-(2-Oxo-2-((1,2,3,4-tetrahydronaphthalen-1-yl)amino)ethyl)-[1,1'-biphenyl]-4-carboxamide

# 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:**  $C_{25}H_{24}N_2O_2$ . ½ $H_2O$ 

Batch Molecular Weight: 393.48

Physical Appearance: Off White solid

Solubility: DMSO to 100 mM ethanol to 20 mM

Store at RT

Batch Molecular Structure:

#### 2. ANALYTICAL DATA

Storage:

**HPLC:** Shows 99.3% purity

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

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 76.31 6.4 7.12 Found 76.3 6.1 7.1



# **Product Information**

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IUPAC Name: N-(2-Oxo-2-((1,2,3,4-tetrahydronaphthalen-1-yl)amino)ethyl)-[1,1'-biphenyl]-4-carboxamide

#### **Description:**

Potent TAO kinase (TAOK) inhibitor (IC<sub>50</sub> values are 11 nM/L and 15 nM/L for TAOK1 and TAOK2, respectively). Inhibits TAOK phosphorylation and activation of JNK in vitro. Prolongs duration of mitosis and increases mitotic cell death in the SKBR3 breast cancer cell line. Also reduces tau phopshorylation in cortical neurons at sites associated with neurodegeneration in human tauopathies.

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

Batch Molecular Formula: C25H24N2O2.1/2H2O

Batch Molecular Weight: 393.48 Physical Appearance: Off White solid

**Minimum Purity: >98%** 

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

Storage: Store at RT

## Solubility & Usage Info:

DMSO to 100 mM ethanol 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:

**Giacomini** *et al* (2018) A new TAO kinase inhibitor reduces tau phosphorylation at sites associated with neurodegeneration in human tauopathies. Acta Neuropathol.Commun. *6* 37. PMID: 29730992.

**Koo** et al (2017) Targeting TAO kinase using a new inhibitor compound delays mitosis and induces mitotic cell death in centrosome amplified breast cancer cells. Mol.Cancer Ther. **16** 2410. PMID: 28830982.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use