



# **Certificate of Analysis**

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Product Name: CMPD-1 Catalog No.: 2186 Batch No.: 3

CAS Number: 41179-33-3

IUPAC Name: 2'-Fluoro-*N*-(4-hydroxyphenyl)-[1,1'-biphenyl]-4-butanamide

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>22</sub>H<sub>20</sub>FNO<sub>2</sub>

Batch Molecular Weight: 349.4

Physical Appearance: Pale pink solid

Solubility: DMSO to 100 mM ethanol to 100 mM

Storage: Store at RT

**Batch Molecular Structure:** 

### 2. ANALYTICAL DATA

**TLC:**  $R_f = 0.3$  (Dichloromethane:Methanol [1:5])

**HPLC:** Shows 99.5% purity

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

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 75.63 5.77 4.01 Found 75.47 5.77 3.99

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



# **Product Information**

Print Date: Jan 20th 2021

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#### **Description:**

Non-ATP-competitive, selective inhibitor of p38 $\alpha$ -mediated MK2a (mitogen-activated protein kinase-2a) phosphorylation (apparent K<sub>i</sub> = 330 nM). Does not inhibit p38 $\alpha$ -mediated phosphorylation of MBP and ATF-2. Also tubulin polymerization inhibitor. Cytotoxic in glioblastoma cells at concentrations that do not affect the MK2 pathway.

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

Batch Molecular Formula: C<sub>22</sub>H<sub>20</sub>FNO<sub>2</sub> Batch Molecular Weight: 349.4 Physical Appearance: Pale pink solid

Minimum Purity: ≥99%

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

Storage: Store at RT

#### Solubility & Usage Info:

DMSO to 100 mM ethanol 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:

Gurgis et al (2015) Cytotoxic activity of the MK2 inhibitor CMPD1 in glioblastoma cells is independent of MK2. Cell Death Discovery 1 15028.

Davidson et al (2004) Discovery and characterisation of a substrate selective p38α inhibitor. Biochemistry 43 11658. PMID: 15362850.

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