

# **Certificate of Analysis**

Print Date: Aug 8th 2018

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Product Name: Fmk Catalog No.: 4690 Batch No.: 1

CAS Number: 821794-92-7

IUPAC Name: 1-[4-Amino-7-(3-hydroxypropyl)-5-(4-methylphenyl)-7*H*-pyrrolo[2,3-d]pyrimidin-6-yl]-2-fluoroethanone

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>18</sub>H<sub>19</sub>FN<sub>4</sub>O<sub>2</sub>

Batch Molecular Weight: 342.37

Physical Appearance: Yellow solid

**Solubility:** DMSO to 100 mM

Storage: Store at -20°C

**Batch Molecular Structure:** 

## 2. ANALYTICAL DATA

**HPLC:** Shows 97.6% purity

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

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 63.15 5.59 16.36 Found 62.96 5.37 16.32

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



# **Product Information**

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#### **Description:**

Potent irreversible RSK1/2 inhibitor (IC $_{50}$  = 15 nM). Inactivates the C-terminal auto-kinase domain activity. Suppresses RSK2 kinase activity in RSK2-expressing HNSCC cell lines. Reduces HNSCC cell invasive ability. Displays no effect on EGF-stimulated phosphorylation of ERK1 or ERK2.

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

Batch Molecular Formula: C<sub>18</sub>H<sub>19</sub>FN<sub>4</sub>O<sub>2</sub>

Batch Molecular Weight: 342.37 Physical Appearance: Yellow solid

**Minimum Purity:** >97%

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

Storage: Store at -20°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:

Kang et al (2010) p90 ribosomal S6 kinase 2 promotes invasion and metastasis of human head and neck squamous cell carcinoma cells. J.Clin.Invest. 120 1165. PMID: 20234090.

**Cohen** *et al* (2007) A clickable inhibitor reveals context-dependent autoactivation of p90 RSK. Nat.Chem.Biol. **3** 156. PMID: 17259979. **Cohen** *et al* (2005) Structural bioinformatics-based design of selective, irreversible kinase inhibitors. Science **308** 1318. PMID: 15919995.