

# Certificate of Analysis

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**Product Name:** PF 03814735

**Catalog No.:** 4821

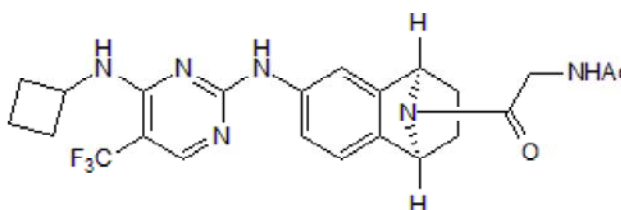
**Batch No.:** 1

**CAS Number:** 942487-16-3

**IUPAC Name:** *N*-[2-[(1*S*,4*R*)-6-[[4-(Cyclobutylamino)-5-(trifluoromethyl)-2-pyrimidinyl]amino]-1,2,3,4-tetrahydronaphthalen-1,4-imin-9-yl]-2-oxoethyl]-acetamide

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>23</sub>H<sub>25</sub>F<sub>3</sub>N<sub>6</sub>O<sub>2</sub>  
**Batch Molecular Weight:** 474.48  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 100 mM  
 ethanol to 20 mM  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 98.6% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon Hydrogen Nitrogen		
Theoretical	58.22	5.31	17.71
Found	58.27	5.35	17.74

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

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**Description:**

ATP-competitive inhibitor of Aurora kinases A and B (IC<sub>50</sub> values are 0.8 and 5 nM for recombinant Aurora B and Aurora A, respectively). Inhibits phosphorylation of Aurora B, histone H3 and Aurora A in cultured MDA-MB-231 cells (IC<sub>50</sub> values are approximately 20, 50 and 150 nM respectively). Shown to block cytokinesis; inhibits cellular proliferation in several human tumor cell lines, including HCT-116, HL-60, A549 and H125, and in human xenograft mouse models. Also enhances adeno-associated virus transduction of retina cells in vitro and in vivo. Orally available.

**Physical and Chemical Properties:**

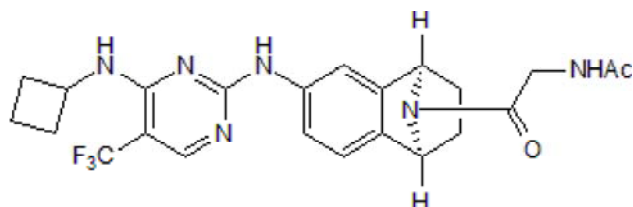
Batch Molecular Formula: C<sub>23</sub>H<sub>25</sub>F<sub>3</sub>N<sub>6</sub>O<sub>2</sub>

Batch Molecular Weight: 474.48

Physical Appearance: White solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**Storage:** Store at -20°C

**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.

**Licensing Information:**

Sold for research purposes under agreement from Pfizer Inc.

**References:**

**Maddelena et al** (2018) High-throughput screening identifies kinase inhibitors that increase dual adeno-associated viral vector transduction *in vitro* and in mouse retina. *Hum.Gene.Ther.* **29** 886. PMID: 29641320.

**Hook et al** (2012) An integrated genomic approach to identify predictive biomarkers of response to the Aurora kinase inhibitor PF-03814735. *Mol.Cancer Ther.* **11** 710. PMID: 22222631.

**Kollareddy et al** (2012) Aurora kinase inhibitors: progress towards the clinic. *Invest.New Drugs* **30** 2411. PMID: 22350019.

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