

**Product Name:** WH-4-023

**Catalog No.:** 5413

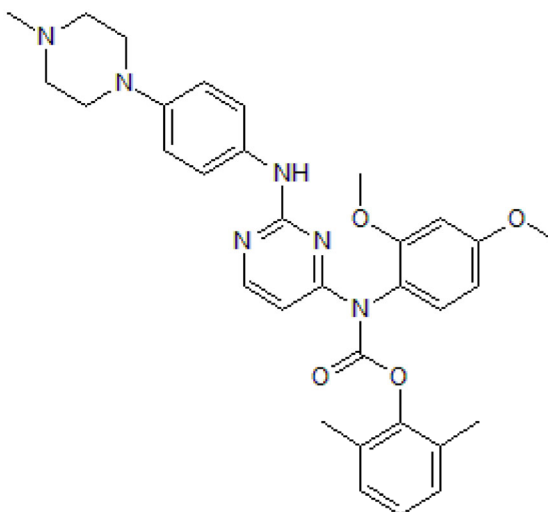
**Batch No.:** 3

CAS Number: 837422-57-8

IUPAC Name: 2,6-Dimethylphenyl-*N*-(2,4-dimethoxyphenyl)-*N*-[2-[[4-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl] carbamate

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>32</sub>H<sub>36</sub>N<sub>6</sub>O<sub>4</sub>.  
**Batch Molecular Weight:** 568.67  
**Physical Appearance:** Off White solid  
**Solubility:** DMSO to 100 mM  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 99.4% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	67.59	6.38	14.78
Found	67.48	6.3	14.68

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

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**Description:**

WH-4-023 is a potent and selective Lck and Src inhibitor (IC<sub>50</sub> values are 2 and 6 nM respectively). Exhibits >300-fold selectivity against p38α and KDR. Also potently inhibits SIK (IC<sub>50</sub> values are 10, 22 and 60 nM for SIK 1, 2 and 3 respectively) and displays selectivity over a range of closely related kinases. Supports self-renewal of naive hESCs in combination with PD 0325901, CHIR 99021 and SB 590885.

**Physical and Chemical Properties:**

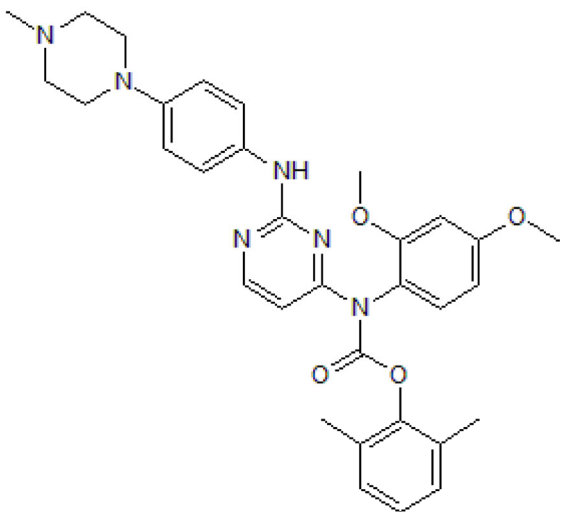
Batch Molecular Formula: C<sub>32</sub>H<sub>36</sub>N<sub>6</sub>O<sub>4</sub>.

Batch Molecular Weight: 568.67

Physical Appearance: Off White solid

**Minimum Purity:** ≥98%

**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. \*Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

**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:**

**Theunissen et al** (2014) Systematic identification of culture conditions for induction and maintenance of naive human pluripotency. *Cell Stem Cell* **15** 471. PMID: 25090446.

**Clark et al** (2012) Phosphorylation of CRT3 by the salt-inducible kinases controls the interconversion of classically activated and regulatory macrophages. *Proc.Natl.Acad.Sci.U.S.A.* **109** 16986. PMID: 23033494.

**Martin et al** (2006) Novel 2-aminopyrimidine carbamates as potent and orally active inhibitors of Lck: synthesis, SAR, and in vivo antiinflammatory activity. *J.Med.Chem.* **49** 4981. PMID: 16884310.

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