

# a biotechne brand

## **Certificate of Analysis**

www.tocris.com

Print Date: Jan 14th 2016

**Product Name: RWJ 67657** Catalog No.: 2999 Batch No.: 2

CAS Number: 215303-72-3

**IUPAC Name:** 4-[4-(4-Fluorophenyl)-1-(3-phenylpropyl)-5-(4-pyridinyl)-1*H*-imidazol-2-yl]-3-butyn-1-ol

#### 1. PHYSICAL AND CHEMICAL PROPERTIES

 $C_{27}H_{24}FN_3O.4H_2O$ **Batch Molecular Formula:** 

**Batch Molecular Weight:** 

Off-white solid **Physical Appearance:** Solubility: DMSO to 100 mM ethanol to 100 mM

Storage: Store at RT

**Batch Molecular Structure:** 

#### 2. ANALYTICAL DATA

 $R_f = 0.8$  (Ethyl acetate) TLC:

Shows 98.8% purity HPLC:

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

Microanalysis: Carbon Hydrogen Nitrogen

> Theoretical 75.42 5.74 9.77 Found 75.16 5.62 9.81



### **Product Information**

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#### **Description:**

Selective p38 $\alpha$  and p38 $\beta$  inhibitor (IC<sub>50</sub> values are 1 and 11  $\mu$ M respectively) that displays no activity at p38 $\gamma$ , p38 $\delta$  and a range of other kinases. Potently inhibits TNF- $\alpha$  and IL-1 $\beta$  release (IC<sub>50</sub> values are 3 and 11 nM respectively) and suppresses HIV-1 replication in T cells in vitro. Displays cardioprotective and anti-inflammatory activity in vivo. Orally active.

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

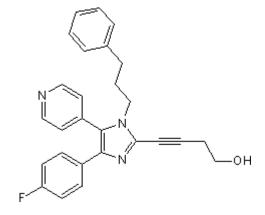
Batch Molecular Formula: C<sub>27</sub>H<sub>24</sub>FN<sub>3</sub>O.1/4H<sub>2</sub>O

Batch Molecular Weight: 430

Physical Appearance: Off-white solid

Minimum Purity: >98%

#### **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:

Wadsworth et al (1999) RWJ 67657, a potent, orally active inhibitor of p38 mitogen-activated protein kinase. J.Pharm.Exp.Ther. 291 680

Muthumani et al (2004) Suppresssion of HIV-1 viral replication and cellular pathogenesis by a novel p38/JNK kinase inhibitor. AIDS 18 739. PMID: 15075508.

See et al (2004) p38 mitogen activated protein kinase inhibition improves cardiac function and attenuates left ventricular remodeling fowllowing myocardial infarction in the rat. J.Am.Coll.Cardiol. 44 1679. PMID: 15489104.