## TOCRIS a biotechne brand

#### Print Date: Feb 25th 2021

## **Certificate of Analysis**

#### www.tocris.com

Batch No.: 4

Catalog No.: 1962

#### Product Name: SB 239063

CAS Number: 193551-21-2

IUPAC Name: trans-4-[4-(4-Fluorophenyl)-5-(2-methoxy-4-pyrimidinyl)-1H-imidazol-1-yl]cyclohexanol

#### 1. PHYSICAL AND CHEMICAL PROPERTIES

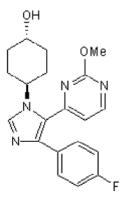
Batch Molecular Formula: Batch Molecular Weight: Physical Appearance:

**Batch Molecular Structure:** 

Solubility:

Storage:

 $C_{20}H_{21}FN_4O_2$ 368.41 White solid DMSO to 10 mM with gentle warming Desiccate at +4°C



#### 2. ANALYTICAL DATA

TLC: HPLC: <sup>1</sup>H NMR: Mass Spectrum: Microanalysis: R<sub>f</sub> = 0.53 (Dichloromethane:Methanol [9:1]) Shows 99.2% purity Consistent with structure Consistent with structure Carbon Hydrogen Nitrogen Theoretical 65.2 5.75 15.21

Found	64.74	5.69	15.08

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

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### **Product Information**

# Print Date: Feb 25<sup>th</sup> 2021

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IUPAC Name: *trans*-4-[4-(4-Fluorophenyl)-5-(2-methoxy-4-pyrimidinyl)-1*H*-imidazol-1-yl]cyclohexanol

#### **Description:**

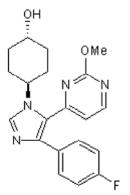
Potent and selective p38 MAP kinase inhibitor (IC<sub>50</sub> = 44 nM for p38 $\alpha$ ). Displays > 220-fold selectivity over ERK, JNK1 and other kinases; ~ 3-fold more selective than SB 203580 (Cat. Nos. 1202 and 1402). Reduces inflammatory cytokine production and is neuroprotective following oral administration in vivo.

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

Batch Molecular Formula:  $C_{20}H_{21}FN_4O_2$ Batch Molecular Weight: 368.41 Physical Appearance: White solid

#### Minimum Purity: ≥98%

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



#### References:

# Legos *et al* (2002) The selective p38 inhibitor SB-239063 protects primary neurons from mild to moderate excitotoxic injury. Eur.J.Pharmacol. **447** 37. PMID: 12106800.

**Barone** *et al* (2001) SB 239063, a second-generation p38 mitogen-activated protein kinase inhibitor, reduces brain injury and neurological deficits in cerebral focal ischemia. J.Pharmacol.Exp.Ther. **296** 312. PMID: 11160612.

**Underwood** *et al* (2000) SB 239063, a potent p38 MAP kinase inhibitor, reduces inflammatory cytokine production, airways eosinophil infiltration, and persistence. J.Pharmacol.Exp.Ther. **293** 281. PMID: 10734180.

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#### Catalog No.: 1962

Batch No.: 4

Storage: Desiccate at +4°C

#### Solubility & Usage Info:

DMSO to 10 mM with gentle warming

#### 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 GlaxoSmithKline