

Certificate of Analysis

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Product Name: TA 02

Catalog No.: 5384

Batch No.: 1

IUPAC Name: 4-(2-(2-Fluorophenyl)-4-(fluorophenyl)-1H-imidazol-5-yl)pyridine

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{20}H_{13}F_2N_3 \cdot \frac{1}{4}H_2O$

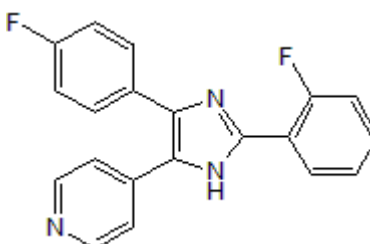
Batch Molecular Weight: 337.83

Physical Appearance: Beige solid

Solubility: DMSO to 100 mM
ethanol to 20 mM

Storage: Store at +4°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 98.3% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	71.11	4.03	12.44
Found	71.51	3.85	12.56

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

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Description:

Induces cardiomyocyte differentiation from human embryonic stem cells following mesoderm induction. Potently inhibits p38 α , CK1 δ and CK1 ϵ (IC₅₀ values are 20, 32 and 32 nM respectively).

Physical and Chemical Properties:

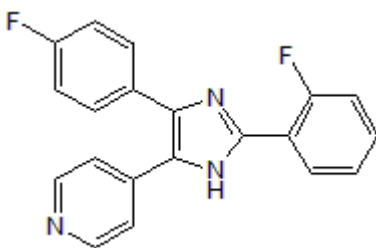
Batch Molecular Formula: C₂₀H₁₃F₂N₃·¼H₂O

Batch Molecular Weight: 337.83

Physical Appearance: Beige solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at +4°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.

References:

Laco et al (2014) Cardiomyocyte differentiation of pluripotent stem cells with SB203580 analogues correlates with Wnt pathway CK1 inhibition independent of p38 MAPK signaling. *J.Mol.Cell.Cardiol.* PMID: 25528965.

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bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel: +1 612 379 2956