

Certificate of Analysis

Print Date: May 17th 2024

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Product Name: KY 02111 Catalog No.: 4731 Batch No.: 2

CAS Number: 1118807-13-8

IUPAC Name: N-(6-Chloro-2-benzothiazolyl)-3,4-dimethoxybenzenepropanamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{18}H_{17}CIN_2O_3S$.

Batch Molecular Weight: 376.86

Physical Appearance: White solid

Solubility: DMSO to 50 mM Storage: Store at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 99.7% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 57.37 4.55 7.43 Found 57.3 4.4 7.39



Product Information

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IUPAC Name: N-(6-Chloro-2-benzothiazolyl)-3,4-dimethoxybenzenepropanamide

Description:

KY 02111 promotes differentiation of human ESCs and iPSCs into cardiomyocytes when used after day three in culture; differentiation efficiency increases when used after initial culture with CHIR 99021 (Cat. No. 4423). Induces downregulation of Wnt signaling target genes; inhibits canonical Wnt signaling in a manner distinct from other known Wnt inhibitors.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₈H₁₇ClN₂O₃S.

Batch Molecular Weight: 376.86 Physical Appearance: White solid

Minimum Purity: ≥98%

Batch Molecular Structure:

Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 50 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:

Minami et al (2012) A small molecule that promotes cardiac differentiation of human pluripotent stem cells under defined, cytokine- and xeno-free conditions. Cell Rep. **2** 1448. PMID: 23103164.