

## Certificate of Analysis

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**Product Name:** KY 02111

**Catalog No.:** 4731

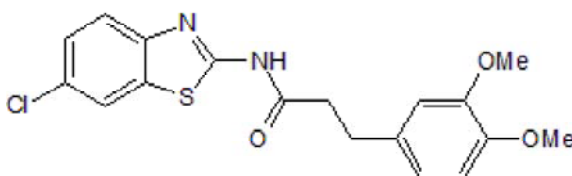
**Batch No.:** 1

CAS Number: 1118807-13-8

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

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>18</sub>H<sub>17</sub>ClN<sub>2</sub>O<sub>3</sub>S  
**Batch Molecular Weight:** 376.86  
**Physical Appearance:** Pale yellow solid  
**Solubility:** DMSO to 50 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**HPLC:** Shows 99.3% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	57.37	4.55	7.43
Found	57.21	4.53	7.52

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

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**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:**

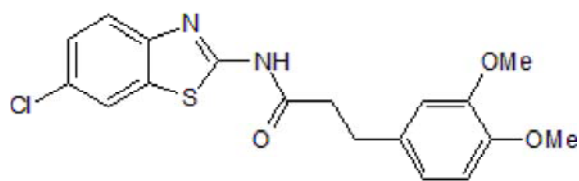
Batch Molecular Formula: C<sub>18</sub>H<sub>17</sub>ClN<sub>2</sub>O<sub>3</sub>S

Batch Molecular Weight: 376.86

Physical Appearance: Pale yellow solid

**Minimum Purity:** ≥99%

**Batch Molecular Structure:**



**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.

**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. 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.

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