#### KY02111

# Small Molecules

WNT pathway inhibitor

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Catalog # 72582 5 mg

## **Product Description**

KY02111 promotes the differentiation of pluripotent stem cells (PSCs) to cardiomyocytes by inhibiting canonical WNT signaling in a manner distinct from that of other WNT inhibitors (Minami et al.).

Molecular Name: KY02111

Alternative Names: Not applicable CAS Number: 1118807-13-8 Chemical Formula:  $C_{18}H_{17}CIN_2O_3S$  Molecular Weight: 376.9 g/mol Purity:  $\geq 95\%$ 

Chemical Name: N-(6-chloro-1,3-benzothiazol-2-yl)-3-(3,4-dimethoxyphenyl)propanamide

Structure:

## **Properties**

Physical Appearance: A crystalline solid

Storage: Product stable at -20°C as supplied. Protect from prolonged exposure to light.

Stable as supplied for 12 months from date of receipt.

Solubility:  $\cdot$  DMSO  $\leq$  25 mM

For example, to prepare a 10 mM stock solution in DMSO, resuspend 1 mg in 265 µL of fresh DMSO.

Prepare stock solution fresh before use. Information regarding stability of small molecules in solution has rarely been reported, however, as a general guide we recommend storage in DMSO at -20°C. Aliquot into working volumes to avoid repeated freeze-thaw cycles. The effect of storage of stock solution on compound performance should be tested for each application.

Compound has low solubility in aqueous media. For use as a cell culture supplement, stock solution should be diluted into culture medium immediately before use. Avoid final DMSO concentration above 0.1% due to potential cell toxicity.

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### **Published Applications**

**DIFFERENTIATION** 

· Promotes cardiomyocyte differentiation of human and mouse PSCs in combination with BIO (Catalog #72032), CHIR99021 (Catalog #72052), and XAV939 (Catalog #72672) (Minami et al.).

### References

Minami I 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(5): 1448–60.

### Related Small Molecules

For a complete list of small molecules available from STEMCELL Technologies, visit www.stemcell.com/smallmolecules or contact us at techsupport@stemcell.com.

## This product is hazardous. Please refer to the Safety Data Sheet (SDS).

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