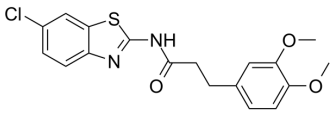
KY02111

Cat. No.:	HY-13815
CAS No.:	1118807-13-8
Molecular Formula:	$C_{18}H_{17}ClN_2O_3S$
Molecular Weight:	376.86
Target:	Wnt
Pathway:	Stem Cell/Wnt

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	2 years
	-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 33.33 mg/mL (88.44 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.6535 mL	13.2675 mL	26.5351 mL
5 mM	0.5307 mL	2.6535 mL	5.3070 mL
10 mM	0.2654 mL	1.3268 mL	2.6535 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

KY02111 is a canonical WNT signaling (β-catenin) inhibitor which promotes differentiation of hPSCs to cardiomyocytes. KY02111 can be used for the research of human cardiomyocyte regeneration[1].

In Vitro

KY02111 promotes differentiation by inhibiting WNT signaling in hPSCs[1].

KY02111 induces cardiomyocytes expressed the cardiac markers, αMHC, NKH2.5, and HCN4[1].

KY02111 (1-10 μM; 12 hours, 24 hours) reduces WNT signaling in both IMR90-1 cells and HEK293 cells in a dose-dependent manner[1].

KY02111 treatment with WNT signaling modulators produces robust cardiac differentiation of hPSCs in a xeno-free, defined medium, devoid of serum and any kind of recombinant cytokines and hormones, such as BMP4, Activin A, or insulin[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Europace. 2022 Jun 21;euac090.
- Int J Mol Sci. 2022, 23(20), 12219.
- Biology (Basel). 2021, 10(10), 1062.
- Patent. US20180263995A1.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Minami I, et al. A small molecule that promotes cardiac differentiation of human pluripotent stem cells under defined, cytokine- and xeno-free conditions. Cell Rep. 2012 Nov 29;2(5):1448-60.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA