



IWP-2

Data Sheet

Catalog Number:	MC11067	Product Type:	Small Molecule
Bio-Activity:	Porcn inhibitor; Wnt/b-catenin pathway inhibitor	CAS #:	686770-61-6
Research Categories:	Stem cells, cancer	Chemical Name:	N-(6-Methyl-2-benzothiazolyl)-2-[(3,4,6,7-tetrahydro-4-oxo-3-phenylthieno[3,2-d]pyrimidin-2-yl)thio]-acetamide
Solubility:	Soluble in DMSO (up to 5 mg/ml, with warming).	Molecular Formula:	C ₂₂ H ₁₈ N ₄ O ₂ S ₃
Purity:	> 98%	Molecular Weight:	466.6
Format:	Powder	Ship Temp:	Ambient
Storage:	-20°C		

Application Notes

Description/Data:

IWP-2 is an inhibitor of Wnt secretion and processing. It blocks Wnt-dependent signaling (IC₅₀=27nM) by inhibition of the O-acyltransferase Porcn [1]. Induces cardiomyocyte differentiation from human pluripotent stem cells [2]. An important tool to probe the involvement of the Wnt pathway in physiological processes [3,4]. Cell permeable.

References:

- 1) Chen et al. (2009), Small molecule-mediated disruption of Wnt-dependent signaling in tissue regeneration and cancer; *Nature Chem. Biol.*, 5 100
- 2) Lian et al. (2012), Robust Cardiomyocyte differentiation from human pluripotent stem cells via temporal modulation of canonical Wnt signaling; *Proc. Natl. Acad. Sci. USA*, 109 1848
- 3) ten Berge et al. (2011), Embryonic stem cells require Wnt proteins to prevent differentiation to epiblast stem cells; *Nature Cell. Biol.*, 13 1070
- 4) Uyama et al. (2013), Wasf2: a novel target of intermittent parathyroid hormone administration; *Int. J. Mol. Med.*, 31 1243

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