



<b>Catalog Number:</b>	MC11067	<b>Product Type:</b>	Small Molecule
<b>Bio-Activity:</b>	Porcn inhibitor; Wnt/b-catenin pathway inhibitor	<b>CAS #:</b>	686770-61-6
<b>Research Categories:</b>	Stem cells, cancer	<b>Chemical Name:</b>	N-(6-Methyl-2-benzothiazolyl)-2-[(3,4,6,7-tetrahydro-4-oxo-3-phenylthieno[3,2-d]pyrimidin-2-yl)thio]-acetamide
<b>Solubility:</b>	Soluble in DMSO (up to 5 mg/ml, with warming).	<b>Molecular Formula:</b>	C22H18N4O2S3
<b>Purity:</b>	> 98%	<b>Molecular Weight:</b>	466.6
<b>Format:</b>	Powder	<b>Ship Temp:</b>	Ambient
<b>Storage:</b>	-20°C		

### Application Notes

#### Description/Data:

IWP-2 is an inhibitor of Wnt secretion and processing. It blocks Wnt-dependent signaling (IC<sub>50</sub>=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), Wnt2: a novel target of intermittent parathyroid hormone administration; Int. J. Mol. Med., 31 1243

### FOR RESEARCH USE ONLY

NEUROMICS' REAGENTS ARE FOR IN VITRO AND CERTAIN NON-HUMAN IN VIVO EXPERIMENTAL USE ONLY AND NOT INTENDED FOR USE IN ANY HUMAN CLINICAL INVESTIGATION, DIAGNOSIS, PROGNOSIS, OR TREATMENT. THE ABOVE ANALYSES ARE MERELY TYPICAL GUIDES. THEY ARE NOT TO BE CONSTRUED AS BEING SPECIFICATIONS. ALL OF THE ABOVE INFORMATION IS, TO THE BEST OF OUR KNOWLEDGE, TRUE AND ACCURATE. HOWEVER, SINCE THE CONDITIONS OF USE ARE BEYOND OUR CONTROL, ALL RECOMMENDATIONS OR SUGGESTIONS ARE MADE WITHOUT GUARANTEE, EXPRESS OR IMPLIED, ON OUR PART. WE DISCLAIM ALL LIABILITY IN CONNECTION WITH THE USE OF THE INFORMATION CONTAINED HEREIN OR OTHERWISE, AND ALL SUCH RISKS ARE ASSUMED BY THE USER. WE FURTHER EXPRESSLY DISCLAIM ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.-V2/08/2012