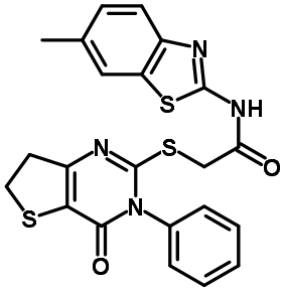
Product Specification Sheet

Product Name	Stemolecule™ Wnt Inhibitor IWP-2
Description	Stemolecule Wnt Inhibitor IWP-2 was identified in a high throughput screen for antagonists of the Wnt/β-catenin pathway. Wnt Inhibitor IWP-2 prevents palmitylation of Wnt proteins by Porcupine (Porcn), a membrane-bound O-acyltransferase, thereby blocking Wnt secretion and activity. It also blocks phosphorylation of the Lrp6 receptor and accumulation of both Dvl2 and β-catenin[1].
Catalog Number	AMS.04-0034
Size	2 mg
Alternate Name	N-(6-Methyl-2-benzothiazolyl)-2-[(3,4,6,7-tetrahydro-4-oxo-3-phenylthieno[3,2 d]pyrimidin-2-yl)thio]-acetamide
Chemical Formula	$C_{22}H_{18}N_4O_2S_3$
Structure	
Molecular Weight	466.6
CAS Number	686770-61-6
Purity	Greater than 99% by HPLC analysis
Formulation	White powder
Solubility	For a 5 mM concentrated stock solution of Wnt Inhibitor IWP-2, reconstitute the compound by adding 857.3 µl of DMSO to the entire contents of the vial. If precipitate is observed, warm the solution to 37°C for 2 to 5 minutes. For cell culture, the media should be prewarmed prior to adding the reconstituted compound. Note: for most cells, the maximum tolerance to DMSO is less than 0.5%. This molecule is soluble in DMSO at 5 mM.
Storage and Stability	Store powder at 4°C protected from light. Following reconstitution, store aliquots at -20°C. Stock solutions are stable for 6 months when stored as directed.
Quality Control	The purity of Wnt Inhibitor IWP-2 was determined by HPLC analysis. The accurate mass was determined by mass spectrometry. Cellular toxicity of Wnt Inhibitor IWP-2 was tested on mouse embryonic stem cells.

References

1. Chen, B., Dodge, M.E., Tang, W., Lu, J., Ma, Z., Fan, C.W., Wei, S., Hao, W., Kilgore, J., Williams, N.S., Roth, M.G., Amatruda, J.F., Chen, C., and Lum, L. (2009) Small molecule-mediated disruption of Wnt-dependent signaling in tissue regeneration and cancer. Nat Chem Biol 5: 100-107.

AMSBIO| www.amsbio.com | info@amsbio.com

UK & Rest of the World
AMS Biotechnology (Europe) Ltd
184 Park Drive, Milton Park
Abingdon, OX14 4SE, UK
T: +44 (0)1235 828 200
F: +44 (0)1235 820 482

North America
amsbio LLC
1035 Cambridge Street,
Cambridge, MA 02141
T: +1 (617) 945-5033 or
T: +1 (800) 987-0985
F: +1 (617) 945-8218

Germany
AMS Biotechnology (Europe) Ltd
Bockenheimer Landstr. 17/19
60325 Frankfurt/Main
T: +49 (0) 69 779099
F: +49 (0) 69 13376880

Switzerland
AMS Biotechnology (Europe) Ltd
Centro Nord-Sud 2E
CH-6934 Bioggio-Lugano
T: +41(0) 91 604 55 22
F: +41(0) 91 605 17 85

AMS Biotechnology (Europe) Limited registered in England & Wales number 02117791