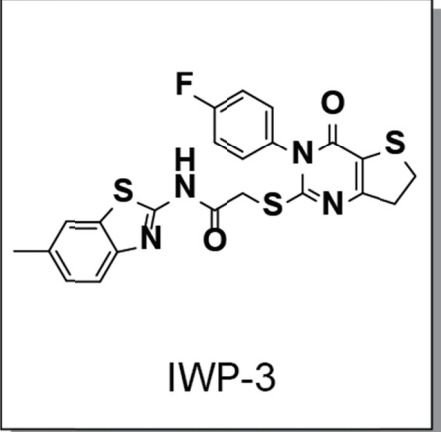




Product Specification Sheet

Product Name:	IWP-3	 <p>IWP-3</p>
Catalog Number:	C4971-2 (powder) C4971-2s (10mM in DMSO)	
Package Size:	2 mg	
Technical information:		
Chemical Formula:	C ₂₂ H ₁₇ FN ₄ O ₂ S ₃	
CAS #:	687561-60-0	
Molecular Weight:	484.59	
Purity:	>98%	
Formulation:	Light yellow solid	
Solubility:	Soluble in DMSO up to 100 mM	
Chemical Name:	2-(3-(4-fluorophenyl)-3,4,6,7-tetrahydro-4-oxothieno[3,2-d]pyrimidin-2-ylthio)-N-(6-methylbenzo[d]thiazol-2-yl)acetamide	
Storage:	Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.	
Handling:	<ul style="list-style-type: none">• For C4971-2 (powder), add 413 uL of DMSO to make 10 mM solution.• For C4971-2s, before open the vial, centrifuge the vial at 500rpm x 1 min in a 50 mL conical tube to ensure full recovery of sample.	
Biological Activity:	IWP-3 is a selective small molecule wnt inhibitor, prevents palmitoylation of Wnt proteins by Porcupine (Porcn), a membrane-bound O-acyltransferase, thereby blocking Wnt secretion and activity ¹ . It blocks phosphorylation of the Lrp6 receptor and accumulation of both Dvl2 and β-catenin. It has an IC ₅₀ of 40 nM which is 100 folds less potent than Wnt-C59, but it can still efficiently promote cardiomyocyte differentiation from human ESCs.	
Reference:	<ol style="list-style-type: none">1. Baozhi Chen, et al. Small molecule-mediated disruption of Wnt-dependent signaling in tissue regeneration and cancer. <i>Nature Chemical Biology</i> (2009); 5(2), 100-107.2. Willems E, et al. Small-Molecule Inhibitors of the Wnt Pathway Potently Promote Cardiomyocytes From Human Embryonic Stem Cell-Derived Mesoderm. <i>Circ Res.</i> 2011	

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