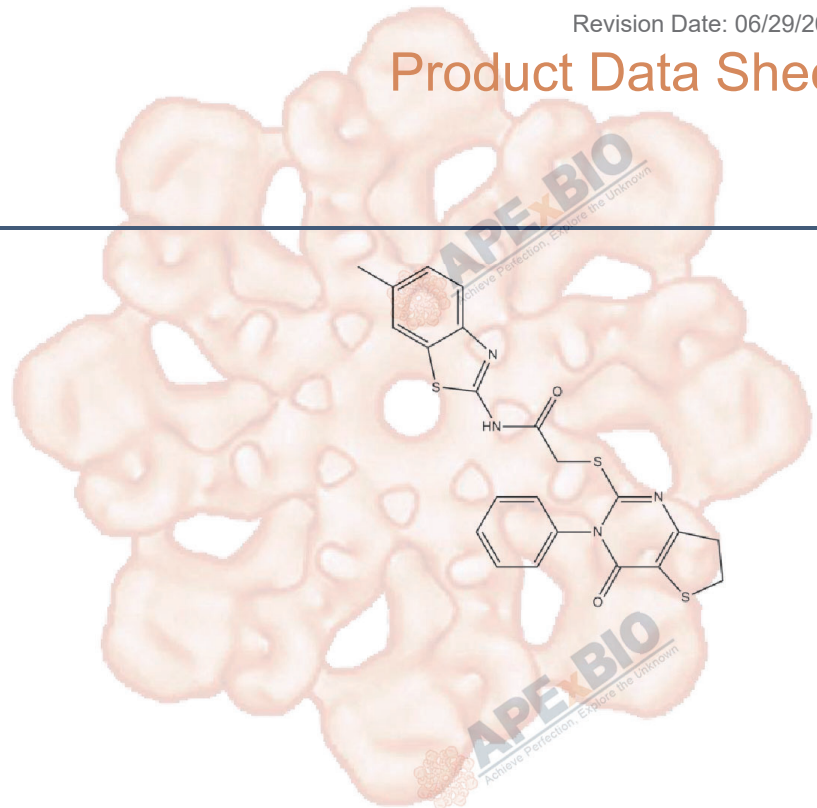


Product Data Sheet

IWP-2

Cat. No.:	A3512
CAS No.:	686770-61-6
Formula:	C22H18N4O2S3
M.Wt:	466.6
Synonyms:	IWP 2
Target:	Stem Cell
Pathway:	Wnt/ β -catenin
Storage:	Store at -20°C



Solvent & Solubility

≥23.35 mg/mL in DMF with gentle warming; insoluble in H₂O; insoluble in EtOH

	Solvent	Mass			
		1mg	5mg	10mg	
In Vitro	Preparing Stock Solutions				
		Concentration			
		1 mM	2.1432 mL	10.7158 mL	21.4316 mL
		5 mM	0.4286 mL	2.1432 mL	4.2863 mL
	10 mM	0.2143 mL	1.0716 mL	2.1432 mL	

Please refer to the solubility information to select the appropriate solvent

Biological Activity

Shortsummary	Wnt production inhibitor,PORCN inhibitor	
IC ₅₀ & Target	27 nM (Wnt)	
In Vitro	Cell Viability Assay	
	Cell Line:	Gastric cancer MKN28 cell line
	Preparation method:	The solubility of this compound in DMSO is > 10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
	Reacting conditions:	10-50 μM, four days

	Applications:	Following treatment in the MKN28 cell line for four days, IWP-2 (10-50 μ M) significantly suppressed the proliferation, migration and invasion, and elevated caspase 3/7 activity. IWP-2 treatment significantly decreased anchor-dependent and anchor-independent colony numbers. IWP-2 treatment downregulated the transcriptional activity of the Wnt/ β -catenin signaling pathway and downregulated the expression levels of downstream Wnt/ β -catenin target genes in MKN28 cells.
In Vivo	Animal experiment	
	Animal models:	C57BL/6 mice
	Dosage form:	200 μ L each of IWP-2-liposome intraperitoneally
	Applications:	200 μ L each of IWP-2-liposome or free liposome separately injected into C57BL/6 mice intraperitoneally about 2 h before injection of a similar volume of either blue-dye-filled latex beads or E. coli DH5 α . IWP-2 significantly reduced the uptake of blue beads as well as E. coli as assessed by CFUs in peritoneal lavage cells within 2 h. IWP-2 increased secretion of the anti-inflammatory cytokine IL-10.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

1. MXinwei Feng, Junfeng Lu, et al. "Mycobacterium smegmatis Induces Neurite Outgrowth and Differentiation in an Autophagy-Independent Manner in PC12 and C17.2 Cells." Front. Cell. Infect. Microbiol., 19 June 2018.
2. Chae WJ, Park JH, et al. "Membrane-bound Dickkopf-1 in Foxp3(+) regulatory T cells suppresses T-cell-mediated autoimmune colitis." Immunology. 2017 Oct;152(2):265-275.PMID:28556921

See more customer validations on www.apexbt.com.

References

- [1]. Mo M L, Li M R, Chen Z, et al. Inhibition of the Wnt palmitoyltransferase porcupine suppresses cell growth and downregulates the Wnt/ β -catenin pathway in gastric cancer[J]. Oncology letters, 2013, 5(5): 1719-1723.
- [2]. Maiti G, Naskar D, Sen M. The Wntless homolog Wnt5a stimulates phagocytosis but not bacterial killing[J]. Proceedings of the National Academy of Sciences, 2012, 109(41): 16600-16605.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable

under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.



APExBIO Technology

www.apexbt.com

7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com

