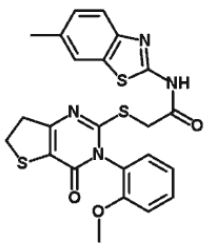


PRODUCT SPECIFICATIONS SHEET:

Stemolecule™ Wnt Inhibitor IWP-4

| | |
|-------------------------|---|
| Product Name | Stemolecule™ Wnt Inhibitor IWP-4 |
| Description | Wnt Inhibitor IWP-4 was identified in a high throughput screen for antagonists of the Wnt/ β -catenin pathway. Wnt Inhibitor IWP-4 prevents palmitoylation 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 | 04-0036 |
| Size | 2 mg |
| Alternate Names | 2-(3,4,6,7-tetrahydro-3-(2-methoxyphenyl)-4-oxotheno[3,2- <i>d</i>]pyrimidin-2-ylthio)- <i>N</i> -(6-methylbenzo[<i>d</i>]thiazol-2-yl)acetamide |
| Chemical Formula | C ₂₃ H ₂₀ N ₄ O ₃ S ₃ |
| Structure |  |
| Molecular Weight | 496.62 |
| CAS Number | 686772-17-8 |
| Purity | >96% pure by HPLC |
| Formulation | White solid |
| Solubility | For a 2.5 mM concentrated stock solution of Wnt Inhibitor IWP-4, reconstitute the compound by adding 1.61 mL of DMSO to the entire contents of the vial. If |



REPROCELL Inc (Japan)

KDX Shin-yokohama 381, Bldg.9F
3-8-11, Shin-yokohama,
Kohoku-ku, Yokohama,
Kanagawa 222-0033,
Japan

Tel: +81 45 475 3887
Email: info-asia@reprocell.com

REPROCELL USA Inc

9000 Virginia Manor Road
Suite 207
Beltsville, MD 20705
USA

Tel: +1 301.470.3362
Email: info-us@reprocell.com

REPROCELL Europe Ltd

Thomson Pavilion,
Todd Campus,
West of Scotland Science Park,
Acre Road,
Glasgow G20 0XA, UK

Tel: +44 (0)141 465 3460
Email: info-emea@reprocell.com

www.reprocell.com

precipitate is observed, warm the solution to 37 °C for 2 to 5 minutes. For use in cell culture, warm the medium just prior to adding the reconstituted compound. Once the compound is added, mix and filter-sterilize the medium using a 0.2 µm low-protein binding filter.

Storage and Stability

Store powder at 4 °C or -20 °C, protected from light.

Information about the stability of Stemolecules in solution is largely not available. As a general guideline, we recommend that stock solution be freshly made and stored in aliquots at -20 °C. The effect of storage of stock solutions should be verified for each application.

Quality Control

The purity of Wnt Inhibitor IWP-4 was determined by HPLC analysis. The accurate mass was determined by mass spectrometry. The structure was verified by NMR spectroscopy. Cellular toxicity was tested on pluripotent stem cells.

Regulatory Disclaimer

For research use only. Not for use in therapeutic or diagnostic procedures.

References

1. Chen B; Dodge ME; Tang W; Lu J; Ma Z; Fan CW; Wei S; Hao W; Kilgore J; Williams NS; Roth MG; Amatruda JF; Chen C; Lum L.(2009) Small molecule-mediated disruption of Wnt-dependent signaling in tissue regeneration and cancer. *Nat Chem Biol* 5: 100-107.



REPROCELL Inc (Japan)

KDX Shin-yokohama 381, Bldg.9F
3-8-11, Shin-yokohama,
Kohoku-ku, Yokohama,
Kanagawa 222-0033,
Japan

Tel: +81 45 475 3887

Email: info-asia@reprocell.com

REPROCELL USA Inc

9000 Virginia Manor Road
Suite 207
Beltsville, MD 20705
USA

Tel: +1 301 470 3362

Email: info-us@reprocell.com

REPROCELL Europe Ltd

Thomson Pavilion,
Todd Campus,
West of Scotland Science Park,
Acre Road,
Glasgow G20 0XA, UK

Tel: +44 (0)141 465 3460

Email: info-emea@reprocell.com

www.reprocell.com

