IWP-2

Wnt/β-catenin pathway inhibitor

IWP-2 is a potent, cell-permeable, and selective inhibitor of Wnt processing and secretion. It works by blocking the activity of Porcupine (Porcn), a membrane-bound O-acyltransferase essential for the palmitoylation and secretion of Wnt proteins. This inhibition disrupts the Wnt/β-catenin signaling pathway, which is crucial for various cellular processes, including cell proliferation, differentiation, and migration.

Key features and applications include:

- **Stem Cell Research:** IWP-2 is used to study the differentiation of human pluripotent stem cells (hPSCs) into various cell types, including cardiomyocytes and lung epithelial cells.
- **Cancer Research:** It is employed to investigate the role of Wnt signaling in cancer progression and tumorigenesis.
- **Developmental Biology:** Researchers use IWP-2 to study Wnt signaling pathways during embryonic development and organogenesis.
- **Regenerative Medicine:** IWP-2 is used in protocols to reprogram human somatic cells into induced pluripotent stem cells (iPSCs), aiding in the development of regenerative therapies.

Relevant disease states include:

- **Cancer:** By inhibiting Wnt signaling, IWP-2 is relevant in research focused on cancers where Wnt signaling is dysregulated.
- **Bone Disorders:** It is relevant in research on bone diseases, as Wnt signaling is crucial for bone formation and homeostasis.

- GMP format available

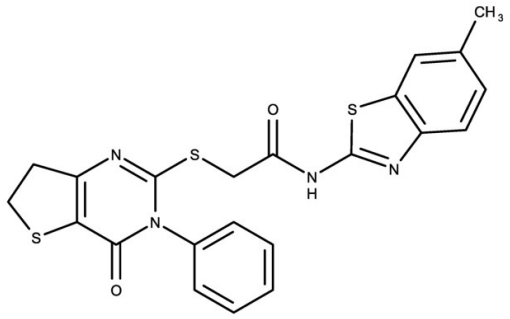
Ordering Information

Order Online »

ENZ-CHM334-0025	25mg

Manuals, SDS & CofA

View Online »


CH3
O
S
N
S
N
H
N
S
O

Handling & Storage

Use/Stability	As indicated on product label or CoA when stored as recommended. Solutions in DMSO may be stored at -20°C for up to 2 months.
Handling	Keep container tightly closed in a dry and well-ventilated place. Store with desiccant.
Short Term Storage	-20°C
Long Term Storage	-20°C
Shipping	Ambient Temperature

Regulatory Status

RUO - Research Use Only

Product Details

Alternative Name	N-(6-Methyl-2-benzothiazolyl)-2-[(3,4,6,7-tetrahydro-4-oxo-3-phenylthieno[3,2-d]pyrimidin-2-yl)thio]-acetamide
Appearance	Off-white solid.
CAS	686770-61-6
Couple Target	Palmitoyltransferase
Couple Type	Inhibitor
Formula	$C_{22}H_{18}N_4O_2S_3$
Identity	Determined by NMR.
MW	466.6
Purity	≥98% (HPLC)
Solubility	Soluble in DMSO (up to 5 mg/mL with warming).

Last modified: February 3, 2025

ENZO LIFE SCIENCES, INC.
Phone: 800.942.0430
info-usa@enzolifesciences.com

European Sales Office
ENZO LIFE SCIENCES (ELS) AG
Phone: +41 61 926 8989
info-eu@enzolifesciences.com

Belgium, The Netherlands & Luxembourg
Phone: +32 3 466 0420
info-be@enzolifesciences.com

France
Phone: +33 472 440 655
info-fr@enzolifesciences.com

Germany
Phone: +49 7621 5500 526
info-de@enzolifesciences.com

UK & Ireland
Phone (UK customers): 0845 601 1488
Phone: +44 1392 825900
info-uk@enzolifesciences.com

For local distributors and detailed product information visit us online: enzo.com All product names, logos, and brands are the property of their respective owners.