

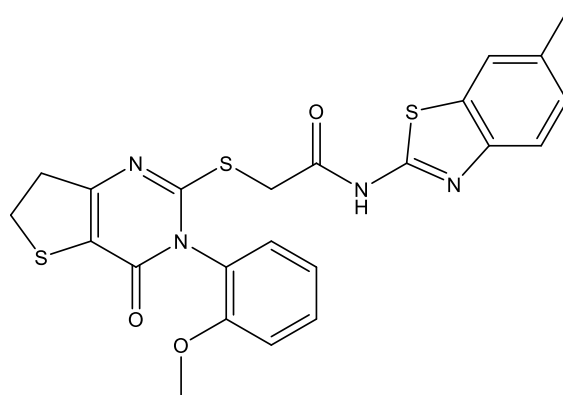
Catalog #10-3370

IWP-4

CAS# 686772-17-8

N-(6-Methyl-2-benzothiazolyl)-2-[[3,4,6,7-tetrahydro-3-(2-methoxyphenyl)-4-oxothieno[3,2-d]pyrimidin-2-yl]thio]-acetamide

Lot # X107321



IWP-4 is an inhibitor of Wnt secretion and processing. It blocks Wnt-dependent signaling ($IC_{50}=25$ nM) by inhibition of the O-palmitoyltransferase Porcn.¹ Induces cardiomyocyte differentiation from human pluripotent stem cells.^{2,3} An important tool for probing the involvement of the Wnt pathway in physiological processes.⁴ Cell permeable.

- 1) Chen *et al.* (2009), *Small molecule-mediated disruption of Wnt-dependent signaling in tissue regeneration and cancer*; Nat. Chem. Biol. **5** 100
- 2) Lian *et al.* (2012), *Robust cardiomyocyte differentiation from human pluripotent stem cells via temporal modulation of canonical Wnt signaling*; Proc. Natl. Acad. Sci. USA **109** 1848
- 3) Muneer *et al.* (2023), *Wnt signaling pathway inhibitor promotes mesenchymal stem cells differentiation into cardiac progenitor cells in vitro and improves cardiomyopathy in vivo*; World J. Stem Cells **15** 821
- 4) Zhao *et al.* (2022), *LINC02381, a sponge of miR-21, weakens osteogenic differentiation of hUC-MSCs through KLF12-mediated Wnt4 transcriptional repression*; J. Bone Miner. Metab. **40** 66

PHYSICAL DATA

Molecular Weight:	496.62
Molecular Formula:	C ₂₃ H ₂₀ N ₄ O ₃ S ₃
Purity:	>98% (HPLC)
	NMR: (Conforms)
Solubility:	DMSO (5 mg/mL)
Physical Description:	Pale yellow solid
Storage and Stability:	Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.

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