

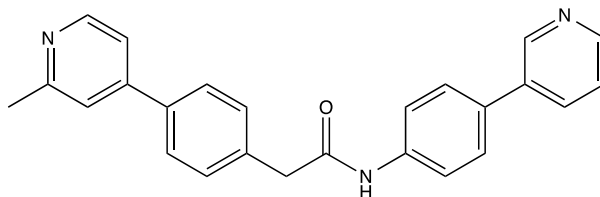
Catalog #10-4605

Wnt-C59

CAS# 1243243-89-1

4-(2-Methyl-4-pyridinyl)-N-[4-(3-pyridinyl)phenyl]benzeneacetamide

Lot # FBA4062



Wnt-C59 is a potent ($IC_{50} = 74$ pmol/L) inhibitor of Porcupine (PORCN), a Wnt-acyltransferase.¹ Blockage of Wnt-acyltransferase prevents secretion of all Wnt isoforms. It was able to block progression of mammary tumors in MMTV-WNT1 transgenic mice.¹ Wnt-C59 strongly inhibited the growth of intestinal neoplasia in RZ-mutant mice.² Wnt-C59 was able to efficiently differentiate pluripotent stem cells into cortical neurons (CTIP2+/COUP-TF1).³ Wnt-C59 was also able to dramatically attenuate kidney fibrosis via inhibition of collagen mRNA expression and expression of inflammatory cytokines.⁴

- 1) Proffitt *et al.* (2013), *Pharmacological Inhibition of the Wnt Acyltransferase PORCN Prevents Growth of Wnt-Driven Mammary Cancer*, *Cancer Res.* **73** 502
- 2) Koo *et al.* (2015), *Porcupine inhibitor suppresses paracrine Wnt-driven growth of Rnf43;Znf3-mutant neoplasia*; *Proc.Natl.Acad.Sci USA.* **112** 7548
- 3) Motono *et al.* (2016), *Wnt-C59, a Small-Molecule Wnt Inhibitor, Efficiently Induces Anterior Cortex That Includes Cortical Motor Neurons From Human Pluripotent Stem Cells*; *Stem Cells Transl.Med.* **5** 552
- 4) Madan *et al.* (2016), *Experimental inhibition of porcupine-mediated Wnt O-acylation attenuates kidney fibrosis*; *Kidney Int.* **89** 1062

PHYSICAL DATA

Molecular Weight:	379.46
Molecular Formula:	C ₂₅ H ₂₁ N ₃ O
Purity:	>98% (HPLC)
	NMR: (Conforms)
Solubility:	DMSO (7 mg/mL) and Ethanol (6 mg/mL)
Physical Description:	Tan solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

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