

# Wnt-C59

## PORCN inhibitor

Wnt-C59 is a highly potent and selective inhibitor of Porcupine (PORCN), a membrane-bound O-acyltransferase essential for Wnt protein palmitoylation and secretion. It has an IC<sub>50</sub> value of 74 pM in Wnt signaling reporter assays.

Key features and applications include:

- **Cancer Research:** Wnt-C59 is used to study the inhibition of Wnt signaling pathways, which are crucial in the development and progression of various cancers. It has been shown to block the growth of Wnt-driven mammary tumors in animal models.
- **Stem Cell Research:** This compound is employed to induce differentiation of human induced pluripotent stem cells (iPSCs) into cardiomyocytes and neural cells.
- **Developmental Biology:** Wnt-C59 is utilized to investigate the roles of Wnt signaling in embryonic development and tissue regeneration.

Relevant disease states include:

- **Cancer:** Wnt-C59 has shown potential in inhibiting the growth of various cancers by blocking Wnt signaling, which is often upregulated in tumors.
- **Neurodegenerative Diseases:** It is used in research to study its effects on neural differentiation, which can be relevant for conditions like Alzheimer's and Parkinson's diseases.
- **Developmental Disorders:** Wnt-C59 is studied for its role in inhibiting embryonic development processes, which can be relevant in understanding certain developmental disorders.

- GMP format available

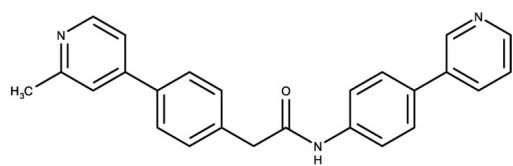
## Ordering Information

[Order Online »](#)

|                 |      |
|-----------------|------|
| ENZ-CHM345-0025 | 25mg |
|-----------------|------|

## Manuals, SDS & CofA

[View Online »](#)



## Handling & Storage

|                    |   |
|--------------------|---|
| Use/Stability      | As indicated on product label or CoA when stored as recommended. Solutions in DMSO or ethanol may be stored at -20°C for up to 1 month. |
| Handling           | Keep container tightly closed in a dry and well-ventilated place.   |
| Short Term Storage | -20°C   |
| Long Term Storage  | -20°C   |
| Shipping           | Ambient Temperature   |

## Regulatory Status

RUO - Research Use Only

## Product Details

|                  |   |
|------------------|---|
| Alternative Name | 4-(2-Methyl-4-pyridinyl)-N-[4-(3-pyridinyl)phenyl]benzeneacetamide, C59 |
| Appearance       | Tan solid.  |
| CAS              | 1243243-89-1  |
| Couple Target    | Palmitoyltransferase  |
| Couple Type      | Inhibitor   |
| Formula          | $C_{25}H_{21}N_3O$  |
| Identity         | Determined by NMR.  |
| MW               | 379.46  |
| Purity           | ≥98% (HPLC)   |
| Solubility       | Soluble in DMSO (up to 7 mg/ml) or in ethanol (up to 6 mg/ml).          |



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