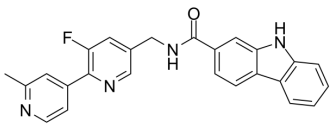
Porcn-IN-1

Cat. No.:	HY-111472
CAS No.:	2036044-77-4
Molecular Formula:	$C_{25}H_{19}FN_4O$
Molecular Weight:	410.44
Target:	Porcupine
Pathway:	Stem Cell/Wnt
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 2 years -20°C 1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 100 mg/mL (243.64 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.4364 mL	12.1820 mL	24.3641 mL
5 mM	0.4873 mL	2.4364 mL	4.8728 mL
10 mM	0.2436 mL	1.2182 mL	2.4364 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Porcn-IN-1 is potent porcupine inhibitor with an IC_{50} of 0.5±0.2 nM.

IC_{50} & Target

IC50: 0.5±0.2 nM (Porcupine inhibitor)[1]

In Vitro

Porcupine is an enzyme that catalyses the addition of palmitoleate to a serine residue in Wnt proteins, a process which is required for the secretion of Wnt proteins. Porcupine-IN-1 is as potent as the clinical compound LGK974 in a cell based STF reporter gene assay. Porcn-IN-1 potently inhibits the secretion of Wnt3A, therefore is confirmed to be a porcupine inhibitor [1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

Porcn-IN-1 demonstrates moderate clearance under the treatment of human liver microsomes (57 mL/min/kg) and rat liver microsomes (24 mL/min/kg). It exhibits high clearance when treated with mouse microsomes (109 mL/min/kg)[1].

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PROTOCOL

Cell Assay [1]

HEK293T cells are transfected with pLinbin-Wnt3A plasmid or vehicle control. The HEK293T cells are then treated with or without compounds (Porcn-IN-1). Western Blot is used after 48 h to analyze both the cell lysis and culture medium[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Xu Z, et al. Design, synthesis, and evaluation of novel porcupine inhibitors featuring a fused 3-ring system based on the 'reversed' amide scaffold.

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