# **PRODUCT** INFORMATION



Porcupine-IN-1

Item No. 25834

CAS Registry No.: Formal Name:	2036044-77-4 N-[(3-fluoro-2'-methyl[2,4'- bipyridin]-5-yl)methyl]-9H- carbazole-2-carboxamide	
Synonym:	PORCN-IN-1	
MF:	C <sub>25</sub> H <sub>19</sub> FN <sub>4</sub> O	
FW:	410.4	
Purity:	≥98%	F L N
UV/Vis.:	λ <sub>max</sub> : 250, 304 nm	$\rightarrow$
Supplied as:	A crystalline solid	
Storage:	-20°C	
Stability:	≥4 years	

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

# Laboratory Procedures

Porcupine-IN-1 is supplied as a crystalline solid. A stock solution may be made by dissolving the porcupine-IN-1 in the solvent of choice, which should be purged with an inert gas. Porcupine-IN-1 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of porcupine-IN-1 in these solvents is approximately 10 mg/ml. Porcupine-IN-1 is also slightly soluble in ethanol.

Porcupine-IN-1 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, porcupine-IN-1 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Porcupine-IN-1 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

# Description

Porcupine-IN-1 is an inhibitor of the Wnt and hedgehog signaling pathways ( $IC_{50}s = 0.5$  and 71 nM, respectively, in cell-based reporter assays).<sup>1,2</sup> It inhibits secretion of Wnt3A from Wnt3A-transfected HEK293T cells when used at a concentration of 0.1  $\mu$ M, indicating inhibition of porcupine, an enzyme that catalyzes palmitoylation of Wnt proteins.<sup>1</sup>

# References

- 1. Xu, Z., Xu, X., O'Laoi, R., et al. Design, synthesis, and evaluation of novel porcupine inhibitors featuring a fused 3-ring system based on the 'reversed' amide scaffold. Bioorg. Med. Chem. 24(22), 5861-5872 (2016).
- 2. Ma, H., Chen, Q., Zhu, F., et al. Discovery and characterization of a potent Wnt and hedgehog signaling pathways dual inhibitor. Eur. J. Med. Chem. 149, 110-121 (2018).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

## SAFFTY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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