

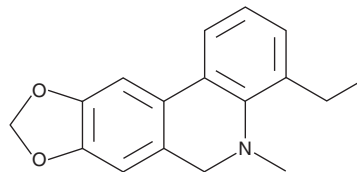
PRODUCT INFORMATION



HLY78

Item No. 19087

CAS Registry No.: 854847-61-3
Formal Name: 4-ethyl-5,6-dihydro-5-methyl-[1,3]dioxolo[4,5-j]phenanthridine
MF: C₁₇H₁₇NO₂
FW: 267.3
Purity: ≥98%
UV/Vis.: λ_{max}: 214, 282, 319 nm
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

HLY78 is supplied as a crystalline solid. A stock solution may be made by dissolving the HLY78 in the solvent of choice, which should be purged with an inert gas. HLY78 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of HLY78 in DMF is approximately 12 mg/ml and approximately 2 mg/ml in ethanol and DMSO.

HLY78 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, HLY78 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. HLY78 has a solubility of approximately 0.2 mg/ml in a 1:5 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Wnt signaling proteins are small secreted proteins that are active in embryonic development, tissue homeostasis, and tumorigenesis.¹⁻³ HLY78 is a positive modulator of the Wnt/β-catenin pathway, as it augments Wnt-mediated signaling in cells at concentrations of 5 to 20 μM.⁴ It has no significant effect alone, and it does not affect LiCl-stimulated β-catenin signaling. A biotinylated form of HLY78 binds Axin at its DIX domain, which is thought to potentiate Axin-LRP6 association.⁴ HLY78 activates Wnt signaling *in vivo*, altering Wnt-dependent gene expression and embryonic development in zebrafish.⁴

References

1. Polakis, P. Wnt signaling and cancer. *Genes Dev.* **14**, 1837-1851 (2000).
2. Reya, T. and Clevers, H. Wnt signalling in stem cells and cancer. *Nature* **434**, 834-850 (2005).
3. Clevers, H. Wnt/β-catenin signaling in development and disease. *Cell* **127**, 469-480 (2006).
4. Wang, S., Yin, J., Chen, D., *et al.* Small-molecule modulation of Wnt signaling via modulating the Axin-LRP5/6 interaction. *Nat. Chem. Biol.* **9**, 579-585 (2013).

WARNING

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

SAFETY 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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