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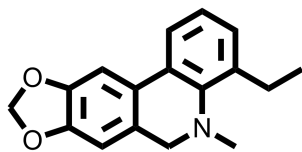
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Wnt Activator – HLY78

Chemical Name: 4-ethyl-5-methyl-5,6-dihydro-[1,3]dioxolo[4,5-j]phenanthridine



Molecular Weight:	267.32
Formula:	C ₁₇ H ₁₇ NO ₂
Purity:	≥98%
CAS#:	854847-61-3
Solubility:	DMSO up to 100 mM
Storage	Powder: 4 °C 1 year DMSO: 4 °C 3 months -20 °C 1 year

Biological Activity:

HLY78 is an activator of the Wnt pathway by acting in a Wnt ligand-dependent manner, identified by a high-throughput, cell-based screen. HLY78 targets the DIX domain of Axin and potentiates the Axin-LRP6 association, thus promoting LRP6 phosphorylation and Wnt signaling transduction. HLY78 may weaken the autoinhibition of Axin. In addition, HLY78 acts synergistically with Wnt in the embryonic development of zebrafish and increases the expression of the conserved hematopoietic stem cell (HSC) markers, *runx1* and *cmyb*, in zebrafish embryos. HLY78 as a specific Wnt synergistic activator presents another opportunity for potential clinical applications relevant to the Wnt pathway.

How to Use:

In vitro: HLY78 was used at 10-20 μM final concentration in various in vitro assays.

In vivo: Wild-type zebrafish embryos were treated with HLY78 at 80 μM from the three-somite stage until 36 h.p.f.

Reference:

1. Wang S, et al. Small-molecule modulation of Wnt signaling via modulating the Axin-LRP5/6 interaction. (2013) *Nat Chem Biol.* 9(9):579-85.

Products are for research use only. Not for human use.