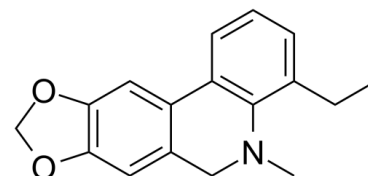


Data Sheet

Product Name:	HLY78
Cat. No.:	CS-0089730
CAS No.:	854847-61-3
Molecular Formula:	C ₁₇ H ₁₇ NO ₂
Molecular Weight:	267.32
Target:	Apoptosis; Wnt; β-catenin
Pathway:	Apoptosis; Stem Cell/Wnt
Solubility:	DMSO : 26 mg/mL (97.26 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

HLY78, a [Lycorine](#) (HY-N0288) derivative, is a potent activator of the **Wnt/β-catenin** signaling pathway. HLY78 targets the DIX domain of Axin and promotes the Axin-LRP6 (lipoprotein receptor-related protein 6) association, thus promoting **LRP6 phosphorylation** and Wnt signal transduction. HLY78 can be used for subarachnoid hemorrhage (SAH) research^{[1][2][3]}.
Target: Wnt/β-catenin^[1] **In Vitro:** HLY78 inhibits **apoptosis** in tumor cells and embryonic cells caused by carbon ion radiation through activation of the Wnt/β-catenin pathway^[2].

HLY78 (20 μM, 0-48 h) significantly increases the colony formation ability by 2.78-fold and 2.88-fold for HGC-27 and AGS cells compared with the controls^[3].

HLY78 (20 μM, 0-48 h) elevates the migration ability of HGC-27 and AGS cells^[3].

HLY78 significantly increases TNKS expression, which is ameliorated by [Dihydroartemisinin](#) (HY-N0176)^[3]. **In Vivo:** HLY78 (0-1.8 mg/kg, Intranasal injection, once) attenuates neuronal apoptosis and improves neurological deficits through the LRP6/GSK3β/β-catenin signaling pathway after SAH (subarachnoid hemorrhage) in rats^[2].

References:

- [1]. Wang S, et al. Small-molecule modulation of Wnt signaling via modulating the Axin-LRP5/6 interaction. *Nat Chem Biol.* 2013 Sep;9(9):579-85.
- [2]. Luo X, et al. HLY78 Attenuates Neuronal Apoptosis via the LRP6/GSK3β/β-Catenin Signaling Pathway After Subarachnoid Hemorrhage in Rats. *Neurosci Bull.* 2020 Oct;36(10):1171-1181.
- [3]. Ma Y, et al. Dihydroartemisinin suppresses proliferation, migration, the Wnt/β-catenin pathway and EMT via TNKS in gastric cancer. *Oncol Lett.* 2021 Oct;22(4):688.

CAIndexNames:

[1,3]Dioxolo[4,5-j]phenanthridine, 4-ethyl-5,6-dihydro-5-methyl-

SMILES:

CCC1=CC=CC2=C1N(CC3=CC4=C(C=C32)OCO4)C

Caution: Product has not been fully validated for medical applications. For research use only.

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