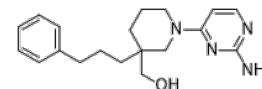


Product Name : AVIL inhibitor Compound A
Cat. No. : PC-25980
CAS No. : 1332084-64-6
Molecular Formula : C₁₉H₂₆N₄O
Molecular Weight : 326.44
Target : Other Targets
Solubility : 10 mM in DMSO



CAS: 1332084-64-6

Biological Activity

AVIL inhibitor Compound A (PLH1215) is a specific small molecule actin-binding protein **advillin** (AVIL)-interacting compound with MST Kd of 6 uM, also blocks AVIL binding to its substrate actin.

Compound A decreased the expression of FOXM1 and LIN28B in GBM cell lines U87 and A172, whereas abundance of AVIL itself was not affected, also also down-regulated at the RNA level of LIN28B.

Compound A killed U87 cell cultures at 10 μM, but TMZ was not effective even at 400 μM.

Compound A effectively kills four GBM cell lines-U87, A172, U251, and T98-at lower IC50 values (10 to 30 μM) than the astrocyte cell line (>120 μM).

Compound A induced a transcriptome profile similar to that of AVIL silencing by siRNA and caused down-regulation of FOXM1 and LIN28B, two known downstream targets of AVIL.

Compound A exhibited selectivity toward tumor cells, sparing astrocytes and neural stem cells in vitro.

Compound A impairs GBM and GBM stem cell growth and migration, extending survival in multiple mouse models of GBM, including TMZ-resistant models.

References

Xie Z, et al. *Sci Transl Med*. 2026 Jan 28;18(834):eadt1211.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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