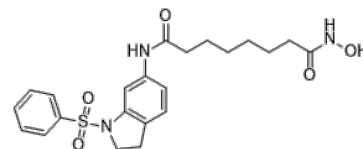


Product Name : WMJ-J-09
Cat. No. : PC-24736
CAS No. : 2416914-29-7
Molecular Formula : C₂₂H₂₇N₃O₅S
Molecular Weight : 445.53
Target : HDAC
Solubility : 10 mM in DMSO



CAS: 2416914-29-7

Biological Activity

WMJ-J-09 is a potent, hydroxamate based **HDAC** inhibitor, exhibits potent inhibitory activity against class I HDACs, including HDAC1 (IC₅₀=7.5 nM), HDAC2 (IC₅₀=21.3 nM), HDAC3 (IC₅₀=18.4 nM), and HDAC8 (IC₅₀=90.9 nM), also strongly inhibits HDAC6 (class IIb) with IC₅₀ of 3.9 nM.

WMJ-J-09 arrests the cell cycle and induced apoptosis in HCT116 cells.

WMJ-J-09 shows moderate inhibition toward HDAC4 (class IIa) with an IC₅₀ of 8715.7 nM.

WMJ-J-09 significantly reduces the polymerized tubulin fraction through HDAC inhibition.

WMJ-J-09 caused HCT116 cell death may involve p21 elevation and survivin suppression.

WMJ-J-09 triggers LKB1-p38MAPK-p53 signaling pathway to increases p21 expression and survivin reduction, culminating in HCT116 cell death.

WMJ-J-09 induced survivin degradation.

WMJ-J-09 (20 mg/kg/day) inhibits growth of the HCT116 tumor xenograft, does not impact mouse body weight.

References

Yen CS, et al. *Front Pharmacol.* 2018 Mar 1;9:167.

Huang YH, et al. *Sci Rep.* 2025 Jun 4;15(1):19590.

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

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