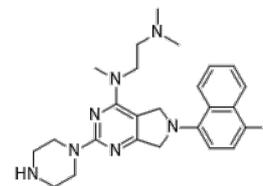


Product Name : WCY-8-67
Cat. No. : PC-25548
CAS No. : 3052618-54-6
Molecular Formula : C₂₅H₃₂FN₇
Molecular Weight : 449.58
Target : Deubiquitinase (DUB)
Solubility : 10 mM in DMSO

Cat. PC-25548



CAS: 3052618-54-6

Biological Activity

WCY-8-67 is a potent, selective inhibitor of deubiquitinating enzyme (DUB) **USP5** with IC₅₀ of 0.33 μM and SPR K_d of 5.73 μM, inhibits the growth of t(8;21) AML cells.

WCY-8-67 is selective over a panel of 35 recombinant human DUB proteins in enzyme assays.

WCY-8-67 inhibits the deubiquitinating activity of USP5 by binding to the UBA2 region.

WCY-8-67 inhibits AML cell proliferation and induces differentiation of AML cells in vitro, shows antiproliferative effects on AE-positive AML cells (Kasumi-1, Skno-1, and U937-AE cells) with IC₅₀ of 1.75 μM, 0.99 μM and 1.20 μM respectively, with negligible antiproliferative effects on other AE-negative AML cells.

WCY-8-67 induces ubiquitination-mediated degradation of AE protein in both USP5WT and USP5C335A mutant cells.

WCY-8-67 suppresses colony formation and decreases the proportion of LSCs, resulting in AML cell differentiation.

WCY-8-67 down-regulates the expression of MDM2 and up-regulate the expression of p53 in two AML cell lines in a dose-dependent manner.

WCY-8-67 (20 mg/kg, ip, qd) inhibits AML progression in Skno-1 subcutaneous xenograft mouse model. WCY-8-67 inhibits USP5 through formation of insoluble aggregates.

References

Ma L, et al. *Sci Transl Med*. 2025 Sep 24;17(817):eadt9100.

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

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