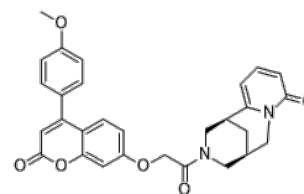


Product Name : U4-I05
Cat. No. : PC-23952
CAS No. : 956941-31-4
Molecular Formula : C₂₉H₂₆N₂O₆
Molecular Weight : 498.54
Target : Deubiquitinase (DUB)
Solubility : 10 mM in DMSO



CAS: 956941-31-4

Biological Activity

U4-I05 is a specific small molecule **USP4** inhibitor (KD=239 nM) that inhibits USP4 deubiquitinating enzyme activity, inhibits stemness characteristics in CRC cells.

U4-I05 inhibited **CD44 protein** expression in organoids derived from MC38 cells.

U4-I05 significantly suppressed tumorsphere formation and reduced the proportion of CD44+EpCAM+Lgr5+ cells, with no effects on stemness in cells with USP4 knockdown.

U4-I05 inhibits the protein expression of Twist1 and β-catenin by abolishing the deubiquitinating enzyme activity of USP4, thereby promoting protein degradation.

U4-I05 enhances the sensitivity of tumor cells to oxaliplatin.

U4-I05 exerts a potent anti-tumor effect by downregulating Twist1 and β-catenin expression and enhancing the sensitivity of tumor cells to oxaliplatin in xenograft mice.

References

Li F, et al. *J Transl Med.* 2025 Jan 24;23(1):114.

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

E-mail: tech@probechem.com