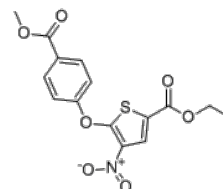


Product Name : USP10 inhibitor Wu-5
Cat. No. : PC-38585
CAS No. : 2630378-05-9
Molecular Formula : C₁₅H₁₃NO₇S
Molecular Weight : 351.329
Target : Deubiquitinase (DUB)
Solubility : 10 mM in DMSO



Biological Activity

USP10 inhibitor Wu-5 (Wu-5) is a novel small molecule USP10 inhibitor inducing the degradation of FLT3-mutated protein, directly interacts and inactivates USP10, the deubiquitinase for FLT3-ITD in vitro (IC₅₀=8.3 μM) and in FLT3-ITD-positive AML cells.

Wu-5 selectively inhibited the viability of FLT3 inhibitor-sensitive (MV4-11, Molm13) and -resistant (MV4-11R) FLT3-ITD-positive AML cells with IC₅₀ of 3.794, 5.056, and 8.386 μM, respectively.

Wu-5 (1-10 μM) dose-dependently induced apoptosis of MV4-11, Molm13, and MV4-11R cells through the proteasome-mediated degradation of FLT3-ITD.

Combined treatment of Wu-5 and crenolanib produced synergistic cell death in FLT3-ITD-positive cells via the reduction of both FLT3 and AMPKα proteins.

References

Miao Yu, et al. Acta Pharmacol Sin. 2021 Apr;42(4):604-612.

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

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