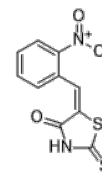


Product Name : USP14 inhibitor AKOS
Cat. No. : PC-25113
CAS No. : 1784763-14-9
Molecular Formula : C₁₀H₆N₂O₃S₂
Molecular Weight : 266.29
Target : Deubiquitinase (DUB)
Solubility : 10 mM in DMSO



CAS: 1784763-14-9

Biological Activity

USP14 inhibitor AKOS (AKOSB018304) is a specific and covalent **USP14** inhibitor with IC₅₀ of 0.98 μM for USP14 deubiquitinase activity, also is a small molecule chikungunya virus (CHIKV) inhibitor.

AKOS directly binds to USP14, covalently modifying the active-site cysteine residue (Cys114), thereby effectively inhibiting its deubiquitinase activity.

AKOS destabilizes its substrate MEF2D and inhibits the transcription of genes involved in the ECM-receptor interaction pathway in CRC.

AKOS significantly inhibited the proliferation and metastasis of CRC cells in vitro with IC₅₀ values of 9.88 and 16.57 μM, respectively, in SW620 cells and HCT116 cells.

AKOS (15, 30 mg/kg, every 5 days) effectively suppressed the tumor growth in HCT116 xenograft mouse models in vivo.

References

Lu B, et al. *Acta Pharmacol Sin*. 2025 Jul 17. doi: 10.1038/s41401-025-01616-5.

Jadav SS, et al. *Eur J Med Chem*. 2015 Jan 7;89:172-8.

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

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