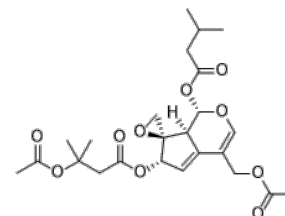


Product Name : Acevaltrate
Cat. No. : PC-24932
CAS No. : 25161-41-5
Molecular Formula : C₂₄H₃₂O₁₀
Molecular Weight : 480.51
Target : Ferroptosis
Solubility : 10 mM in DMSO



Biological Activity

Acevaltrate is a novel ferroptosis inducer and dual inhibitor of PCBP1/2 and GPX4, also inhibits the Na⁺/K⁺-ATPase activity in the rat kidney and brain hemispheres with IC₅₀s of 22.8 μM and 42.3 μM, respectively.

Acevaltrate promotes apoptosis and inhibits proliferation by suppressing HIF-1α accumulation in cancer cells.

Acevaltrate not only increases Fe²⁺ levels in colorectal cancer cells by targeting iron chaperones PCBP1/2 and reducing their expression but also disrupts the antioxidant system of colorectal cancer cells by targeting GPX4 and inhibiting its enzymatic activity, leading to its ubiquitin-mediated degradation.

Acevaltrate overcomes myeloma resistance to bortezomib via pyroptosis by promoting BAX translocation to mitochondria.

References

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Yu D, et al. *Signal Transduct Target Ther.* 2025 Jul 7;10(1):211.

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

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