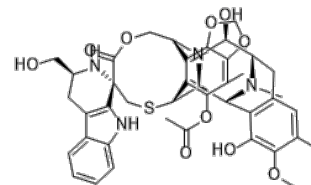


Product Name : Ecubectedin
Cat. No. : PC-27660
CAS No. : 2248127-53-7
Molecular Formula : C₄₁H₄₄N₄O₁₀S
Molecular Weight : 784.88
Target : DNA Alkylator/Crosslinker
Solubility : 10 mM in DMSO



Biological Activity

Ecubectedin is an ecteinascidin synthetic analogue and selective inhibitor of **transcription**, reducing cell proliferation and migration, as well as inducing S-phase cell cycle arrest and DNA damage in malignant pleural mesothelioma cells. Ecubectedin inhibits cell viability in a panel of twelve 2D-cultures of patient-derived MPM, independent of histotype or BAP1 status, with mean IC₅₀ of 0.06 nM.

Ecubectedin strongly impairs invasion, migration and cell cycle of MPM cells, down-regulates DNA damage sensors (ABL1, BRCA1 and TP53) and up-regulated repair machinery genes (ATR, ATM, CHEK1, CHEK2, PRKDC and RAD51), activates the cGAS/STING pathway.

Ecubectedin induces immunogenic cell death and immune killing by CD8⁺T-lymphocytes, reshaping the MPM immune-environment.

Ecubectedin increased the efficacy of atezolizumab in immune-PDX models of MPM.

References

Salaroglio IC, et al. *J Exp Clin Cancer Res*. 2024 Dec 21;43(1):327.

Gorgels D, et al. *Cancer Res Commun*. 2026 Aug 14. doi: 10.1158/2767-9764.CRC-26-0377.

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

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