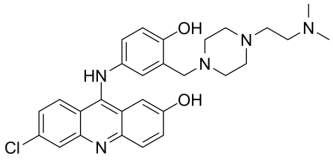
ERCC1-XPF-IN-1

Cat. No.:	HY-143498
CAS No.:	2411584-25-1
Molecular Formula:	$C_{28}H_{32}ClN_5O_2$
Molecular Weight:	506.04
Target:	DNA/RNA Synthesis
Pathway:	Cell Cycle/DNA Damage
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	ERCC1-XPF-IN-1 is a potent and high-affinity ERCC1-XPF inhibitor with IC_{50} value of 0.49 μM. ERCC1-XPF-IN-1 has the capacity to potentiate the cytotoxicity effect of UV radiation and inhibiting DAN repair, by the inhibition of removal of CPDs, and cyclophosphamide toxicity to colorectal cancer cells[1].
IC_{50} & Target	IC_{50}: 0.49 μM (ERCC1-XPF)[1]
In Vitro	ERCC1-XPF-IN-1 (compound B7) (2 μM; 0-24 hours) significantly inhibits the removal of CPDs in UV-irradiated HCT-116 cells[1]. ERCC1-XPF-IN-1 (5-20 μM; 72 hours) exhibits approximately 95% of the HCT116 cells survived at 5 μM[1]. ERCC1-XPF-IN-1 (2 and 4 μM; 72 hours) significantly sensitizes HCT 116 cells to cyclophosphamide[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	ERCC1-XPF-IN-1 has a moderate rate of metabolism in human liver microsomes, with log D value of 2.01 at pH 7.4 and an efflux ratio ≥ 43.39[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Cytotoxicity Assay

Cell Line:	HCT-116[1]
Concentration:	5, 10, 15 and 20 μM
Incubation Time:	72 hours
Result:	Exhibited approximately 95% of the HCT116 cells survived at 5 μM.

REFERENCES

[1]. Elmenoufy AH, Gentile F, Jay D, et al. Design, synthesis and in vitro cell-free/cell-based biological evaluations of novel ERCC1-XPF inhibitors targeting DNA repair pathway. Eur J Med Chem. 2020;204:112658.

Caution: Product has not been fully validated for medical applications. For research use only.

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