Zn(BQTC)

Cat. No.: HY-146287

CAS No.: 2785342-54-1

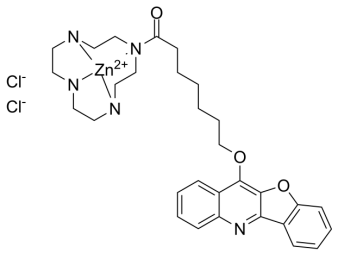
Molecular Formula: $C_{30}H_{36}Cl_2N_5O_3Zn$

Molecular Weight: 650.92

Target: DNA/RNA Synthesis; Apoptosis

Pathway: Cell Cycle/DNA Damage; Apoptosis

Storage: Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Zn(BQTC) is a highly potent mitochondrial DNA (mtDNA) and nuclear DNA (nDNA) inhibitor. Zn(BQTC) causes severe damage to the mtDNA and nDNA, sequentially disruptes mitochondrial and nuclear functions. Zn(BQTC) promotes the DNA damage-induced apoptotic signaling pathway. Zn(BQTC) has selectively antiproliferative activity against A549R cells. Zn(BQTC) can be used for researching anticancer[1].
IC_{50} & Target	IC_{50}: 10 nM in A549R cells[1]
In Vitro	Zn(BQTC) (0-100 μM; 6 hours) exhibits highly and selectively antiproliferative activity against A549R with an IC_{50} of 10 nM[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only. Cell Proliferation Assay

Cell Line:	A549R, A549 and HL-7702[1]
Concentration:	0-100 μM
Incubation Time:	6 hours
Result:	Exhibited potent antiproliferative activity against A549R and A549 cells with IC_{50}s of 10 nM and 11.59 μM, but low activity against HL-7702 with an IC_{50} over 100 μM.

REFERENCES

[1]. Wang ZF, et al. Novel bifluorescent Zn(II)-cryptolepine-cyclen complexes trigger apoptosis induced by nuclear and mitochondrial DNA damage in cisplatin-resistant lung tumor cells [published online ahead of print, 2022 Apr 30]. Eur J Med Chem. 2022;238:114418.

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