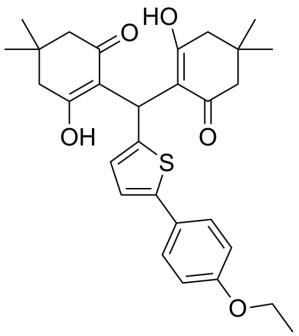
WRN inhibitor 6

Cat. No.:	HY-157954
Molecular Formula:	$C_{29}H_{34}O_5S$
Molecular Weight:	494.64
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	WRN inhibitor 6 (compound 3ci) is a potent WRN inhibitor. WRN inhibitor 6 induces apoptosis. WRN inhibitor 6 increases the expression of p-p53, P-Chk2, γH2AX expression[1].
IC_{50} & Target	IC_{50}:2.305 μM (WRN)[1]

In Vitro

WRN inhibitor 6 (compound 3ci) (0-100 μM; 72 h) induces DNA damage and apoptotic cell death with IC_{50}s of 2.305, 16.58 μM for HCT116, SW620 cells, respectively[1].

WRN inhibitor 6 (0, 2.5, 5, 10 μM; 3, 27 h) increases the expression of p-p53, P-Chk2, γH2AX expression in a dose-dependent manner in HCT116 cells[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Cytotoxicity Assay[1]

Cell Line:	HCT116, SW620 cells
Concentration:	0-100 μM
Incubation Time:	72 h
Result:	Induced cell death with IC_{50}s of 2.305, 16.58 μM for HCT116, SW620 cells, respectively.

Western Blot Analysis[1]

Cell Line:	HCT116 cells
Concentration:	0, 2.5, 5, 10 μM
Incubation Time:	3, 27 h
Result:	Increased p-p53, P-Chk2, γH2AX expression in a dose-dependent manner.

In Vivo

WRN inhibitor 6 (20 mg/kg for p.o.; 5 mg/kg for i.v.) shows low oral availability with F of 11.43% and a short half-life of 0.17 h for IV in mice[1].

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REFERENCES

[1]. Yang H, et al. Discovery of thiophen-2-ylmethylene bis-dimedone derivatives as novel WRN inhibitors for treating cancers with microsatellite instability. Bioorg Med Chem. 2024 Feb 15;100:117588.

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