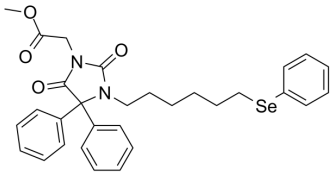
Anticancer agent 50

Cat. No.:	HY-146389
CAS No.:	2487457-15-6
Molecular Formula:	$C_{30}H_{32}N_2O_4Se$
Molecular Weight:	563.55
Target:	MDM-2/p53; P-glycoprotein
Pathway:	Apoptosis; Membrane Transporter/Ion Channel
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

Anticancer agent 50 (compound 6) is a potent ABCB1 efflux pump modulator. Anticancer agent 50 shows cytotoxic effects and antiproliferative effects. Anticancer agent 50 decreases the expression of cyclin D1 and induces p53 expression. Anticancer agent 50 has the potential for the research of T-lymphoma[1].

In Vitro

Anticancer agent 50 (compound 6) (0-100 μM) shows cytotoxic effects with IC_{50}s of 0.67, 0.90 μM for sensitive parental (PAR) and resistant (MDR) mouse T-lymphoma cells, respectively[1].

Anticancer agent 50 (0-100 μM) shows antiproliferative effects with IC_{50}s of 3.84, 1.34 μM for sensitive parental (PAR) and resistant (MDR) mouse T-lymphoma cells, respectively[1].

Anticancer agent 50 (0.1, 0.5, 2 μM; 24 h) inhibits cell cycle progression through the reduction of the expression of cyclin D1 and inhibits cell proliferation by inducing p53 expression[1].

Anticancer agent 50 (0.1, 0.5, 2, 10 μM; 72 h) inhibits cell growth by 12% in SH-SY5Y cells[1].

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

RT-PCR[1]

Cell Line:	JURKAT cells
Concentration:	0.1, 0.5, 2 μM
Incubation Time:	24 h
Result:	Significantly reduced cyclin D1 expression and increased the level of p53.

REFERENCES

[1]. Ali W, et al. Discovery of phenylselenoether-hydantoin hybrids as ABCB1 efflux pump modulating agents with cytotoxic and antiproliferative actions in resistant T-lymphoma. Eur J Med Chem. 2020 Aug 15;200:112435.

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

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