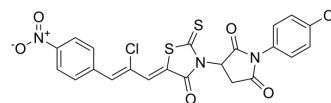


## Anticancer agent 44

Cat. No.:	HY-146286
CAS No.:	2770943-86-5
Molecular Formula:	C <sub>22</sub> H <sub>13</sub> Cl <sub>2</sub> N <sub>3</sub> O <sub>5</sub> S <sub>2</sub>
Molecular Weight:	534.39
Target:	Apoptosis
Pathway:	Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Anticancer agent 44 (compound 2a) is a potent anticancer agent. Anticancer agent 44 shows cytotoxicity activity in cancer cells. Anticancer agent 44 induces apoptosis. Anticancer agent 44 shows low toxicity towards activated lymphocytes of human blood <sup>[1]</sup> .
<b>In Vitro</b>	<p>Anticancer agent 44 (compound 2a) (0-100 μM; 72 h) shows antitumor activity with GI<sub>50</sub>s of 3.40, 63.90, 7.95, 6.45, 70.30, 6.65, 9.18, 6.00, 8.93, 65.90, &gt;100 μM for Jurkat, A549, MCF-7, MDA-MB-231, KB3-1, HeLa, HCT-116, HCT-116 p53<sup>-/-</sup>, U251, SK-OV-3, HaCaT cells, respectively<sup>[1]</sup>.</p> <p>Anticancer agent 44 (1.5 μM; 24 h) induces apoptosis by increases the expression of caspase 3, Bax and decreases the amount of anti-apoptotic Bcl-2 protein<sup>[1]</sup>.</p> <p>Anticancer agent 44 (0-2 μM; 24, 48 h) shows low toxicity towards normal human keratinocytes of HaCaT line and mitogen-activated lymphocytes of peripheral blood of healthy human donor<sup>[1]</sup>.</p> <p>Anticancer agent 44 dose not induce significant DNA damage and changes in morphology of mitogen-activated lymphocytes of peripheral blood of healthy donor<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

### REFERENCES

[1]. Finiuk N, et al. Novel hybrid pyrrolidinedione-thiazolidinones as potential anticancer agents: Synthesis and biological evaluation. *Eur J Med Chem.* 2022 May 2;238:114422.

[2]. Nataliya Finiuk, et al. Novel hybrid pyrrolidinedione-thiazolidinones as potential anticancer agents: Synthesis and biological evaluation. *Eur J Med Chem.* 2022 May 2;238:114422.

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

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