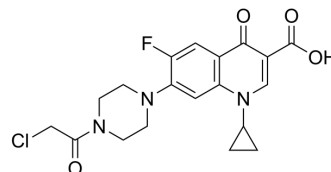


## Anticancer agent 118

<b>Cat. No.:</b>	HY-154861
<b>CAS No.:</b>	864443-43-6
<b>Molecular Formula:</b>	C <sub>19</sub> H <sub>19</sub> ClFN <sub>3</sub> O <sub>4</sub>
<b>Molecular Weight:</b>	407.82
<b>Target:</b>	Bacterial; Apoptosis; Necroptosis
<b>Pathway:</b>	Anti-infection; Apoptosis
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Anticancer agent 118, a N-acylated ciprofloxacin derivative, has anti-bacterial and anticancer activities. Anticancer agent 118 shows high activity against Gram-positive strains and antiproliferative activities against prostate PC3 cells. Anticancer agent 118 can be used for antitumor research <sup>[1]</sup> .								
<b>In Vitro</b>	<p>Anticancer agent 118 (Compound 3) (0-100 μM; 72 hours) shows high antiproliferative activities against prostate PC3 cells and induces apoptosis/necrosis in PC3 cells<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Proliferation Assay<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>Prostate PC3 and HaCaT cells</td> </tr> <tr> <td>Concentration:</td> <td>0-100 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>72 hours</td> </tr> <tr> <td>Result:</td> <td> <p>Showed high antiproliferative activities against prostate PC3 cells with an IC<sub>50</sub> of 2.02 μM. Reduced the growth and proliferation rates in prostate PC3 cells, without acytotoxic action against normal HaCaT cell lines.</p> <p>Induced apoptosis/necrosis in PC3 cells by increasing the intracellular ROS amount and diminished the IL-6 level in tumor cells.</p> </td> </tr> </table>	Cell Line:	Prostate PC3 and HaCaT cells	Concentration:	0-100 μM	Incubation Time:	72 hours	Result:	<p>Showed high antiproliferative activities against prostate PC3 cells with an IC<sub>50</sub> of 2.02 μM. Reduced the growth and proliferation rates in prostate PC3 cells, without acytotoxic action against normal HaCaT cell lines.</p> <p>Induced apoptosis/necrosis in PC3 cells by increasing the intracellular ROS amount and diminished the IL-6 level in tumor cells.</p>
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### REFERENCES

[1]. Struga M, et.al. N-Acylated Ciprofloxacin Derivatives: Synthesis and In Vitro Biological Evaluation as Antibacterial and Anticancer Agents. ACS Omega. 2023 May 18;8(21):18663-18684.

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

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