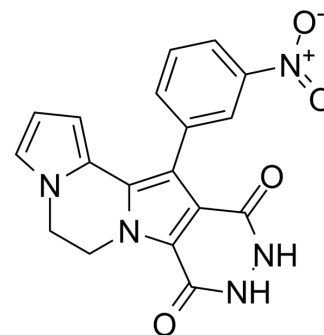


## Antiproliferative agent-42

<b>Cat. No.:</b>	HY-155402
<b>CAS No.:</b>	3002404-74-9
<b>Molecular Formula:</b>	C <sub>18</sub> H <sub>13</sub> N <sub>5</sub> O <sub>4</sub>
<b>Molecular Weight:</b>	363.33
<b>Target:</b>	Caspase; Apoptosis
<b>Pathway:</b>	Apoptosis
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Antiproliferative agent-42 (compound 7m) is a dihydrodipyrrolo compound. Antiproliferative agent-42 showed antiproliferative activity against Panc-1 cell line with an IC <sub>50</sub> value of 12.54 μM <sup>[1]</sup> .								
<b>In Vitro</b>	<p>Antiproliferative agent-42 (0-100 μM, 48 h) can inhibit Panc-1 and PC3 as well as MDA-MB-231 cell lines with IC<sub>50</sub> values of 12.5 μM, 17.7 μM, and 13.1 μM, respectively<sup>[1]</sup>.</p> <p>Antiproliferative agent-42 (12.54 μM, 48 h) can induce sub-G1 phase arrest in Panc-1 cancer cells<sup>[1]</sup>.</p> <p>Antiproliferative agent-42 (12.54 μM) turns down the protein lever of cleaved-caspase-3 and caspase-3 in Panc-1 cancer cells, while the protein lever of pro-caspase-3 retains unchanged in Panc-1 cancer cells<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Apoptosis Analysis<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>Panc-1</td> </tr> <tr> <td>Concentration:</td> <td>12.54 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>48 h</td> </tr> <tr> <td>Result:</td> <td>Induced apoptosis at 15.54 μM concentration (11.1%).</td> </tr> </table>	Cell Line:	Panc-1	Concentration:	12.54 μM	Incubation Time:	48 h	Result:	Induced apoptosis at 15.54 μM concentration (11.1%).
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Concentration:	12.54 μM								
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### REFERENCES

[1]. Lish A B, et al. Synthesis and Biological Evaluation of 12-Aryl-11-hydroxy-5,6-dihydropyrrolo[2",1":3',4']pyrazino[1',2':1,5]pyrrolo[2,3-d]pyridazine-8(9H)-one Derivatives as Potential Cytotoxic Agents [J]. [2023-11-08].

[2]. Barghi Lish, Azam, et al. "Synthesis and Biological Evaluation of 12-Aryl-11-hydroxy-5,6-dihydropyrrolo [2",1":3',4'] pyrazino [1',2':1,5] pyrrolo [2,3-d] pyridazine-8 (9H)-one Derivatives as Potential Cytotoxic Agents." ACS Omega (2023).

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

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