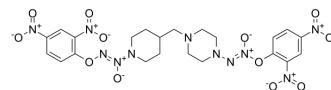


## Bcl-2-IN-10

<b>Cat. No.:</b>	HY-150540
<b>CAS No.:</b>	2773354-28-0
<b>Molecular Formula:</b>	C <sub>22</sub> H <sub>25</sub> N <sub>11</sub> O <sub>12</sub>
<b>Molecular Weight:</b>	635.5
<b>Target:</b>	Bcl-2 Family; 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>	Bcl-2-IN-10 is an active Bcl-2 inhibitor that can release up to four nitric oxide (NO) molecules. Bcl-2-IN-10 has cytotoxic activities against cancer cells, such as human leukemia, breast cancer and lung cancer. Bcl-2-IN-10 induces cell apoptosis and arrest cell cycle of G2/M phase, and can be used in cancer-related research <sup>[1]</sup> .																		
<b>IC<sub>50</sub> &amp; Target</b>	Bax																		
<b>In Vitro</b>	<p>Steroid sulfatase-IN-2 (compound 1, 0-20 μM approximately, 72 h) inhibits different cancer cells with IC<sub>50</sub>s ranging from 1.26 μM to 17.86 μM<sup>[1]</sup>.</p> <p>Steroid sulfatase-IN-2 (1 μM, 5 h) releases up to four molecules of nitric oxide<sup>[1]</sup>.</p> <p>Steroid sulfatase-IN-2 (8 μM, 8-72 h) induces leukemia cell CCRF-CEM apoptosis via MAPKs pathways, arrests cell in the G2/M phase, and increases ratio of Bax/Bcl-2<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" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Cell Line:</td> <td>CEM cells</td> </tr> <tr> <td>Concentration:</td> <td>8 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>8, 24, 48 or 72 h</td> </tr> <tr> <td>Result:</td> <td>Induced apoptosis in a time-dependent and dose-dependent manner.</td> </tr> </table> <p>Cell Cycle Analysis<sup>[1]</sup></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Cell Line:</td> <td>CEM cells</td> </tr> <tr> <td>Concentration:</td> <td>8 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>8, 24, 48 or 72 h</td> </tr> <tr> <td>Result:</td> <td>Arrested cell in the G2/M phase.</td> </tr> </table> <p>Western Blot Analysis<sup>[1]</sup></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Cell Line:</td> <td>CEM cells</td> </tr> </table>	Cell Line:	CEM cells	Concentration:	8 μM	Incubation Time:	8, 24, 48 or 72 h	Result:	Induced apoptosis in a time-dependent and dose-dependent manner.	Cell Line:	CEM cells	Concentration:	8 μM	Incubation Time:	8, 24, 48 or 72 h	Result:	Arrested cell in the G2/M phase.	Cell Line:	CEM cells
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Concentration:	0-8 $\mu$ M
Incubation Time:	72 h
Result:	Increased the levels of JNK and p38, and the levels of phosphorylated JNK and p38. Decreased Bcl-2 level in a time- and dose-dependent manner, and increased pro-apoptotic Bax level.

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## REFERENCES

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[1]. Xun Ji, et al. Double-component diazeniumdiolate derivatives as anti-cancer agents. *Bioorg Med Chem*. 2020 Apr 15;28(8):115405.

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

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