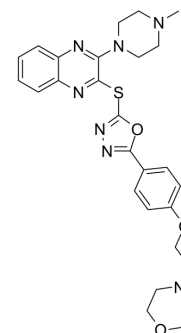


## Bcl-2-IN-9

Cat. No.:	HY-149009
CAS No.:	2490542-33-9
Molecular Formula:	C <sub>27</sub> H <sub>31</sub> N <sub>7</sub> O <sub>3</sub> S
Molecular Weight:	533.65
Target:	Bcl-2 Family; Apoptosis
Pathway:	Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Bcl-2-IN-9 is a novel proapoptotic Bcl-2 inhibitor with IC <sub>50</sub> value of 2.9 μM and low cytotoxic. Bcl-2-IN-9 mediates apoptosis by down-regulating expression of Bcl-2 in cancer cells and has a high selectivity against leukemia cells <sup>[1]</sup> .																		
<b>IC<sub>50</sub> &amp; Target</b>	Bcl-2 2.9 μM (IC <sub>50</sub> , <sup>[1]</sup> )																		
<b>In Vitro</b>	<p>Bcl-2-IN-9 (compound 6e) (10 μM, 48 hours) inhibits HL-60 cells in vitro<sup>[1]</sup>.</p> <p>Bcl-2-IN-9 (compound 6e) (10 μM, 48 hours) shows low cytotoxic effects against WI-38 cells with cell viability of 91%<sup>[1]</sup>.</p> <p>Bcl-2-IN-9 (compound 6e) (10 μM, 48 hours) displays a high selectivity against leukemia cells<sup>[1]</sup>.</p> <p>Bcl-2-IN-9 (compound 6e) (10 μM) mediates apoptotic by down-regulating expression of Bcl-2 and causing chromatin compaction and nuclear fragmentation<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Viability Assay<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>HL-60 cells</td> </tr> <tr> <td>Concentration:</td> <td>1, 10, 20, 40 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>48 hours</td> </tr> <tr> <td>Result:</td> <td>Suppressed cell growth and viability to 28.9%.</td> </tr> </table> <p>Cell Cytotoxicity Assay<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>WT-38 cells</td> </tr> <tr> <td>Concentration:</td> <td>10 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>48 hours</td> </tr> <tr> <td>Result:</td> <td>Low cytotoxic effects.</td> </tr> </table> <p>Apoptosis Analysis<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>HL-60 cells</td> </tr> </table>	Cell Line:	HL-60 cells	Concentration:	1, 10, 20, 40 μM	Incubation Time:	48 hours	Result:	Suppressed cell growth and viability to 28.9%.	Cell Line:	WT-38 cells	Concentration:	10 μM	Incubation Time:	48 hours	Result:	Low cytotoxic effects.	Cell Line:	HL-60 cells
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Concentration:	1, 10, 20, 40 $\mu$ M
Incubation Time:	48 hours
Result:	Caused chromatin compaction and nuclear fragmentation.

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## REFERENCES

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[1]. Yukari Ono, et al. Design and synthesis of quinoxaline-1,3,4-oxadiazole hybrid derivatives as potent inhibitors of the anti-apoptotic Bcl-2 protein. Bioorg Chem. 2020 Aug; 104: 104245.

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

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