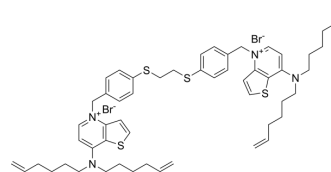


## ChoKα inhibitor-5

Cat. No.:	HY-152195
Molecular Formula:	C <sub>54</sub> H <sub>68</sub> Br <sub>2</sub> N <sub>4</sub> S <sub>4</sub>
Molecular Weight:	1061.21
Target:	Apoptosis
Pathway:	Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	ChoKα inhibitor-5 is a sulphur-containing choline kinase inhibitor. ChoKα inhibitor-5 can inhibit HChoK α1 with an IC <sub>50</sub> value of 0.64 μM. ChoKα inhibitor-5 also can induce apoptosis. ChoKα inhibitor-5 can be used for the research of cancer <sup>[1]</sup> .																		
<b>IC<sub>50</sub> &amp; Target</b>	IC <sub>50</sub> : 0.66 μM (HChoK α1); 1.29 μM (A549); 4.63 μM (HeLa); 2.41 μM (HT-29); 1.92 μM (MDA-MB-231); 2.12 μM (MCF7) <sup>[1]</sup>																		
<b>In Vitro</b>	<p>ChoKα inhibitor-5 (PL 69) has HChoK α1 inhibition activity with an IC<sub>50</sub> value of 0.64 μM<sup>[1]</sup>. ChoKα inhibitor-5 (1.46 μM; 72 h) can inhibit cell proliferation for A549, HeLa, HT-29, MDA-MB-231 and MCF7 cells with IC<sub>50</sub> values of 1.29 μM, 4.63 μM, 2.41 μM, 1.92 μM and 2.12 μM, respectively<sup>[1]</sup>.</p> <p>ChoKα inhibitor-5 (1, 5 μM; 48, 72 h) induces apoptosis in cancer cells through the mitochondrial pathway<sup>[1]</sup>. 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>HT29, A549, HeLa, HT-29, MDA-MB-231 and MCF7 cells</td> </tr> <tr> <td>Concentration:</td> <td>2.47 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>72 h</td> </tr> <tr> <td>Result:</td> <td>Had anti-proliferative property.</td> </tr> </table> <p>Apoptosis Analysis<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>A549 and HeLa cells</td> </tr> <tr> <td>Concentration:</td> <td>1, 5 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>48, 72 h</td> </tr> <tr> <td>Result:</td> <td>Induced a stronger mitochondrial depolarization in HeLa cells at early time-point treatment (24 h).</td> </tr> </table> <p>Western Blot Analysis<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>HeLa and NHA cells</td> </tr> </table>	Cell Line:	HT29, A549, HeLa, HT-29, MDA-MB-231 and MCF7 cells	Concentration:	2.47 μM	Incubation Time:	72 h	Result:	Had anti-proliferative property.	Cell Line:	A549 and HeLa cells	Concentration:	1, 5 μM	Incubation Time:	48, 72 h	Result:	Induced a stronger mitochondrial depolarization in HeLa cells at early time-point treatment (24 h).	Cell Line:	HeLa and NHA cells
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Cell Line:	HeLa and NHA cells																		

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Concentration:	5 $\mu$ M
Incubation Time:	48 h
Result:	Significantly reduced the expression of the anti-apoptotic protein MCL-1.

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## REFERENCES

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[1]. Pilar M Luque-Navarro, et al. New bioisosteric sulphur-containing choline kinase inhibitors with a tracked mode of action. Eur J Med Chem. 2023 Jan 15;246:115003.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA