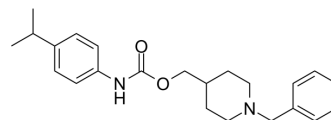


## AChE/BChE-IN-6

<b>Cat. No.:</b>	HY-146315
<b>CAS No.:</b>	2416910-94-4
<b>Molecular Formula:</b>	C <sub>23</sub> H <sub>30</sub> N <sub>2</sub> O <sub>2</sub>
<b>Molecular Weight:</b>	366.5
<b>Target:</b>	Cholinesterase (ChE); Monoamine Oxidase
<b>Pathway:</b>	Neuronal Signaling
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	AChE/BChE-IN-6 (compound 22) is a potent dual AChE/BChE inhibitor with IC <sub>50</sub> values of 0.809 μM, 2.248 μM and > 100 μM for hBChE, hAChE and hMAO-B, respectively. AChE/BChE-IN-6 penetrates the blood-brain barrier (BBB). AChE/BChE-IN-6 can be used for Alzheimer's disease (AD) research <sup>[1]</sup> .										
<b>IC<sub>50</sub> &amp; Target</b>	hMAO-B ∞ 100 μM (IC <sub>50</sub> )	hAChE 2.248 μM (IC <sub>50</sub> )	hBChE 0.809 μM (IC <sub>50</sub> )								
<b>In Vitro</b>	<p>AChE/BChE-IN-6 (compound 22) (1-100 μM; 48 hours) can cross the blood-brain barrier and has neuroprotective to human neuronal-like SH-SY5Y and liver HepG2 cells<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>SH-SY5Y and HepG2 cells</td> </tr> <tr> <td>Concentration:</td> <td>1-100 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>48 hours</td> </tr> <tr> <td>Result:</td> <td>Had non-cytotoxic at 20 μM on SH-SY5Y cells and at 50 μM on HepG2 cells.</td> </tr> </table>			Cell Line:	SH-SY5Y and HepG2 cells	Concentration:	1-100 μM	Incubation Time:	48 hours	Result:	Had non-cytotoxic at 20 μM on SH-SY5Y cells and at 50 μM on HepG2 cells.
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### REFERENCES

[1]. Kořak U, et, al. N-alkylpiperidine carbamates as potential anti-Alzheimer's agents. Eur J Med Chem. 2020 Jul 1;197:112282.

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

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