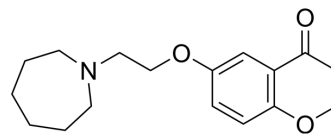


## ACHe/BuChE/MAO-B-IN-1

<b>Cat. No.:</b>	HY-151562
<b>CAS No.:</b>	2834758-29-9
<b>Molecular Formula:</b>	C <sub>17</sub> H <sub>23</sub> NO <sub>3</sub>
<b>Molecular Weight:</b>	289.37
<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/BuChE/MAO-B-IN-1 (compound 19) is an inhibitor of human acetyl- (hAChE), butyrylcholinesterase (hBuChE) and monoamine oxidase-B (hMAO-B) with IC <sub>50</sub> s of 4.8 μM, 13.7 μM, and 1.11 μM, respectively. AChE/BuChE/MAO-B-IN-1 also exhibits high affinity to both the σ <sub>1</sub> and σ <sub>2</sub> receptors with K <sub>i</sub> values of 42.8 nM (human σ <sub>1</sub> receptor) and 191 nM (rat σ <sub>2</sub> receptor), respectively. AChE/BuChE/MAO-B-IN-1 can be used for Alzheimer's disease research <sup>[1]</sup> .		
<b>IC<sub>50</sub> &amp; Target</b>	hAChE 4.8 μM (IC <sub>50</sub> )	hBCHE 13.7 μM (IC <sub>50</sub> )	hMAO-B 1.11 μM (IC <sub>50</sub> )

### REFERENCES

[1]. Tim Keuler, et al. The Chemotype of Chromanones as a Privileged Scaffold for Multineurotarget Anti-Alzheimer Agents. ACS Pharmacol. Transl. Sci. 2022, 12 Oct.

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

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