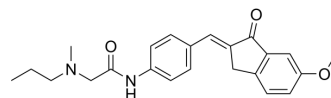


## AChE/MAO-IN-2

<b>Cat. No.:</b>	HY-152110
<b>Molecular Formula:</b>	C <sub>23</sub> H <sub>26</sub> N <sub>2</sub> O <sub>3</sub>
<b>Molecular Weight:</b>	378.46
<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>	Dual AChE-MAO B-IN-5, indanone derivative, is a potent dual AChE/MAO-B inhibitor with IC <sub>50</sub> values of 0.0224, 0.0412, and 0.1116 μM for AChE, MAO-B and MAO-A, respectively. Dual AChE-MAO B-IN-5 has antioxidant activity and prevents β-amyloid plaque aggregation. Dual AChE-MAO B-IN-5 can be used for Alzheimer's disease (AD) research <sup>[1]</sup> .		
<b>IC<sub>50</sub> &amp; Target</b>	AChE 0.0224 μM (IC <sub>50</sub> )	MAO-B 0.0412 μM (IC <sub>50</sub> )	MAO-A 0.1116 μM (IC <sub>50</sub> )
<b>In Vitro</b>	Dual AChE-MAO B-IN-5 (compound D29; 0.1-1 μM) has antioxidant activity with an IC <sub>50</sub> value of 0.188 μM <sup>[1]</sup> . Dual AChE-MAO B-IN-5 (0.1-1 μM) increases cholinergic activity and prevents the buildup of β-amyloid plaque with inhibitions of 82.748% and 71.891 % for 0.1 μM and 1 μM, respectively <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.		

### REFERENCES

[1]. Sağlık BN, et, al. Design, Synthesis, and In Vitro and In Silico Approaches of Novel Indanone Derivatives as Multifunctional Anti-Alzheimer Agents. ACS Omega. 2022 Dec 7;7(50):47378-47404.

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

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