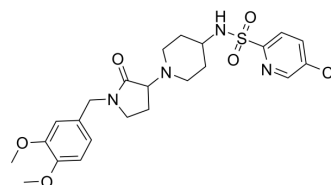


## AChe-IN-56

Cat. No.:	HY-161243
Molecular Formula:	C <sub>23</sub> H <sub>29</sub> ClN <sub>4</sub> O <sub>5</sub> S
Molecular Weight:	509.02
Target:	Cholinesterase (ChE)
Pathway:	Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	AChE-IN-56 is an orally active inhibitor for acetylcholinesterase enzyme (AChE) with neuroprotective efficacy <sup>[1]</sup> .	
<b>IC<sub>50</sub> &amp; Target</b>	AChE	
<b>In Vivo</b>	AChE-IN-56 (2 mg/kg, p.o., 5 days) exhibits an inhibitory efficacy in scopolamine-induced memory impairment and learning disability in Swiss albino mice <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
	Animal Model:	scopolamine-induced memory and learning disability in swiss albino mice <sup>[1]</sup>
	Dosage:	2 mg/kg
	Administration:	p.o., for 5 days
	Result:	Reduced escape latency, restored the levels of AChE, lipids peroxidation, nitrit and oxidative stress and inhibited the production of ROS and RNS.

### REFERENCES

[1]. Gupta M, et al., Investigation, scaffold hopping of novel donepezil-based compounds as anti-Alzheimer's agents: synthesis, in-silico and pharmacological evaluations. Sci Rep. 2024 Jan 19;14(1):1687.

**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

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