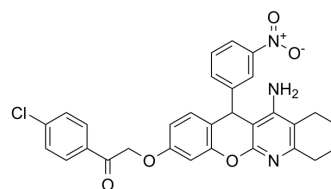


hAChE-IN-3

Cat. No.:	HY-155085
CAS No.:	2983723-56-2
Molecular Formula:	C ₃₀ H ₂₄ ClN ₃ O ₅
Molecular Weight:	541.98
Target:	Monoamine Oxidase; Amyloid-β; Cholinesterase (ChE)
Pathway:	Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	hAChE-IN-3 (compounds 5c) is a potent and blood-brain barrier permeable AChE, BuChE, MAO-B-IN-1 and BACE-1 inhibitor, with IC ₅₀ values of 0.44, 0.08, 5.15 and 0.38 μM, respectively. hAChE-IN-3 has antioxidant activity and metal chelating ability. In addition, hAChE-IN-3 can bind to peripheral anion sites, and affect β amyloid and reduce Alzheimer's-associated neurodegeneration. hAChE-IN-3 has the potential for the research of Alzheimer's disease ^[1] .		
IC₅₀ & Target	MAO-B 5.15 μM (IC ₅₀)	AChE 0.44 μM (IC ₅₀)	BChE 0.08 μM (IC ₅₀)
In Vitro	hAChE-IN-3 (compounds 5c) has IC ₅₀ values of 36.28 μM (24 h) for SH-SY5Y cell line and 154.10 μM (48 h) for HepG2 cell line ^[1] . hAChE-IN-3 has IC ₅₀ values of 2.58 μM of inhibition of Aβ Aggregation and 59% inhibition at 10 μM ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.		

REFERENCES

[1]. Salma Fares et al. Modified Tacrine Derivatives as Multitarget-Directed Ligands for the Treatment of Alzheimer's Disease: Synthesis, Biological Evaluation, and Molecular Modeling Study. ACS Omega 2023, 8, 29, 26012–26034.

[2]. Salma Fares et al. Modified Tacrine Derivatives as Multitarget-Directed Ligands for the Treatment of Alzheimer's Disease: Synthesis, Biological Evaluation, and Molecular Modeling Study. ACS Omega 2023, 8, 29, 26012–26034.

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