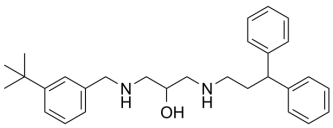
Multitarget AD inhibitor-1

Cat. No.:	HY-136813
CAS No.:	2205015-77-4
Molecular Formula:	$C_{29}H_{38}N_2O$
Molecular Weight:	430.62
Target:	Beta-secretase; Amyloid-β; Cholinesterase (ChE)
Pathway:	Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Multitarget AD inhibitor-1 is a selective and reversible butyrylcholinesterase (BuChE) inhibitor with IC_{50}s of 7.22 μM and 1.55 μM for hBuChE and eqBuChE (BuChE from equine serum), respectively. Multitarget AD inhibitor-1 inhibits β-secretase ($IC_{50hBACE-1}$=41.60 μM), amyloid β aggregation ($IC_{50Aβ}$=3.09 μM), tau aggregation. Multitarget AD inhibitor-1, a diphenylpropylamine derivative, has the potential for multifunctional disease-modifying anti-Alzheimer's research[1].
In Vitro	Multitarget AD inhibitor-1 (compound 10) selectively inhibits BuChE from equine serum (eqBuChE) and hBuChE over AChE from electric eel (eeAChE; 21.78% at 10 μM)[1]. Multitarget AD inhibitor-1 (10 μM) inhibits full-length tau aggregation with 44.4%[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Dawid Panek, et al. Design, Synthesis, and Biological Evaluation of 1-Benzylamino-2-hydroxyalkyl Derivatives as New Potential Disease-Modifying Multifunctional Anti-Alzheimer's Agents. ACS Chem Neurosci. 2018 May 16;9(5):1074-1094.

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