BChE-IN-11

Cat. No.: HY-N10488

CAS No.: 133740-30-4

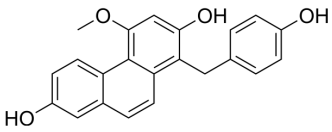
Molecular Formula: $C_{22}H_{18}O_4$

Molecular Weight: 346.38

Target: Cholinesterase (ChE)

Pathway: Neuronal Signaling

Storage: Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	BChE-IN-11 (compound 10) is a potent, selective and non-competitive BChE (butyrylcholinesterase) inhibitor, with an IC_{50} of 2.1 μM. BChE-IN-11 can be used for Alzheimer's disease (AD) research[1].	
IC_{50} & Target	BChE 2.1 ± 0.3 μM (IC_{50})	AChE
In Vitro	BChE-IN-11 (compound 10) shows inhibition activity for BChE and AChE, with inhibition of 96.6 ± 1.2% and 19.1 ± 3.8% at 25 μg/mL, respectively[1].BChE-IN-11 binds to the active pocket of BChE via multiple hydrogen bonds with His438, Pro285, Gly115 and π–π stacking with Tyr332 and Trp82[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

REFERENCES

[1]. Liu Y, et al. Biological evaluation, molecular modeling and dynamics simulation of phenanthrenes isolated from Bletilla striata as butyrylcholinesterase inhibitors. Sci Rep. 2022 Aug 11;12(1):13649.

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