BChE-IN-31

Cat. No.: HY-163441

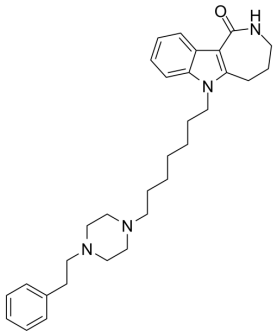
Molecular Formula: $C_{31}H_{42}N_4O$

Molecular Weight: 486.69

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-31 (Compound 14d) is a selective BChE inhibitor with an IC_{50} of 65 nM. BChE-IN-31 inhibits the self-induced aggregation of neurotoxic amyloid-β (Aβ) peptide[1].

IC_{50} & Target

BChE	AChE
65 nM (IC_{50})	5.9 μM (IC_{50})

In Vitro

BChE-IN-31 (0-20 μM, 24 h) exhibits a protective effect against NMDA (HY-17551)-induced toxicity and H_2O_2-induced oxidation in SH-SY5Y cells at 5 μM[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay[1]

Cell Line:	SH-SY5Y
Concentration:	0-20 μM
Incubation Time:	24 h
Result:	Improved the cell viability at 5 μM, inhibited cell viability dose-dependently at 5-20 μM.

REFERENCES

[1]. Samarelli F, et al., Novel 6-alkyl-bridged 4-arylalkylpiperazin-1-yl derivatives of azepino [4, 3-b] indol-1 (2H)-one as potent BChE-selective inhibitors showing protective effects against neurodegenerative insults[J]. European Journal of Medicinal Chemistry, 2024: 116353.

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