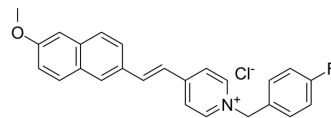


SB-1436

Cat. No.:	HY-149300
CAS No.:	2925298-08-2
Molecular Formula:	C ₂₅ H ₂₁ ClFNO
Molecular Weight:	405.89
Target:	Cholinesterase (ChE)
Pathway:	Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	SB-1436 is an Cholinesterase (ChE) inhibitor, inhibits acetylcholinesterase (AChE), butyrylcholinesterase (BChE) and recombinant human acetylcholinesterase (rHuAChE) with IC ₅₀ s of 0.176, 0.37 and 0.08 μM, respectively. SB-1436 inhibits AChE and BChE in a non-competitive manner with K _i s of 0.046 and 0.115 μM, respectively. SB-1436 significantly stops the self-aggregation of Aβ, and can be used for neurological disease research ^[1] .											
IC₅₀ & Target	EeAChE 0.176 μM (IC ₅₀)	eqBChE 0.37 μM (IC ₅₀)	EeAChE 0.046 μM (K _i)	eqBChE 0.115 μM (K _i)								
In Vitro	<p>SB-1436 (Compound 7av) (1 μM, 20 min) inhibits AChE, BChE and rHuAChE with IC₅₀s of 0.176, 0.37 and 0.08 μM, respectively [1].</p> <p>SB-1436 (0.78-100 μM, 48 hours) reduces the cell viability in J774A.1 and primary astrocytes cell lines^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Viability Assay^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>J774A.1 cells and primary astrocytes</td> </tr> <tr> <td>Concentration:</td> <td>0.78-100 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>48 hours</td> </tr> <tr> <td>Result:</td> <td>Reduced the cell viability in J774A.1 and primary astrocytes cell lines, and its GI₅₀ in both cell types is 6.25 μM.</td> </tr> </table>				Cell Line:	J774A.1 cells and primary astrocytes	Concentration:	0.78-100 μM	Incubation Time:	48 hours	Result:	Reduced the cell viability in J774A.1 and primary astrocytes cell lines, and its GI ₅₀ in both cell types is 6.25 μM.
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REFERENCES

[1]. Abdullaha M, et.al. Methoxy-naphthyl-Linked N-Benzyl Pyridinium Styryls as Dual Cholinesterase Inhibitors: Design, Synthesis, Biological Evaluation, and Structure-Activity Relationship. ACS Omega. 2023 May 9;8(20):17591-17608.

Caution: Product has not been fully validated for medical applications. For research use only.

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