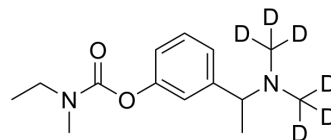


(rac)-Rivastigmine-d₆

Cat. No.:	HY-17368S1
CAS No.:	194930-04-6
Molecular Formula:	C ₁₄ H ₁₆ D ₆ N ₂ O ₂
Molecular Weight:	256.37
Target:	Cholinesterase (ChE); Isotope-Labeled Compounds
Pathway:	Neuronal Signaling; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	(rac)-Rivastigmine-d ₆ is a labelled racemic Rivastigmine. Rivastigmine (S-Rivastigmine) is an orally active and potent cholinesterase (ChE) inhibitor and inhibits butyrylcholinesterase (BChE) and acetylcholinesterase (AChE) with IC ₅₀ s of 0.037 μM, 4.15 μM, respectively. Rivastigmine can pass the blood brain barrier (BBB). Rivastigmine is a parasympathomimetic or cholinergic agent used for the research of mild to moderate dementia of the Alzheimer's type and dementia due to Parkinson's disease ^{[1][2]} .
In Vitro	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

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- [2]. Qian-Sheng Yu, et al. Anticholinesterase activity of compounds related to geneserine tautomers. N-Oxides and 1,2-oxazines. *J Med Chem.* 2002 Aug 15;45(17):3684-91.
- [3]. Han HJ, Lee JJ, Park SA et al. Efficacy and safety of switching from oral cholinesterase inhibitors to the rivastigmine transdermal patch in patients with probable Alzheimer's disease. *J Clin Neurol.* 2011 Sep;7(3):137-42.
- [4]. Helena Shifrin, et al. Rivastigmine alleviates experimentally induced colitis in mice and rats by acting at central and peripheral sites to modulate immune responses. *PLoS One.* 2013;8(2):e57668.
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Caution: Product has not been fully validated for medical applications. For research use only.

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