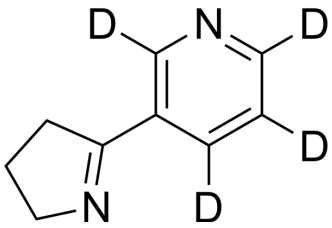
Myosmine-d_4

Cat. No.:	HY-W001909S
CAS No.:	66148-17-2
Molecular Formula:	$C_9H_6D_4N_2$
Molecular Weight:	150.21
Target:	nAChR
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 6 months -20°C 1 month



BIOLOGICAL ACTIVITY

Description	Myosmine-d_4 is the deuterium labeled Myosmine. Myosmine, a specific tobacco alkaloid in nuts and nut products, has low affinity for a4b2 nicotinic acetylcholinergic receptors (nAChR) with a Ki of 3300 nM[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

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216.

[2]. G Ferretti, er al. Binding of Nicotine and Homoazanicotine Analogues at Neuronal Nicotinic Acetylcholinergic (nACh) Receptors. Bioorg Med Chem Lett. 2003 Feb 24;13(4):733-5.

[3]. Wolfgang Zwickenpflug, et al. Metabolism of Myosmine in Wistar Rats. Drug Metab Dispos. 2005 Nov;33(11):1648-56.

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