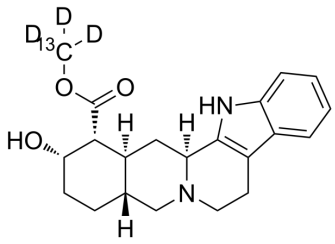
Yohimbine-$^{13}C,d_3$

Cat. No.:	HY-12715S
CAS No.:	1261254-59-4
Molecular Formula:	$C_{20}{}^{13}CH_{23}D_3N_2O_3$
Molecular Weight:	358.45
Target:	Adrenergic Receptor
Pathway:	GPCR/G Protein; 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	Yohimbine-$^{13}C,d_3$ is the ^{13}C- and deuterium labeled Yohimbine. Yohimbine is a potent and relatively nonselective alpha 2-adrenergic receptor (AR) antagonist, with IC50 of 0.6 μM.
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]. Saeed SA, et al. Signaling mechanisms mediated by G-protein coupled receptors in human platelets. Acta Pharmacol Sin. 2004 Jul;25(7):887-892.

[3]. Blanchard RJ, et al. Yohimbine potentiates active defensive responses to threatening stimuli in Swiss-Webster mice. Pharmacol Biochem Behav. 1993 Mar;44(3):673-681.

[4]. Fuller BB, et al. Downregulation of tyrosinase activity in human melanocyte cell cultures by yohimbine. J Invest Dermatol. 2000 Feb;114(2):268-276.

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