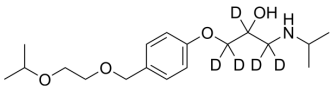
Bisoprolol-d_5

Cat. No.:	HY-129029S
CAS No.:	1189881-87-5
Molecular Formula:	$C_{18}H_{26}D_5NO_4$
Molecular Weight:	330.47
Target:	Adrenergic Receptor; Isotope-Labeled Compounds
Pathway:	GPCR/G Protein; Neuronal Signaling; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Bisoprolol-d_5 is the deuterium labeled Bisoprolol. Bisoprolol is a potent, selective and orally active β1-adrenergic receptor blocker. Bisoprolol has little activity on β2-receptor and has the potential for hypertension, coronary artery disease and stable ventricular dysfunction research[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]. Jillian G Baker, et al. The selectivity of beta-adrenoceptor antagonists at the human beta1, beta2 and beta3 adrenoceptors. Br J Pharmacol. 2005 Feb;144(3):317-22.

[3]. Maria Hoeltzenbein, et al. Pregnancy outcome after first trimester exposure to bisoprolol: an observational cohort study. J Hypertens. 2018 Oct;36(10):2109-2117.

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