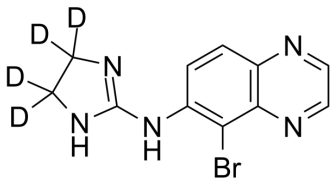
Brimonidine-d4

Cat. No.:	HY-B0659S
CAS No.:	1184971-51-4
Molecular Formula:	$C_{11}H_6D_4BrN_5$
Molecular Weight:	296.16
Target:	Adrenergic Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Brimonidine-d4 is the deuterium labeled Brimonidine. Brimonidine (UK 14304) is a full α2-adrenergic receptor (α2-AR) agonist.
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]. Andorn, A.C., M.A. Carlson, and R.C. Gilkeson, Specific [3H]UK 14,304 binding in human cortex occurs at multiple high affinity states with alpha 2-adrenergic selectivity and differing affinities for GTP. Life Sci, 1988. 43(22): p. 1805-12.

[3]. Cambridge, D., UK-14,304, a potent and selective alpha2-agonist for the characterisation of alpha-adrenoceptor subtypes. Eur J Pharmacol, 1981. 72(4): p. 413-5.

[4]. Chopin, P., F.C. Colpaert, and M. Marien, Effects of alpha-2 adrenoceptor agonists and antagonists on circling behavior in rats with unilateral 6-hydroxydopamine lesions of the nigrostriatal pathway. J Pharmacol Exp Ther, 1999. 288(2): p. 798-804.

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

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA