Proteins

Product Data Sheet

(rac)-Nebivolol-d4

Cat. No.: HY-B0203BS1 CAS No.: 1219407-55-2 Molecular Formula: $C_{22}H_{21}D_{4}F_{2}NO_{4}$

Molecular Weight: 409.46

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	(rac)-Nebivolol- d_4 is a labelled racemic Nebivolol. Nebivolol selectively inhibits $\beta 1$ - adrenergic receptor with IC50 of 0.8 nM[1][2].
IC ₅₀ & Target	β adrenergic receptor
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]. Brehm BR, et al. Effects of nebivolol on proliferation and apoptosis of human coronary artery smooth muscle and endothelial cells. Cardiovasc Res. 2001 Feb 1;49(2):430-9.

[3]. Mercanoglu G, et al. The effects of nebivolol on apoptosis in a rat infarct model. Circ J. 2008 Apr;72(4):660-70.

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