
Product Data Sheet

Product Name: (rac)-Nebivolol-d4

Cat. No.: GC62228

Chemical Properties

Cas. No. 1219407-55-2

Formula C₂₂H₂₁D₄F₂NO₄

M.Wt

409.46

Solubility

Storage

Store at -20°C

General tips

For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure **Background**

(Rac)-Nebivolol-d4 ((Rac)-R 065824-d4) is a labelled racemic Nebivolol. Nebivolol selectively inhibits β 1- adrenergic receptor with IC₅₀ of 0.8 nM[1][2].

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].

[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.

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