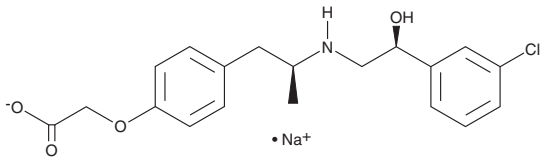
PRODUCT INFORMATION

BRL 37344 (sodium salt)

Item No. 18622

CAS Registry No.: 127299-93-8
Formal Name: *rel*-2-[4-[(2S)-2-[[(2S)-2-(3-chlorophenyl)-2-hydroxyethyl]amino]propyl]phenoxy]-acetic acid, monosodium salt
Synonym: BRL 37344A
MF: $C_{19}H_{21}ClNO_4 \bullet Na$
FW: 385.8
Purity: ≥98%
UV/Vis.: λ_{max}: 218, 274 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

BRL 37344 (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the BRL 37344 (sodium salt) in the solvent of choice, which should be purged with an inert gas. BRL 37344 (sodium salt) is soluble in the organic solvent DMSO at a concentration of approximately 5 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of BRL 37344 (sodium salt) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of BRL 37344 (sodium salt) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

BRL 37344 is a selective agonist of β_3-adrenergic receptors with K_i values of 0.43, 9.17, and 37.9 µM for β_3, β_2, and β_1, respectively.[1] β_3-Adrenoceptors are expressed in adipose tissue as well as endothelial and myocardial tissues.[2] This compound has been used to explore the role of these receptors in the regulation of thermogenesis and lipolysis and to modulate cardiac function in models of cardiovascular disease.[3] It has also been used in rodents to study the role that β_3-adrenergic receptors play in regulating anxiety-like behaviors.[4]

References

1. Hoffmann, C., Leitz, M.R., Oberdorf-Maass, S., *et al*. Comparative pharmacology of human β-adrenergic receptor subtypes-characterization of stably transfected receptors in CHO cells. *Naunyn Schmiedebergs Arch. Pharmacol.* **369(2)**, 151-159 (2004).
2. Kanzler, S.A., Januario, A.C., and Paschoalini, M.A. Involvement of β_3-adrenergic receptors in the control of food intake in rats. *Braz. J. Med. Biol. Res.* **44(11)**, 1141-1147 (2011).
3. Niu, X., Zhao, L., Li, X., *et al*. β_3-Adrenoreceptor stimulation protects against myocardial infarction injury *via* eNOS and nNOS activation. *PLoS One* **9(6)**, (2014).
4. Butler, T.R., Chappell, A.M., and Weiner, J.L. Effect of β_3 adrenoceptor activation in the basolateral amygdala on ethanol seeking behaviors. *Psychopharmacology (Berl)* **231(1)**, 293-303 (2014).

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