
Product Data Sheet

Product Name: (+)-Penbutolol ((R)-Penbutolol)

Cat. No.: GC31597

Chemical Properties

Cas. No. 38363-41-6

SMILES O[C@@H](COC1=C(C=CC=C1)C2CCCC2)CNC(C)(C)C

Formula $C_{18}H_{29}NO_2$ M.Wt 291.43

Solubility DMSO : 100 mg/mL (343.14 mM; Need ultrasonic) 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

(+)-Penbutolol is a β -adrenoceptor antagonist, with an IC_{50} of 0.74 μ M[1]. (+)-Penbutolol is an optical isomer of l-penbutolol with Na^+ channel-blocking action[2].

(+)-penbutolol on the $[Ca^{2+}]_i$ -increase induced by LPC is concentration-dependent[1]. (+)-penbutolol inhibits the rounding of cells dose dependently ($8\pm 4\%$, $56\pm 4\%$ and $66\pm 2\%$ at the concentrations of 10^{-6} M, 5×10^{-6} M and 10^{-5} M, respectively)[2].

[1]. Chen M, et al. Effects of beta-adrenoceptor antagonists on Ca^{2+} -overload induced by lysophosphatidylcholine in rat isolated cardiomyocytes. Br J Pharmacol. 1996 Jun;118(4):865-70. [2]. Hashizume H, et al. Effects of antiischemic drugs on veratridine-induced hypercontracture in rat cardiac myocytes. Eur J Pharmacol. 1994 Dec 12;271(1):1-8.

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA