Data Sheet   (Cat.No.T13465)
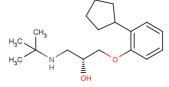
TargetMol
A DRUG SCREENING EXPERT

(+)-Penbutolol

Chemical Properties

CAS No.:	38363-41-6
Formula：	C18H29NO2
Molecular Weight：	291.43
Appearance:	N/A
Storage：	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	(+)-Penbutolol is an antagonist of β-adrenoceptor(IC50 of 0.74 μM). (+)-Penbutolol is an optical isomer of l-penbutolol with Na+ channel-blocking action.
Targets(IC$_{50}$)	β-adrenoceptor: 0.74 μM
In vitro	LPC is concentration-dependent induce (+)-penbutolol on the [Ca2+]i-increase [1]. (+)-penbutolol inhibits the rounding of cells dose dependently (8±4%, 56±4% and 66±2% at the concentrations of 10-6 M, 5×10-6 M and 10-5 M, respectively)[2].

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.431 mL	17.157 mL	34.314 mL
5 mM	0.686 mL	3.431 mL	6.863 mL
10 mM	0.343 mL	1.716 mL	3.431 mL
50 mM	0.069 mL	0.343 mL	0.686 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

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.