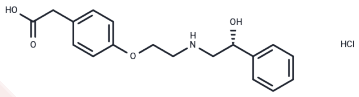
Data Sheet (Cat.No.T23557)

TargetMol

Talibegron hydrochloride

Chemical Properties



CAS No. : 178600-17-4

Formula: C18H22ClNO4

Molecular Weight: 351.83

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Talibegron hydrochloride (ZD2079 hydrochloride) is a β3 adrenergic receptor agonist with a pD2 of 3.72 on phenylephrine-preconstricted rat mesenteric artery. It relaxes rat mesenteric artery and isolated aorta in vitro, and inhibits ob gene expression and circulating leptin levels in lean mice in vivo.
Targets(IC50)	Adrenergic Receptor
In vitro	Talibegron hydrochloride (0.01-1000 μM) produces a concentration-dependent relaxation of phenylephrine-preconstricted isolated mesenteric arteries and causes full relaxation with 1 mM[1].
In vivo	The β3-adrenoceptor agonist talibegron hydrochloride produced a concentration-dependent relaxation of phenylephrine-preconstricted isolated mesenteric arteries. The shape of the concentration-response curve of talibegron hydrochloride also suggests that this drug, which was studied up to 1 mm, causes full relaxation [3].

Solubility Information

Solubility	H2O: < 8.8 mg/mL,Sonication is recommended. DMSO: 230 mg/mL (653.72 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 10 mg/mL (28.42 mM),Solution. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8423 mL	14.2114 mL	28.4228 mL
5 mM	0.5685 mL	2.8423 mL	5.6846 mL
10 mM	0.2842 mL	1.4211 mL	2.8423 mL
50 mM	0.0568 mL	0.2842 mL	0.5685 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Hanna Kozłowska, et al. Atypical beta-adrenoceptors, different from beta 3-adrenoceptors and probably from the low-affinity state of beta 1-adrenoceptors, relax the rat isolated mesenteric artery. Br J Pharmacol. 2003 Sep;140 (1):3-12.

Brawley L, et al. Role of endothelium/nitric oxide in atypical beta-adrenoceptor-mediated relaxation in rat isolated aorta. Eur J Pharmacol. 2000 Jun 16;398(2):285-96.

Kozłowska H, et al. Atypical beta-adrenoceptors, different from beta 3-adrenoceptors and probably from the low-affinity state of beta 1-adrenoceptors, relax the rat isolated mesenteric artery. Br J Pharmacol. 2003 Sep;140(1):3-12.