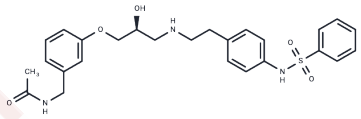
Data Sheet (Cat.No.T22905)

L748337

Chemical Properties



CAS No. : 244192-94-7

Formula: C26H31N3O5S

Molecular Weight: 497.61

Storage: Keep away from moisture,Store at low temperature
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	L748337 is a competitive and potent β3-adrenoceptor antagonist that inhibits the action of β3-, β2-, and β1-adrenoceptors, activates MAPK signaling, promotes phosphorylation of Erk1/2, and inhibits the protective effects of CL316243, and is used in the study of disorders caused by abnormalities of the β3-adrenoceptors.
Targets(IC50)	Adrenergic Receptor
In vitro	The β3-adrenergic receptor selective antagonist L748337 (100nM) partially antagonized the relaxation induced by (-)-isoprenaline in cav-1KO arteries, but did not antagonize the relaxation in WT arteries[1].
In vivo	L748337 (5 mg/kg) exhibits anti-cancer effects in male C57BL/6 J mice (8 weeks of age) bearing syngeneic B16F10 cells[1].

Solubility Information

Solubility	Ethanol: 20 mg/mL (40.19 mM),Sonication is recommended. DMSO: 80 mg/mL (160.77 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.3 mg/mL (6.63 mM),Sonication is recommended. *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	2.0096 mL	10.048 mL	20.0961 mL
5 mM	0.4019 mL	2.0096 mL	4.0192 mL
10 mM	0.201 mL	1.0048 mL	2.0096 mL
50 mM	0.0402 mL	0.201 mL	0.4019 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

S Neidhold, et al. The function of alpha- and beta-adrenoceptors of the saphenous artery in caveolin-1 knockout and wild-type mice. Br J Pharmacol. 2007 Feb;150(3):261-70.

Masaaki Sato, et al. The beta3-adrenoceptor agonist 4-[[(Hexylamino)carbonyl]amino]-N-[4-[2-[[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propyl]amino]ethyl]-phenyl]-benzenesulfonamide (L755507) and antagonist (S)-N-[4-[2-[[3-[3-(acetamidomethyl)phenoxy]-2-hydroxypropyl]amino]-ethyl]phenyl]benzenesulfonamide (L748337) activate different signaling pathways in Chinese hamster ovary-K1 cells stably expressing the human beta3-adrenoceptor. Mol Pharmacol. 2008 Nov;74(5):1417-28.

Ziwen Wang, et al. The protective effects of the β3 adrenergic receptor agonist BRL37344 against liver steatosis and inflammation in a rat model of high-fat diet-induced nonalcoholic fatty liver disease (NAFLD). Mol Med. 2020 Jun 5;26(1):54.