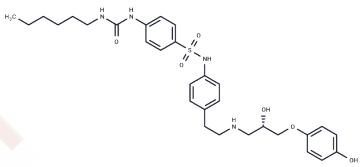
Data Sheet (Cat.No.T6872)

L755507

Chemical Properties



CAS No. : 159182-43-1

Formula: C30H40N4O6S

Molecular Weight: 584.73

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	L755507 is an effective, selective agonist of β3-AR(IC50=35 nM).
Targets(IC50)	Adrenergic Receptor,CRISPR/Cas9
In vitro	L-755,507 displays an excellent activity profile as an extremely potent human β3 adrenergic receptor agonist (β3 EC50 0.43 nM), with >440-fold selectivity over β1 and β2 binding[1]. L755507 causes a robust concentration-dependent increase in cAMP accumulation in CHO-K1 cells expressing human β3-adrenoceptors(pEC50 values of 12.3)[4]. In a recent study employing a high-throughput screen to identify chemicals capable of modulating HR-mediated genome editing, L-755507 is identified that could enhance HR repair by up to ninefold[3].
In vivo	Acute exposure of rhesus monkeys to L-755,507 elicits lipolysis and metabolic rate elevation, and that chronic exposure increases uncoupling protein 1 expression in rhesus brown adipose tissue[2].

Solubility Information

Solubility	DMSO: 40 mg/mL (68.41 mM),Sonication is recommended. Ethanol: 58.5 mg/mL (100.05 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: 2 mg/mL (3.42 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	1.7102 mL	8.551 mL	17.1019 mL
5 mM	0.342 mL	1.7102 mL	3.4204 mL
10 mM	0.171 mL	0.8551 mL	1.7102 mL
50 mM	0.0342 mL	0.171 mL	0.342 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

Parmee ER, et al. Bioorg Med Chem Lett. 1998, 8(9):1107-1112.
Fisher MH, et al. J Clin Invest. 1998, 101(11): 2387-2393.
Yu C, et al. Cell Stem Cell. 2015, 16(2):142-147.
Sato M, et al. Mol Pharmacol. 2008, 74(5):1417-1428.