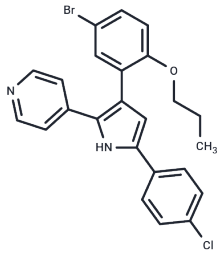
Data Sheet (Cat.No.T22893)

TargetMol

L-168049

Chemical Properties



CAS No. : 191034-25-0

Formula: C24H20BrClN2O

Molecular Weight: 467.79

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	L-168049 is a selective and non-competitive antagonist of human glucagon receptor with IC50s of 3.7 nM, 63 nM, and 60 nM for human, murine, and canine, respectively.
Targets(IC50)	Glucagon Receptor
In vitro	In Chinese hamster ovary cells expressing the human glucagon receptor, L-168049 increases the apparent EC50 of glucagon-stimulated adenylate cyclase and decreases maximal glucagon stimulation with a Kb of 25 nM[1]. L-168049 blocks glucagon-stimulated cAMP formation in mouse liver membrane and inhibits glucagon (100 pM)-stimulated cAMP synthesis in CHO cells expressing the human glucagon receptor with IC50 of 41 nM [3].
In vivo	In the liver of L-G6pc-/- mice, L-168049 (50 mg/kg body; p.o.) reduces Pck1 mRNA expression by half within 6 hours. L-168049 prevents the increase in G6pc expression in the kidney and gut [2].

Solubility Information

Solubility	Ethanol: 3.4 mM,Sonication is recommended. DMSO: insoluble (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1377 mL	10.6886 mL	21.3771 mL
5 mM	0.4275 mL	2.1377 mL	4.2754 mL
10 mM	0.2138 mL	1.0689 mL	2.1377 mL
50 mM	0.0428 mL	0.2138 mL	0.4275 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

M A Cascieri, et al. Characterization of a novel, non-peptidyl antagonist of the human glucagon receptor. J Biol Chem. 1999 Mar 26;274(13):8694-7.

Elodie Mutel, et al. Control of blood glucose in the absence of hepatic glucose production during prolonged fasting in mice: induction of renal and intestinal gluconeogenesis by glucagon. Diabetes. 2011 Dec;60(12):3121-31.

S E de Laszlo, et al. Potent, orally absorbed glucagon receptor antagonists. Bioorg Med Chem Lett. 1999 Mar 8;9(5):641-6.