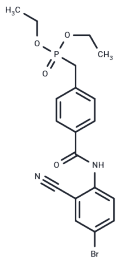
Data Sheet (Cat.No.T7832)

TargetMol

Ibrolipim

Chemical Properties



CAS No. : 133208-93-2

Formula: C19H20BrN2O4P

Molecular Weight: 451.25

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	Ibrolipim (NO-1886) attenuates high glucose-induced endothelial dysfunction in cultured human umbilical vein endothelial cells via PI3K/Akt pathway.
Targets(IC50)	Others,Lipase,LPL Receptor
In vitro	Ibrolipim?5 and 50 μmol/L significantly increased cholesterol efflux from THP-1 macrophage-derived foam cells to apoA-I or HDL. Moreover, it upregulated the expression of ABCA1 and ABCG1. In addition, LXRα was also upregulated by the? ibrolipim?treatment. In addition, LXRα small interfering RNA completely abolished the promotion effect that was induced by?ibrolipim[1].
In vivo	Ibrolipim (NO-1886; 100 mg/kg; oral administration; daily; for 8 weeks; female Sprague-Dawley rats) treatment decreases accumulation of visceral fat and suppresses the increase in body weight resulting from the ovariectomy. Ibrolipim decreases the respiratory quotient and increases expression of the fatty acid translocase messenger RNA (mRNA) in the liver, soleus muscle, and mesenteric fat. Ibrolipim also increases the expression of fatty acid-binding protein mRNA in the liver and soleus muscle and the expression of the uncoupling protein 3 (UCP3) mRNA in the heart, soleus muscle, and mesenteric fat, but not in the brown adipose tissue[2]
Cell Research	Human THP-1 cells pre-incubated with ox-LDL served as foam cell models. Specific mRNA was quantified using real-time RT-PCR and protein expression using Western blotting. Cellular cholesterol handling was studied using cholesterol efflux experiments and high performance liquid chromatography assays[1]
Animal Research	Animal Model: Female Sprague-Dawley rats (10-week-old; 200-260 g) with experimental ovariectomy treatment. Dosage: 100 mg/kg ? ? ??. Administration: Oral administration; daily; for 8 weeks[2]

Solubility Information

Solubility	DMSO: 125 mg/mL (277.01 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: 4 mg/mL (8.86 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one.*

In vivo Formulation	*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	2.2161 mL	11.0803 mL	22.1607 mL
5 mM	0.4432 mL	2.2161 mL	4.4321 mL
10 mM	0.2216 mL	1.108 mL	2.2161 mL
50 mM	0.0443 mL	0.2216 mL	0.4432 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

Chen SG, et al. Ibrolipim increases ABCA1/G1 expression by the LXRα signaling pathway in THP-1 macrophage-derived foam cells. Acta Pharmacol Sin. 2010 Oct;31(10):1343-9.

Kano S , Doi M . NO-1886 (ibrolipim), a lipoprotein lipase-promoting agent, accelerates the expression of UCP3 messenger RNA and ameliorates obesity in ovariectomized rats[J]. Metabolism-clinical & Experimental, 2006, 55(2): 151-158.