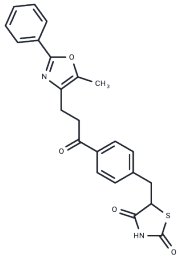
Data Sheet (Cat.No.T22708)

TargetMol

Darglitazone

Chemical Properties



CAS No. : 141200-24-0

Formula: C23H20N2O4S

Molecular Weight: 420.48

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	Darglitazone (CP-86325) is a potent, selective agonist of PPAR-γ with antidiabetic actions. Darglitazone is effective in controlling blood glucose and lipid metabolism.
Targets(IC50)	PPAR
In vitro	Darglitazone (30 μM) stimulated UCP2 gene expression, likely through PPAR-γ, and increased UCP2 mRNA levels in cell lines representing white (3T3-L1 and 3T3-F442A), brown (HIB-1B) adipose tissues, and skeletal muscle (L6) [1].
In vivo	In male diabetic ob/ob mice, Darglitazone dramatically reduces the infarct size in the ob/ob mice at 24?h of recovery. Normalized blood glucose and reduced circulating triglycerides (TG) and very-low-density lipoproteins (VLDL) in diabetic ob/ob mice without having any effect in the nondiabetic mice. Darglitazone treatment restores acute cerebral inflammatory responses that were absent in the diabetic mice and profoundly improved their recovery from hypoxic-ischemic (H/I) insult[2].

Solubility Information

Solubility	DMSO: 75 mg/mL (178.37 mM),Sonication is recommended. Ethanol: ≤ 5 mg/mL,Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 7.5 mg/mL (17.84 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 7.5 mg/mL (17.84 mM),Solution. 10% DMSO+90% Corn Oil: 2.5 mg/mL (5.95 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	2.3782 mL	11.8912 mL	23.7823 mL
5 mM	0.4756 mL	2.3782 mL	4.7565 mL
10 mM	0.2378 mL	1.1891 mL	2.3782 mL
50 mM	0.0476 mL	0.2378 mL	0.4756 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

A Camirand, et al. Thiazolidinediones stimulate uncoupling protein-2 expression in cell lines representing white and brown adipose tissues and skeletal muscle. Endocrinology. 1998 Jan;139(1):428-31.
Rashmi Kumari, et al. The PPAR-gamma agonist, darglitazone, restores acute inflammatory responses to cerebral hypoxia-ischemia in the diabetic ob/ob mouse. J Cereb Blood Flow Metab. 2010 Feb;30(2):352-60.