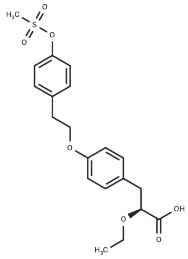
Data Sheet (Cat.No.T17044)

TargetMol

Tesaglitazar

Chemical Properties



CAS No. : 251565-85-2

Formula: C20H24O7S

Molecular Weight: 408.47

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	Tesaglitazar is a potent and selective peroxide PPARα / γ receptor dual agonist with a more potent affinity for PPARγ than PPARα, The EC50 values for rat PPARα and human PPARα were 13.4 μM and 3.6 μM, respectively, and 0.2 μM for rat PPARγ and human PPARγ. Tesaglitazar induced DNA synthesis and fibrosarcoma formation in rat subcutaneous mesenchymal cells.
Targets(IC50)	PPAR
In vivo	The aim of the present study was to determine whether tesaglitazar attenuates NAFLD and atherosclerosis development in diabetic low-density lipoprotein receptor-deficient (LDLr(-/-)) mice. Tesaglitazar therapeutic group (n=15, 20 μg/kg/day oral treatment for 6 weeks). Tesaglitazar decreased serum glucose and lipid levels compared with the diabetic mice and significantly reduced atherosclerotic lesions, lipid accumulation in the liver, macrophage infiltration, and decreased total hepatic cholesterol and triglyceride content compared to the diabetic mice. In addition, tesaglitazar reduced inflammatory markers at both the serum and mRNA levels. Tesaglitazar may be effective in preventing NAFLD and atherosclerosis in a pre-existing diabetic condition by regulating glucose and lipid metabolism, and the inflammatory response.[1]

Solubility Information

Solubility	DMSO: 260 mg/mL (636.52 mM),Sonication and heating to 60℃ are recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4482 mL	12.2408 mL	24.4816 mL
5 mM	0.4896 mL	2.4482 mL	4.8963 mL
10 mM	0.2448 mL	1.2241 mL	2.4482 mL
50 mM	0.049 mL	0.2448 mL	0.4896 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

Zhang BC, et al. Tesaglitazar ameliorates non-alcoholic fatty liver disease and atherosclerosis development in diabetic low-density lipoprotein receptor-deficient mice. Exp Ther Med. 2012;4(6):987-992.
Hellmold H, et al. Tesaglitazar, a PPARalpha/gamma agonist, induces interstitial mesenchymal cell DNA synthesis and fibrosarcomas in subcutaneous tissues in rats. Toxicol Sci. 2007;98(1):63-74.
Glinghammar B, et al. Proliferative and molecular effects of the dual PPARalpha/gamma agonist tesaglitazar in rat adipose tissues: relevance for induction of fibrosarcoma. Toxicol Pathol. 2011;39(2):325-336.
Osinski V, et al. In vivo liposomal delivery of PPARα/γ dual agonist tesaglitazar in a model of obesity enriches macrophage targeting and limits liver and kidney drug effects. Theranostics. 2020;10(2):585-601.