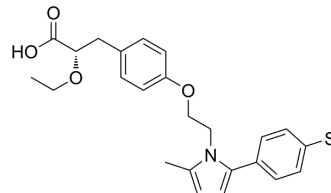


Saroglitazar

Cat. No.:	HY-19937												
CAS No.:	495399-09-2												
Molecular Formula:	C ₂₅ H ₂₉ NO ₄ S												
Molecular Weight:	439.57												
Target:	PPAR												
Pathway:	Cell Cycle/DNA Damage; Vitamin D Related/Nuclear Receptor												
Storage:	<table border="0"> <tr> <td>Pure form</td> <td>-20°C</td> <td>3 years</td> </tr> <tr> <td></td> <td>4°C</td> <td>2 years</td> </tr> <tr> <td>In solvent</td> <td>-80°C</td> <td>6 months</td> </tr> <tr> <td></td> <td>-20°C</td> <td>1 month</td> </tr> </table>	Pure form	-20°C	3 years		4°C	2 years	In solvent	-80°C	6 months		-20°C	1 month
Pure form	-20°C	3 years											
	4°C	2 years											
In solvent	-80°C	6 months											
	-20°C	1 month											



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 25 mg/mL (56.87 mM)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.2750 mL	11.3748 mL	22.7495 mL
	5 mM	0.4550 mL	2.2750 mL	4.5499 mL
	10 mM	0.2275 mL	1.1375 mL	2.2750 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
 Solubility: ≥ 2.5 mg/mL (5.69 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Saroglitazar is a novel peroxisome proliferator-activated receptor (PPAR) agonist with predominant PPAR α and moderate PPAR γ activity with EC₅₀ values of 0.65 pM and 3 nM in HepG2 cells, respectively.

IC₅₀ & Target

PPAR α 0.65 pM (EC ₅₀ , HepG2 cell)	PPAR γ 3 nM (EC ₅₀ , HepG2 cell)
--	---

In Vivo

In db/db mice, 12-day treatment with Saroglitazar (0.01-3 mg/kg per day, orally) causes dose-dependent reductions in serum triglycerides (TG), free fatty acids (FFA), and glucose. The ED₅₀ for these effects is found to be 0.05, 0.19, and 0.19 mg/kg, respectively with highly significant (91%) reduction in serum insulin and AUC-glucose following oral glucose administration (59%) at 1 mg/kg dose. A 90-day repeated dose comparative study in Wistar rats and marmosets confirms efficacy (TG lowering) potential of Saroglitazar and has indicated low risk of PPAR-associated side effects in humans. Based

on efficacy and safety profile, Saroglitazar appears to have good potential as novel^[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

PROTOCOL

Animal Administration ^[1]

Rats: Rats randomize based on body weights and are divided into three equal groups and receives the daily administration of vehicle (50% w/v honey for marmoset and 0.1% carboxymethylcellulose for Wistar rats) or Saroglitazar (1.5 and 15 mg/kg per day) for 90 days by oral gavage^[1].

Mice: Male C57BL/6J-db/db mice are bled on day 0 to determine pretreatment serum glucose and TG. During next 12 days, each animal is dosed (by oral gavage) with vehicle (0.5% sodium carboxymethyl cellulose) or Saroglitazar (0.01, 0.03, 0.1, 0.3, 1, and 3 mg/kg per day) or pioglitazone (60 mg/kg per day) and on day 12 of the treatment, blood samples are collected (1 h after dosing) from orbital sinus under light ether anesthesia. The serum is isolated and analyzed for glucose, TG, free fatty acid (FFA), and insulin levels^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Cell Biol Toxicol. 2020 Jul 1.
- Patent. US20210275504A1.
- BMC Complement Med Ther. 2021 Apr 10;21(1):118.
- Patent. US20190388398A1.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Jain MR, et al. Saroglitazar, a novel PPAR α / γ agonist with predominant PPAR α activity, shows lipid-lowering and insulin-sensitizing effects in preclinical models. Pharmacol Res Perspect. 2015 Jun;3(3):e00136.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA