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Lieferung & Zahlungsart

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Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
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Saroglitazar

Cat. No.: HY-19937

CAS No.: 495399-09-2

Molecular Formula: $C_{25}H_{29}NO_4S$

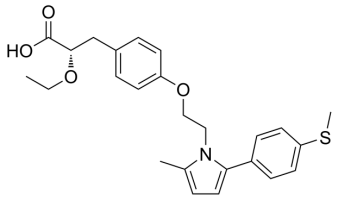
Molecular Weight: 439.57

Target: PPAR

Pathway: Cell Cycle/DNA Damage; Vitamin D Related/Nuclear Receptor

Storage:

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 / Mass / Concentration	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 PPARα and moderate PPARγ activity with EC_{50} values of 0.65 pM and 3 nM in HepG2 cells, respectively.

IC_{50} & Target

PPARα	PPARγ
0.65 pM (EC50, HepG2 cell)	3 nM (EC50, 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 ED_{50} 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 PPARα/γ agonist with predominant PPARα activity, shows lipid-lowering and insulin-sensitizing effects in preclinical models. Pharmacol Res Perspect. 2015 Jun;3(3):e00136.

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