

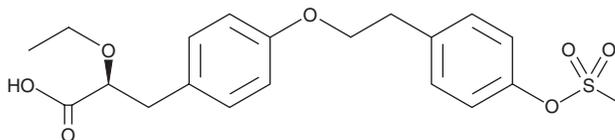
PRODUCT INFORMATION



Tesaglitazar

Item No. 16791

CAS Registry No.: 251565-85-2
Formal Name: αS-ethoxy-4-[2-[4-
[(methylsulfonyl)oxy]phenyl]
ethoxy]-benzenepropanoic acid
Synonym: AZ 242
MF: C₂₀H₂₄O₇S
FW: 408.5
Purity: ≥98%
UV/Vis.: λ_{max}: 225, 275 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Tesaglitazar is supplied as a crystalline solid. A stock solution may be made by dissolving the tesaglitazar in the solvent of choice, which should be purged with an inert gas. Tesaglitazar is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of tesaglitazar in ethanol is approximately 10 mg/ml and approximately 50 mg/ml in DMSO and DMF.

Tesaglitazar is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, tesaglitazar should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Tesaglitazar has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Peroxisome proliferator-activated receptors (PPARs) are activated by fatty acids and eicosanoids as well as antidyslipidemic agents. Among the receptor isotypes, PPAR α demonstrates a particular role in fatty acid oxidation whereas PPAR γ is known to be involved in adipocyte differentiation and lipid storage. Tesaglitazar, a dihydro cinnamate derivative, is a dual agonist of PPAR α and γ that demonstrates IC₅₀ values of 1 and 0.2 μ M, respectively in ligand binding assays.¹ At 3 μ M/kg/day for three weeks, tesaglitazar has been used to reduce insulin resistance in obese Zucker rats.² Furthermore, it has been investigated clinically for its potential to address disorders in glucose and lipid metabolism in patients with type 2 diabetes.³

References

1. Cronet, P., Petersen, J.F.W., Folmer, R., *et al.* Structure of the PPAR α and - γ ligand binding domain in complex with AZ 242; ligand selectivity and agonist activation in the PPAR family. *Structure* **9(8)**, 699-706 (2001).
2. Wallenius, K., Kjellstedt, A., Thalén, P., *et al.* The PPAR α / γ agonist, tesaglitazar, improves insulin mediated switching of tissue glucose and free fatty acid utilization *in vivo* in the obese Zucker rat. *PPAR Res.* 305347 (2013).
3. Wilding, J.P.H., Gause-Nilsson, I., Persson, A., *et al.* Tesaglitazar, as add-on therapy to sulphonylurea, dose-dependently improves glucose and lipid abnormalities in patients with type 2 diabetes. *Diab. Vasc. Dis. Res.* **4(3)**, 194-203 (2007).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 09/14/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM