Troglitazone

Product Number T 2573
Store at Room Temperature

CAS #: 97322-87-7
Synonyms: CS-045
(±)-5-[4-{(6-Hydroxy-2,5,7,8-tetramethylchroman-2-yl) methoxy}benzyl]-2,4-thiazolidinedione

Product Description
Molecular Formula: C_{24}H_{27}NO_{5}S
Molecular Weight: 441.5

Troglitazone, a thiazolidinedione, is a potent and selective PPARγ (peroxisome proliferator-activated receptor γ) agonist. It exhibits an EC_{50} of 550 nM for the human receptor and an EC_{50} of 780 nm for the mouse receptor.¹ No activation of PPARα or PPARδ was observed at up to 10 mM troglitazone. Troglitazone binds to the ligand binding domain (LBD) but does not stimulate the interaction of the PPARγ LBD with the transcriptional coactivators SRC-1, AIB1, TIF2, p300 or TRAP220.²

Troglitazone is an anti-diabetic, decreasing blood glucose in type II diabetes and stimulating glucose transport in adipocytes (EC_{50} = 1 µM).³,⁴ It has anti-inflammatory and anti-tumor activity; inducing apoptosis via a p53 pathway.⁵,⁶

Reagent
The product is supplied as a solid.

Precautions and Disclaimer
Consult the MSDS for information regarding hazards and safe handling practices.

Preparation Instructions
Troglitazone is soluble in dimethyl sulfoxide (DMSO) at 20 mg/ml.

Storage/Stability
Store at room temperature.

References

AC 3/03

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