Cat No. 48-A90

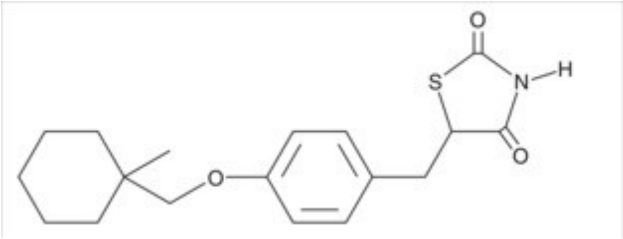
Ciglitazone

5mg

For research purposes only

Ciglitazone is an antihyperglycemic agent of the thiazolidinedione structural class, selective agonist at PPARγ (peroxisome proliferator-activated receptor γ). It activates PPARγ with an EC50 value of 3 µM in vitro, and is at least 33-fold selective over PPARα and δ. Antihyperglycemic in vivo. Ciglitazone inhibits HUVEC differentiation and angiogenesis and also stimulates adipogenesis and decreases osteoblastogenesis in human mesenchymal stem cells.

TECHNICAL INFORMATION



Other Names: 5-[[4-[(1-methylcyclohexyl)methoxy] phenyl]methyl]-2, 4-thiazolidinedione

Chemical Formula: $C_{18}H_{23}NO_3S$

CAS Number: 74772-77-3

PubChem Substance ID: 2750

Molecular Weight: 333.50

Purity: >98%

Appearance: Crystalline Solid

Solubility: DMSO

IC_{50} : 3 µM

STORAGE AND HANDLING

Storage: Store at 4°C and protected from light. Following reconstitution, store aliquots at -20°C.

Stability: Stock solutions stable at -20°C for up to 2 years.

Shipping Conditions: Shipped at room temperature.

PRODUCT USE

Soluble in ≥25mg/mL of DMSO.

REFERENCES

1. Lee, M.W., et al (2012). Cell death is induced by Ciglitazone, a peroxisome proliferator-activated receptor ϒ (PPARϒ) agonist, independently of PPARϒ in human glima cells. Biochem Biophys Res Commun. 417:552-7.
2. Yokoyama, Y., et al (2011). Combination of Ciglitazone, a peroxisome proliferator-activated receptor gamma ligand, and cisplatin enhances the inhibition of growth of human ovarian cancer. J Cancer Res Clin Oncol. 137:1219-28.
3. Lai, L.j., et al (2011). Pigment epithelial-derived factor inhibits c-FLIP expression and assists Ciglitazone-induced apoptosis in hepatocellular carcinoma. Anticancer Res. 31:1173-80.