

Rosiglitazone

Catalog Number :1227342

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Synonyms: Avandia, Rosiglitazone, rosiglitazona, BRL49653, Gaudil

Chemical Name: 5-[[4-[2-[methyl(pyridin-2-yl)amino]ethoxy]phenyl]methyl]-1,3-thiazolidine-2,4-dione

Molecular Formula: C₁₈H₁₉N₃O₃S

Molecular Weight: 357.4

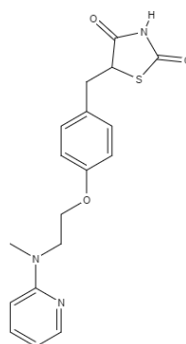
CAS Number: 122320-73-4

Purity: ≥98%

Applications: FA

Formulation: Crystalline solid

Storage: Product should be kept at -20°C.



Description

Rosiglitazone is an antidiabetic agent and a potent selective PPAR γ agonist. It functions as an antidiabetic by binding to fat cell PPAR γ receptors and inducing greater insulin sensitivity in the cells. It is reported to stimulate neuronal differentiation and proliferation. In angiogenic progenitor cells, Rosiglitazone promotes the differentiation of endothelial cells and inhibits smooth muscle differentiation.

Preparation & Storage

Soluble in organic solvents such as ethanol or DMSO. DMSO up to 95mM.

References

1. Fryer, L. G., Parbu-Patel, A., Carling, D. (2002). The anti-diabetic drugs rosiglitazone and metformin stimulate AMP-activated protein kinase through distinct signaling pathways.;*Journal of Biological Chemistry*.;277(28), 25226-25232.
2. DREAM (Diabetes REduction Assessment with ramipril and rosiglitazone Medication) Trial Investigators. (2006). Effect of rosiglitazone on the frequency of diabetes in patients with impaired glucose tolerance or impaired fasting glucose: a randomised controlled trial.;*The Lancet*.;368(9541), 1096-1105.
3. Wang, C. H., Ciliberti, N., Li, S. H., Szmítko, P. E., Weisel, R. D., Fedak, P. W., ... Verma, S. (2004). Rosiglitazone facilitates angiogenic progenitor cell differentiation toward endothelial lineage a new paradigm in glitazone pleiotropy.*Circulation*.;109(11), 1392-1400.