



Data Sheet

Research Use Only

Compound Name

Rosiglitazone

Catalog Number

SM86

Alternative Names

BRL 49653, 5-[[4-[2-(Methyl-2-pyridinylamino)ethoxy]phenyl]methyl]-2,4-thiazolidinedione

Activity

Rosiglitazone is a potent and selective agonist for PPAR γ (Peroxisome proliferator-activated receptor). PPAR γ plays a functional role in adipogenesis, it belongs to a group of nuclear receptor proteins that are essential to the regulation of cellular differentiation, development and metabolism. It activates luciferase-based expression constructs PPAR γ 1 and PPAR γ 2.

Effect

It is antidiabetic, working as an insulin sensitizer by binding to the PPAR γ receptors in fat cells and making the cells more responsive to insulin. Rosiglitazone induced adipocyte differentiation in pluripotent C3H10T1/2 stem cells. It also significantly increased the differentiation of multinucleated osteoclasts.

Purity

>98%

CAS

122320-73-4

Formula

C₁₈H₁₉N₃O₃S

Molecular Weight

357.43

Solubility

DMSO

Stability

Stable at -20°C. Keep away from direct sunlight.

References

1. García-Ruiz, I., et al. 2007. Hepatology. 46(2): 414-423. PMID: 17654601
2. Zhang, XZ. 2010. Reprod Biomed Online. 21(1): 26-36. PMID: 20462797
3. Lyssiotis, Ca., et al. 2011. Angew Chem Int Ed Engl. 50(1): 200-242. PMID: 21184400
4. Wu, H., et al. 2013. J Cell Biochem. 114(9): 1969-1977. PMID: 23494891