

Catalog # 10-1012 Rosiglitazone Maleate

CAS# 155141-29-0

5-[[4-[2-(Methyl-2-pyridinylamino)ethoxy]phenyl]methyl]-2,4-thiazolidinedione maleate; Avandia; BRL49653 Lot # X104131

Prototypical TZD antidiabetic agent. Potent and selective PPARγ agonist (K_d=43 nM).^{1,2} Clinically useful antihyperglycemc agent.³ Induces a brown fat gene program in subcutaneous white adipose tissue via activation of the PRDM16 protein.⁴ Induces differentiation of pluripotent stem cells into adipocytes.⁵

- 1) Cantello *et al.* (1994), [[omega-(Heterocyclylamino)alkoxy]benzyl]-2,4-thiazolidinediones as potent antihyperglycemic agents; J. Med. Chem., **37** 3977
- 2) Lehmann et al. (1995) An antidiabetic thiazolidinedione is a high affinity ligand for peroxisome proliferator-activated receptor gamma (PPARgamma); J.Biol.Chem., **270** 12953
- 3) Wilson et al. (1996), The structure-activity relationship between peroxisome proliferator-activated receptor gamma agonism and the antihyperglycemic activity of thiazolidinediones; J. Med. Chem., **39** 665
- 4) Haruya et al. (2012), PPARgamma agonists induce a white-to-brown fat conversion through stabilization of PRDM16 protein; Cell Metab., **15** 395
- 5) Ruiz-Ojeda et al. (2016), Cell Models and their Application for Studying Adipogenic Differentiation in Relation to Obesity: A Review, Int. J. Mol. Sci., **17 E**1040

PHYSICAL DATA

Molecular Weight: 473.52

Molecular Formula: C₁₈H₁₉N₃O₃S·C₄H₄O₄

Purity: 98% by TLC

NMR: (Conforms)

Solubility: DMSO (up to 50 mg/ml)

Physical Description: White solid

Storage and Stability: Store as supplied at room temperature for up to 2 years from the date of purchase. Solutions in

DMSO may be stored at -20°C for up to 3 months.

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