Phone: 888-558-5227

651-644-8424

Fax: 888-558-7329 Email: getinfo@lktlabs.com

Web: lktlabs.com

Product Information

Product ID R5772

CAS No. 155141-29-0

Chemical Name 5-[[4-[2-(Methyl-2-pyridinylamino)ethoxy]phenyl]methyl]-2,4-

thiazolidinedione

Synonym BRL-49653c, Avandia

Formula C₁₈H₁₉N₃O₃S • C₄H₄O₄

Formula Wt. 473.51 Melting Point 122-123°C

Purity ≥98%

Solubility Readily soluble in ethanol

and in buffered aqueous solutions with a pH of 2.3.

Store Temp Ambient

Ship Temp Ambient

Bulk quanitites available upon request

Size
100 mg
500 mg
1 g
5 g

Description Rosiglitazone is a thiazolidinedione insulin sensitizer that activates PPARy, decreasing blood glucose and insulin levels. Rosiglitazone exhibits anti-diabetic, anti-inflammatory, antioxidative, anticancer, anti-angiogenic, antihypertensive, and antifibrotic activities. In vivo, rosiglitazone decreases LPS-stimulated production of TNF-α, IL-1B, and IL-6 as well as activity of myeloperoxidase; it also inhibits activation of NF-κB, preventing mastitis. In multiple myeloma cells, rosiglitazone suppresses expression of HIF-1α and IGF-1, decreases activation of Aky, and Erk, and inhibits cell viability and proliferation. This compound also inhibits endothelin-1-induced vasoconstriction in a NO-dependent manner in animal models of pulmonary arterial hypertension. Additionally, rosiglitazone prevents activation of AP-1, production of collagen, and differentiation in fibroblasts.

References Rui M, Huang Z, Liu Y, et al. Rosiglitazone suppresses angiogenesis in multiple myeloma via downregulation of hypoxia inducible factor 1α and insulin like growth factor 1 mRNA expression. Mol Med Rep. 2014 Jul 22. [Epub ahead of print]. PMID: 25050627.

> Mingfeng D, Xiaodong M, Yue L, et al. Effects of PPAR-y Agonist Treatment on LPS-Induced Mastitis in Rats. Inflammation. 2014 May 18. [Epub ahead of print]. PMID: 24839089.

> Liu Y, Tian XY, Huang Y, et al. Rosiglitazone Attenuated Endothelin-1-Induced Vasoconstriction of Pulmonary Arteries in the Rat Model of Pulmonary Arterial Hypertension via Differential Regulation of ET-1 Receptors. PPAR Res. 2014;2014:374075. PMID: 24701204.

He H, Tao H, Xiong H, et al. Rosiglitazone causes cardiotoxicity via peroxisome proliferator-activated receptor γ-independent mitochondrial oxidative stress in mouse hearts. Toxicol Sci. 2014 Apr; 138(2):468-81. PMID: 24449420.

Hou X, Zhang Y, Shen YH, et al. PPAR-γ activation by rosiglitazone suppresses angiotensin II-mediated proliferation and phenotypictransition in cardiac fibroblasts via inhibition of activation of activator protein 1. Eur J Pharmacol. 2013 Sep 5;715(1 -3):196-203. PMID: 23791613.

Sharma AN, Elased KM, Lucot JB. Rosiglitazone treatment reversed depression- but not psychosis-like behavior of db/db diabetic mice. J Psychopharmacol. 2012 May;26(5):724-732. PMID: 22331176.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.