

CAS Number:

**Certificate of Analysis** 

Print Date: Jan 15th 2016

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Catalog No.: 1307 Batch No.: 1

**Product Name: Ciglitazone** 

IUPAC Name: 5-[[4-[(1-Methylcyclohexyl)methoxy]phenyl]methyl]-2,4-thiazolidinedione

## 1. PHYSICAL AND CHEMICAL PROPERTIES

74772-77-3

Batch Molecular Formula: C<sub>18</sub>H<sub>23</sub>NO<sub>3</sub>S Batch Molecular Weight: 333.44

Physical Appearance: White solid

**Solubility:** DMSO to 100 mM

1eq. NaOH to 100 mM

Storage: Store at RT

Batch Molecular Structure:

#### 2. ANALYTICAL DATA

**TLC:**  $R_f = 0.4$  (Ethyl acetate:Petroleum ether [3:7])

Melting Point:

Between 126 - 128°C

HPLC:

Shows >99.4% purity

1H NMR:

Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 64.84 6.95 4.2 0 0 0 0 Found 64.53 6.93 4.16 0 0 0



# **Product Information**

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IUPAC Name: 5-[[4-[(1-Methylcyclohexyl)methoxy]phenyl]methyl]-2,4-thiazolidinedione

# **Description:**

Selective agonist at PPAR $\gamma$  (peroxisome proliferator-activated receptor  $\gamma$ ). Activates PPAR $\gamma$  with an EC $_{50}$  value of 3  $\mu$ M in vitro, and is at least 33-fold selective over PPAR $\alpha$  and  $\delta$ . Antihyperglycemic in vivo.

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Minimum Purity: >99%

#### **Batch Molecular Structure:**

Storage: Store at RT

#### Solubility & Usage Info:

DMSO to 100 mM 1eg. NaOH to 100 mM

#### Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

## References:

Willson et al (1996) The structure-activity relationship between peroxisome proliferator receptor γ agonism and the antihyperglycemic activity of thiazolidinediones. J.Med.Chem. 39 665. PMID: 8576907.

Xin et al (1999) Peroxisome proliferator-activated receptor γ ligands are potent inhibitors of angiogenesis in vitro and in vivo. J.Biol.Chem. 274 9116. PMID: 10085162.

Jh (1999) Thiazolidinediones - the new insulin enhancers. Clin.Exp.Hypertens. 21 157. PMID: 10052651.

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