



LKT Laboratories, Inc.

## Troglitazone

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### Product Information

**Product ID** T7056

**CAS No.** 97322-87-7

**Chemical Name** 5-[[4-[(3,4-Dihydro-6-hydroxy-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl)methoxy]phenyl]methyl]-2,4-thiazolidinedione

**Synonym** Noscalt, Prelay, Rezulin, Romozin

**Formula** C<sub>24</sub>H<sub>27</sub>NO<sub>5</sub>S

**Formula Wt.** 441.54

**Melting Point** 184-186°C

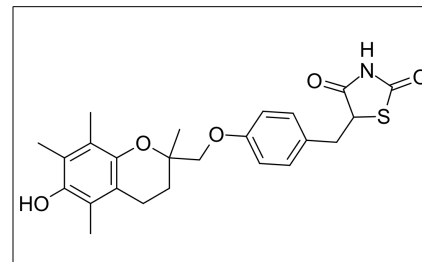
**Purity** ≥97%

**Solubility** Soluble in DMSO 15mg/mL, and dimethyl formide. Slightly soluble in 100% ethanol (warm).

**Store Temp** Ambient

**Ship Temp** Ambient

**Description** Troglitazone is a thiazolidinedione PPAR $\gamma$  agonist that exhibits anti-diabetic, anticancer, anti-fibrotic, and anti-inflammatory activities. Troglitazone contains a vitamin E-like ring structure that forms hepatotoxic metabolites in vivo. Troglitazone induces apoptosis in cervical cancer cells and decreases expression and activity of telomerase in ER- breast cancer cells. In vitro, troglitazone activates AMPK, decreases membrane potential, inhibits high glucose-closed ATP-sensitive K<sup>+</sup> channels, and decreases insulin hypersecretion. In alveolar epithelial cells, troglitazone inhibits TGF- $\beta$ 1-induced activation of Akt, GSK-3 $\beta$  and Smad2/3, decreases  $\beta$ -catenin signaling, and suppresses epithelial-to-mesenchymal transition (EMT). Additionally, this compound inhibits PAM-induced increases in TGF- $\beta$ 1 and increases MUC1 expression in airway epithelial cells.



### Pricing and Availability

**Bulk quantities available upon request**

Product ID	Size	List Price
T7056	10 mg	\$127.90
T7056	50 mg	\$491.30
T7056	100 mg	\$727.30

**References** Chen HM, Zhang DG, Wu JX, et al. Ubiquitination of p53 is involved in troglitazone induced apoptosis in cervical cancer cells. *Asian Pac J Cancer Prev.* 2014;15(5):2313-8. PMID: 24716976.

Deng R, Nie A, Jian F, et al. Acute exposure of beta-cells to troglitazone decreases insulin hypersecretion via activating AMPK. *Biochim Biophys Acta.* 2014 Jan;1840(1):577-85. PMID: 24144566.

Zhou B, Buckley ST, Patel V, et al. Troglitazone attenuates TGF- $\beta$ 1-induced EMT in alveolar epithelial cells via a PPAR $\gamma$ -independent mechanism. *PLoS One.* 2012;7(6):e38827. PMID: 22745681.

Park YS, Lillehoj EP, Kato K, et al. PPAR $\gamma$  inhibits airway epithelial cell inflammatory response through a MUC1-dependent mechanism. *Am J Physiol Lung Cell Mol Physiol.* 2012 Apr 1;302(7):L679-87. PMID: 22268120.

Rashid-Kolvear F, Taboski MA, Nguyen J, et al. Troglitazone suppresses telomerase activity independently of PPAR $\gamma$  in estrogen-receptor negative breast cancer cells. *BMC Cancer.* 2010 Jul 22;10:390. PMID: 20650001.

Ozaki S, Minamisono T, Yamashita T, et al. Supersaturation-nucleation behavior of poorly soluble drugs and its impact on the oral absorption of drugs in thermodynamically high-energy forms. *J Pharm Sci.* 2012 Jan;101(1):214-222. PMID: 21918988.

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