# **GW 9578**

Cat. No.: HY-117196 CAS No.:

Molecular Formula:  $C_{26}H_{34}F_2N_2O_3S$ 

Molecular Weight: 492.62 Target: **PPAR** 

Pathway: Cell Cycle/DNA Damage

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

247923-29-1

.OH

**Product** Data Sheet

## **BIOLOGICAL ACTIVITY**

Description	GW9578 is a subtype-selective PPAR $\alpha$ agonist (EC $_{50}$ s of 5 and 50 nM for murine and human PPAR- $\alpha$ ) with potent lipid-lowering activity [1][2].
IC <sub>50</sub> & Target	mouse PPARα h-PPARα   5 nM (EC50) 50 nM (EC50)
In Vitro	GW9578 exhibits activities on Murine PPAR- $\alpha$ , PPAR- $\gamma$ , and PPAR- $\delta$ with EC <sub>50</sub> s of 0.005, 1.5, 2.6 $\mu$ m, respectively. GW9578 exhibits activities on Human PPAR- $\alpha$ , PPAR- $\gamma$ , and PPAR- $\delta$ with EC <sub>50</sub> s of 0.05, 1, and 1.4 $\mu$ m, respectively [2]. Treatment of the CD8 <sup>+</sup> T-cell line, TK.1 cells with GW9578 (10 nM-1 $\mu$ M; for 24 hours) is able to induce a dose-dependent increase in the amount of relative luciferase activity [3]. Treatment of murine T-cell thymoma EL-4 T cells with GW9578 (10 nM-10 $\mu$ M; for 2 hours) leads to a significant decrease in IL-2 production compared with control cells [3]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### **REFERENCES**

[1]. P J Brown, et al. A ureido-thioisobutyric acid (GW9578) is a subtype-selective PPARalpha agonist with potent lipid-lowering activity. J Med Chem. 1999 Sep 23;42(19):3785-8.

[2]. Alexandre Trifilieff, et al. PPAR-alpha and -gamma but not -delta agonists inhibit airway inflammation in a murine model of asthma: in vitro evidence for an NF-kappaBindependent effect. Br J Pharmacol. 2003 May;139(1):163-71.

[3]. Dallas C Jones, et al. Nuclear receptor peroxisome proliferator-activated receptor alpha (PPARalpha) is expressed in resting murine lymphocytes. The PPARalpha in T and B lymphocytes is both transactivation and transrepression competent. J Biol Chem. 2002 Mar 1;277(9):6838-45.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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