



**GW9508** 

Catalog No: tcsc1286



## **Available Sizes**

Size: 10mg

Size: 50mg

Size: 100mg



# **Specifications**

#### CAS No:

885101-89-3

#### Formula:

 $C_{22}H_{21}NO_{3}$ 

# Pathway:

GPCR/G Protein

### **Target:**

GPR40

## **Purity / Grade:**

>98%

## **Solubility:**

DMSO : ≥ 100 mg/mL (287.84 mM)

### **Observed Molecular Weight:**

347.41

# **Product Description**

GW9508 is a potent and selective agonist for FFA1 (GPR40) with pEC50 of 7.32, 100-fold selective against GPR120, stimulates insulin secretion in a glucose-sensitive manner.





IC50 value: 7.32 (pEC50) [1]

Target: GPR40

GW9508 is shown to be at least 100-fold selective against 220 other GPCRs, 60 kinases, 63 proteases, seven integrins and 20 nuclear receptors including PPAR $\alpha$ ,  $\delta$  and  $\gamma$  (pEC50 4.0, 4 and 4.9, respectively). GW9508 produces a concentration-dependent increase in intracellular Ca2+ concentrations via GPR40 receptor activation and the GPR120 receptor. GW9508 is active as an agonist at both GPR40 and GPR120, it is approximately 100-fold selective for GPR40 with respect to GPR120. GW9508 produces a concentration-dependent increase (pEC50=6.14) in glucose-stimulated insulin secretion at high glucose levels (25 mM). GW9508 dose dependently stimulated insulin secretion in a glucose-sensitive manner in MIN6 cells. Furthermore, GW9508 is able to potentiate the KCI-mediated increase in insulin secretion in MIN6 cells. [1] GW9508 induced hyperpolarization and opening of KATP channels in rat  $\beta$ -cells. [2] GW9508 inhibits CCL17 and CCL5 expression in a pertussis toxin-sensitive manner. GW9508 further suppresses expression of IL-11, IL-24, and IL-33 induced in HaCaT cells by TNF- $\alpha$  and IFN- $\gamma$ . GW9508 also inhibits CCL5 and CXCL10 production by normal human epidermal keratinocytes. [3]

All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!