

# 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 :  $\geq 100$  mg/mL (287.84 mM)

**Observed Molecular Weight:**

347.41

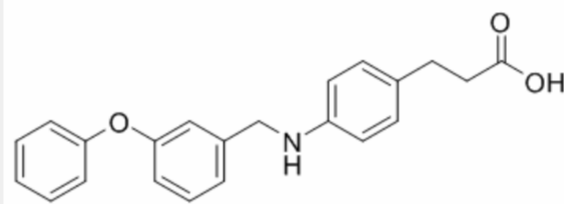
## Product Description

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 Ca<sup>2+</sup> 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 KCl-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!