

# GW-1100

Catalog No: tcsc0280



## Available Sizes

**Size:** 5mg

**Size:** 10mg

**Size:** 50mg



## Specifications

**CAS No:**

306974-70-9

**Formula:**

$C_{27}H_{25}FN_4O_4S$

**Pathway:**

GPCR/G Protein

**Target:**

GPR40

**Purity / Grade:**

>98%

**Solubility:**

10 mM in DMSO

**Observed Molecular Weight:**

520.58

## Product Description

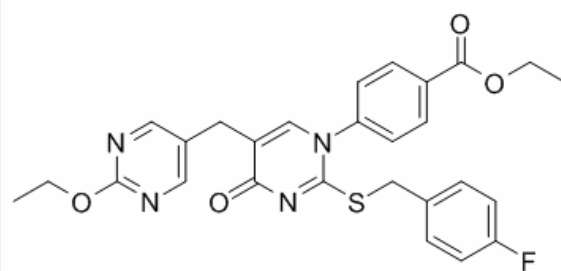
GW-1100 is a selective **GPR40** antagonist with a **pIC<sub>50</sub>** of 6.9. GW1100 acts as a GPR40 inverse agonist.

IC50 & Target: pIC50: 6.9 (GPR40)<sup>[1]</sup>

***In Vitro:***

GW-1100 (GW1100) dose dependently inhibits GPR40-mediated  $\text{Ca}^{2+}$  elevations stimulated by GW9508 and linoleic acid ( $\text{pIC}_{50}$  values of  $5.99 \pm 0.03$  and  $5.99 \pm 0.06$ , respectively). GW-1100 at a concentration of  $1 \mu\text{M}$  produces a significant rightward shift in the concentration-response curve to GW9508 ( $\text{pEC}_{50} = 7.17 \pm 0.08$  in the absence and  $\text{pEC}_{50} = 6.79 \pm 0.09$  in the presence of  $1 \mu\text{M}$  GW-1100; P50 response<sup>[2]</sup>). GW-1100 (GW1100) reduces FFAR1 ligand-induced intracellular calcium in CHO-K1/bFFAR1 cells and neutrophils. CHO-K1/bFFAR1 cells are incubated for 15 min with  $10 \mu\text{M}$  GW1100 or vehicle (0.1% DMSO) and then stimulated with vehicle, oleic acid, linoleic acid or GW9508. GW-1100 significantly reduces the increase in intracellular calcium induced by  $300 \mu\text{M}$  oleic acid ( $\text{AUC}_{(60-150 \text{ s})}$ ,  $p(60-150 \text{ s})$ ,  $p(60-150 \text{ s})$ ,  $p[3]$ ).

***In Vivo:*** The intracerebroventricular injection of DHA ( $50 \mu\text{g}$ ) and GW9508 ( $1.0 \mu\text{g}$ ), a GPR40-selective agonist, significantly reduces mechanical allodynia and thermal hyperalgesia at day 7, but not at day 1, after CFA injection. These effects are inhibited by intracerebroventricular pretreatment with GW-1100 ( $10 \mu\text{g}$ ), a GPR40 antagonist<sup>[4]</sup>.



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