

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

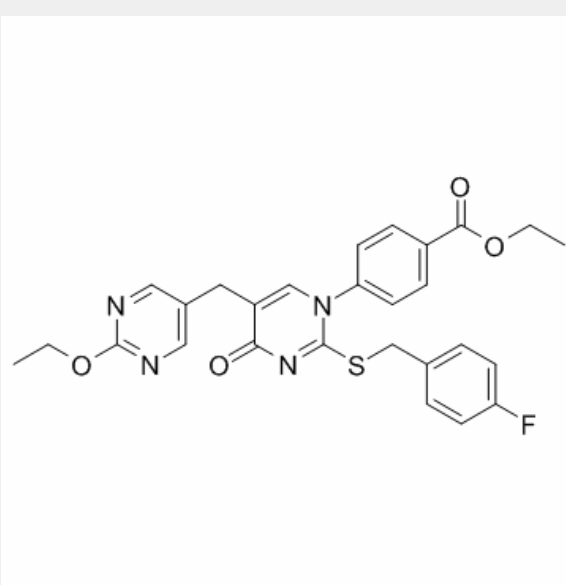
GW-1100 is a selective **GPR40** antagonist with a **pIC₅₀** of 6.9. GW1100 acts as a GPR40 inverse agonist.

IC50 & Target: pIC50: 6.9 (GPR40)^[1]

In Vitro:

GW-1100 (GW1100) dose dependently inhibits GPR40-mediated Ca^{2+} elevations stimulated by GW9508 and linoleic acid (pIC_{50} values of 5.99 ± 0.03 and 5.99 ± 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^[2]). 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^[4].



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