Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

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_{50}** of 6.9. GW1100 acts as a GPR40 inverse agonist.

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

In Vitro:

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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 μM produces a significant rightward shift in the concentration-response curve to GW9508 (pEC_{50}=7.17±0.08 in the absence and pEC_{50}=6.79±0.09 in the presence of 1 μM 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 μM 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 μM oleic acid ($AUC_{(60\text{-}150\ s)}$, p(60-150 s), p(60-150 s), p[3].

In Vivo: The intracerebroventricular injection of DHA (50 μg) and GW9508 (1.0 μg), 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 μg), a GPR40 antagonist[4].