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

GW 4064

Catalog No: tcsc0304

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Size: 200mg

Specifications

CAS No:
278779-30-9

Formula:
$C_{28}H_{22}Cl_3NO_4$

Pathway:
Metabolic Enzyme/Protease

Target:
FXR

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 150 mg/mL (276.32 mM)

Observed Molecular Weight:
542.84

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Product Description

GW 4064 is a potent **FXR** agonist with **EC_{50}** of 65 nM.

IC50 & Target: EC50: 65 nM (FXR)[1]

In Vitro: Treatment with different concentrations of GW4064 (1, 2.5, 5, 10 μM) reduces the lipid accumulation in the cells. Concordantly, GW4064 treatment significantly represses oleic acid-induced CD36 protein levels in a dose-dependent manner. Taken together, these data indicate that prevention of hepatic lipid accumulation is likely due to an inhibition of *Cd36* expression by long-term GW4064 treatment[2].

In Vivo: GW4064 suppresses weight gain in C57BL/6 mice fed with either a high-fat diet (HFD) or high-fat, high-cholesterol diet. GW4064 treatment of mice on HFD significantly represses diet-induced hepatic steatosis as evidenced by lower triglyceride and free fatty acid level in the liver. GW4064 markedly reduces lipid transporter CD36 expression without affecting expression of genes that are directly involved in lipogenesis. GW4064 treatment attenuates hepatic inflammation while having no effect on white adipose tissue[2]. GW4064 (30 mg/kg) treatment results in substantial, statistically significant reductions in serum activities of ALT, AST, LDH, and ALP in the ANIT-treated rats. Serum bile acid levels are also significantly reduced by GW4064 treatment. Bilirubin levels are decreased in the GW4064-treated rats, but statistical significance is not achieved. Notably, GW4064 is much more effective in decreasing these markers of liver damage than TUDCA, which reduces only LDH levels[3].