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

SR9238

Catalog No: tcsc0021352

Available Sizes

Size: 5mg

Size: 10mg

Size: 25mg

Size: 50mg

Specifications

CAS No:
1416153-62-2

Formula:
$C_{31}H_{33}NO_7S_2$

Pathway:
Metabolic Enzyme/Protease

Target:
LXR

Purity / Grade:
>98%

Solubility:
DMSO : 62.5 mg/mL (104.91 mM; Need ultrasonic)

Observed Molecular Weight:
595.73

Product Description

SR9238 is a synthetic **LXR** antagonist with **IC_{50}**s of 214 nM and 43 nM for **LXRα** and **LXRβ**, respectively.

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IC50 & Target: IC50: 43 nM (LXRβ), 214 nM (LXRα)[1]

In Vitro: Results from the cell-based cotransfection assays demonstrate that SR9238 is a synthetic LXR inverse agonist with IC_{50}s of 214 nM and 43 nM for LXRα and LXRβ, respectively. SR9238 also effectively suppresses transcription from a fatty acid synthase (*Fasn*) promoter driven luciferase reporter. It is found that SR9238 induces increased interaction of CoRNR box peptides derived from NCoR (NCoR ID1 and NCoR ID2) with both LXRα and LXRβ, while causing decreased interaction with a coactivator NR box peptide derived from TRAP220. SR9238-induced recruitment of CoRNR box peptides is dose-dependent for both LXRα and LXRβ. HepG2 cells treated with SR9238 result in a significant decrease in *Fasn* and *Srebp1c* mRNA expression[1].

In Vivo: Approximately 6 μM SR9238 is detected in the liver 2h after the injection of SR9238, but no compound is detected in the plasma. SR9238 is also detected in the intestine with either ip or oral administration. SR9238-treated mice display greatly reduced lipid content in the liver. Results demonstrate that both *Tnfa* and *Il1b* expression are substantially reduced (~80% and >95%, respectively) in the SR9238-treated mice when compare to the vehicle-treated mice. SR9238-treated DIO mice display considerably lower intensity of F4/80 staining versus vehicle-treated DIO mice consistent with a beneficial effect of SR9238 on non-alcoholic steatohepatitis (NASH). SR9238 treatment does not alter body weight or percent body fat composition relative to vehicle treated animals during the experiment. Treatment with SR9238 suppresses diet-induced hepatosteatosis, hepatic inflammation, and hepatocellular injury[1].