

Rimonabant (Hydrochloride)

Catalog No: tcsc0707



Available Sizes

Size: 10mg

Size: 50mg

Size: 100mg



Specifications

CAS No:

158681-13-1

Formula:

$C_{22}H_{22}Cl_4N_4O$

Pathway:

Anti-infection;Autophagy;GPCR/G Protein

Target:

Bacterial;Autophagy;Cannabinoid Receptor

Purity / Grade:

>98%

Solubility:

DMSO : 33.33 mg/mL (66.63 mM; Need ultrasonic)

Alternative Names:

SR 141716A;SR 151716A

Observed Molecular Weight:

500.25

Product Description

Rimonabant hydrochloride is a highly potent and selective central **cannabinoid (CB1)** receptor inverse agonist with an K_i of 1.8 nM. Rimonabant hydrochloride also inhibits ***Mycobacterial membrane protein Large 3 (MMPL3)***.

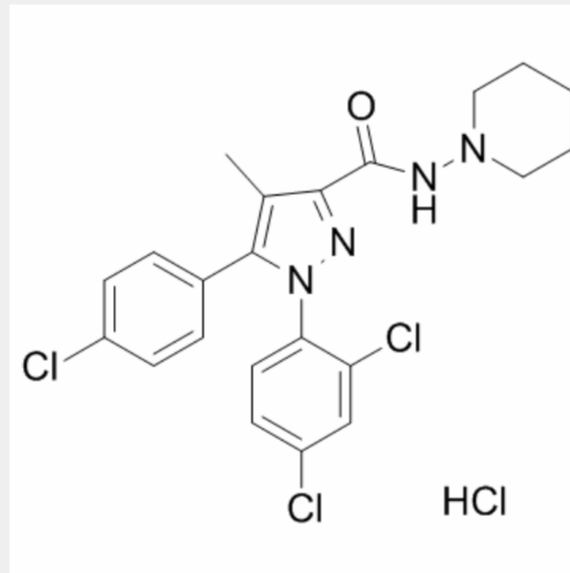
IC₅₀ & Target: K_i : 1.8 nM(CB1 Receptor)^[1], MMPL3^[2].

In Vitro: Rimonabant could inhibit the growth of Mtb with an MIC of 54 μ M. MmpL3, an anti-TB target, is the direct target of rimonabant^[2].

Rimonabant itself (10^{-12} - 10^{-3} M, 12 concentrations) inhibits the basal binding of [³⁵S]GTP γ S to human cortical membranes in a concentration dependent manner, with a $-\log IC_{50}$ of 4.7 ± 0.2 ($IC_{50} = 20 \mu$ M) and a maximal inhibition of $48 \pm 2\%$ ^[3].

In Vivo: Rimonabant (10 mg/kg by gavage) is fed for 2 weeks to 3-month-old male obese Zucker rats as an impaired glucose tolerance model and for 10 weeks to 6-month-old male obese Zucker rats as a model of the metabolic syndrome. RANTES and MCP-1 serum levels are increased in obese vs lean Zucker rats and significantly reduced by long-term treatment with Rimonabant, which slows weight gain in rats with the metabolic syndrome. Neutrophils and monocytes are significantly increased in young and old obese vs lean Zucker rats and lowered by Rimonabant. Platelet-bound fibrinogen is significantly enhanced in obese vs lean Zucker rats of both age, and is reduced by Rimonabant^[1].

Rimonabant (20 mg daily) exhibits a significant reduction in many cardiometabolic risk factors^[4].



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