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

RPR107393 free base

Catalog No: tcsc0018451

Available Sizes

Size: 1mg

Size: 5mg

Size: 10mg

Specifications

CAS No:
197576-78-6

Formula:
$C_{22}H_{22}N_2O$

Pathway:
Metabolic Enzyme/Protease

Target:
Farnesyl Transferase

Purity / Grade:
>98%

Solubility:
10 mM in DMSO

Observed Molecular Weight:
330.42

Product Description

RPR107393 free base is a selective **squalene synthase** inhibitor, which inhibits rat liver microsomal squalene synthase with an **IC_{50}** of 0.8±0.2 nM.

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IC50 & Target: IC50: 0.8±0.2 nM (rat liver microsomal squalene synthase)[1]

In Vitro: RPR107393 is a selective squalene synthase inhibitor with subnanomolar potency. RPR107393 inhibits rat liver microsomal squalene synthase with an IC_{50} value of 0.8±0.2 nM (n=4)[1]. In the time-course study, cells are treated with ER-27856 (1 μM), RPR-107393 (10 μM), Atorvastatin (1 μM), or NB-598 (1 μM) for 2-24 h, and lipid biosynthesis during the last 2 h of the incubation is determined. RPR-107393 (10 μM) inhibits Cholesterol biosynthesis and reduces triglyceride biosynthesis. Similarly, 1 μM RPR-107393 inhibits Cholesterol and triglyceride biosynthesis by 82.4% and 70.0%, respectively[2].

In Vivo: One hour after RPR107393 (10 mg/kg p.o.), Cholesterol biosynthesis is reduced by 92% with an approximate ED_{50} value of 5 mg/kg. Six hours after RPR107393 (10 mg/kg p.o.) administration, Cholesterol biosynthesis is reduced by 74% (the time for 50% inhibition is ~7 hr). An 82% inhibition of hepatic Cholesterol biosynthesis is observed 10 hr after RPR107393 (25 mg/kg p.o.), but the effect is no longer apparent at 21 hr. Inhibition of Cholesterol biosynthesis by Zaragozic acid or RPR107393 is associated with an accumulation of radiolabeled diacid products in the liver. RPR107393 is a potent Cholesterol-lowering agent in rats. RPR107393 (30 mg/kg p.o. b.i.d.) lowers serum Cholesterol by 35% after 2 days and by nearly 50% after 3 days of treatment[1].