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

KAT681

Catalog No: tcsc7365

Available Sizes

Size: 1mg

Size: 5mg

Size: 10mg

Size: 20mg

Specifications

CAS No:
373641-87-3

Formula:
$C_{24}H_{22}FNNaO_6$

Pathway:
Others

Target:
Thyroid Hormone Receptor

Purity / Grade:
>98%

Solubility:
10 mM in DMSO

Alternative Names:
T0681

Observed Molecular Weight:
462.42

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Product Description

KAT681 is a liver-selective thyromimetic.

IC50 & Target: Thyroid Hormone Receptor[1]

In Vitro: The impact of the liver-selective thyromimetic KAT681 (T-0681) is investigated on lipoprotein metabolism. Prolonged treatment with KAT681 increases the hepatic expression of both low-density lipoprotein (LDL) receptor and scavenger receptor class B, type I without affecting cholesteryl ester transfer protein activity. Western blot showing human SR-BI (CLA-1) expression in normal HepG2 cells and in HepG2 cells loaded with AcLDL and subsequently incubated with vehicle or KAT681. SR-BI protein expression is markedly downregulated by incubation with 50 μg/mL AcLDL. This effect can not be reversed by addition of KAT681[1]

In Vivo: In preliminary dose-titration studies, a marked decrease of plasma cholesterol is observed at 36 nmoles/kg/day KAT681 (T-0681), whereas doses higher than 36 nmoles/kg/day show no further lipid-lowering effect. In the subsequent study, New Zealand White (NZW) rabbits are fed a 0.2% cholesterol diet and dosed with 36 nmoles/kg/day KAT681 or a respective placebo control for 4 weeks. KAT681 treatment results in a 60% decrease of plasma cholesterol and a 70% decrease of plasma triglycerides[1]. In preliminary dose-titration studies in wild-type (WT) mice, a marked increase of hepatic SR-BI expression at 36 nmol/kg/d KAT681 (T-0681), and a concomitant 50% decrease of plasma cholesterol are observed. Higher doses than 36 nmol/kg/d show no further lipid-lowering effect. KAT681 significantly increases hepatic LDLrs in SR-BI KO mice (2-fold of controls, P[2].