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

RP-64477

Catalog No: tcsc0006335

Available Sizes

Size: 1mg

Size: 5mg

Size: 10mg

Specifications

CAS No:
135239-65-5

Formula:
$C_{29}H_{42}N_2O_3S$

Pathway:
Metabolic Enzyme/Protease

Target:
Acyltransferase

Purity / Grade:
>98%

Solubility:
10 mM in DMSO

Observed Molecular Weight:
498.72

Product Description

RP-64477 is a potent inhibitor of the cholesterol esterifying enzyme Acyl-coenzyme A:cholesterol O-acyltransferase (**ACAT**).

IC50 & Target: ACAT[1]

In Vitro:

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RP-64477 is a potent inhibitor of the cholesterol esterifying enzyme Acyl-coenzyme A:cholesterol O-acyltransferase (ACAT). Inhibitory potencies of RP-64477 *in vitro* in tissue preparations are obtained from a range of species and in human cell cultures. For animal tissues, IC_{50} values in the range 6 to 283 nM are recorded, with no obvious species/tissue differences apparent. Potent inhibitory activity of RP-64477 is also recorded in human cell lines of hepatic (HepGZ), intestinal (CaCo-2), and monocytic (THP-1) origin with IC_{50}s of 503, 113, and 180 nM, respectively. No inhibitory activity is recorded against rat PCEH or LCAT at test concentrations up to 200 μM and 20 μM, respectively[1].

In Vivo: Administration of RP-64477 (0.01% and 0.03% w/w by diet) reduces significantly plasma cholesterol levels in cholesterol/cholic acid-fed rats by 29% and 61%, respectively. Food consumption is not affected by dietary incorporation of RP-64477. Animals receiving RP-64477 (10 and 30 mg/kg b.i.d.) over this period exhibit significantly lower plasma cholesterol levels on both days 4 and 7 when compare to values recorded from vehicle treated animals fed the cholesterol-containing diet. Compare to cholesterol-fed controls, after 7 days of dosing, plasma cholesterol levels are 35% and 53% lower in animals receiving 10 and 30 mg/kg b.i.d. doses of RP-64477, respectively[1].