

RP-64477

## Chemical Properties

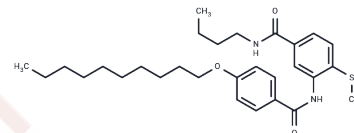
CAS No. : 135239-65-5

Formula: C<sub>29</sub>H<sub>42</sub>N<sub>2</sub>O<sub>3</sub>S

Molecular Weight: 498.72

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



## Biological Description

Description	RP-64477 is the cholesterol esterifying enzyme Acyl-coenzyme A:cholesterol O-acyltransferase (ACAT) inhibitor.
Targets(IC50)	Acyltransferase
In vivo	Inhibition by RP 64477 in a rabbit intestinal enzyme preparation was shown to be non-competitive with respect to the substrate oleoyl-CoA. In whole cell assays using human intestinal (CaCo-2), hepatic HepG2) and monocytic (THP-1) cell lines, RP 64477 inhibited ACAT activity with IC50s of 113, 503, and 180 nM, respectively. RP 64477 (0.03% w/w by diet) reduced significantly cholesterol absorption in cholesterol/cholic acid-fed rats from 94 +/- 8% to 65 +/- 4%. In cholesterol-fed rabbits, cholesterol absorption was reduced from 72 +/- 5% to 50 +/- 5% and 44 +/- 5% at dose levels of 10 and 30 mg kg <sup>-1</sup> b.i.d., respectively. Plasma cholesterol levels were reduced dose-dependently in both cholesterol/cholic-acid-fed rats and cholesterol-fed rabbits. Neither cholesterol absorption nor plasma cholesterol levels were reduced significantly in animals maintained on standard laboratory diets. Pharmacokinetic studies indicated that RP 64477 were very poorly absorbed following oral administration to rats.

## Solubility Information

Solubility	DMSO: 8.33 mg/mL (16.7 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	2.0051 mL	10.0257 mL	20.0513 mL
5 mM	0.401 mL	2.0051 mL	4.0103 mL
10 mM	0.2005 mL	1.0026 mL	2.0051 mL
50 mM	0.0401 mL	0.2005 mL	0.401 mL

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Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Bello AA, et al. RP 64477: a potent inhibitor of acyl-coenzyme A:cholesterol O-acyltransferase with low systemic bioavailability. *Biochem Pharmacol.* 1996 Feb 23;51(4):413-21.

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