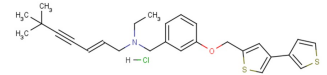


Data Sheet (Cat.No.T12199L)

NB-598 hydrochloride

Chemical Properties

CAS No.:	136719-25-0
Formula:	C ₂₇ H ₃₂ ClNOS ₂
Molecular Weight:	486.13
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).



Biological Description

Description	NB-598 hydrochloride is a competitive squalene epoxidase (SE) inhibitor.
Targets(IC ₅₀)	squalene epoxidase: None
In vitro	NB-598, an inhibitor of squalene epoxidase, on cholesterol absorption from the intestinal epithelia. NB-598 (10 microM) inhibited the synthesis of sterol and sterol ester from [14C]acetate without affecting the synthesis of other lipids such as phospholipids (PL), free fatty acids (FFA) and triacylglycerol (TG). When labeled lipid was apically loaded as a micellar lipid solution into Caco-2 cell cultures, NB-598 reduced basolaterally secreted radioactivity in cholesterol, cholesterol ester, PL and TG. Furthermore, NB-598 suppressed the basolateral secretion of apolipoprotein (apo) B. When microsomes prepared from control Caco-2 cells were incubated with 10 microM NB-598, acyl CoA:cholesterol acyltransferase (ACAT) activity was inhibited slightly. After incubating Caco-2 cells with 10 microM NB-598, a slight reduction in cellular ACAT activity was also observed. These results suggest that suppression of the secretion of particles containing apo B and reduction of cellular ACAT activity in the intestinal epithelia are part of the mechanism of the cholesterol-lowering effect of NB-598.

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.057 mL	10.285 mL	20.571 mL
5 mM	0.411 mL	2.057 mL	4.114 mL
10 mM	0.206 mL	1.029 mL	2.057 mL
50 mM	0.041 mL	0.206 mL	0.411 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference

1. Xia F, et al. Inhibition of cholesterol biosynthesis impairs insulin secretion and voltage-gated calcium channel function in pancreatic beta-cells. *Endocrinology*. 2008 Oct;149(10):5136-45.
2. Horie M, et al. Effects of NB-598, a potent squalene epoxidase inhibitor, on the apical membrane uptake of cholesterol and basolateral membrane secretion of lipids in Caco-2 cells. *Biochem Pharmacol*. 1993 Jul 20;46(2):297-305.
3. Horie M, et al. An inhibitor of squalene epoxidase, NB-598, suppresses the secretion of cholesterol and triacylglycerol and simultaneously reduces apolipoprotein B in HepG2 cells. *Biochim Biophys Acta*. 1993 May 20;1168(1):45-51.

Inhibitors · Natural Compounds · Compound Libraries

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