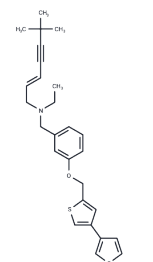


## NB-598 hydrochloride

### Chemical Properties

CAS No. : 136719-25-0  
 Formula: C<sub>27</sub>H<sub>32</sub>ClNOS<sub>2</sub>  
 Molecular Weight: 486.13  
 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	NB-598 hydrochloride is a competitive squalene epoxidase (SE) inhibitor.
Targets(IC50)	Others,Antifungal
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.

### Preparing Stock Solutions

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	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	2.0571 mL	10.2853 mL	20.5706 mL
5 mM	0.4114 mL	2.0571 mL	4.1141 mL
10 mM	0.2057 mL	1.0285 mL	2.0571 mL
50 mM	0.0411 mL	0.2057 mL	0.4114 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

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.

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.

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.

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