

Product Name	:	NB-598
Synonyms	:	—
Cat No.	:	M22060
CAS Number	:	131060-14-5
Molecular Formula	:	C27H31NOS2
Formula Weight	:	449.67
Chemical Name	:	
Description	:	NB-598 is an effective and competitive inhibitor of squalene epoxidase. It suppresses triglyceride biosynthesis through the famesol pathway.NB-598 (10 µM) inhibits 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). In the absence of exogenous liposomal cholesterol, NB-598 reduces ACAT activity by 31%. NB-598 reduces ACAT activity by 22% even in the presence of a 600 pM concentration of liposomal cholesterol. NB598 (10 µM) causes a 36±7% reduction in the total cholesterol level of MIN6 cells. NB598 causes a significant decrease in cholesterol by 49±2%, 46±7%, and 48±2% from PM, ER, and SG, respectively. NB598 dose-dependently inhibits insulin secretion under both basal (1 mM glucose) and glucose-stimulated (16.7 mM glucose) conditions. NB598 at concentrations up to 10 µM does not affect peak outward KV currents or the voltage dependence of activation but increases current inactivation.
Pathway	:	Microbiology/Virology
Target	:	Antifungal
Receptor	:	Squalene epoxidase
Solubility	:	DMSO:Soluble
SMILES	:	CCN(CC=CC#CC(C)(C)C)CC1=CC(=CC=C1)OCC2=CC(=CS2)C3=CSC=C3
Storage	:	(-20°C)
Stability	:	≥ 2 years
Reference	:	

1. 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):297-305.2. 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.

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