# Data Sheet (Cat.No.T15187)



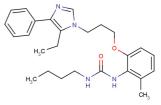
#### E-5324

## **Chemical Properties**

CAS No.: 141799-76-0 Formula: C26H34N4O2

Molecular Weight: 434.57
Appearance: N/A

Storage: 0-4°C for short term (days to weeks), or -20°C for long term (months).



# **Biological Description**

Description	E-5324 is potent cholesterol acyltransferase (ACAT) inhibitor (IC50s: 44 to 190 nM).		
Targets(IC <sub>50</sub> )	ACAT: 44 to 190 nM		
In vitro	E-5324 inhibits the incorporation of [3H]oleate into cholesteryl [3H]oleate in a concentration-dependent manner (IC50: $0.44 \mu M$ ) and it also inhibits [3H]cholesteryl ester synthesis (IC50: $0.41 \mu M$ ). E-5324 displays no effect on triglyceride synthesis up to 10 $\mu M$ and it also has no effect on bovine pancreatic cholesterol esterase or lecithin: cholesterol acyltransferase (LCAT) up to 10 $\mu M$ [1].		
In vivo	E-5324 treatment significantly decreases the wet weight and protein content. The high dose of E-5324 (0.1%) obviously decreases the surface involvement by 34% and 54% in the aortic arch and thoracic aorta, respectively. In the aortic arch, the high dose of E-5324 (0.1%) obviously reduces both cholesteryl ester and total cholesterol by 60% and 59%, respectively. The high dose of E-5324 (0.1%) markedly decreases the ACAT activities in the aortic arch and thoracic aorta by 35% and 44%, respectively. The areas under the cholesterol-time curves for duration of this study (AUC) for control, E-5324 0.02% and E-5324 0.1% are 104985±4411, 106096±4476 and 105231±4 348 mg×day/dL, respectively [2].		

# **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	2.301 mL	11.506 mL	23.011 mL
5 mM	0.46 mL	2.301 mL	4.602 mL
10 mM	0.23 mL	1.151 mL	2.301 mL
50 mM	0.046 mL	0.23 mL	0.46 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.

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#### Reference

- 1. Kogushi M, et al. Effect of E5324, a novel inhibitor of acyl-CoA:cholesterol acyltransferase, on cholesteryl ester synthesis and accumulation in macrophages. Jpn J Pharmacol. 1995 Jun;68(2):191-9.
- 2. Kogushi M, et al. Anti-atherosclerotic effect of E5324, an inhibitor of acyl-CoA:cholesterol acyltransferase, in Watanabe heritable hyperlipidemic rabbits. Atherosclerosis. 1996 Aug 2;124(2):203-10.

### Inhibitors · Natural Compounds · Compound Libraries

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