# Data Sheet (Cat.No.T14362)



### AY 9944

## **Chemical Properties**

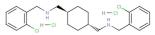
CAS No.: 366-93-8

Formula: C22H30Cl4N2

Molecular Weight: 464.3

Appearance: N/A

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



# **Biological Description**

Description	AY 9944 is a specific cholesterol biosynthesis inhibitor. AY 9944 inhibits the 7-dehydro cholesterol $\Delta 7$ -reductase (DHCR7) enzyme (IC50=13 nM). At high doses, AY 9944 inhibits also in cultured embryos sterol $\Delta 7$ - $\Delta 8$ isomerase, which causes the accumulation of cholest-8-en-3 $\beta$ -ol[1][2][3]. AY 9944 causes hypocholesterolemia and accumulation of 7DHC.
Targets(IC <sub>50</sub> )	Others: None

## 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	2.154 mL	10.769 mL	21.538 mL
5 mM	0.431 mL	2.154 mL	4.308 mL
10 mM	0.215 mL	1.077 mL	2.154 mL
50 mM	0.043 mL	0.215 mL	0.431 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. Dvornik D, et al. Effect of long-term administration of AY-9944, an inhibitor of 7-dehydrocholesterol delta 7-reductase, on serum and tissue lipids in the rat. J Lipid Res. 1968 Sep;9(5):587-95.
- 2. Moebius FF, et al. Molecular cloning and expression of the human delta7-sterol reductase. Proc Natl Acad Sci U S A. 1998 Feb 17;95(4):1899-902.
- 3. Chevy F, et al. Limb malformations of rat fetuses exposed to a distal inhibitor of cholesterol biosynthesis. J Lipid Res. 2002 Aug;43(8):1192-200.

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