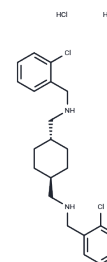


AY 9944

## Chemical Properties

CAS No. : 366-93-8  
 Formula: C<sub>22</sub>H<sub>30</sub>Cl<sub>4</sub>N<sub>2</sub>  
 Molecular Weight: 464.3  
 Appearance: no data available  
 Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



## Biological Description

Description	AY 9944 is a specific cholesterol biosynthesis inhibitor that targets the 7-dehydrocholesterol $\Delta^7$ -reductase (DHCR7) enzyme (IC <sub>50</sub> =13 nM). At high doses, AY 9944 also inhibits sterol $\Delta^7$ - $\Delta^8$ isomerase in cultured embryos, leading to the accumulation of cholest-8-en-3 $\beta$ -ol[1][2][3]. Additionally, AY 9944 causes hypocholesterolemia and accumulation of 7DHC.
Targets(IC <sub>50</sub> )	Others

## Solubility Information

Solubility	H <sub>2</sub> O: 4.64 mg/mL (9.99 mM), Sonication is recommended. DMSO: 4.64 mg/mL (9.99 mM), Sonication is recommended. ( $< 1$ mg/ml refers to the product slightly soluble or insoluble)
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1538 mL	10.7689 mL	21.5378 mL
5 mM	0.4308 mL	2.1538 mL	4.3076 mL
10 mM	0.2154 mL	1.0769 mL	2.1538 mL
50 mM	0.0431 mL	0.2154 mL	0.4308 mL

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.

## Reference

- 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.
- 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.
- 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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