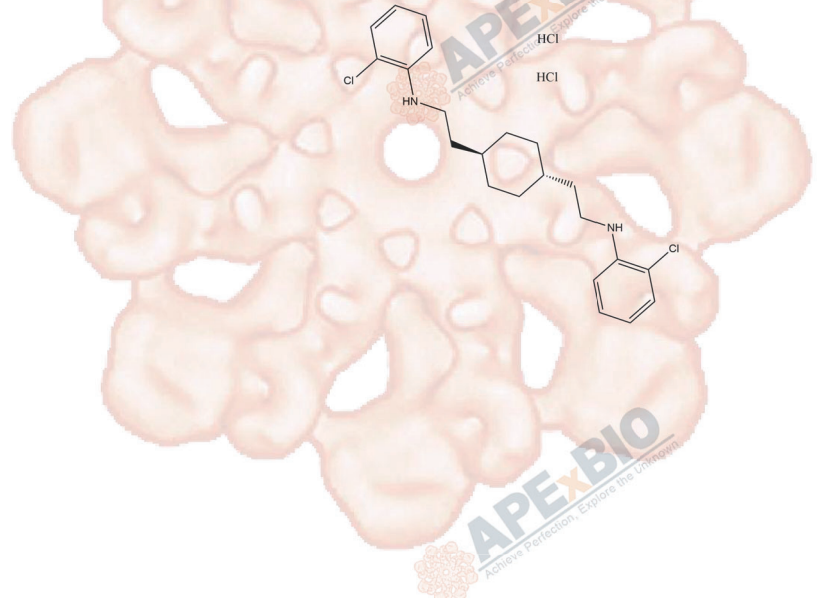


Product Data Sheet

AY 9944 dihydrochloride

Cat. No.:	A8658
CAS No.:	366-93-8
Formula:	C ₂₂ H ₂₈ Cl ₂ N ₂ ·2HCl
M.Wt:	464.3
Synonyms:	
Target:	Stem Cell
Pathway:	Hedgehog
Storage:	Desiccate at RT



Solvent & Solubility

 Soluble in H₂O

In Vitro

Preparing	Solvent	Mass		
		1mg	5mg	10mg
Stock Solutions	Concentration			
	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

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary

Hedgehog Inhibitor

 IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line: PBMCs

Preparation method: The solubility of this compound in sterile water is 50 mM. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below - 20 °C for several months.

 Reacting conditions: 3 × 10⁻⁶ M

Applications: In HIV-1-infected PBMCs, AY 9944 Dihydrochloride restored mitogen-induced

as well as recall antigen- and superantigen-induced proliferation. After 2-week treatment, the percentage of dead CD4+ cells in HIV-1-infected cultures was comparable that in uninfected culture. AY 9944 Dihydrochloride also stimulated IL-12 and interferon- γ production by 2 ~ 12 folds.

Animal experiment

Animal models: SD rats

Dosage form: 25 mg/kg; s.c.

Applications: The relative enrichment of sterol in rafts from AY 9944 Dihydrochloride-treated rat brains (average 7.85 folds) was similar to that from the control group (5.44 folds), which implied that 7-dehydrocholesterol (7DHC) promoted raft formation in a similar way as cholesterol did. However, the protein profiles of rafts from AY 9944 Dihydrochloride-treated rat brains were markedly different from those from the control group.

Other notes: Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

In Vivo

Product Citations

See more customer validations on www.apexbt.com.

References

- [1]. Achour, A., et al., Restoration of immune response by a cationic amphiphilic drug (AY 9944) in vitro: a new approach To chemotherapy against human immunodeficiency virus type 1. Antimicrob Agents Chemother, 1998. 42(10): p. 2482-91.
- [2]. Keller RK, Arnold TP, Fliesler SJ. Formation of 7-dehydrocholesterol-containing membrane rafts in vitro and in vivo, with relevance to the Smith-Lemli-Opitz syndrome. J Lipid Res. 2004 Feb;45(2):347-55.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.



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