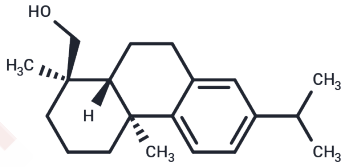
Data Sheet (Cat.No.TN3790)

TargetMol

Dehydroabietinol

Chemical Properties



CAS No. : 3772-55-2

Formula: C20H30O

Molecular Weight: 286.45

Storage: Store at low temperature
Pure form: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Dehydroabietinol (Pomiferin A) inhibits growth of chloroquine-sensitive as well as chloroquine-resistant strains of Plasmodium falciparum cultivated in erythrocytes in vitro (IC 50 26-27 microM).
Targets(IC50)	Syk,Antifection
In vitro	Dehydroabietinol isolated from Hyptis suaveolens (L.) Poit. was found to inhibit growth of chloroquine-sensitive as well as chloroquine-resistant strains of Plasmodium falciparum cultivated in erythrocytes in vitro (IC 50 26-27 microM). However, erythrocytes exposed to Dehydroabietinol were transformed in a dose-dependent manner towards spherostomatocytic forms with concomitant formation of endovesicles, as disclosed by transmission electron microscopy. The erythrocyte shape alterations caused by Dehydroabietinol correlated well with its apparent IC 50 value. CONCLUSIONS: Thus, Dehydroabietinol incorporates into the erythrocyte membrane, and since invasion and survival of Plasmodium parasites is known to depend on the function of the erythrocyte membrane, the observed antiplasmodial effect of Dehydroabietinol is presumably an indirect effect on the host cell. Because of these findings, microscopic investigations should be generally used to support claims of antimalarial effects of apolar natural products[1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.491 mL	17.4551 mL	34.9101 mL
5 mM	0.6982 mL	3.491 mL	6.982 mL
10 mM	0.3491 mL	1.7455 mL	3.491 mL
50 mM	0.0698 mL	0.3491 mL	0.6982 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Possible artefacts in the in vitro determination of antimalarial activity of natural products that incorporate into lipid bilayer: apparent antiplasmodial activity of dehydroabietinol, a constituent of Hyptis suaveolens. Planta Med. 2002 Jun;68(6):547-9.