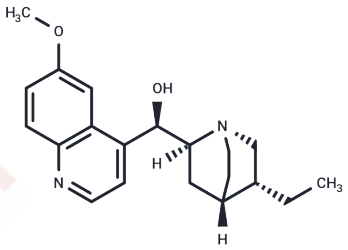
Data Sheet (Cat.No.T7126)

TargetMol

Hydroquinine

Chemical Properties



CAS No. : 522-66-7

Formula: C20H26N2O2

Molecular Weight: 326.43

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

Biological Description

Description	Hydroquinine, is an organic compound and as a cinchona alkaloid closely related to quinine.
Targets(IC50)	Others,Antibacterial,Parasite,PAD,ROS
In vivo	Compared with placebo the decrease in the mean number of muscle cramps (16.1 or 58%) in the active drug treatment group during the medication period was highly significant (Wilcoxon test p = 0.004).Daily dose of 300 mg hydroquinine hydrobromide was effective in preventing frequent ordinary muscle cramp in healthy female volunteers. The effects of hydroquinine outlasted its administration. The drug was well tolerated.
Animal Research	Twenty healthy adult volunteers experiencing at least 3 muscle cramps a week (6 men, 14 women aged 38-78 yrs) were enrolled into this study, and 19 of them completed it. Hydroquinine hydrobromide (300 mg/day) was administered to group 1 (10 women) and placebo to group 2 (4 women, 6 men). The frequency, severity, duration and location of muscle cramps as well as short-term adverse drug effects were recorded in daily diaries.

Solubility Information

Solubility	DMSO: 65 mg/mL (199.12 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2.5 mg/mL (7.66 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.0634 mL	15.3172 mL	30.6344 mL
5 mM	0.6127 mL	3.0634 mL	6.1269 mL
10 mM	0.3063 mL	1.5317 mL	3.0634 mL
50 mM	0.0613 mL	0.3063 mL	0.6127 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

Jansen P H P , Veenhuizen K C W , Verbeek A L M , et al. Efficacy of hydroquinine in preventing frequent ordinary muscle cramp outlasts actual administration[J]. 1994, 122(2):157-161.