Data Sheet (Cat.No.T0908)

TargetMol

Chlorquinaldol

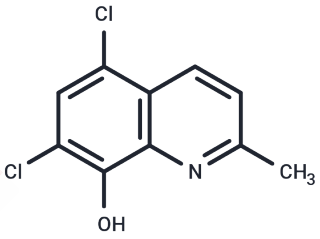
Chemical Properties

CAS No. : 72-80-0

Formula: C10H7Cl2NO

Molecular Weight: 228.07

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	Chlorquinaldol (5,7-Dichloro-8-hydroxy-2-methylquinoline) is a Standardized Chemical Allergen. The physiologic effect of chlorquinaldol is by means of Increased Histamine Release, and Cell-mediated Immunity.
Targets(IC50)	Apoptosis,Antibacterial,Antibiotic,Antifungal,Wnt/beta-catenin
In vivo	Chlorquinaldol, a derivative of hydroxy-8-quinoline, exhibits enhanced bactericidal activity in duodenal-pancreatic secretions. At concentrations of 0.1-0.2% (w/v), Chlorquinaldol reduced Neisseria gonorrhoeae and Chlamydia trachomatis by approximately 10^4 within 60 minutes.

Solubility Information

Solubility	Ethanol: 6 mg/mL (26.31 mM),Sonication is recommended. DMSO: 49.5 mg/mL (217.04 mM),Sonication is recommended. H2O: < 1 mg/mL (insoluble or slightly soluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: < 4.95 mg/mL (21.7 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+90% Corn oil: 4.95 mg/mL (21.7 mM),Solution. 10% DMSO+90% (20% SBE-β-CD in Saline): < 4.95 mg/mL (21.7 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+90% Saline: < 4.95 mg/mL (21.7 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. *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	4.3846 mL	21.9231 mL	43.8462 mL
5 mM	0.8769 mL	4.3846 mL	8.7692 mL
10 mM	0.4385 mL	2.1923 mL	4.3846 mL
50 mM	0.0877 mL	0.4385 mL	0.8769 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

Corrihons I, et al. Pathol Biol (Paris), 1991, 39(2), 136-139.
Chen Y, Chen X, Liang S, et al. Chlorquinaldol inhibits the activation of nucleotide-binding oligomerization domain-like receptor family pyrin domain-containing protein 3 inflammasome and ameliorates imiquimod-induced psoriasis-like dermatitis in mice. Chemico-Biological Interactions. 2022, 365: 110122.
Mett H, et al. Antimicrob Agents Chemother, 1984, 26(1), 35-38.