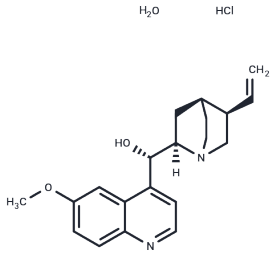
Data Sheet (Cat.No.T0266)

TargetMol

Quinidine hydrochloride monohydrate

Chemical Properties



CAS No. : 6151-40-2

Formula: C20H27ClN2O3

Molecular Weight: 378.89

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	Quinidine hydrochloride monohydrate is an optical isomer of quinine, extracted from the bark of the Cinchona tree and similar plant species. It prolongs cellular action potential and decreases automaticity. This alkaloid dampens the excitability of cardiac and skeletal muscles by blocking sodium and potassium currents across cellular membranes. Quinidine also blocks muscarinic and alpha-adrenergic neurotransmission.
Targets(IC50)	Parasite,Potassium Channel,Sodium Channel

Solubility Information

Solubility	DMSO: 32.5 mg/mL (85.78 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 mg/mL (5.28 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	2.6393 mL	13.1964 mL	26.3929 mL
5 mM	0.5279 mL	2.6393 mL	5.2786 mL
10 mM	0.2639 mL	1.3196 mL	2.6393 mL
50 mM	0.0528 mL	0.2639 mL	0.5279 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

Stokoe KS, et al. J Physiol. 2007 Jan 1;578(Pt 1):69-84.