

Quinine hemisulfate hydrate

Chemical Properties

CAS No. : 207671-44-1

Formula: C₄₀H₅₄N₄O₁₀S

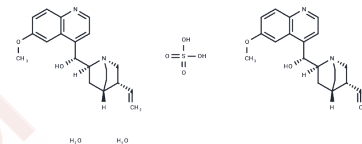
Molecular Weight: 782.94

Storage:

Keep away from moisture, Keep away from direct sunlight

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	Quinine hemisulfate hydrate is an alkaloid extracted from the bark of cinchona, which has antimalarial effect. Quinine hemisulfate hydrate can be used as a potassium ion channel inhibitor to inhibit the voltage-induced mSlo3(KCa5.1) channel current, and its IC ₅₀ is 169 μM under the condition of +100 mV.
Targets(IC50)	Parasite, Potassium Channel

Solubility Information

Solubility	H ₂ O: 4.00 mg/mL (5.11 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	---------------------------------------------------------------------------------------------------------------------------------------

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.2772 mL	6.3862 mL	12.7724 mL
5 mM	0.2554 mL	1.2772 mL	2.5545 mL
10 mM	0.1277 mL	0.6386 mL	1.2772 mL
50 mM	0.0255 mL	0.1277 mL	0.2554 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

Jane Achan , et al. Quinine, an Old Anti-Malarial Drug in a Modern World: Role in the Treatment of Malaria. Malar J. 2011 May 24;10:144.

Wrighton DC, et al. Mechanism of inhibition of mouse Slo3 (KCa 5.1) potassium channels by quinine, quinidine and barium. Br J Pharmacol. 2015 Sep;172(17):4355-63.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only· Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481