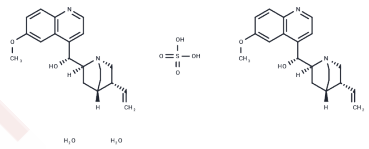
# Data Sheet (Cat.No.T75333)

TargetMol

## 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 | H2O: 4.00 mg/mL (5.11 mM),Sonication is recommended.<br>(< 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.



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