N-Desethyl amodiaquine dihydrochloride

Cat. No.: HY-128554A

CAS No.: 79049-30-2

Molecular Formula: $C_{18}H_{20}Cl_3N_3O$

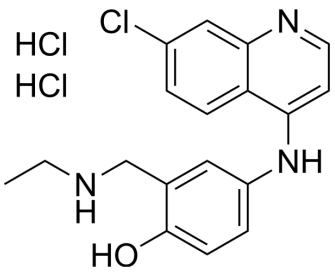
Molecular Weight: 400.73

Target: Parasite

Pathway: Anti-infection

Storage: 4°C, sealed storage, away from moisture

* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

H_2O : 100 mg/mL (249.54 mM; Need ultrasonic)

DMSO : 62.5 mg/mL (155.97 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.4954 mL	12.4772 mL	24.9545 mL
5 mM	0.4991 mL	2.4954 mL	4.9909 mL
10 mM	0.2495 mL	1.2477 mL	2.4954 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: PBS
   Solubility: 100 mg/mL (249.54 mM); Clear solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.08 mg/mL (5.19 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (5.19 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

N-Desethyl amodiaquine dihydrochloride is the biologically active metabolite of Amodiaquine (HY-B1322A). N-Desethyl amodiaquine dihydrochloride is an antiparasitic agent, has inhibitory for strains V1/S and 3D7 with IC_{50} values of 97 nM and 25 nM, respectively. N-Desethyl amodiaquine dihydrochloride can be used for the research of malaria[1][2].

In Vitro

N-Desethyl amodiaquine dihydrochloride has inhibitory for strains V1/S and 3D7 with IC_{50} values of 97 nM and 25 nM, respectively[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Xue-Qing Li, et al. Amodiaquine clearance and its metabolism to N-desethylamodiaquine is mediated by CYP2C8: a new high affinity and turnover enzyme-specific probe substrate. J Pharmacol Exp Ther. 2002 Feb;300(2):399-407.

[2]. Sasi P, et al. In vivo and in vitro efficacy of amodiaquine against Plasmodium falciparum in an area of continued use of 4-aminoquinolines in East Africa. J Infect Dis. 2009 Jun 1;199(11):1575-82.

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