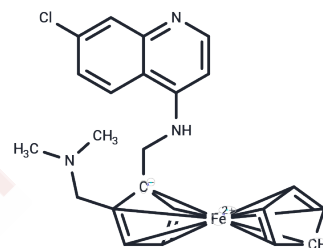


Ferroquine

Chemical Properties

CAS No. :	185055-67-8
Formula:	C ₂₃ H ₂₄ ClFeN ₃
Molecular Weight:	433.76
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	Ferroquine (Ferrochloroquine) is a ferrocenyl analogue of Chloroquine with antimalarial activity. Ferroquine induces oxidative stress and the subsequent destruction of the membrane, resulting in parasitocidal effect on Plasmodium.
Targets(IC50)	Others,Parasite
In vitro	All newly transformed schistosomula (NTS) exposed to 33.3µM hydroxyl-ferroquine (FQ-OH), Ferroquine (FQ), and Ruthenoquine (RQ) displays strongly decrease liabilities, after 24hours post-incubation. All NTS exposed to 33.3 µM RQ have died, while Ferroquine and FQ-OH treated worms are strongly affected but still alive, after 72hours post-incubation [1].
In vivo	Ferroquine (200 and 800mg/kg; mice) treatment, displays low total worm burden reductions of 19.4% and 35.6%. One of the mice treated with 800mg/kg Ferroquine died within 24hours post-treatment. No activity is observed treating mice with Ruthenoquine at 200mg/kg. Hence, modification of Chloroquine (CQ) by a ferrocenyl or ruthenoceryl fragment does not increase the antischistosomal properties of CQ. A total worm burden reduction of 17.3% is observed following treatment with hydroxyl-ferroquine. Furthermore, in one of the hydroxyl-ferroquine treated mice many dead worms are recovered and a hepatic shift (i.e. worms migrating to the liver) observed. Hence, Ferroquine and hydroxyl-ferroquine show weak antischistosomal activity in vivo[1].

Solubility Information

Solubility	DMSO: 7.5 mg/mL (17.29 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3054 mL	11.5271 mL	23.0542 mL
5 mM	0.4611 mL	2.3054 mL	4.6108 mL
10 mM	0.2305 mL	1.1527 mL	2.3054 mL
50 mM	0.0461 mL	0.2305 mL	0.4611 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

Keiser J, et al. In vitro and in vivo antischistosomal activity of ferroquine derivatives. Parasit Vectors. 2014 Sep 4;7: 424.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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