

**Product Name:** Mefloquine hydrochloride

**Catalog No.:** 6819

**Batch No.:** 1

CAS Number: 51773-92-3

IUPAC Name: (*αS*)-*rel-α*-(2*R*)-2-Piperidinyl-2,8-bis(trifluoromethyl)-4-quinolinemethanol hydrochloride

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>17</sub>H<sub>16</sub>F<sub>6</sub>N<sub>2</sub>O.HCl.½H<sub>2</sub>O

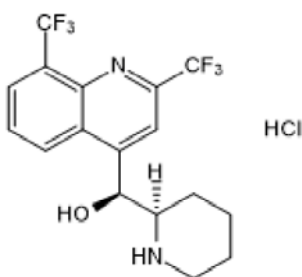
**Batch Molecular Weight:** 423.78

**Physical Appearance:** White solid

**Solubility:** ethanol to 100 mM  
DMSO to 50 mM

**Storage:** Store at +4°C

**Batch Molecular Structure:**



(and enantiomer)

**2. ANALYTICAL DATA**

**HPLC:** Shows 99.4% purity

**<sup>1</sup>H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	48.18	4.28	6.61
Found	48.17	4.22	6.61

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

**bio-techne.com**

info@bio-techne.com  
techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com  
Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

www.tocris.com/distributors  
Tel: +1 612 379 2956

**Product Name:** Mefloquine hydrochloride

**Catalog No.:** 6819

**Batch No.:** 1

CAS Number: 51773-92-3

IUPAC Name: ( $\alpha$ S)-*rel*- $\alpha$ -(2*R*)-2-Piperidinyl-2,8-bis(trifluoromethyl)-4-quinolinemethanol hydrochloride

**Description:**

Cx36 and Cx50 gap channel blocker (IC<sub>50</sub> values are 0.3 and 1.1  $\mu$ M, respectively). Blocks gap junctional-coupling between interneurons in neocortical slices. Also antimalarial. Bind 80S ribosome of *Plasmodium falciparum* to inhibit protein synthesis. Improves survival in *P. berghei*-infected mice. Additionally exhibits antischistosomal activity in vitro and in vivo.

**Physical and Chemical Properties:**

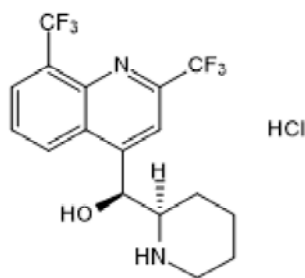
Batch Molecular Formula: C<sub>17</sub>H<sub>16</sub>F<sub>6</sub>N<sub>2</sub>O.HCl.½H<sub>2</sub>O

Batch Molecular Weight: 423.78

Physical Appearance: White solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



(and enantiomer)

**Storage:** Store at +4°C

**Solubility & Usage Info:**

ethanol to 100 mM

DMSO to 50 mM

**Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**References:**

**Pasche et al** (2019) Early antischistosomal leads identified from *in vitro* and *in vivo* screening of the Medicines for Malaria Venture Pathogen Box. *ACS Infect.Dis.* **5** 102. PMID: 30398059.

**Wong et al** (2017) Mefloquine targets the *Plasmodium falciparum* 80S ribosome to inhibit protein synthesis. *Nat.Microbiol.* **2** 17031. PMID: 28288098.

**Cruikshank et al** (2004) Potent block of Cx36 and Cx50 gap junction channels by mefloquine. *Proc.Natl.Acad.Sci.U.S.A.* **101** 12364. PMID: 15297615.

**Ohnmacht et al** (1971) Antimalarials. 7. Bis(trifluoromethyl)- $\alpha$ -(2-piperidyl)-4-quinolinemethanols. *J.Med.Chem.* **14** 926. PMID: 5115690.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

www.tocris.com/distributors

Tel:+1 612 379 2956