Hello Bio, Inc.
304 Wall St., Princeton, NJ 08540 USA

T. 609-683-7500
F. 609-228-4994

customercare-usa@hellobio.com

DATASHEET

Mefloquine hydrochloride

Product overview

Name	Mefloquine hydrochloride
Cat No	HB9555
Biological action	Blocker
Purity	>98%
Description	Cx36 and Cx50 gap channel blocker. Antimalarial, antischistosomal and antiviral.

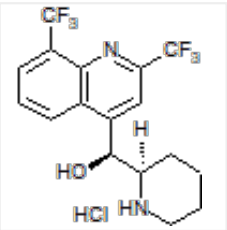
Biological Data

Biological description	Cx36 and Cx50 gap channel blocker (IC_{50} values are 0.3 and 1.1 µM, respectively). Other gap junctions (e.g. Cx43, Cx32, and Cx26) are only affected at concentrations 10-100 fold higher. In neocortical slices, mefloquine blocks gap junctional coupling between interneurons with minimal nonspecific actions. Also shows antimalarial action. Inhibits the 80S ribosome of *Plasmodium falciparum* to block protein synthesis. Additionally shows antischistosomal and antiviral actions and has recently been investigated as part of COVID-19 compound repurposing.

Solubility & Handling

Storage instructions	+4°C
Solubility overview	Soluble in DMSO (50 mM), and in ethanol (100 mM)
Important	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use

Chemical Data

Chemical name	(S)-[2,8-bis(trifluoromethyl)quinolin-4-yl]-[(2R)-piperidin-2-yl]methanol;hydrochloride
Molecular Weight	414.77
Chemical structure	
Molecular Formula	$C_{17}H_{16}F_6N_2O \cdot HCl$
CAS Number	51773-92-3
PubChem identifier	65329
SMILES	C1CCNC(C1)C(C2=CC(=NC3=C2C=CC=C3C(F)(F)F)C(F)(F)F)O.Cl
InChi	InChI=1S/C17H16F6N2O.ClH/c18-16(19,20)11-5-3-4-9-10(15(26)12-6-1-2-7-24-12)8-13(17(21,22)23)25-14(9)11;/h3-5,8,12,15,24,26H,1-2,6-7H2;1H/t12-,15+;/m1./s1
InChiKey	WESWYMRNZNDGBX-YLCXCWDSSA-N
MDL number	MFCD00797519

References

Identification of Antiviral Drug Candidates against SARS-CoV-2 from FDA-Approved Drugs

Jeon S *et al* (2020) Antimicrob Agents Chemother 64
PubMedID 32366720

Potent block of Cx36 and Cx50 gap junction channels by mefloquine

Cruikshank SJ *et al* (2004) Proc Natl Acad Sci U S A 101(33)
PubMedID 15297615

Mefloquine targets the Plasmodium falciparum 80S ribosome to inhibit protein synthesis

Wong W *et al* (2017) Nat Microbiol 2
PubMedID 28288098