Proteins

Inhibitors

Amodiaquine-d₁₀

Cat. No.: HY-B1322AS CAS No.: 1189449-70-4 Molecular Formula: $C_{20}H_{12}D_{10}CIN_3O$

Molecular Weight: 365.92

Target: Histone Methyltransferase; Parasite

Pathway: Epigenetics; Anti-infection

Powder -20°C Storage: 3 years

2 years

-80°C In solvent 6 months

> -20°C 1 month

Product Data Sheet

SOLVENT & SOLUBILITY

In Vitro

DMSO: 66.67 mg/mL (182.20 mM; ultrasonic and adjust pH to 3 with 1M HCl)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.7328 mL	13.6642 mL	27.3284 mL
	5 mM	0.5466 mL	2.7328 mL	5.4657 mL
	10 mM	0.2733 mL	1.3664 mL	2.7328 mL

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

BIOLOGICAL ACTIVITY

Description $A modiaquine-d_{10} is the deuterium labeled A modiaquine. A modiaquine (A modiaquin), a 4-amin oquino line class of the deuterium labeled a modiaquine (A modiaquine) and the deuterium labeled a modiaquine (A$ antimalarial agent, is a potent and orally active histamine N-methyltransferase inhibitor. Amodiaquine is also a Nurr1 agonist and specifically binds to Nurr1-LBD (ligand binding domain) with an EC50 of ~20 μM. Anti-inflammatory effect[1][2][3][4].

IC₅₀ & Target Plasmodium

> Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs[1].

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

REFERENCES

In Vitro

- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216.
- [2]. Chun-Hyung Kim, et al. Nuclear receptor Nurr1 agonists enhance its dual functions and improve behavioral deficits in an animal model of Parkinson's disease. Proc Natl Acad Sci U S A. 2015 Jul 14;112(28):8756-61.
- [3]. Keita Kinoshita, et al. A Nurr1 agonist amodiaquine attenuates inflammatory events and neurological deficits in a mouse model of intracerebral hemorrhage. J Neuroimmunol. 2019 May 15;330:48-54.
- [4]. Akira Yokoyama, et al. Effect of amodiaquine, a histamine N-methyltransferase inhibitor, on, Propionibacterium acnes and lipopolysaccharide-induced hepatitis in mice. Eur J Pharmacol. 2007 Mar 8;558(1-3):179-84.
- [5]. M T HOEKENGA. The treatment of acute malaria with single oral doses of amodiaquin, chloroquine, hydroxychloroquine and pyrimethamine. Am J Trop Med Hyg. 1954 Sep;3(5):833-8.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA