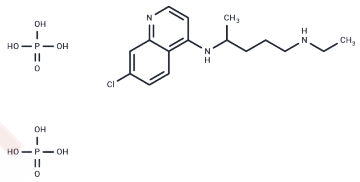
Data Sheet (Cat.No.T11001L)

TargetMol

Desethyl chloroquine diphosphate

Chemical Properties



CAS No. :	247912-76-1
Formula:	C16H28ClN3O8P2
Molecular Weight:	487.81
Appearance:	no data available
Storage:	store at low temperature,keep away from direct sunlight Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Desethyl chloroquine diphosphate, the active metabolite of Desethylchloroquine, is a cross-placental and orally available inhibitor of toll-like receptors (TLRs) with antiplasmodial activity and inhibition of autophagy.
Targets(IC50)	Parasite,Autophagy,TLR
In vivo	In the study, amochloroquine was administered by intraperitoneal injection to wild-type mice and Huntington's chorea mice. Levels of amochloroquine and its metabolites were compared in blood, brain and muscle tissue using LC-MS/MS (liquid chromatography-mass spectrometry) techniques. Despite the low concentrations of amochloroquine (5-15 μM), amochloroquine was more stable in the brain than in blood and muscle from 4 to 24 hours after administration. At the same time, Desethyl chloroquine (the active metabolite of amochloroquine) concentrations in blood and muscle decreased after 24 hours, while concentrations in the brain were lower and increased slightly during this period. Desethyl chloroquine diphosphate is a salt form of Desethyl chloroquine. [2]

Solubility Information

Solubility	DMSO: 1 mg/mL (2.05 mM),Sonication is recommended. H2O: 10 mg/mL (20.5 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.050 mL	10.2499 mL	20.4998 mL
5 mM	0.410 mL	2.050 mL	4.100 mL
10 mM	0.205 mL	1.025 mL	2.050 mL
50 mM	0.041 mL	0.205 mL	0.410 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.

Reference

Ajayi FO, et al. Comparison of the partitioning in vitro of chloroquine and its desethyl metabolites between the erythrocytes and plasma of healthy subjects and those with falciparum malaria. Afr J Med Med Sci. 1989 Jun;18(2):95-100.

Vodicka P, et al. Assessment of chloroquine treatment for modulating autophagy flux in brain of WT and HD mice. J Huntingtons Dis. 2014;3(2):159-74.

Said A, et al. Chloroquine promotes IL-17 production by CD4+ T cells via p38-dependent IL-23 release by monocyte-derived Langerhans-like cells. J Immunol. 2014 Dec 15;193(12):6135-43.