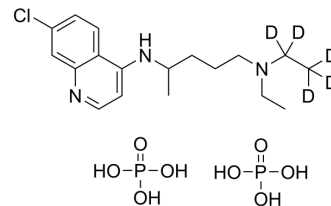


Chloroquine-d₅ diphosphate

Cat. No.:	HY-17589S
CAS No.:	1854126-42-3
Molecular Formula:	C ₁₈ H ₂₇ D ₅ ClN ₃ O ₈ P ₂
Molecular Weight:	520.89
Target:	Toll-like Receptor (TLR); Autophagy; HIV; SARS-CoV; Parasite; Antibiotic; Isotope-Labeled Compounds
Pathway:	Immunology/Inflammation; Autophagy; Anti-infection; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Chloroquine-d ₅ (diphosphate) is the deuterium labeled Chloroquine (phosphate). Chloroquine phosphate is an antimalarial and anti-inflammatory agent widely used to treat malaria and rheumatoid arthritis. Chloroquine phosphate is an autophagy and toll-like receptors (TLRs) inhibitor. Chloroquine phosphate is highly effective in the control of SARS-CoV-2 (COVID-19) infection in vitro (EC50=1.13 μM)[1][2][3][4].	
IC₅₀ & Target	Plasmodium	TLRs
In Vitro	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.	

CUSTOMER VALIDATION

- Nucleic Acids Res. 2021 Jan 8;49(D1):D11113-D11121.

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

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