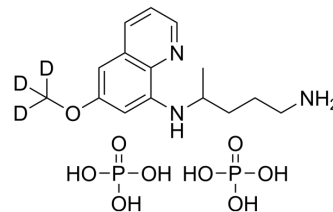


Primaquine-d3 diphosphate

Cat. No.:	HY-12651S
Molecular Formula:	C ₁₅ H ₂₄ D ₃ N ₃ O ₉ P ₂
Molecular Weight:	458.36
Target:	Parasite; Isotope-Labeled Compounds
Pathway:	Anti-infection; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Primaquine-d ₃ (diphosphate) is the deuterium labeled Primaquine diphosphate. Primaquine Diphosphate (Primaquine phosphate), an 8-aminoquinoline, exerts a broad spectrum of activities against various stages of parasitic malaria. Primaquine Diphosphate remains as the only agent that destroys late hepatic stages and latent tissue forms of Plasmodium vivax and Plasmodium ovale[1][2].
IC₅₀ & Target	Plasmodium
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.

REFERENCES

- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216.
- [2]. Ashley EA, et al. Primaquine: the risks and the benefits. *Malar J.* 2014 Nov 3;13:418.
- [3]. Rajgor DD, et al. Antirelapse Efficacy of Various Primaquine Regimens for Plasmodium vivax. *Malar Res Treat.* 2014;2014:347018.
- [4]. Hanboonkunupakarn B, et al. Open-label crossover study of primaquine and dihydroartemisinin-piperaquine pharmacokinetics in healthy adult thai subjects. *Antimicrob Agents Chemother.* 2014 Dec;58(12):7340-6.

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

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