

## **Product** Data Sheet

## Didesethyl chloroquine-d<sub>4</sub>

 Cat. No.:
 HY-100662S

 CAS No.:
 1215797-41-3

 Molecular Formula:
 C<sub>14</sub>H<sub>14</sub>D<sub>4</sub>ClN<sub>3</sub>

Molecular Weight: 267.79

Target: Drug Metabolite; Isotope-Labeled Compounds

Pathway: Metabolic Enzyme/Protease; Others

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

## **BIOLOGICAL ACTIVITY**

Description	Didesethyl chloroquine-d <sub>4</sub> is the deuterium labeled Didesethyl chloroquine. Didesethyl chloroquine (Bisdesethylchloroquine) is a major metabolite of the antimalarial agent Chloroquine. Didesethyl chloroquine is a potent myocardial depressant[1][2].
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 <sup>[1]</sup> .  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]. Biot C, et al. Synthesis and antimalarial activity in vitro of potential metabolites of ferrochloroquine and related compounds. Bioorg Med Chem. 1999 Dec;7(12):2843-7.

[3]. Essien EE, et al. Effects of chloroquine and didesethylchloroquine on rabbit myocardium and mitochondria. J Pharm Pharmacol. 1986 Jul;38(7):543-6.

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

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