# **PRODUCT** INFORMATION



Amodiaquine-d<sub>10</sub>

Item No. 28525

CAS Registry No.: Formal Name:	1189449-70-4 2-(( <i>bis</i> (ethyl-d <sub>5</sub> )amino)methyl)-4-((7- chloroquinolin-4-yl)amino)phenol	
Synonyms: MF: FW:	Camoquine- $d_{10}$ , Flavoquine- $d_{10}$ C <sub>20</sub> H <sub>12</sub> ClD <sub>10</sub> N <sub>3</sub> O 365.9	
Chemical Purity: Deuterium	≥95% (Amodiaquine)	H N
Incorporation: Supplied as: Storage: Stability:	≥99% deuterated forms (d <sub>1</sub> -d <sub>10</sub> ); ≤1% d <sub>0</sub> A solid -20°C ≥4 years	N CI

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

# Laboratory Procedures

Amodiaquine-d<sub>10</sub> is intended for use as an internal standard for the quantification of amodiaquine (Item No. 15954) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Amodiaquine- $d_{10}$  is supplied as a solid. A stock solution may be made by dissolving the amodiaquine- $d_{10}$ in the solvent of choice, which should be purged with an inert gas. Amodiaquine- $d_{10}$  is soluble in organic solvents such as methanol and chloroform.

# Description

Amodiaquine is a prodrug form of the antimalarial compound N-desethyl amodiaquine (Item No. 20822).<sup>1,2</sup> It is active against several strains of P. falciparum in vitro ( $EC_{50}s = 0.23-0.52$  nM) and exhibits a synergistic effect when used in combination with N-desethyl amodiaquine.<sup>1</sup> Amodiaquine dose-dependently inhibits development of parasitemia in a mouse model of P. berghei infection.<sup>3</sup>

# References

- 1. Mariga, S.T., Gil, J.P., Sisowath, C., et al. Synergism between amodiaquine and its major metabolite, desethylamodiaquine, against Plasmodium falciparum in vitro. Antimicrob. Agents Chemother. 48(11), 4089-4096 (2004).
- 2. Sá, J.M., Chong, J.L., and Wellems, T.E. Malaria drug resistance: New observations and developments. Essays Biochem. 51, 137-160 (2014).
- 3. Jacobs, R.L., Alling, D.W., and Cantrell, W.F. An evaluation of antimalarial combinations against Plasmodium berghei in the mouse. J. Parasitol. 49(6), 920-925 (1963).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

## SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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