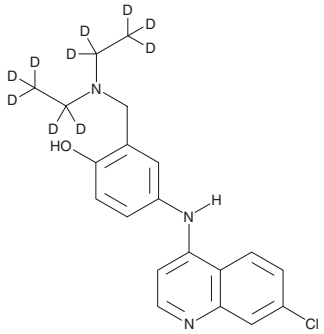
PRODUCT INFORMATION

Amodiaquine-d_{10}

Item No. 28525

CAS Registry No.:	1189449-70-4
Formal Name:	2-((*bis*(ethyl-d_5)amino)methyl)-4-((7-chloroquinolin-4-yl)amino)phenol
Synonyms:	Camoquine-d_{10}, Flavoquine-d_{10}
MF:	$C_{20}H_{12}ClD_{10}N_3O$
FW:	365.9
Chemical Purity:	≥95% (Amodiaquine)
Deuterium Incorporation:	≥99% deuterated forms (d_1-d_{10}); ≤1% d_0
Supplied as:	A solid
Storage:	-20°C
Stability:	≥4 years



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

Laboratory Procedures

Amodiaquine-d_{10} 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).[1,2] 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.[1] Amodiaquine dose-dependently inhibits development of parasitemia in a mouse model of *P. berghei* infection.[3]

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).

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