

Product Data Sheet

Product Name: Desethylchloroquine

Cat. No.: GC47194

Chemical Properties

Cas. No. 1476-52-4

SMILES CCNCCCC(C)NC1=CC=NC2=C1C=CC(Cl)=C2

Formula C₁₆H₂₂ClN₃

M.Wt 291.8

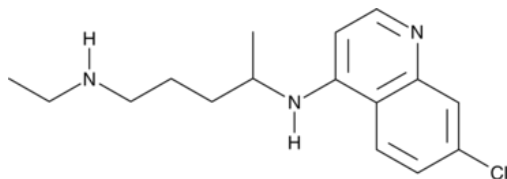
Solubility Chloroform: slightly soluble, Methanol: slightly soluble

Storage Store at -20°C, protect from light

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure



Background

Desethylchloroquine is a major active metabolite of chloroquine.¹ Desethylchloroquine is formed when chloroquine undergoes dealkylation, primarily by the cytochrome P450 (CYP) isoforms CYP2C8 and CYP3A4 and to a lesser extent by CYP2D6. It inhibits the growth of the *P. falciparum* strain LA136 *in vitro* (IC₅₀ = 9.9 ng/ml).²

1. Projean, D., Baune, B., Farinotti, R., et al. In vitro metabolism of chloroquine: Identification of CYP2C8, CYP3A4, and CYP2D6 as the main isoforms catalyzing N-desethylchloroquine formation. *Drug Metab. Dispos.* 31(6):748-754 (2003).
2. Aderounmu, F.A. In vitro assessment of the antimalarial activity of chloroquine and its major metabolites. *Ann. Trop. Med. Parasitol.* 78(6):581-585 (1984).

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

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