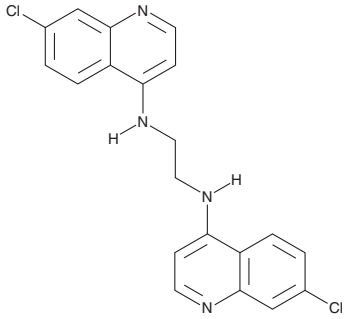
# PRODUCT INFORMATION

## NSC 5844

*Item No. 23443*



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| **CAS Registry No.:** | 140926-75-6 |
| **Formal Name:** | $N^1$,$N^2$-*bis*(7-chloro-4-quinolinyl)-1,2-ethanediamine |
| **MF:** | $C_{20}H_{16}Cl_2N_4$ |
| **FW:** | 383.3 |
| **Purity:** | ≥95% |
| **UV/Vis.:** | $\lambda_{max}$: 219, 254, 336 nm |
| **Supplied as:** | A crystalline 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

NSC 5844 is supplied as a crystalline solid. A stock solution may be made by dissolving the NSC 5844 in the solvent of choice, which should be purged with an inert gas. NSC 5844 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of NSC 5844 in these solvents is approximately 0.25 and 0.33 mg/ml, respectively. NSC 5844 is also slightly soluble in ethanol.

### Description

NSC 5844 is a *bis*-quinoline with diverse biological activities.[1-3] It inhibits the growth of *P. falciparum* strains that are sensitive (D-6) and resistant (W-2) to chloroquine (Item No. 14194) *in vitro* ($IC_{50}$s = 17 and 27 nM, respectively) but lacks activity against *P. berghei in vivo*.[1] NSC 5844 inhibits the growth of MDA-MB-468 and MCF-7 breast cancer cells with $GI_{50}$ values of 7.35 and 14.80 µM, respectively.[2] It also inhibits 24% of botulinum neurotoxin serotype A light chain (BoNT/A LC) metalloprotease activity at a concentration of 20 µM.[3]

### References


1. Vennerstrom, J.L., Ellis, W.Y., Ager, A.L., Jr., *et al.* Bisquinolines. 1. *N,N-bis*(7-chloroquinolin-4-yl)alkanediamines with potential against chloroquine-resistant malaria. *J. Med. Chem.* **35(11)**, 2129-2134 (1992).
2. Zhang, H., Solomon, V.R., Hu, C., *et al.* Synthesis and *in vitro* cytotoxicity evaluation of 4-aminoquinoline derivatives. *Biomed. Pharmacother.* **62(2)**, 65-69 (2008).
3. Burnett, J.C., Schmidt, J.J., Stafford, R.G., *et al.* Novel small molecule inhibitors of botulinum neurotoxin A metalloprotease activity. *Biochem. Biophys. Res. Commun.* **310(1)**, 84-93 (2003).





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