

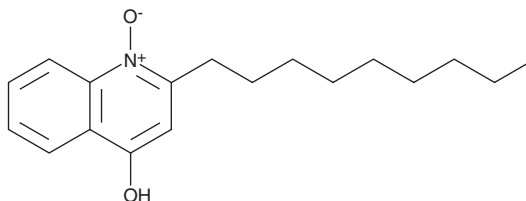
PRODUCT INFORMATION



2-Nonyl-4-hydroxyquinoline N-oxide

Item No. 45204

CAS Registry No.: 316-66-5
Formal Name: 2-nonyl-4-quinolinol 1-oxide
Synonyms: NoHOQnO, NQNO
MF: $C_{18}H_{25}NO_2$
FW: 287.4
Purity: $\geq 98\%$
Supplied as: A solid
Storage: $-20^{\circ}C$
Stability: ≥ 4 years



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

Description

2-Nonyl-4-hydroxyquinoline N-oxide (NQNO) is an electron transport inhibitor.^{1,2} It inhibits electron transport in plants and bacteria by inhibiting the reduction of endogenous quinones by binding at the Q_n -site of the photosynthetic cytochrome b_6f complex. NQNO has been used to study electron transfer mechanisms in biological systems. It has also been isolated from *P. aeruginosa* swarms after exposure to tobramycin (Item Nos. 14596 | 41453).³

References

1. Jones, R.W. and Whitmarsh, J. Inhibition of electron transfer and the electrogenic reaction in the cytochrome b/f complex by 2-*n*-nonyl-4-hydroxyquinoline N-oxide (NQNO) and 2,5-dibromo-3-methyl-6-isopropyl-*p*-benzoquinone (DBMIB). *Biochimica et Biophysica Acta* **933**, 258-268 (1988).
2. Hasan, S.S., Yamashita, E., Baniulis, D., et al. Quinone-dependent proton transfer pathways in the photosynthetic cytochrome b_6f complex. *Proc. Natl. Acad. Sci. USA* **110**(11), 4297-4302 (2013).
3. Morales-Soto, N., Dunham, S.J.B., Baig, N.F., et al. Spatially dependent alkyl quinolone signaling responses to antibiotics in *Pseudomonas aeruginosa* swarms. *J. Biol. Chem.* **293**(24), 9544-9552 (2018).

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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