

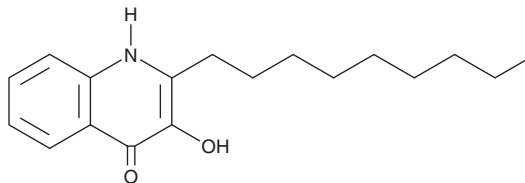
PRODUCT INFORMATION



2-nonyl-3-hydroxy-4-Quinolone

Item No. 9002699

CAS Registry No.: 1259944-03-0
Formal Name: 3-hydroxy-2-nonyl-4(1H)-quinolinone
Synonym: C9-PQS
MF: C₁₈H₂₅NO₂
FW: 287.4
Purity: ≥98%
UV/Vis.: λ_{max}: 215, 251, 290, 342 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

2-nonyl-3-hydroxy-4-Quinolone is supplied as a crystalline solid. A stock solution may be made by dissolving the 2-nonyl-3-hydroxy-4-quinolone in the solvent of choice, which should be purged with an inert gas. 2-nonyl-3-hydroxy-4-Quinolone is soluble in organic solvents such as ethanol and dimethyl formamide. The solubility of 2-nonyl-3-hydroxy-4-quinolone in these solvents is approximately 5 and 15 mg/ml, respectively.

Description

2-nonyl-3-hydroxy-4-Quinolone is a bacterial quorum-sensing signal molecule produced by *P. aeruginosa*.¹ It activates a biosensor for the *P. aeruginosa* gene *pqsA*, which encodes the first enzyme in the *P. aeruginosa* biosynthesis of the bacterial quorum-sensing signal molecule 2-heptyl-3-hydroxy-4-quinolone (Item No. 29186), in a concentration-dependent manner.²

References

1. Nguyen, A.T., Jones, J.W., Ruge, M.A., *et al.* Iron depletion enhances production of antimicrobials by *Pseudomonas aeruginosa*. *J. Bacteriol.* **197(14)**, 2265-2275 (2015).
2. Fletcher, M.P., Diggle, S.P., Crusz, S.A., *et al.* A dual biosensor for 2-alkyl-4-quinolone quorum-sensing signal molecules. *Environ. Microbiol.* **9(11)**, 2683-2693 (2007).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 02/10/2025

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM