

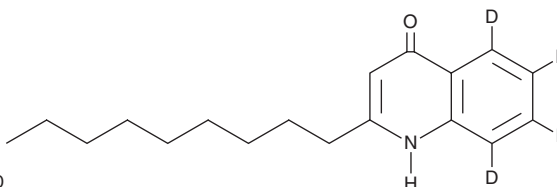
PRODUCT INFORMATION



2-Nonylquinolin-4(1H)-one-d₄

Item No. 9003970

Formal Name: 2-nonyl-4(1H)-quinolinone-5,6,7,8-d₄
Synonyms: 2-n-Nonyl-4-quinolone-d₄,
2-Nonyl-1H-quinolin-4-one-d₄,
2-Nonylquinolin-4(1H)-one-d₄,
Pseudane IX-d₄
MF: C₁₈H₂₁D₄NO
FW: 275.4
Chemical Purity: ≥98% (2-nonylquinolin-4(1H)-one)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₄); ≤1% d₀
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Synthetic



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

Laboratory Procedures

2-Nonylquinolin-4(1H)-one-d₄ is intended for use as an internal standard for the quantification of 2-nonylquinolin-4(1H)-one (Item No. 9003627) 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).

2-Nonylquinolin-4(1H)-one-d₄ is supplied as a solid. A stock solution may be made by dissolving the 2-nonylquinolin-4(1H)-one-d₄ in the solvent of choice, which should be purged with an inert gas. 2-Nonylquinolin-4(1H)-one-d₄ is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of 2-nonylquinolin-4(1H)-one-d₄ in DMSO is approximately 15 mg/ml and approximately 30 mg/ml in ethanol and DMF.

Description

2-Nonylquinolin-4(1H)-one is a quinolone alkaloid that has been found in *P. aeruginosa* and has diverse biological activities.¹⁻⁴ It reduces infection of Huh7.5 cells by hepatitis C virus (HCV) with an IC₅₀ value of 1.4 µg/ml.¹ 2-Nonylquinolin-4(1H)-one (50 and 100 µg/ml) is also active against *L. gongylophorus*, a symbiotic fungus of the agricultural pest *A. sexdens* (leaf-cutting ant).² It inhibits activation of nuclear factor of activated T cells (NFAT) induced by phorbol 12-myristate 13-acetate (TPA; Item No. 10008014) and the calcium ionophore A23187 (Item No. 11016) in Jurkat cells (IC₅₀ = 3.44 µM), but not LPS-induced NF-κB activation in RAW 264.7 cells (IC₅₀ = >100 µM), in reporter assays.³

References

1. Wahyuni, T.S., Widyawaruyanti, A., Lusida, M.I., et al. *Fitoterapia* **99**, 276-283 (2014).
2. Biavatti, M.W., Vieira, P.C., da Silva, F.d.G.F., et al. *J. Braz. Chem. Soc.* **13**(1), 66-70 (2002).
3. Jin, H.Z., Lee, J.H., Lee, D., et al. *Biol. Pharm. Bull.* **27**(6), 926-928 (2004).
4. Ortori, C.A., Dubern, J.-F., Chhabra, S.R., et al. *Anal. Bioanal. Chem.* **399**(2), 839-850 (2011).

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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