

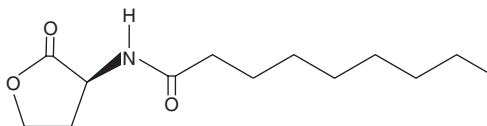
PRODUCT INFORMATION



N-nonanoyl-L-Homoserine lactone

Item No. 16868

CAS Registry No.: 177158-21-3
Formal Name: N-[(3S)-tetrahydro-2-oxo-3-furanyl]-nonanamide
Synonyms: C9-HSL, N-nonanoyl-L-HSL
MF: C₁₃H₂₃NO₃
FW: 241.3
Purity: ≥98%
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

N-nonanoyl-L-Homoserine lactone (C9-HSL) is supplied as a crystalline solid. A stock solution may be made by dissolving the C9-HSL in the solvent of choice, which should be purged with an inert gas. C9-HSL is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of C9-HSL in these solvents is approximately 25 and 20 mg/ml, respectively. While C9-HSL is also soluble in ethanol and other primary alcohols, their use is not recommended as they have been shown to open the lactone ring.

Description

C9-HSL is an N-acylated homoserine lactone and a bacterial quorum-sensing signaling molecule.¹ It induces GFP production in an *E. coli* reporter strain expressing the *V. fischeri* LuxR-P_{luxI} quorum-sensing operon when used at concentrations ranging from 100 to 1,000 nM.

Reference

1. Syrpas, M., Ruysbergh, E., Stevens, C.V., *et al.* Synthesis and biological evaluation of novel N-α-haloacylated homoserine lactones as quorum sensing modulators. *Beilstein J. Org. Chem.* **10**, 2539-2549 (2014).

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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