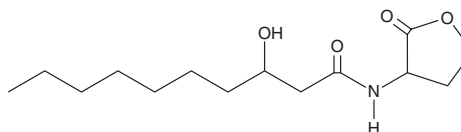


PRODUCT INFORMATION

N-3-hydroxydecanoyl-DL-Homoserine lactone

Item No. 34217

CAS Registry No.: 929222-14-0
Formal Name: 3-hydroxy-N-(tetrahydro-2-oxo-3-furanyl)-decanamide
Synonyms: 3OH-C10-DL-HSL, 3OH-C10-HSL, OH-C10-HSL
MF: C₁₄H₂₅NO₄
FW: 271.4
Purity: ≥98%
Supplied as: A 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-3-hydroxydecanoyl-DL-Homoserine lactone is supplied as a solid. A stock solution may be made by dissolving the N-3-hydroxydecanoyl-DL-homoserine lactone in the solvent of choice, which should be purged with an inert gas. N-3-hydroxydecanoyl-DL-Homoserine lactone is soluble in acetonitrile and dimethyl formamide. While N-3-hydroxydecanoyl-DL-homoserine lactone 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

N-3-hydroxydecanoyl-DL-Homoserine lactone is a bacterial quorum-sensing molecule.¹ It activates SdiA (EC₅₀ = 0.6 μM), a transcription factor that detects N-acyl homoserine lactones (AHLs), in the 14028/pJNS25 strain of *S. enterica*.²

References

1. Fekete, A., Frommberger, M., Rothballer, M., *et al.* Identification of bacterial N-acylhomoserine lactones (AHLs) with a combination of ultra-performance liquid chromatography (UPLC), ultra-high-resolution mass spectrometry, and in-situ biosensors. *Anal. Bioanal. Chem.* **387**(2), 455-467 (2007).
2. Janssens, J.C.A., Metzger, K., Daniels, R., *et al.* Synthesis of N-acyl homoserine lactone analogues reveals strong activators of SdiA, the *Salmonella enterica* serovar Typhimurium LuxR homologue. *Appl. Environ. Microb.* **73**(2), 535-544 (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, 12/05/2022

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