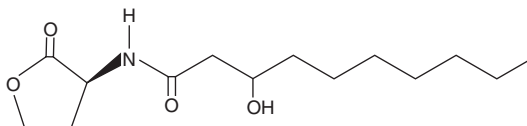


PRODUCT INFORMATION

N-3-hydroxydecanoyl-L-Homoserine lactone

Item No. 9001147

CAS Registry No.: 192883-12-8
Formal Name: 3-hydroxy-N-[(3S)-tetrahydro-2-oxo-3-furanyl]-decanamide
Synonyms: OH-C10-HSL, 3OH-C10-HSL, 3OH-C10-L-HSL
MF: $C_{14}H_{25}NO_4$
FW: 271.4
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-3-hydroxydecanoyl-L-Homoserine lactone is supplied as a crystalline solid. A stock solution may be made by dissolving the N-3-hydroxydecanoyl-L-homoserine lactone in the solvent of choice, which should be purged with an inert gas. N-3-hydroxydecanoyl-L-Homoserine lactone is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of N-3-hydroxydecanoyl-L-homoserine lactone in these solvents is approximately 20 mg/ml. While N-3-hydroxydecanoyl-L-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-L-Homoserine lactone is a bacterial quorum-sensing molecule that has been found in *B. pseudomallei*.¹ It induces expression of *tda*, a gene with roles in the production of the antibiotic tropodithietic acid (TDA; Item No. 23244) and the algicide roseobactide, in *P. inhibens*.²

References

1. Lumjiaktase, P., Diggle, S.P., Loprasert, S., *et al.* Quorum sensing regulates *dpsA* and the oxidative stress response in *Burkholderia pseudomallei*. *Microbiology* **152**, 3651-3659 (2006).
2. Wang, R., Gallant, É., and Seyedsayamdost, M.R. Investigation of the genetics and biochemistry of roseobactide production in the *Roseobacter* clade bacterium *Phaeobacter inhibens*. *mBio* **7**(2), e02118 (2016).

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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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