

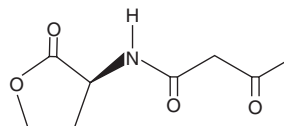
PRODUCT INFORMATION



N-3-oxo-butyryl-L-Homoserine lactone

Item No. 13024

CAS Registry No.: 148433-27-6
Formal Name: 3-oxo-N-[(3S)-tetrahydro-2-oxo-3-furanyl]-butanamide
Synonyms: 3-oxo-C4-HSL, 3-oxobutanoyl-HSL, N-3-(Oxobutanoyl)-L-Homoserine lactone
MF: C₈H₁₁NO₄
FW: 185.2
Purity: ≥90%
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-oxo-butyryl-L-homoserine lactone is supplied as a solid. A stock solution may be made by dissolving the N-3-oxo-butyryl-L-homoserine lactone in the solvent of choice, which should be purged with an inert gas. N-3-oxo-butyryl-L-homoserine lactone is soluble in chloroform. While N-3-oxo-butyryl-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-oxo-butyryl-L-Homoserine lactone is a bacterial quorum-sensing signaling molecule.¹ It induces expression of *rhlI* in *R. leguminosarum*, a gene with roles in the interaction of the rhizosphere with legumes.

Reference

1. Rodelas, B., Lithgow, J.K., Wisniewski-Dye, F., *et al.* Analysis of quorum-sensing-dependent control of rhizosphere-expressed (*rhlI*) genes in *Rhizobium leguminosarum* bv. *viciae*. *J. Bacteriol.* **181(12)**, 3816-3823 (1999).

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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