## **Product** Data Sheet

## N-(3-Oxopentanoyl)-L-homoserine lactone

Cat. No.:HY-141641CAS No.:148433-21-0Molecular Formula: $C_9H_{13}NO_4$ Molecular Weight:199.2Target:Bacterial

Pathway: Anti-infection

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

## **BIOLOGICAL ACTIVITY**

Description

N-(3-Oxopentanoyl)-L-homoserine lactone is an autoinducer, a kind of chemical signal molecule which passively diffuses across the bacterial envelope and accumulates intracellularly at high bacterial densities. It may bind to a protein related to the LuxR protein of V. fischeri and causes cell density-dependent gene expression. N-(3-Oxopentanoyl)-L-homoserine can be used for research of quorum sensing<sup>[1]</sup>.

## **REFERENCES**

[1]. Zhu J, et al. Analogs of the autoinducer 3-oxooctanoyl-homoserine lactone strongly inhibit activity of the TraR protein of Agrobacterium tumefaciens. J Bacteriol. 1998 Oct;180(20):5398-405.

Caution: Product has not been fully validated for medical applications. For research use only.