



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

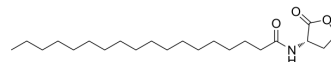
[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

## N-Octadecanoyl-L-homoserine lactone

Cat. No.:	HY-W127487
CAS No.:	479050-96-9
Molecular Formula:	C <sub>22</sub> H <sub>41</sub> NO <sub>3</sub>
Molecular Weight:	367.57
Target:	Biochemical Assay Reagents
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

#### Description

Quorum sensing is a regulatory system used by bacteria to control gene expression in response to increased cell density. This regulatory process manifests itself in a variety of phenotypes, including biofilm formation and virulence factor production. Coordinated gene expression is achieved through the production, release and detection of small diffusible signaling molecules called autoinducers. N-acylated homoserine lactones (AHLs) comprise a class of such autoinducers, each of which generally consists of a fatty acid coupled to a homoserine lactone (HSL). Modulation of bacterial quorum-sensing signaling systems to suppress pathogenesis represents a new approach to antimicrobial research for infectious diseases. AHLs differ in acyl length (C4-C18), C3 substitution (hydrogen, hydroxyl, or oxo group), and the presence or absence of one or more carbon-carbon double bonds in the fatty acid chain. These differences confer signaling specificity through the affinity of the LuxR family of transcriptional regulators. C18-HSL, one of four lipophilic long acyl side chain AHLs produced by the LuxI AHL synthase homolog SinI, is involved in quorum-sensing signaling in strains of *Rhizobium meliloti* (a nitrogen-fixing bacterial symbiont of the legume *M. sativa*). C18-HSL and other hydrophobic AHLs tend to localize in the relatively lipophilic environment of bacterial cells and cannot diffuse freely across the cell membrane. Long-chain N-acyl homoserine lactones can be exported from cells by efflux pumps, or can be transported between communicating cells by extracellular outer membrane vesicles.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA