

Product Data Sheet

Product Name: N-3-hydroxydecanoyl-DL-Homoserine lactone

Cat. No.: GC49187

Chemical Properties

Cas. No. 929222-14-0

SMILES O=C(CC(CCCCCC)O)NC(CCO1)C1=O

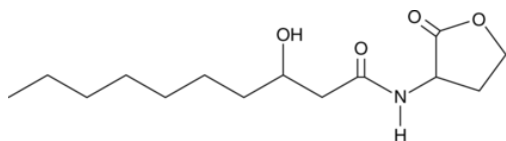
Formula C₁₄H₂₅NO₄ M.Wt 271.4

Solubility Acetonitrile: soluble, DMF: soluble Storage -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure



Background

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

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.* 387:455-467 (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)

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA