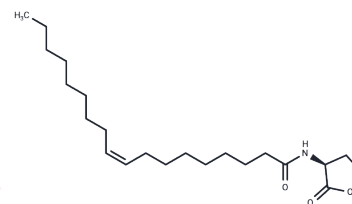


N-cis-octadec-9Z-enoyl-L-Homoserine lactone

Chemical Properties

CAS No. :	1400974-23-3
Formula:	C ₂₂ H ₃₉ NO ₃
Molecular Weight:	365.558
Appearance:	no data available
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year



Biological Description

Description	Quorum sensing is a regulatory process used by bacteria for controlling gene expression in response to increasing cell density. This regulatory process manifests itself with a variety of phenotypes including biofilm formation and virulence factor production. Coordinated gene expression is achieved by the production, release, and detection of small diffusible signal molecules called autoinducers. The N-acylated homoserine lactones (AHLs) comprise one such class of autoinducers, each of which generally consists of a fatty acid coupled with homoserine lactone (HSL). AHLs vary in acyl group length (C₄-C₁₈), in the substitution of C₃ (hydrogen, hydroxyl, or oxo group) and in the presence or absence of one or more carbon-carbon double bonds in the fatty acid chain. These differences confer signal specificity through the affinity of transcriptional regulators of the LuxR family. C₁₈:1-δ⁹ cis-(L)-HSL is a long-chain AHL that may have antimicrobial activity and thus, might be used to inhibit pathogenesis by regulating bacterial quorum sensing signaling.
-------------	--

Solubility Information

Solubility	DMSO: 20 mg/mL Ethanol: 2 mg/mL DMSO:PBS(pH7.2) 1:1: 0.5 mg/mL DMF: 20 mg/mL (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.7355 mL	13.6776 mL	27.3553 mL
5 mM	0.5471 mL	2.7355 mL	5.4711 mL
10 mM	0.2736 mL	1.3678 mL	2.7355 mL
50 mM	0.0547 mL	0.2736 mL	0.5471 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only· Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:36 Washington Street,Wellesley Hills,MA 02481