N-Hexanoyl-DL-homoserine lactone

Cat. No.: HY-W045071

CAS No.: 106983-28-2

Molecular Formula: $C_{10}H_{17}NO_3$

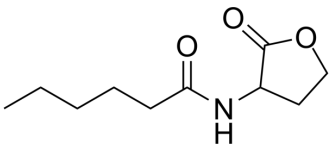
Molecular Weight: 199.25

Target: Bacterial

Pathway: Anti-infection

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (501.88 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	5.0188 mL	25.0941 mL	50.1882 mL
	5 mM	1.0038 mL	5.0188 mL	10.0376 mL
	10 mM	0.5019 mL	2.5094 mL	5.0188 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (12.55 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (12.55 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (12.55 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

N-Hexanoyl-DL-homoserine lactone is a bacterial quorum sensing molecule produced in the rhizosphere. N-Hexanoyl-DL-homoserine lactone, a bacterial quorum sensing signal, induces transcriptional changes in Arabidopsis and may contribute to tuning plant growth to the microbial composition of the rhizosphere[1].

REFERENCES

[1]. von Rad U, et al. Response of Arabidopsis thaliana to N-hexanoyl-DL-homoserine-lactone, a bacterial quorum sensing molecule produced in the rhizosphere. Planta. 2008;229(1):73-85.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA