Creative Enzymes®

quorum-quenching N-acyl-homoserine lactonase

Cat. No. EXWM-3510

Lot. No. (See product label)

Introduction

Description	Acyl-homoserine lactones (AHLs) are produced by a number of bacterial species and are used by them to regulate the expression of virulence genes in a processknown as quorum-sensing. Each bacterial cell has a basal level of AHL and, once thepopulation density reaches a critical level, it triggers AHL-signalling which, in turn,initiates the expression of particular virulence genes.Plants or animals capable of degrading AHLs would have a therapeutic advantage in avoiding bacterial infection as they could prevent AHL-signalling and the expression of virulence genes in quorum-sensing bacteria. N-(3-Oxohexanoyl)-L-homoserine lactone, N-(3-oxododecanoyl)-L-homoserine lactone, N-butanoyl-L-homoserine lactone and N-(3-oxooctanoyl)-L-homoserine lactone can act as substrates.
Synonyms	acyl homoserine degrading enzyme; acyl-homoserine lactone acylase; AHL lactonase; AHL-degrading enzyme; AHL-inactivating enzyme; AHLase; AhlD; AhlK; AiiA; AiiA lactonase; AiiA-like protein; AiiB; AiiC; AttM; delactonase; lactonase-like enzyme; N-acyl homoserine lactonase; N-acyl homoserine lactone hydrolase; N-acyl-homoserine lactone lactonase; N-acyl-L-homoserine lactone hydrolase; quorum-quenching lactonase; quorum-quenching N-acyl homoserine lactone hydrolase

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 3.1.1.81
CAS No.	389867-43-0
Reaction	an N-acyl-L-homoserine lactone + H2O = an N-acyl-L-homoserine
Notes	This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

Storage and Shipping Information

Storage	Store it at +4 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.