

## 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 process known as quorum-sensing. Each bacterial cell has a basal level of AHL and, once the population 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 + H<sub>2</sub>O = 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 °C for short term. For long term storage, store it at -20 °C~-80 °C.