

acyl-homoserine-lactone synthase

Cat. No. EXWM-2126

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. N-(3-Oxohexanoyl)-[acyl-carrier protein] and hexanoyl-[acyl-carrier protein] are the best substrates. The fatty-acyl substrate is derived from fatty-acid biosynthesis through acyl-[acyl-carrier protein] rather than from fatty-acid degradation through acyl-CoA. S-Adenosyl-L-methionine cannot be replaced by methionine, S-adenosylhomocysteine, homoserine or homoserine lactone.

Synonyms acyl-homoserine lactone synthase; acyl homoserine lactone synthase; acyl-homoserinelactone synthase; acylhomoserine lactone synthase; AHL synthase; AHS; AHSL synthase; Ahyl; AinS; AinS protein; autoinducer synthase; autoinducer synthesis protein rhII; Esal; ExpISCC1; ExpISCC3065; LasI; LasR; LuxI; LuxI protein; LuxM; N-acyl homoserine lactone synthase; RhII; Yspl acyl-[acyl carrier protein]:S-adenosyl-L-methionine acyltransferase (lactone-forming, methylthioadenosine-releasing)

Product Information

Form Liquid or lyophilized powder

EC Number EC 2.3.1.184

CAS No. 176023-66-8

Reaction an acyl-[acyl-carrier protein] + S-adenosyl-L-methionine = an [acyl-carrier protein] + S-methyl-5'-thioadenosine + an N-acyl-L-homoserine lactone

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.