Creative Enzymes®

3-acetyloctanal synthase

Cat. No. EXWM-2028

Lot. No. (See product label)

Introduction

Description	Requires thiamine diphosphate. The enzyme, characterized from the bacterium Serratia marcescens, participates in the biosynthesis of the antibiotic prodigiosin. The enzyme decarboxylates pyruvate, followed by attack of the resulting two-carbon fragment on (E)-oct-2-enal, resulting in a Stetter reaction. In vitro the enzyme can act on a number of α,β-unsaturated carbonyl compounds, including aldehydes and ketones, and can catalyse both 1-2 and 1-4 carboligations depending on the substrate.
Synonyms	pigD (gene name)

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 2.2.1.12
Reaction	pyruvate + (E)-oct-2-enal = (S)-3-acetyloctanal + CO2
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 ℃.