

10-deoxymethynolide synthase

Cat. No. EXWM-2187

Lot. No. (See product label)

Introduction

Description

The product, 10-deoxymethynolide, contains a 12-membered ring and is an intermediate in the biosynthesis of methymycin in the bacterium *Streptomyces venezuelae*. The enzyme also produces narbonolide (see EC 2.3.1.240, narbonolide synthase). The enzyme has 29 active sites arranged in four polypeptides (pikAI - pikAIV) with a loading domain, six extension modules and a terminal thioesterase domain. Each extension module contains a ketosynthase (KS), keto reductase (KR), an acyltransferase (AT) and an acyl-carrier protein (ACP). Not all active sites are used in the biosynthesis.

Synonyms

pikromycin PKS

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 2.3.1.239

Reaction

malonyl-CoA + 5 (2S)-methylmalonyl-CoA + 5 NADPH + 5 H⁺ = 10-deoxymethynolide + 6 CoA + 6 CO₂ + 5 NADP⁺ + 2 H₂O

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.