Creative Enzymes®

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