

pikromycin synthase

Cat. No. EXWM-0784

Lot. No. (See product label)

Introduction

Description

A heme-thiolate protein (cytochrome P-450). Involved in the biosynthesis of a number of bacterial macrolide antibiotics containing a desosamine glycoside unit. With narbomycin it hydroxylates at either C-12 to give pikromycin or C-14 to give neopikromycin or both positions to give narvopikromycin. With 10-deoxymethymycin it hydroxylates at either C-10 to give methymycin or C-12 to give neomethymycin or both positions to give novamethymycin.

Synonyms

PikC; CYP107L1

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.14.13.185

Reaction

(1) narbomycin + NADPH + H⁺ + O₂ = pikromycin + NADP⁺ + H₂O; (2) narbomycin + NADPH + H⁺ + O₂ = neopikromycin + NADP⁺ + H₂O; (3) narbomycin + 2 NADPH + 2 H⁺ + 2 O₂ = novapikromycin + 2 NADP⁺ + 2 H₂O; (4) 10-deoxymethymycin + NADPH + H⁺ + O₂ = methymycin + NADP⁺ + H₂O; (5) 10-deoxymethymycin + NADPH + H⁺ + O₂ = neomethymycin + NADP⁺ + H₂O; (6) 10-deoxymethymycin + 2 NADPH + 2 H⁺ + 2 O₂ = novamethymycin + 2 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.