

4-(γ-L-glutamylamino)butanoyl-[BtrI acyl-carrier protein] monooxygenase

Cat. No. EXWM-0910

Lot. No. (See product label)

Introduction

Description

Catalyses a step in the biosynthesis of the side chain of the aminoglycoside antibiotics of the butirosin family. FMNH₂ is used as a free cofactor. Forms a complex with a dedicated NAD(P)H:FMN oxidoreductase. The enzyme is not able to hydroxylate free substrates, activation by the acyl-carrier protein is mandatory. Octanoyl-S-[BtrI acyl-carrier protein] is also accepted.

Synonyms

btrO (gene name)

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.14.14.13

Reaction

4-(γ-L-glutamylamino)butanoyl-[BtrI acyl-carrier protein] + FMNH₂ + O₂ = 4-(γ-L-glutamylamino)-(2S)-2-hydroxybutanoyl-[BtrI acyl-carrier protein] + FMN + 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.