

L-ornithine N5-monooxygenase [NAD(P)H]

Cat. No. EXWM-0796

Lot. No. (See product label)

Introduction

Description

A flavoprotein (FAD). The enzyme from the pathogenic fungus *Aspergillus fumigatus* catalyses a step in the biosynthesis of the siderophores triacetylfusarinine and desferriferricrocin, while the enzyme from the bacterium *Kutzneria* sp. 744 is involved in the biosynthesis of piperazate, a building block of the kutzneride family of antifungal antibiotics. Activity of the fungal enzyme is higher with NADPH, due to the fact that following the reduction of the flavin, NADP⁺ (but not NAD⁺) stabilizes the C4a-hydroperoxyflavin intermediate that oxidizes the substrate. cf. EC 1.14.13.195, L-ornithine N5-monooxygenase (NADPH).

Synonyms

SidA (ambiguous)

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.14.13.196

Reaction

L-ornithine + NAD(P)H + H⁺ + O₂ = N5-hydroxy-L-ornithine + NAD(P)⁺ + 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.