

2-epi-5-epi-valiolone synthase

Cat. No. EXWM-5167

Lot. No. (See product label)

Introduction

Description

The enzyme is highly specific for α -D-sedoheptulopyranose 7-phosphate. It requires a divalent metal ion (Zn^{2+} or Co^{2+}) and an NAD^+ cofactor, which is transiently reduced during the reaction. The enzyme is involved in the biosynthesis of C7N-aminocyclitol natural products, such as the valienamine moiety of the antidiabetic drug acarbose and the crop protectant validamycin A. cf. EC 4.2.3.155, 2-epi-valiolone synthase and EC 4.2.3.154, demethyl-4-deoxygadusol synthase.

Synonyms

AcbC; ValA; CetA; SalQ; C7-cyclitol synthase

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 4.2.3.152

Reaction

α -D-sedoheptulopyranose 7-phosphate = 2-epi-5-epi-valiolone + phosphate

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.