

2-methylbutanoate polyketide synthase

Cat. No. EXWM-2193

Lot. No. (See product label)

Introduction

Description

This polyketide synthase enzyme forms the (S)-2-methylbutanoate side chain during lovastatin biosynthesis by the filamentous fungus *Aspergillus terreus*. The overall reaction comprises a single condensation reaction followed by α -methylation, β -ketoreduction, dehydration, and α,β enoyl reduction.

Synonyms

LovF

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 2.3.1.244

Reaction

acetyl-CoA + malonyl-CoA + [2-methylbutanoate polyketide synthase] + 2 NADPH + 2 H⁺ + S-adenosyl-L-methionine = (S)-2-methylbutanoyl-[2-methylbutanoate polyketide synthase] + 2 CoA + CO₂ + 2 NADP⁺ + S-adenosyl-L-homocysteine + 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.