

methylsterol monooxygenase

Cat. No. EXWM-0879

Lot. No. (See product label)

Introduction

Description Requires cytochrome b5. Also acts on 4 α -methyl-5 α -cholest-7-en-3 β -ol. The sterol can be based on cycloartenol as well as lanosterol.

Synonyms methylsterol hydroxylase; 4-methylsterol oxidase; 4,4-dimethyl-5 α -cholest-7-en-3 β -ol,hydrogen-donor:oxygen oxidoreductase (hydroxylating)

Product Information

Form Liquid or lyophilized powder

EC Number EC 1.14.13.72

CAS No. 37256-80-7

Reaction 4,4-dimethyl-5 α -cholest-7-en-3 β -ol + 3 NAD(P)H + 3 H⁺ + 3 O₂ = 3 β -hydroxy-4 β -methyl-5 α -cholest-7-ene-4 α -carboxylate + 3 NAD(P)⁺ + 4 H₂O (overall reaction); (1a) 4,4-dimethyl-5 α -cholest-7-en-3 β -ol + NAD(P)H + H⁺ + O₂ = 4 β -hydroxymethyl-4 α -methyl-5 α -cholest-7-en-3 β -ol + NAD(P)⁺ + H₂O; (1b) 4 β -hydroxymethyl-4 α -methyl-5 α -cholest-7-en-3 β -ol + NAD(P)H + H⁺ + O₂ = 3 β -hydroxy-4 β -methyl-5 α -cholest-7-ene-4 α -carbaldehyde + NAD(P)⁺ + 2 H₂O; (1c) 3 β -hydroxy-4 β -methyl-5 α -cholest-7-ene-4 α -carbaldehyde + NAD(P)H + H⁺ + O₂ = 3 β -hydroxy-4 β -methyl-5 α -cholest-7-ene-4 α -carboxylate + 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.