

cholesterol 7-desaturase

Cat. No. EXWM-0984

Lot. No. (See product label)

Introduction

Description

The enzyme, characterized from several organisms including the worm *Caenorhabditis elegans*, the fly *Drosophila melanogaster*, and the ciliate *Tetrahymena thermophila*, is a Rieske oxygenase. In insects it participates in the biosynthesis of ecdysteroid hormones. The electrons are transferred from NAD(P)H via an electron transfer chain likely to include ferredoxin reductase and ferredoxin. The enzyme differs from regular desaturases, such as EC 1.14.19.20, 7-sterol 5(6)-desaturase, which are cytochrome b5-dependent and contain the three His-boxes that are typical to most desaturases.

Synonyms

nvd (gene name); daf-36 (gene name)

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.14.19.21

Reaction

cholesterol + O₂ + NAD(P)H + H⁺ = cholesta-5,7-dien-3 β -ol + NAD(P)⁺ + 2 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.