

## sterol 22-desaturase

Cat. No. EXWM-1006

Lot. No. (See product label)

### Introduction

#### Description

A heme-thiolate protein (P450). The enzyme, found in yeast and plants, catalyses the introduction of a double bond between the C-22 and C-23 carbons of certain sterols. In yeast the enzyme acts on ergosta-5,7,24(28)-trien-3 $\beta$ -ol, a step in the biosynthesis of ergosterol. The enzyme from the plant *Arabidopsis thaliana* acts on sitosterol and 24-epi-campesterol, producing stigmasterol and brassicasterol, respectively.

#### Synonyms

ERG5 (gene name); CYP710A (gene name)

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 1.14.19.41

#### Reaction

ergosta-5,7,24(28)-trien-3 $\beta$ -ol + NADPH + H<sup>+</sup> + O<sub>2</sub> = ergosta-5,7,22,24(28)-tetraen-3- $\beta$ -ol + NADP<sup>+</sup> + 2 H<sub>2</sub>O

#### 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.