

## long-chain fatty acid $\omega$ -monooxygenase

Cat. No. EXWM-0807

Lot. No. (See product label)

### Introduction

#### Description

The plant enzyme CYP704B1, which is involved in the synthesis of sporopollenin, a complex polymer found at the outer layer of spores and pollen, acts on palmitate (18:0), stearate (18:0) and oleate (18:1). The plant enzyme CYP86A1 also acts on laurate (12:0). The enzyme from the yeast *Starmerella bombicola* (CYP52M1) acts on C16 to C20 saturated and unsaturated fatty acids and can also hydroxylate the ( $\omega$ -1) position. The mammalian enzyme CYP4A acts on laurate (12:0), myristate (14:0), palmitate (16:0), oleate (18:1), and arachidonate (20:4).

#### Synonyms

CYP704B1 (gene name); CYP52M1 (gene name); CYP4A (gene name); CYP86A (gene name)

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 1.14.13.205

#### Reaction

a long-chain fatty acid + NADPH + H<sup>+</sup> + O<sub>2</sub> = an  $\omega$ -hydroxy-long-chain fatty acid + NADP<sup>+</sup> + 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.