

## β-carotene 3-hydroxylase

Cat. No. EXWM-0729

Lot. No. (See product label)

### Introduction

#### Description

Requires ferredoxin and Fe(II). Also acts on other carotenoids with a β-end group. In some species canthaxanthin is the preferred substrate.

#### Synonyms

β-carotene 3,3'-monooxygenase; CrtZ

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 1.14.13.129

#### CAS No.

133425-64-6

#### Reaction

β-carotene + 2 NADH + 2 H<sup>+</sup> + 2 O<sub>2</sub> = zeaxanthin + 2 NAD<sup>+</sup> + 2 H<sub>2</sub>O (overall reaction); (1a) β-carotene + NADH + H<sup>+</sup> + O<sub>2</sub> = β-cryptoxanthin + NAD<sup>+</sup> + H<sub>2</sub>O; (1b) β-cryptoxanthin + NADH + H<sup>+</sup> + O<sub>2</sub> = zeaxanthin + NAD<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.