

zeaxanthin epoxidase

Cat. No. EXWM-0899

Lot. No. (See product label)

Introduction

Description

A flavoprotein (FAD) that is active under conditions of low light. Along with EC 1.10.99.3, violaxanthin de-epoxidase, this enzyme forms part of the xanthophyll (or violaxanthin) cycle, which is involved in protecting the plant against damage by excess light. It will also epoxidize lutein in some higher-plant species.

Synonyms

Zea-epoxidase

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.14.13.90

CAS No.

149718-34-3

Reaction

zeaxanthin + 2 NAD(P)H + 2 H⁺ + 2 O₂ = violaxanthin + 2 NAD(P)⁺ + 2 H₂O (overall reaction); (1a) zeaxanthin + NAD(P)H + H⁺ + O₂ = antheraxanthin + NAD(P)⁺ + H₂O; (1b) antheraxanthin + NAD(P)H + H⁺ + O₂ = violaxanthin + 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.