

linoleate 13S-lipoxygenase

Cat. No. EXWM-0532

Lot. No. (See product label)

Introduction

Description

Contains nonheme iron. A common plant lipoxygenase that oxidizes linoleate and α -linolenate, the two most common polyunsaturated fatty acids in plants, by inserting molecular oxygen at the C-13 position with (S)-configuration. This enzyme produces precursors for several important compounds, including the plant hormone jasmonic acid. EC 1.13.11.58, linoleate 9S-lipoxygenase, catalyses a similar reaction at the second available position of these fatty acids.

Synonyms

13-lipoxidase; carotene oxidase; 13-lipoperoxidase; fat oxidase; 13-lipoxydase; linoleate:O₂ 13-oxidoreductase

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.13.11.12

CAS No.

9029-60-1

Reaction

(1) linoleate + O₂ = (9Z,11E,13S)-13-hydroperoxyoctadeca-9,11-dienoate; (2) α -linolenate + O₂ = (9Z,11E,13S,15Z)-13-hydroperoxyoctadeca-9,11,15-trienoate

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.