

## 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  $\alpha$ -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:O<sub>2</sub> 13-oxidoreductase

### Product Information

**Form** Liquid or lyophilized powder

**EC Number** EC 1.13.11.12

**CAS No.** 9029-60-1

**Reaction** (1) linoleate + O<sub>2</sub> = (9Z,11E,13S)-13-hydroperoxyoctadeca-9,11-dienoate; (2)  $\alpha$ -linolenate + O<sub>2</sub> = (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.