

## linoleate 9S-lipoxygenase

Cat. No. EXWM-0577

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 C9 position with (S)-configuration. The enzyme plays a physiological role during the early stages of seedling growth. The enzyme from *Arabidopsis thaliana* shows comparable activity towards linoleate and linolenate. EC 1.13.11.12 (linoleate 13S-lipoxygenase) catalyses a similar reaction at another position of these fatty acids.

**Synonyms** 9-lipoxygenase; 9S-lipoxygenase; linoleate 9-lipoxygenase; LOX1 (gene name); 9S-LOX

### Product Information

**Form** Liquid or lyophilized powder

**EC Number** EC 1.13.11.58

**Reaction** linoleate + O<sub>2</sub> = (9S,10E,12Z)-9-hydroperoxy-10,12-octadecadienoate

**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.