Creative Enzymes®

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 α-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 + O2 = (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 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.