Creative Enzymes®

Native Glycine max (soybean) Lipoxidase

Cat. No. NATE-0407

Lot. No. (See product label)

Introduction

Description	Catalyzes the hydroperoxidation of lipids containing a cis,cis-1,4-pentadiene structure.
Applications	The soybean enzyme will use arachidonic acid as a substrate, with ~ 15% of the activity indicated using linoleic acid as the substrate; the product of arachidonic acid oxidation is 12-or 15-hydroperoxyarachidonic acid (12-HPETE or 15-HPETE).
Synonyms	Lipoxygenases; EC 1.13.11.12; 9029-60-1; 13-lipoxidase; carotene oxidase; 13-lipoperoxidase; fat oxidase; 13-lipoxydase; lionoleate:O2 13-oxidoreductase; linoleate 13S-lipoxygenase

Product Information

Source	Glycine max (soybean)
Form	Type I, ammonium sulfate suspension, Suspension in 2.3 M (NH4)2SO4 solution, pH approx. 6.0; Type II, lyophilized powder, Contains stabilizer and NaCl.
EC Number	EC 1.13.11.12
CAS No.	9029-60-1
Molecular Weight	mol wt 108 kDa (two 54 kDa subunits)
Activity	Type I, 500,000-1,000,000 units/mg protein; Type II, > 50,000 units/mg solid.
Unit Definition	One unit will cause an increase in A234 of 0.001 per min at pH 9.0 at 25°C when linoleic acid is the substrate in 3.0 ml volume (1 cm light path). One A234 unit is equivalent to the oxidation of 0.12 µmole of linoleic acid.

Storage and Shipping Information

Storage	2-8°C