

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; linoleate: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