Creative Enzymes®

hydroperoxide dehydratase

Cat. No. EXWM-5076

Lot. No. (See product label)

Introduction

Description Acts on a number of unsaturated fatty-acid hydroperoxides, forming the corresponding allene oxides. The product of the above reaction is unstable and is acted upon by EC 5.3.99.6, allene-oxide cyclase, to form the cyclopentenone derivative (15Z)-12-oxophyto-10,15-dienoate (OPDA), which is the first cyclic and biologically active metabolite in the jasmonate biosynthesis pathway. The enzyme from many plants belongs to the CYP-74 family of P-450 monooxygenases.

Synonyms hydroperoxide isomerase; linoleate hydroperoxide isomerase; linoleic acid hydroperoxide isomerase; HPI; (9Z,11E,14Z)-(13S)-hydroperoxyoctadeca-9,11,14-trienoate 12,13-hydro-lyase; (9Z,11E,14Z)-(13S)-hydroperoxyoctadeca-9,11,14-trienoate 12,13-hydro-lyase [(9Z)-(13S)-12,13-epoxyoctadeca-9,11-dienoate-forming]; allene oxide synthase; AOS

Product Information

Form Liquid or lyophilized powder

EC Number EC 4.2.1.92

Reaction (9Z,11E,15Z)-(13S)-hydroperoxyoctadeca-9,11,15-trienoate = (9Z,15Z)-(13S)-12,13-epoxyoctadeca-9,11,15-trienoate + H2O

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 ℃.