Creative Enzymes®

9,12-octadecadienoate 8-hydroperoxide 8R-isomerase

Cat. No. EXWM-5546

Lot. No. (See product label)

Introduction

Description The enzyme contains heme. The bifunctional enzyme from Aspergillus nidulans uses different heme domains to catalyse two separate reactions. Linoleic acid is oxidized within the N-terminal heme peroxidase domain to (8R,9Z,12Z)-8-hydroperoxyoctadeca-9,12-dienoate (cf. EC 1.13.11.60, linoleate 8R-lipoxygenase), which is subsequently isomerized to (5S,8R,9Z,12Z)-5,8-dihydroxyoctadeca-9,12-dienoate within the C-terminal P-450 heme thiolate domain.

Synonyms 5,8-LDS (bifunctional enzyme); 5,8-linoleate diol synthase (bifunctional enzyme); 8-hydroperoxide isomerase; (8R,9Z,12Z)-8-hydroperoxy-9,12-octadecadienoate mutase ((5S,8R,9Z,12Z)-5,8-dihydroxy-9,12-octadecadienoate-forming); PpoA

Product Information

Form Liquid or lyophilized powder

EC Number EC 5.4.4.5

Reaction (8R,9Z,12Z)-8-hydroperoxyoctadeca-9,12-dienoate = (5S,8R,9Z,12Z)-5,8-dihydroxyoctadeca-9,12-dienoate

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 ℃.