

## 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 °C for short term. For long term storage, store it at -20 °C~-80 °C.