

## arachidonate 5-lipoxygenase

Cat. No. EXWM-0553

Lot. No. (See product label)

### Introduction

**Description** Arachidonate 5-lipoxygenase, also known as ALOX5, 5-lipoxygenase, 5-LOX, or 5-LO, is a non-heme iron-containing enzyme (EC 1.13.11.34) that in humans is encoded by the ALOX5 gene. Arachidonate 5-lipoxygenase is a member of the lipoxygenase family of enzymes. It transforms EFA substrates into leukotrienes as well as a wide range of other biologically active products. ALOX5 is a current target for pharmaceutical intervention in a number of diseases.

**Synonyms** leukotriene-A4 synthase;  $\Delta$ 5-lipoxygenase; 5 $\Delta$ -lipoxygenase; arachidonic 5-lipoxygenase; arachidonic acid 5-lipoxygenase; C-5-lipoxygenase; LTA synthase; leukotriene A4 synthase

### Product Information

**Form** Liquid or lyophilized powder

**EC Number** EC 1.13.11.34

**CAS No.** 80619-02-9

**Reaction** arachidonate + O<sub>2</sub> = leukotriene A4 + H<sub>2</sub>O (overall reaction); (1a) arachidonate + O<sub>2</sub> = (6E,8Z,11Z,14Z)-(5S)-5-hydroperoxyicosa-6,8,11,14-tetraenoate; (1b) (6E,8Z,11Z,14Z)-(5S)-5-hydroperoxyicosa-6,8,11,14-tetraenoate = leukotriene A4 + H<sub>2</sub>O

**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.