

## acyl-CoA 5-desaturase

Cat. No. EXWM-1001

Lot. No. (See product label)

### Introduction

#### Description

The enzyme, characterized from the plant *Anemone leveillei*, introduces a cis double bond at carbon 5 of acyl-CoAs that do not contain a double bond at position 8. In vivo it forms non-methylene-interrupted polyunsaturated fatty acids such as sciadonate and juniperonate. When expressed in *Arabidopsis thaliana* the enzyme could also act on unsaturated substrates such as palmitoyl-CoA. cf. EC 1.14.19.44, acyl-CoA (8-3)-desaturase.

#### Synonyms

acyl-CoA 5-desaturase (non-methylene-interrupted)

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 1.14.19.37

#### Reaction

(1) (11Z,14Z)-icosa-11,14-dienoyl-CoA + reduced acceptor + O<sub>2</sub> = (5Z,11Z,14Z)-icosa-5,11,14-trienoyl-CoA + acceptor + 2 H<sub>2</sub>O; (2) (11Z,14Z,17Z)-icosa-11,14,17-trienoyl-CoA + reduced acceptor + O<sub>2</sub> = (5Z,11Z,14Z,17Z)-icosa-5,11,14,17-tetraenoyl-CoA + acceptor + 2 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.