

## palmitoyl-[glycerolipid] 3-(E)-desaturase

Cat. No. EXWM-1008

Lot. No. (See product label)

### Introduction

**Description** The enzyme introduces an unusual trans double bond at carbon 3 of a palmitoyl group attached to the sn-2 position of glycerolipids. The enzyme from the plant *Arabidopsis thaliana* is specific for palmitate in phosphatidylglycerol. The enzyme from tobacco can also accept oleate and  $\alpha$ -linolenate if present at the sn-2 position of phosphatidylglycerol.

**Synonyms** FAD4

### Product Information

**Form** Liquid or lyophilized powder

**EC Number** EC 1.14.19.43

**Reaction** a 1-acyl-2-palmitoyl-[glycerolipid] + 2 reduced ferredoxin [iron-sulfur] cluster + O<sub>2</sub> + 2 H<sup>+</sup> = a 1-acyl-2-[(3E)-hexadec-3-enoyl]-[glycerolipid] + 2 oxidized ferredoxin [iron-sulfur] cluster + 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.