Creative Enzymes®

acyl-lipid Δ6-acetylenase

Cat. No. EXWM-1002

Lot. No. (See product label)

Introduction

Description	The enzyme, characterized from the moss Ceratodon purpureus, converts the double bond at position 6 of γ-linolenate and stearidonate into a triple bond. The product of the latter, dicranin, is the main fatty acid found in C. purpureus. The enzyme contains a cytochrome b5 domain that acts as the direct electron donor to the desaturase active site. The enzyme also has the activity of EC 1.14.19.47, acyl-lipid (9-3)-desaturase.

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 1.14.19.38
Reaction	(1) a γ-linolenoyl-[glycerolipid] + 2 ferrocytochrome b5 + O2 + 2 H+ = a (9Z,12Z)-octadeca-9,12-dien-6-ynoyl-[glycerolipid] + 2 ferricytochrome b5 + 2 H2O; (2) a stearidonoyl-[glycerolipid] + 2 ferrocytochrome b5 + O2 + 2 H+ = a (9Z,12Z,15Z)-octadeca-9,12,15-trien-6-ynoyl-[glycerolipid] + 2 ferricytochrome b5 + 2 H2O
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 ℃.