Creative Enzymes®

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 + O2 = (5Z,11Z,14Z)-icosa-5,11,14-trienoyl-CoA + acceptor + 2 H2O; (2) (11Z,14Z,17Z)-icosa-11,14,17-trienoyl-CoA + reduced acceptor + O2 = (5Z,11Z,14Z,17Z)-icosa-5,11,14,17-tetraenoyl-CoA + acceptor + 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 ℃.