

Biosafety Clearing-House (BCH)

GENETIC ELEMENT (GENE)

BCH-GENE-SCBD-113296-2

LAST UPDATED: 17 MAY 2021

General information

Name of genetic element

delta 6-desaturase gene

EN

Alternate genetic element name(s) (synonym(s))

CS-FADS6-MICPS

EN

Abbreviation

CS-delta6D-MICPC

EN

Category

Protein coding sequence

Is this genetic element a synthetic molecule?

No

Donor organism

Donor organism(s)

[BCH-ORGA-SCBD-113293-1](#) ORGANISM | MICROMONAS PUSILLA (PICOPLANKTONIC GREEN ALGA, MICPS) |
Algae

Characteristics of the protein coding sequence

Name of the protein expressed by the coding sequence

delta 6-desaturase

EN

Biological function of the protein

Delta 6 desaturase (FADS6), a membrane-bound desaturase which converts linoleic acid to γ -linolenic acid or α -linolenic acid to stearidonic acid by introducing a double bond between carbons 6 and 7 from the carboxyl end of the substrate.

EN

Related trait(s) or use(s) in biotechnology

Changes in quality and/or metabolite content

Lipid and fatty acids

Additional Information

Other relevant website addresses and/or attached documents

? [Molecular mechanism of substrate specificity for delta 6 desaturase from Mortierella alpina and Micromonas pusilla \(English \)](#)

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Further Information

Questions about the Cartagena Protocol on Biosafety or the operation of the Biosafety Clearing-House may be directed to the Secretariat of the Convention on Biological Diversity.

Secretariat of the Convention on Biological Diversity

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