

## Biosafety Clearing-House (BCH)

GENETIC ELEMENT (GENE)

BCH-GENE-SCBD-113304-1

LAST UPDATED: 13 MAR 2018

### General information

Name of genetic element

delta 4-desaturase gene

EN

Abbreviation

CS-delta4D-REBSA

EN

Category

Protein coding sequence

Is this genetic element a synthetic molecule?

No

### Donor organism

Donor organism(s)

[BCH-ORGA-SCBD-113295-1](#) ORGANISM | REBECCA SALINA (MICROALGA, REBSA) |

Algae

### Characteristics of the protein coding sequence

Name of the protein expressed by the coding sequence

delta 4-desaturase

EN

Biological function of the protein

Delta-4 desaturase is the final enzyme involved in the biosynthesis of docosahexaenoic acid from docosapentaenoic acid.

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

? [Fatty Acid Desaturases, Polyunsaturated Fatty Acid Regulation, and Biotechnological Advances \( English \)](#)

? [Heterologous overexpression of a novel delta-4 desaturase gene from the marine microalga Pavlova viridis in Escherichia coli as a Mystic fusion \( English \)](#)

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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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