

Biosafety Clearing-House (BCH)

GENETIC ELEMENT (GENE)

BCH-GENE-SCBD-103621-3

LAST UPDATED: 06 SEP 2016

General information

Name of genetic element

Phytoene Desaturase gene

EN

Abbreviation

CS-CRTI-PANAN

EN

Category

Protein coding sequence

Is this genetic element a synthetic molecule?

No

Donor organism

Donor organism(s)

[BCH-ORGA-SCBD-103629-3](#) ORGANISM | ERWINIA UREDOVORA (PANAN) |

Bacteria

Characteristics of the protein coding sequence

Name of the protein expressed by the coding sequence

Phytoene Desaturase

EN

Biological function of the protein

Catalyses four-step dehydrogenation reactions in the carotienoid synthesis pathway yielding lycopene.

EN

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

Changes in quality and/or metabolite content
Vitamins

Additional Information

Other relevant website addresses and/or attached documents

? [Carotenoids 2: Genetics and molecular biology of carotenoid pigment biosynthesis.pdf](#) (*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**

413 rue Saint-Jacques, suite 800
Montreal, Québec, H2Y 1N9
Canada
Fax: +1 514 288-6588
Email: secretariat@cbd.int