

Biosafety Clearing-House (BCH)

GENETIC ELEMENT (GENE)

BCH-GENE-SCBD-15012-5

LAST UPDATED: 09 FEB 2021

General information

Name of genetic element

1-amino-cyclopropane -1-carboxylic acid synthase gene

EN

Abbreviation

CS-acc-DIACA

EN

Category

Protein coding sequence

Is this genetic element a synthetic molecule?

No

Donor organism

Donor organism(s)

[BCH-ORGA-SCBD-4954-7](#) ORGANISM | DIANTHUS CARYOPHYLLUS (CARNATION, DIACA) |

Crops

Characteristics of the protein coding sequence

Name of the protein expressed by the coding sequence

1-amino-cyclopropane -1-carboxylic acid synthase

EN

Biological function of the protein

The ACC gene encodes for the carnation 1-amino-cyclopropane-1-carboxylic acid (ACC) synthase which is required for normal ethylene biosynthesis which affects the rate of ripening in plants.

EN

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

Changes in physiology and/or production
Ripening

Additional Information

Other relevant website addresses and/or attached documents

? [Molecular cloning of an 1-aminocyclopropane-1-carboxylate synthase from senescing carnation flower petals \(English \)](#)

[BCH-GENE-SCBD-15012-5](#)

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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