

## Biosafety Clearing-House (BCH)

GENETIC ELEMENT (GENE)

BCH-GENE-SCBD-102613-4

EN

DE

LAST UPDATED: 05 AUG 2022

### General information

Name of genetic element

Acetyl-CoA carboxylase large subunit

EN

Abbreviation

CS-accD-TOBAC

EN

Category

Protein coding sequence

Is this genetic element a synthetic molecule?

No

### Donor organism

Donor organism(s)

[BCH-ORGA-SCBD-12120-4](#) ORGANISM | NICOTIANA TABACUM (TOBACCO, TOBAC )

Crops

### Characteristics of the protein coding sequence

Name of the protein expressed by the coding sequence

Acetyl-CoA carboxylase large subunit

EN

Biological function of the protein

ACC catalyzes the irreversible carboxylation of acetyl-CoA to malonyl-CoA. Malonyl-CoA is needed as a co-substrate in the fatty acids biosynthesis.

EN

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

Other

Homologous recombination

### Additional Information

Other relevant website addresses and/or attached documents

? [The Plant Journal - The tobacco plastid accD gene is essential and is required for leaf development](#)  
[ *English* ]

[BCH-GENE-SCBD-102613-4](#)

## 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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