

Biosafety Clearing-House (BCH)

GENETIC ELEMENT (GENE)

BCH-GENE-SCBD-111937-2

LAST UPDATED: 24 JAN 2022

General information

Name of genetic element

Lycopene epsilon-cyclase fragment

EN

Abbreviation

CS-lyce_RNAi-ANACO

EN

Category

Double-stranded RNA

Is this genetic element a synthetic molecule?

No

Donor organism

Donor organism(s)

[BCH-ORGA-SCBD-111928-1](#) ORGANISM | ANANAS COMOSUS (PINEAPPLE, ANACO) |

Crops

Characteristics of the protein coding sequence

Biological function of the protein

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EN

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

Changes in quality and/or metabolite content
Pigmentation / Coloration

Additional Information

Lycopene ϵ -cyclase (LCY- ϵ) is involved in the first step of the α -branch synthesis pathway of carotenoids from lycopene in plants.

EN

Other relevant website addresses and/or attached documents

? [Downregulation of the lycopene \$\epsilon\$ -cyclase gene increases carotenoid synthesis via the \$\beta\$ -branch-](#)

[specific pathway and enhances salt-stress tolerance in sweetpotato transgenic calli](#) (*English*)

[BCH-GENE-SCBD-111937-2](#)

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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