

Biosafety Clearing-House (BCH)

GENETIC ELEMENT (GENE)

BCH-GENE-SCBD-110886-1 [EN](#) [DE](#)

LAST UPDATED: 30 AUG 2016

General information

Name of genetic element

Root locus C gene

EN

Alternate genetic element name(s) (synonym(s))

Riorf16

EN

rolC

EN

Abbreviation

CS-rolC-AGRRH

EN

Category

Protein coding sequence

Is this genetic element a synthetic molecule?

No

Donor organism

Donor organism(s)

[BCH-ORGA-SCBD-110857-2](#) ORGANISM | AGROBACTERIUM RHIZOGENES (AGRRH) |

Bacteria

Characteristics of the protein coding sequence

Name of the protein expressed by the coding sequence

Cytokinin-beta-glucosidase

EN

Biological function of the protein

The cytokinin-beta-glucosidase encoded by rolC hydrolyses cytokinin-glucosides, releasing active forms of cytokinin.

EN

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

Changes in physiology and/or production

Additional Information

The developmental, physiological and morphological alterations caused by rolC expression in transgenic plants are primarily due to a modification of the hormone balance.

EN

Other relevant website addresses and/or attached documents

? [The plant oncogene rolC is responsible for the release of cytokinins from glucoside conjugates. \(English \)](#)

? [Independent and synergistic activity of rol A, B and C loci in stimulating abnormal growth in plants \(English \)](#)

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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