

Biosafety Clearing-House (BCH)

GENETIC ELEMENT (GENE)

BCH-GENE-SCBD-14986-6

LAST UPDATED: 16 FEB 2021

General information

Name of genetic element

Cry1Ac

EN

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

Cry1A(c)

EN

Abbreviation

CS-cry1Ac-BACTU

EN

Category

Protein coding sequence

Is this genetic element a synthetic molecule?

No

Donor organism

Donor organism(s)

[BCH-ORGA-SCBD-45614-11](#) ORGANISM | BACILLUS THURINGIENSIS (BT, BACILLUS, BACTU) |
Bacteria

Point of collection or acquisition of the donor organism(s)

Bacillus thuringiensis var. kurstaki strain HD73.

EN

Characteristics of the protein coding sequence

Name of the protein expressed by the coding sequence

Cry1Ac delta-endotoxin

EN

Biological function of the protein

The cry1Ac gene codes for a Bt-toxin, which confers resistance to lepidopteran pests of cotton, such as tobacco budworm (*Heliothis virescens*), cotton bollworm (*Helicoverpa zea*), pink bollworm (*Pectinophora gossypiella*), and soybean looper (*Pseudoplusia includens*).

EN

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

Resistance to diseases and pests

Insects

Lepidoptera (butterflies and moths)

Additional Information

Other relevant website addresses and/or attached documents

? [A Review of the Environmental Safety of the Cry1Ac Protein.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