

## Biosafety Clearing-House (BCH)

GENETIC ELEMENT (GENE)

BCH-GENE-SCBD-258879-1

LAST UPDATED: 13 JAN 2022

### General information

Name of genetic element

Cin4-1 element

EN

Abbreviation

O-cin4\_1-MAIZE

EN

Category

Other (Transposon)

Is this genetic element a synthetic molecule?

No

### Donor organism

Donor organism(s)

[BCH-ORGA-SCBD-246-6](#) ORGANISM | ZEA MAYS (MAIZE, CORN, MAIZE) |

Crops

### Characteristics of the protein coding sequence

### Additional Information

Maize *Cin4-1* is a non-viral transposable sequence that is associated with the type 2 allele of the dihydroflavonol 4-reductase gene. *Cin4-1* does not convey functional advantages to dihydroflavonol 4-reductase, but does alter the structure of the *A1* transcriptional unit. The *Cin4-1* element is a member of a family of elements occurring in 50 to 100 copies within the maize genome.

EN

Other relevant website addresses and/or attached documents

? [Cin4, an insert altering the structure of the A1 gene in Zea mays, exhibits properties of nonviral retrotransposons.pdf](#) ( English )

BCH-GENE-SCBD-258879-1

## 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](mailto:secretariat@cbd.int)