

Biosafety Clearing-House (BCH)

GENETIC ELEMENT (GENE)

BCH-GENE-SCBD-112017-2

LAST UPDATED: 18 FEB 2022

General information

Name of genetic element

Homeodomain-leucine zipper 4 gene

EN

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

HD-zip

EN

CS-HD4-HELAN

EN

Abbreviation

CS-HB4-HELAN

EN

Category

Protein coding sequence

Is this genetic element a synthetic molecule?

No

Donor organism

Donor organism(s)

[BCH-ORGA-SCBD-100348-5](#) ORGANISM | HELIANTHUS ANNUUS (SUNFLOWER, HELAN) |

Crops

Characteristics of the protein coding sequence

Name of the protein expressed by the coding sequence

Homeodomain-leucine zipper 4

EN

Biological function of the protein

HAHB4 is a member of the Helianthus annuus (sunflower) subfamily I of HD-Zip proteins that has been previously shown to be transcriptionally regulated by the availability of water and by abscisic acid.

EN

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

Tolerance to abiotic stress

Drought

Salinity

Additional Information

Other relevant website addresses and/or attached documents

? [Modulation of plant growth by HD-Zip class I and II transcription factors in response to environmental stimuli \(English \)](#)

? [Hahb-4, a homeobox-leucine zipper gene potentially involved in abscisic acid-dependent responses to water stress in sunflower \(English \)](#)

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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

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