

Biosafety Clearing-House (BCH)

GENETIC ELEMENT (GENE)

BCH-GENE-SCBD-46004-7

LAST UPDATED: 24 FEB 2021

General information

Name of genetic element

Beta-glucuronidase coding sequence

EN

Abbreviation

CS-uidA-ECOLX

EN

Category

Protein coding sequence

Is this genetic element a synthetic molecule?

No

Donor organism

Donor organism(s)

[BCH-ORGA-SCBD-14930-5](#) ORGANISM | [ESCHERICHIA COLI \(ECOLX\)](#) |
Bacteria

Characteristics of the protein coding sequence

Name of the protein expressed by the coding sequence

Beta-Glucuronidase

EN

Biological function of the protein

The *uidA* gene expresses beta-glucuronidase (GUS). Expression of this enzyme allows detection in the laboratory of transformed cells by using a simple colour change assay. Typically used as a reporter gene or visual marker gene.

EN

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

Selectable marker genes and reporter genes

Additional Information

Other relevant website addresses and/or attached documents

? [GUS reporter system - Wikipedia](#) (*English*)

? [GUS fusions beta-glucuronidase as a sensitive and versatile gene fusion marker in higher plants..pdf](#) (*English*)

? [beta-Glucuronidase from Escherichia coli as a gene-fusion marker.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**

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