

Biosafety Clearing-House (BCH)

GENETIC ELEMENT (GENE)

BCH-GENE-SCBD-14991-8

LAST UPDATED: 27 FEB 2014

General information

Name of genetic element

Hygromycin B phosphotransferase gene

EN

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

aph4 gene

EN

aphIV gene

EN

Abbreviation

CS-hpt-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

Hygromycin B phosphotransferase

EN

Biological function of the protein

The hygromycin B phosphotransferase encoded by the hpt gene specifically inactivates the antibiotic hygromycin by phosphorylation.

EN

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

Resistance to antibiotics

Hygromycin

Selectable marker genes and reporter genes

Additional Information

Other relevant website addresses and/or attached documents

? [Hygromycin B phosphotransferase as a selectable marker for DNA transfer experiments with higher eucaryotic cells..pdf \(English \)](#)

? [Opinion of the Scientific Panel on Genetically Modified Organisms on the use of antibiotic resistance genes as marker genes in genetically modified plants,.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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