

## 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.

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