

Biosafety Clearing-House (BCH)

GENETIC ELEMENT (GENE)

BCH-GENE-SCBD-15001-5

LAST UPDATED: 27 FEB 2014

General information

Name of genetic element

Neomycin Phosphotransferase II

EN

Abbreviation

CS-nptII-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

Neomycin Phosphotransferase II

EN

Biological function of the protein

The nptII (neo) gene codes for an enzyme that phosphorylates kanamycin and confers resistance to this antibiotic. Typically used as a marker gene.

EN

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

Resistance to antibiotics
Kanamycin**Additional Information**

Other relevant website addresses and/or attached documents

? [Nucleotide sequence and exact localization of the neomycin phosphotransferase gene from transposon Tn5 \(English \)](#)

[BCH-GENE-SCBD-15001-5](#)

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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