

Biosafety Clearing-House (BCH)

LIVING MODIFIED ORGANISM (LMO)


BCH-LMO-SCBD-106260-2 EN RU

[? Decisions on the LMO ? Risk Assessments](#)

LAST UPDATED: 09 JAN 2015

Living Modified Organism identity


The image below identifies the LMO through its unique identifier, trade name and a link to this page of the BCH. Click on it to download a larger image on your computer. For help on how to use it go to the LMO quick-links page.



Canola modified for herbicide tolerance

Read barcode or type above URL into internet browser to access information on this LMO in the Biosafety Clearing-House © SCBD 2012

<https://bch.cbd.int/database/record?documentID=106260>



Name

Canola modified for herbicide tolerance

EN

Transformation event

aroA

Developer(s)

- **PERSON:** АНАТОЛИЙ НИКОЛАЕВИЧ ЕВТУШЕНКОВ | [BCH-CON-SCBD-106248-2](#)

PERSON

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RELATED ORGANIZATION

Description

Transgenic rapeseed line with an integrated, modified, aroA gene to confer resistance to the herbicide glyphosate.

EN

Recipient Organism or Parental Organisms

The term "Recipient organism" refers to an organism (either already modified or non-modified) that was subjected to genetic modification, whereas "Parental organisms" refers to those that were involved in cross breeding or cell fusion.

[BCH-ORGA-SCBD-12083-7](#) ORGANISM | BRASSICA NAPUS (TURNIP, RAPESEED, CANOLA PLANT, OILSEED RAPE, RAPE, BRANA) |
Crops

Characteristics of the modification process

Vector

pBI121

EN

Techniques used for the modification

Agrobacterium-mediated DNA transfer

Introduced or modified genetic element(s)

Some of these genetic elements may be present as fragments or truncated forms. Please see notes below, where applicable.

[BCH-GENE-SCBD-100270-6](#) NOPALINE SYNTHASE GENE PROMOTER |

Promoter

[BCH-GENE-SCBD-15001-5](#) NEOMYCIN PHOSPHOTRANSFERASE II | (BACTERIA) |

Protein coding sequence | Resistance to antibiotics (Kanamycin)

[BCH-GENE-SCBD-100287-7](#) CAMV 35S PROMOTER |

Promoter

[BCH-GENE-SCBD-100269-8](#) NOPALINE SYNTHASE GENE TERMINATOR |

Terminator

[BCH-GENE-SCBD-106246-1](#) 5-ENOLPYRUVYLSHIKIMATE-3-PHOSPHATE SYNTHASE GENE |

Protein coding sequence | Resistance to herbicides (Glyphosate)

[BCH-GENE-SCBD-106247-1](#) CHLOROPLAST TRANSIT PEPTIDE | (TOBACCO PLANT) |

Transit signal

Notes regarding the genetic elements present in this LMO

Transgenic rapeseed line with integrated gene *aroA* under control of the constitutive 35S promoter of cauliflower mosaic virus and nopaline synthase termination sequence of *A. tumefaciens*. Incorporation of the *aroA* target gene confers resistance to the herbicide glyphosate. To increase transgenic line resistance to glyphosate single nucleotide mutation was introduced into the *aroA* sequence by the site-directed mutagenesis.

EN

LMO characteristics

Modified traits

Resistance to herbicides

Glyphosate

Resistance to antibiotics

Kanamycin

[BCH-LMO-SCBD-106260-2](#)

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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