

Biosafety Clearing-House (BCH)

LIVING MODIFIED ORGANISM (LMO)


BCH-LMO-SCBD-101074-4

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

LAST UPDATED: 07 MAY 2013

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 glufosinate 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=101074>



Name

Canola modified for glufosinate tolerance

EN

Transformation event

HCR-1

Developer(s)

- [ORGANIZATION: AGREVO CANADA INC.](#) | [BCH-CON-SCBD-101073-1](#)

ORGANIZATION

AgrEvo Canada Inc.
Private sector (business and industry)
430 Dovercourt Drive
Winnipeg, MB
R3Y 1N4, Canada
Phone: +1-204-989-5432

Description

A bacterial pat gene which codes for phosphinothricin acetyltransferase, an enzyme that inactivates glufosinate ammonium through acetylation, was introduced into the HCR-1 line by an interspecific cross with the genetically modified B. napus event T45 (ACS-BNØØ8-2). The inactivation of glufosinate ammonium by the bacterial enzyme confers the herbicide tolerance onto this LMO.

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-9845-4](#) ORGANISM | BRASSICA RAPA (CANOLA PLANT) |

Crops

[BCH-LMO-SCBD-14762-14](#) LIVING MODIFIED ORGANISM | ACS-BNØØ8-2 - HERBICIDE TOLERANT CANOLA |

Resistance to herbicides - Glufosinate

Characteristics of the modification process

Vector

pHoe4/Ac

EN

Techniques used for the modification

Cross breeding

Genetic elements construct

[P-35S-CaMV](#)
0.533 kb

[CS-pat-STRVR](#)
0.552 kb

[T-35S-CaMV](#)
0.220 kb

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-100287-7](#) CAMV 35S PROMOTER |

Promoter

[BCH-GENE-SCBD-15002-4](#) PHOSPHINOTHRICIN N-ACETYLTRANSFERASE GENE |

Protein coding sequence | Resistance to herbicides (Glufosinate)

[BCH-GENE-SCBD-100290-6](#) CAMV 35S TERMINATOR |

Terminator

Notes regarding the genetic elements present in this LMO

The pat gene is a synthetic version of the gene isolated from *Streptomyces viridochromogenes*, strain Tü 494. The nucleotide sequence has been modified to provide codons preferred by plants without changing the amino acid sequence of the enzyme.

EN

For additional information on this LMO, please refer to the record of *B. napus* event T45 (ACS-BNØØ8-2).

LMO characteristics

Modified traits

Resistance to herbicides
Glufosinate

Common use(s) of the LMO

Food
Feed

Additional Information

Other relevant website addresses and/or attached documents

? [HCR-1 - CERA](#) (*English*)

[BCH-LMO-SCBD-101074-4](#)

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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