

## Biosafety Clearing-House (BCH)

LIVING MODIFIED ORGANISM (LMO)


BCH-LMO-SCBD-104975-3

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

LAST UPDATED: 12 DEC 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.



DP-Ø73496-4  
Optimum® Gly Canola

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=104975>



Name

Optimum® Gly Canola

EN

Transformation event

73496

Unique identifier

DP-Ø73496-4

Developer(s)

- [ORGANIZATION: PIONEER HI-BRED INTERNATIONAL INC.](#) | [BCH-CON-SCBD-14931-2](#)

#### ORGANIZATION

Pioneer Hi-Bred International Inc.  
Private sector (business and industry)  
7100 NW 62nd Avenue PO Box 1000  
Johnston, Iowa  
50131, United States of America  
Phone: +1 515 535-3200  
Website: [www.pioneer.com/](http://www.pioneer.com/)

Description

Canola modified for tolerance to the glyphosate herbicide through the insertion of the Glyphosate-N-Acteyltransferase gat4621 gene.

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

Point of collection or acquisition of the recipient organism or parental organisms

Line 1822B

EN

Related LMO(s)

**BCH-LMO-SCBD-105040-2** | DP-Ø61Ø61-7 - Glyphosate tolerant canola | Pioneer Hi-Bred International Inc. | Resistance to herbicides (Glyphosate)

## Characteristics of the modification process

Vector

PHP28181

EN

Techniques used for the modification

Biolistic / Particle gun

Genetic elements construct

**P-ubi10-ARATH**  
1.305 kb

**CS-gat-BACLI**  
0.444 kb

**T-pinII-SOLTU**  
0.310 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-104802-5** POLYUBIQUITIN10 GENE PROMOTER | (THALE CRESS) |  
Promoter

**BCH-GENE-SCBD-48363-4** GLYPHOSATE-N-ACTEYLTRANSFERASE GENE |  
Protein coding sequence | Resistance to herbicides (Glyphosate)

**BCH-GENE-SCBD-100367-4** PROTEINASE INHIBITOR II GENE TERMINATOR | (POTATO) |  
Terminator

Notes regarding the genetic elements present in this LMO

73496 canola has been genetically modified to express the GAT4621 version of the protein.

Southern blot analysis indicated that a single, intact PHP28181A DNA fragment was inserted into the genome with no plasmid backbone DNA.

EN

## LMO characteristics

Modified traits

Resistance to herbicides  
Glyphosate

Common use(s) of the LMO

Food  
Feed

### Detection method(s)

External link(s)

? [DP-073496-4 - GMOMETHODS](#) ( *English* )

### Additional Information

Other relevant website addresses and/or attached documents

? [Brassica gat event dp-073496-4 and compositions and methods for the identification and/or detection thereof US 20120131692 A1](#) ( *English* )

? [Brassica Gat Event Dp-073496-4 and Compositions and Methods for the Identification and/or Detection Thereof - Canadian Patents Database](#) ( *English* )

[BCH-LMO-SCBD-104975-3](#)

## 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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