

Biosafety Clearing-House (BCH)

LIVING MODIFIED ORGANISM (LMO)

BCH-LMO-SCBD-100975-11

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

LAST UPDATED: 24 JUL 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.



<https://bch.cbd.int/database/record?documentID=100975>

MON-00603-6 X ACS-ZM003-2
Roundup Ready™ Liberty Link™ maize



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

Name

Roundup Ready™ Liberty Link™ maize	EN
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Transformation event

NK603 x T25

Unique identifier

MON-00603-6 x ACS-ZM003-2

Developer(s)

<p>- ORGANIZATION: MONSANTO COMPANY BCH-CON-SCBD-46324-3</p> <hr/> <p>ORGANIZATION</p> <p>Monsanto Company 800 N. Lindbergh Blvd. St. Louis, MO 63167, USA Phone: +1 314 694-1000 Website: http://www.monsanto.com/</p>
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Description

The stacked maize line NK603 x T25 was produced by cross breeding between maize LMOs T25 and NK603 for tolerance to herbicides containing glufosinate and glyphosate.	EN
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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-246-6](#) ORGANISM | ZEA MAYS (MAIZE, CORN, MAIZE) |

Crops

[BCH-LMO-SCBD-14776-17](#) LIVING MODIFIED ORGANISM | MON-ØØ6Ø3-6 - ROUNDUP READY™ MAIZE |

Resistance to herbicides - Glyphosate

[BCH-LMO-SCBD-14767-14](#) LIVING MODIFIED ORGANISM | ACS-ZMØØ3-2 - LIBERTY LINK™ MAIZE |

Resistance to antibiotics - Ampicillin Resistance to herbicides - Glufosinate

Characteristics of the modification process

Vector

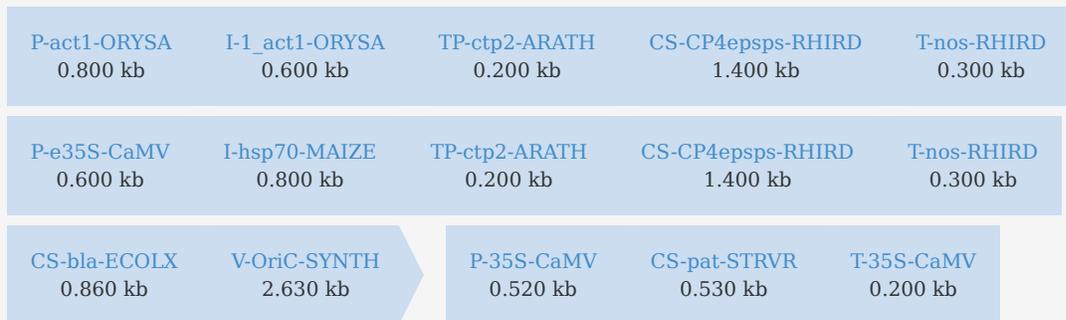
PV-ZMGT32 and pDH51

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Techniques used for the modification

Cross breeding

Genetic elements construct



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-14979-7](#) 5-ENOLPYRUVYLSHIKIMATE-3-PHOSPHATE SYNTHASE GENE |

Protein coding sequence | Resistance to herbicides (Glyphosate)

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

Protein coding sequence | Resistance to herbicides (Glufosinate)

[BCH-GENE-SCBD-14975-5](#) BETA-LACTAMASE GENE | (BACTERIA) |

Protein coding sequence | Resistance to antibiotics (Ampicillin)

[BCH-GENE-SCBD-100364-5](#) RICE ACTIN 1 GENE PROMOTER | (RICE) |

Promoter

[BCH-GENE-SCBD-100355-6](#) RICE ACTIN 1, INTRON | (RICE) |

Intron

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

Terminator

[BCH-GENE-SCBD-100366-6](#) CAMV ENHANCED 35S PROMOTER |

Promoter

[BCH-GENE-SCBD-100359-7](#) HSP70 INTRON | (MAIZE, CORN) |

Intron

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

Promoter

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

Terminator

[BCH-GENE-SCBD-100365-6](#) CHLOROPLAST TRANSIT PEPTIDE 2 | (THALE CRESS)

Transit signal

[BCH-GENE-SCBD-101411-3](#) PUC ORIGIN OF REPLICATION

Plasmid Vector

Notes regarding the genetic elements present in this LMO

DNA insert from NK603 vector PV-ZMGT32:

NK603 contains a form of the plant enzyme 5-enolpyruvylshikimate-3-phosphate synthase (EPSPS) that allows the plant to survive the otherwise lethal application of glyphosate.

DNA insert from T25 vector pDH51:

Glufosinate tolerance in T25 maize is the result of introducing a gene encoding the enzyme phosphinothricin-N-acetyltransferase (PAT) isolated from the common aerobic soil actinomycete, *Streptomyces viridochromogenes*

For additional information on this LMO, please refer to the records of the parental LMOs.

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LMO characteristics

Modified traits

Resistance to herbicides

Glufosinate

Glyphosate

Resistance to antibiotics

Ampicillin

Common use(s) of the LMO

Food

Feed

Biofuel

Detection method(s)

External link(s)

? [MON-ØØ6Ø3-6 - EU Reference Laboratory for GM Food and Feed \(EURL-GMFF\)](#) (*English*)

? [ACS-ZMØØ3-2 - EU Reference Laboratory for GM Food and Feed \(EURL-GMFF\)](#) (*English*)

Additional Information

NK603 x T25 was produced through cross breeding and contains the inserted genetic

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elements from both parents.

From the NK603 parent, NK603 x T25 contains one copy of a DNA cassette containing two cp4 epsps genes (see below). From the T25 parent, NK603 x T25 contains one copy of the DNA cassette with an intact Ori-pUC and the "P-35S - pat - T-35S" construct as well as a truncated *bla* gene (25% of the 5' end of the *bla* gene is missing).

Additional Information

Other relevant website addresses and/or attached documents

? [NK603 X T25](#) (*English*)

[CERA GM Database](#) (*English*)

[BCH-LMO-SCBD-100975-11](#)

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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