

Biosafety Clearing-House (BCH)

LIVING MODIFIED ORGANISM (LMO)

BCH-LMO-SCBD-43796-6

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

LAST UPDATED: 06 SEP 2012

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.



IFD-52901-9
Colour-modified rose

CBD

<https://bch.cbd.int/database/record?documentID=43796>



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

Name

Colour-modified rose

EN

Transformation event

Transformation event unknown

Unique identifier

IFD-52901-9

Developer(s)

- [PERSON](#): DR YOSHIKAZU TANAKA | [BCH-CON-JP-8300-5](#)

PERSON

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RELATED ORGANIZATION

Description

This rose line contains an introduced gene encoding flavonoid 3', 5'-hydroxylase (F3'5'H) enzyme from *Viola x wittrockiana* involved in the synthesis of delphinidin and a gene encoding anthocyanin 5-acyltransferase from *Torenia* (*Torenia hybrida*), which modifies the delphinidin produced.

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-43795-5](#) ORGANISM | ROSA HYBRIDA (ROSE, ROSHC) |

Ornamentals

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

Rose cultivar: WKS82

EN

Characteristics of the modification process

Vector

pSB130

EN

Techniques used for the modification

Agrobacterium-mediated DNA transfer

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-43793-4](#) FLAVONOID 3', 5'-HYDROXYLASE GENE | (PANSIES) |

Protein coding sequence | Changes in quality and/or metabolite content (Pigmentation / Coloration)

[BCH-GENE-SCBD-43794-3](#) ANTHOCYANIN 5-ACYLTRANSFERASE GENE | (TORENIA HYBRID) |

Protein coding sequence | Changes in quality and/or metabolite content (Pigmentation / Coloration)

[BCH-GENE-SCBD-101416-6](#) TI PLASMID RIGHT BORDER REPEAT |

Plasmid vector

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

Terminator

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

Promoter

[BCH-GENE-SCBD-101415-9](#) TI PLASMID LEFT BORDER REPEAT |

Plasmid vector

LMO characteristics

Modified traits

Changes in quality and/or metabolite content

Pigmentation / Coloration

Common use(s) of the LMO

Ornamental

[BCH-LMO-SCBD-43796-6](#)

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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