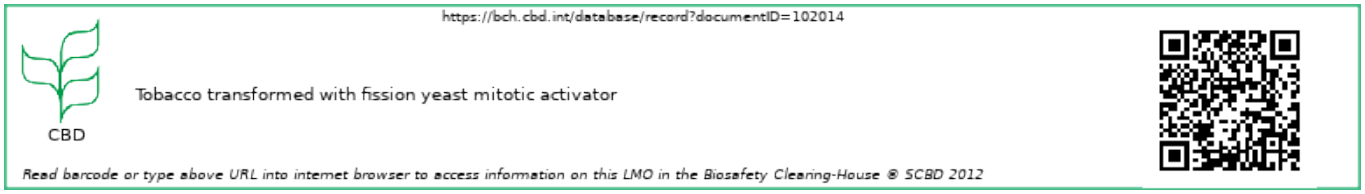
LIVING MODIFIED ORGANISM (LMO) BCH-LMO-SCBD-102014-5

? Decisions on the LMO ? Risk Assessments

LAST UPDATED: 13 AUG 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.



Name

Tobacco transformed with fission yeast mitotic activator	EN

Transformation event

Transformation event unknown

Developer(s)

- PERSON: DENNIS FRANCIS | BCH-CON-CZ-102010-2

PERSON

Dennis Francis
Cardiff, Wales
CF10 3XQ, United Kingdom of Great Britain and Northern Ireland
Phone: +44 29208 76145
Email: FrancisD@cardiff.ac.uk

RELATED ORGANIZATION

Description

Plants of Nicotiana tabacum were transformed with cdc25 gene from Schizosaccharomyces pombe under constitutive promotor 35S CaMV, together with an nptII gene for resistance to kanamycin. The transformation with the gene cdc25 significantly speeds up plant development and flowering earliness.	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-12120-4 ORGANISM | NICOTIANA TABACUM (TOBACCO, TOBAC)
Crops

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

Nicotiana tabacum L. cv. Samsun EN

Characteristics of the modification process

Vector

pBIN19 EN

Techniques used for the modification

Agrobacterium-mediated DNA transfer

Genetic elements construct

P-35S-CaMV	CS-cdc25	T-nos-RHIRD
0.800 kb	1.740 kb	0.200 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-15001-5 NEOMYCIN PHOSPHOTRANSFERASE II | (BACTERIA)
Protein coding sequence | Resistance to antibiotics (Kanamycin)

BCH-GENE-SCBD-102013-3 CDC25 GENE
Protein coding sequence | Changes in physiology and/or production

BCH-GENE-SCBD-100269-8 NOPALINE SYNTHASE GENE TERMINATOR
Terminator

LMO characteristics

Modified traits

Resistance to antibiotics
Kanamycin
Changes in physiology and/or production
Growth rate

Common use(s) of the LMO

Research

Detection method(s)

Additional Information

- Polymerase chain reaction (PCR) with primers specific to inserted sequences - Southern hybridization	EN

Additional Information

Other relevant website addresses and/or attached documents

? Experimental release of genetically modified tobacco into the environment Notification Report: Deliberate Release and Placing on the EU Market of GMOs - GMO Register *(English)*

? Plant transformation vector pBin19 T-DNA region - NCBI *(English)*

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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
413 rue Saint-Jacques, suite 800
Montreal, Québec, H2Y 1N9
Canada
Fax: +1 514 288-6588
Email: secretariat@cbd.int